

# **ACKNOWLEDGEMENTS**

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#### COVER PHOTO: MAIN STREET LOOKING TOWARD THE CITY DOCK

Source: Jarvin Hernandez / Jarvin Photography

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Office of Emergency Management



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Environmental Commission
Transportation Board
Human Relations Commission
Maritime Advisory Board
Affordable Housing and Community Equity Development
Commission
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Historic Preservation Commission
Recreation Advisory Board
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# **TABLE OF CONTENTS**

GLOSSARY OF TERMS 6

#### ANNAPOLIS AHEAD

- 1. INTRODUCTION 14
- 2. DEMOGRAPHIC TRENDS 34

#### THE THRIVING CITY

- 3. MUNICIPAL GROWTH 58
- 4. LAND USE 84
- 5. HOUSING 130

#### THE FUNCTIONAL CITY

- 6. TRANSPORTATION 172
- 7. COMMUNITY FACILITIES 218
- 8. ARTS, CULTURE &

HISTORIC PRESERVATION 262

#### THE ADAPTIVE CITY

9. ENVIRONMENTAL SUSTAINABILITY 28610. WATER RESOURCES 334

Bridging barriers.
Connecting communities.

#### **IMPLEMENTATION**

- 11. DEVELOPMENT REGULATIONS 364
- 12. AREAS OF CRITICAL STATE CONCERN 386
- 13. RECOMMENDED ACTION MATRIX 392

#### **APPENDICES**

APPENDIX A: COMMENT LOG

(THE FOLLOWING ARE INCLUDED UNDER SEPERATE COVER)

APPENDIX B: DEMOGRAPHIC AND MARKET

**ANALYSIS** 

APPENDIX C. FISCAL IMPACT STUDY

APPENDIX D: FOREST DRIVE EASTPORT

SECTOR STUDY TASK FORCE REPORT

APPENDIX E: HOUSING AFFORDABILITY TASK FORCE

REPORT

APPENDIX F: MARITIME TASK FORCE STRATEGY

APPENDIX G. WEST ANNAPOLIS MASTER PLAN

APPENDIX H: OUTDOOR DINING PILOT STUDY

APPENDIX I: MILITARY INSTALLATION RESILIENCE

**RESPONSE STUDY** 

APPENDIX J: BLUE TECHNOLOGY

**BUSINES STUDY AND STRATEGY** 

APPENDIX K: 2020 ANALYSIS OF IMPEDIMENTS

TO FAIR HOUSING CHOICE IN THE

**BALTIMORE REGION** 



# **GLOSSARY OF TERMS**

#### **Acronyms**

AACPS: Anne Arundel County Public Schools

AAMC: Anne Arundel Medical Center

ACAAC: Arts Council of Anne Arundel County

ADA: Americans with Disabilities Act

**ADU: Accessory Dwelling Unit** 

AiPPC: Art in Public Places Commission

AMI: Area median income

APD: Annapolis Police Department

BGE: Baltimore Gas and Electric

BMC: Baltimore Metropolitan Council

BMP: Best management practices

BRT: Bus rapid transit

CDBG: Community Development Block Grant

CDC: Centers for Disease Control

CNI: Choice Neighborhood Initiative

CNRA: Chesapeake National Recreation Area

COF: Consequence of Failure

CPTED: Crime Prevention through Environmental Design

CRAB: Coast Smart - Climate Ready Action Boundary

**CRS: Community Rating System** 

**DNR: Department of Natural Resources** 

EDA: Economic Development Administration

EMS: Emergency medical services

EPA: Environmental Protection Agency

ESD: Environmental site design

EV: Electric vehicle

FEMA: Federal Emergency Management Agency

HACA: Housing Authority of the City of Annapolis

HOA: Homeowners association

HUD: Department of Housing and Urban Development

IIJA: Infrastructure Investment and Jobs Act

ITS: Intelligent Traffic System

LPPRP: Land Preservation Parks and Recreation Plan

MaaS: Mobility-as-a-Service

MDOT: Maryland Department of Transportation

MDE: Maryland Department of the Environment

MGD: Million gallons a day

MGO: Marylanders Grow Oysters

MIRR: Military Installation Resilience Response Study

M.O.R.E.: Mid-Atlantic Off-Road Enthusiasts

MPDU: Moderately Priced Dwelling Unit

MPO: Metropolitan Planning Organization

MTA: Maryland Transit Authority

NACWA: National Association of Clean Water Agencies

NASSCO: National Association of Sewer Service

Companies

NDZ: No discharge zone

NEA: National Endowment for the Arts

NFIP: National Flood Insurance Program

NHTSA: National Highway Traffic Safety Administration

NLC: National League of Cities

NSA-Annapolis: Naval Support Activity Annapolis

NOAA: National Oceanic and Atmospheric Association

NOAH: Naturally occurring affordable housing

NPDES: National Pollutant Discharge Elimination System

OEM: Office of Emergency Management

PIAT: Pedestrian Infrastructure Assessment Tool

Q/LOS: Quality/Level of Service

RFP: Request for Proposal

RTP: Regional Transit Plan

SHA: State Highway Administration

SPCA: Society for the Prevention of Cruelty to Animals

STR: Short term rental

SVI: Social Vulnerability Index

TMDL: Total Maximum Daily Load

USNA: United States Naval Academy

VAAAC: Visit Annapolis and Anne Arundel County

WEE: West East Express

WRF: Water reclamation facility

WTP: Water treatment plant

#### **Key Terminology**

**Affordable housing:** Housing that can be rented or purchased by a household with very low, or moderate income for less than 30 percent of that household's gross monthly income.

Accessory Dwelling Unit: A self-contained living unit (with kitchen and bath), either attached to or detached from, and in addition to, the primary residential unit on a single lot. Sometimes called an "in-law" unit, "second unit," or "granny flat".

Area median income: The median household income for the area adjusted for household size as published and annually updated by the United States Department of Housing and Urban Development (HUD). The 2023 AMI for Annapolis is \$121,700 for a family household of four.

**Best practices**: Local technologies, operating methods, procedures and strategies that demonstrate progressive thinking, innovative approaches, and state of the art solutions to address challenges shared by multiple communities.

**Brownfield**: A property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

**Buildable land:** Acreage that is undeveloped or clearly under-developed, is unencumbered by serious environmental constraints, has the zoning to permit residential development, and is otherwise not actively in use.

**Built out**: Development of land to its theoretical capacity as permitted under current or proposed planning or zoning designations.

**Bus rapid transit**: A form of rapid transit using buses but designed to provide higher capacity and operating efficiency, and faster service than conventional buses. Vehicles are often designed to resemble light-rail vehicles, and may operate in their own travel lanes, with amenities such as stations and platforms.

Census Block: The smallest geographic area for which the Bureau of the Census collects and tabulates census data every ten years, are formed by streets, roads, railroads, streams and other bodies of water, other visible physical and cultural features, and the legal boundaries shown on Census Bureau maps.

**Circulator**: A bus operating on a looped route through a defined area, often connecting residents or visitors to transit, shopping areas, and tourist destinations.

**Code of Ordinances:** Ordinances are the regulations adopted by the City and all of the ordinances related to building and construction are collected together into a manual commonly referred to as the Code of Ordinances.

**Community facility:** Facility in which public services for residents are provided, including recreational, health, and cultural services, and services for youth and seniors.

Complete Streets: Streets designed to improve the safety and comfort for all street users, with features such as wider sidewalks, street parking, and bike lanes; improved environmental functions of the street through features such as street trees and rain gardens; and enhanced identity of the street through features such as wayfinding signage and public art.

**Context-sensitive:** The art of creating public works projects, buildings, additions, etc., which sensitively integrates projects into the context of their setting.

**Corridor**: Any major transportation route; may also be used to describe land uses along these routes.

**Cost Burdened**: The designation for households that pay more than 30% of their income on housing. Those that pay 50% or more are considered severely cost burdened.

**Creekshed**: The area of land which drains into a creek.

**Comprehensive Plan:** A long-range (20-25 year) plan containing maps and policies to guide the future physical development of a city or county.

#### Crime Prevention through Environmental Design:

(CPTED) Methods of reducing crime in an area by using urban and architectural design and the management of built and natural environments.

Critical Area: In 1984, to safeguard the Bay from the negative impacts of intense development, the Maryland General Assembly enacted the Chesapeake Bay Critical Area Protection Program, a far-reaching effort to control future land use development in the Chesapeake's watershed. The ribbon of land within 1000 feet of the tidal influence of the Bay was determined to be crucial because development in this "critical area" has direct and immediate effects on the health of the Bay. Development within this zone is regulated by Maryland's Critical Area Commission.

**Cultural District:** Well-recognized, labeled areas of a city in which a high concentration of arts and cultural facilities and programs serve as the main anchor of attraction.

**Density:** The number of residential dwelling units per acre of land.

**Easement:** The right to use property owned by another for specific purposes, such as access to another piece of property, conveyance of stormwater, or transmission of electricity or gas.

**Environmental Enhancement areas:** Properties that either already offer ecological benefits or should be improved to do so, but are not appropriate to serve as active parkland.

**Environmental Justice:** The practice of redressing inequitable distributions of environmental burdens (pollution, industry, landfills, freeways, etc.) and access to environmental benefits (clean air and water, parks and open space, etc.) in decision-making.

**Equity:** (1) The quality of being impartial and fair; (2) the money value of property or an investment.

**Fair Housing Act:** Federal legislation adopted in 1968 that prohibits discrimination by direct providers of

housing, such as landlords and real estate companies as well as other entities, such as municipalities, banks or other lending institutions and homeowners insurance companies.

**Floor Area Ratio:** The ratio of gross floor space on a property to the lot area of that property.

**Food Desert**: An area in which there are no nearby accessible and affordable places to by fresh and healthy food.

Form based zoning (form based codes): A method of regulating development to achieve a specific urban form. Form-based codes focus on the physical dimensions and design of buildings and public spaces, rather than the land uses that occur within those buildings and spaces.

**Green infrastructure**: The system of parks, gardens, farms, forests, vegetated lands, and other public and private open spaces in a community.

**Greenhouse gas:** Gases that contribute to the warming of the atmosphere, including carbon dioxide, methane, nitrous oxide, and ozone.

**Greenway**: An interconnected area of natural vegetation, often surrounded by urban development.

**Greenway Map:** A map that depicts all land parcels worthy of conservation, with existing protected areas and potential conservation easements.

**Growth Area**: The area outside of the City boundary which meets the guidelines for the State's Priority Funding Areas and is deemed sensible for annexation.

**Historic District**: Area within a city or county formally recognized by the local, state, or federal government for its concentration of historic or notable structures. A *Local Historic District* is an historic district only recognized by local government.

**Historic Preservation**: Efforts to safeguard historical and cultural heritage by preserving sites, structures, or districts which reflect the elements of the city's cultural, social,

economic, political, archaeological, or architectural history. For sites, structures, or districts to warrant attention for historic preservation, they must be culturally, architecturally, or historically significant. Historic significance in Annapolis is not limited to the existing Historic District.

**Household**: All persons occupying a single dwelling unit, including individuals, families, and groups of unrelated individuals.

**Household income:** The combined income of all persons living in a household, regardless of their relationship to one another.

**Household size**: The total number of residents in an area living in "households" divided by the total number of households in that area. Average household size excludes persons in group quarters.

**Housing affordability**: A measure of a household's ability to afford housing that consumes 30% of their income or less.

**Housing choice:** The ability of a household to choose the type of unit or location within a city where they can live, rather than have that choice eliminated because of their social and economic status.

**Impervious** (surface): Surface through which water cannot easily penetrate, such as roofs, roads, sidewalks, and paved parking lots.

**Infill:** Development of individual small vacant lots or leftover vacant properties within areas that are already developed.

**Light industrial** (light manufacturing): Any of a variety of manufacturing, assembly, wholesale, distribution, storage, or similar employment activities with minimal off-site impacts.

**Living Shoreline**: A shoreline with natural wetland plants, which protects shorelines from erosion, develops natural habitats, and rebuilds sandy shorelines that might otherwise be lost due to sea level rise.

**Low Income Housing: Ho**using that is affordable for a household with an aggregate annual income that is below 60% of the area median income.

Low-rise/low-scale: Three stories or less.

**Maritime Zoning Districts:** Districts whose use is reserved for marine related industries like shipyards, marinas and other services for watercraft.

**Mid-rise**: Generally referring to structures that are four to seven stories in height.

**Mixed use** (development): A development type in which various uses, such as office, retail, and residential, are combined in a single building or on a single property.

**Micro-mobility**: Wheeled, low speed transportation intended for one person. Examples include e-scooters and e-bicycles.

**Missing Middle:** The diversity of small scale multi-family dwellings that fall between single family homes and large apartment buildings, and have been zoned out of existence in many cities.

**Mobility-as-a-Service**: A practice that integrates the travel options available and offers them in a single interface, often a single app. Specifically, this often refers to bringing all the mobility options in an area into one app or website.

**Moderately Priced Dwelling Unit (MPDU):** Residential units where the sale price or rent is below the market rate for other units in the same development and affordable to households with an income that is 100% or less than the median family income for the Baltimore Metropolitan Statistical Area.

**Multi-modal** (boulevard/corridor): A street which accommodates multiple modes of transportation, such as rail, bus, and streetcar.

**Neighborhood context:** The overall atmosphere and setting associated with a particular neighborhood, defined by the scale and design of its buildings, the appearance of open spaces and vegetation, and the character of its uses.

**Non-family household**: A household with either one member or whose members are not related to one another.

**Paratransit:** On-demand transit services for seniors and those with disabilities unable to use the normal fixed-route service.

**Parcel:** A unit of land under unified ownership, described in a deed or other legal instrument.

Pedestrian-friendly / Pedestrian-oriented: A form of development that makes the street environment inviting for pedestrians; characterized by special sidewalk pavement, buildings of varied architectural styles with active ground floor uses, surface parking located behind the building or otherwise away from the sidewalk, benches or other pedestrian amenities, residential porches, low fences, pedestrian-scale lighting, and shade trees.

**Pipeline** (development): Any development that has been approved but is not yet occupied, including structures already under construction and structures approved but not yet started.

**Point source pollution:** any single identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack.

**Public art:** Sculpture, painting, murals and other forms of artwork that are placed in public spaces or in public view to enrich and add visual interest to the built environment.

**Public access:** The ability of an individual to easily and freely access a particular location, such as the waterfront or a large tract of federal land.

**Public housing**: Housing that is built, operated, and owned by the Housing Authority of the City of Annapolis and that is typically provided at nominal rent to lower income or special needs households.

**Public realm**: General term referring to the publiclyowned outdoor spaces in a city, including streets, curbs, sidewalks, alleys, planting strips and tree wells, plazas, parks, and the grounds of public buildings.

**Public transit:** Publicly-owned and operated system for the transportation of persons from one location to another, usually along a fixed route. Includes buses, ferries, trains, etc.

**Recreational Enhancement Areas**: All existing parks and other areas best intended for active recreational open space.

**Recreational facility:** A structure or open area improved for recreational purposes, especially on public land. Includes playgrounds, sports fields, tennis courts, recreation centers, swimming pools, stadiums, golf courses, etc.

**Redevelopment:** To demolish existing buildings; or to increase the overall floor area on an existing property, or both, irrespective of whether a change in land use occurs.

**Riparian**: located on, or relating to, the bank of a creek, river, or other body of water.

**Setback**: The minimum distance on the interior perimeter of a property line that is required to be kept free of structures, e.g., the required front, rear, and side yards.

**Small area plan:** Community-driven planning tool used to outline policies, actions, and recommendations for small geographic areas in the city—usually the size of a neighborhood or business district—where particular issues or challenges are present.

Small, local, and minority business: Generally refers to a business with fewer than 50 employees, a business with more than 51% ownership by African-American, Asian, or Latino individuals, or a business that is locally based; formal local and federal definitions may apply.

**Short Term Rental**: A rental unit rented out for short periods of time, usually to visitors or tourists.

**Starter housing**: Housing suitable in price and amenities for first-time home buyers.

**Street tree**: Tree planted in the median or along sidewalks in the public right-of-way intended to enhance the visual quality of a street, provide shade, absorb pollutants and noise, and provide habitat for urban wildlife.

**Social Vulnerability:** How vulnerable a person or community is to social, economic or environmental risks, as determined by an index created by the Centers for Disease Control (CDC).

**Traffic calming:** Refers to measures that make permanent, physical changes to streets to slow traffic and/or reduce volumes; also can include education and enforcement measures to promote changes in driver behavior. Typical measures include speed humps, roundabouts, and through-traffic barriers.

**Tree canopy:** The cover formed by the leafy upper branches of trees in a forest.

Underutilized/underused: A site or structure which no longer represents the highest and best use of that property based on current market conditions. Underutilized sites are characterized by land values that exceed the value of improvements, or by outmoded or obsolete buildings.

**Urban forest**: Term used to describe trees along streets, in parks, and in yards throughout the City; collectively, these trees form a canopy that supports wildlife and provides environmental benefits.

**Urban sprawl:** Low density, automobile dependent development located beyond the edge of existing service and employment areas.

**Vacancy rate**: The percentage of a defined set of housing units (e.g., all rental units, all owner units, all units, etc.) that is unoccupied at any given time.

**Vacant land** (or building): Land that is not covered by a structure; or a building that is not occupied.

**Vision Zero**: A planning strategy to eliminate all traffic fatalities and severe injuries, while increasing safe, healthy, and equitable mobility.

**Walkable**: Well suited or adapted to walking, based on such factors as topography, distance, safety, pedestrian amenities, and visual features.

**Ward:** A geographic and administrative division of a city that elects and is represented by an Alderperson on the City Council. Annapolis is organized into eight wards.

**Watershed**: The land area that ultimately drains into a particular waterway.

**Wetland**: A lowland area, such as a marsh, that is saturated with moisture all or part of the year. Standards for defining wetland boundaries consider hydrology, vegetation, and soil conditions.

Workforce Housing: (1) rental housing that is affordable for a household with an aggregate annual income between 50% and 100% of the area median income; or (2) homeownership housing that: (i) except as provided in item (ii) of this item, is affordable to a household with an aggregate annual income between 60% and 120% of the area median income; or (ii) in target areas that are recognized by the Maryland Secretary of Housing and Community Development for purposes of administering the Maryland Mortgage Program, is affordable to a household with an aggregate annual income between 60% and 150% of the area median income.

**Zoned Development Capacity**: The land available and the housing units which could be built within City limits under current zoning rules.

**Zoning map:** Map that depicts the division of the City into districts or "zones" in which different uses are allowed and different buildings and lot size restrictions apply.

**Zoning**: A set of locally-adopted regulations which implement the Comprehensive Plan Land Use Map and policies, establish the range of allowable uses in defined geographic areas of a community (districts), set the standards for development in each district, and define the process for gaining approval to develop land or change land uses.



# **ANNAPOLIS AHEAD**



#### 1. INTRODUCTION

Annapolis Ahead

City Jurisdiction and Wards

**Environmental Context** 

Maryland's Guiding Vision

Plan Structure

How to Use this Plan

Plan Process

Relationship to Past Plans

Community Participation

The Vision

Plan Priorities



Overview

Population and Households

Social Trends

Summary of Trends

Bridging barriers.
Connecting communities.



# <u>1.</u> Introduction

#### **ANNAPOLIS AHEAD**

Annapolis Ahead 2040 is the City of Annapolis' Comprehensive Plan update, a citywide plan required by Maryland Land Use Code to be updated approximately every ten years following the release of new Census data. Like previous plans, this plan's essential purpose is to bring about the careful development of the City and conservation of what is most exceptional about it. As a general and city-wide Plan, it does this by guiding public and private decisions that work toward achieving the vision set forth by the City and its residents over the use of land, water and other natural resources; streets and other infrastructure; parks, open spaces and other community facilities; and many other aspects of the city related to development through the year 2040. The guidance within this Plan is a representation of the agreement that Annapolis, as a whole, has come to over long-range goals and outcomes. With it, the City's government has a roadmap to make wise and popular decisions on development proposals, the expenditure of public funds, the City's development code, cooperative efforts, and issues of pressing concern. Likewise, the Plan provides city residents, property owners, business owners, and those looking to invest in the city with a clear view of the city's direction.

This Plan explores conditions as they are today, how these conditions may have changed since the last comprehensive plan, and anticipates what the future may hold. From this analysis, the Plan provides goals, performance metrics, and recommended actions that will guide Annapolis toward a healthy, balanced and harmonious future over the next 20 years.

There are many features of this Plan that distinguish it from prior comprehensive plans and reinforce its

relevance to the Annapolis of today. The most important of these features are the following three themes which are interrelated and guide all goals, performance metrics, and recommended actions of the Plan.

#### **Equity**

The Plan's focus on equity is guided by an awareness of longstanding racial inequities in how public and private resources are invested in Annapolis communities. The Plan includes many goals, performance measures, and recommended actions aimed at reversing these decades long trends, and ensuring that all residents and communities have access to the opportunities and resources they need to be successful.

#### Health

The Plan's focus on health is grounded in an appreciation for how the built and natural environment of the city plays an influential role in the physical and mental health of the city's residents and communities. The Plan offers many goals, metrics, and recommended actions aimed at ensuring that our surroundings are designed to improve our health.

#### Resilience

The Plan's focus on resilience is based on the fact that Annapolis will continue to face challenging environmental conditions driven by climate change which in turn have economic and social consequences. The Plan offers goals, metrics, and recommended actions designed to help the city better prepare for, respond to, and adapt to more frequent storms, increasing flooding, extreme heat, and other climate driven conditions.



#### CITY JURISDICTION AND WARDS

The area governed by the City of Annapolis has grown substantially since its beginnings as a small English colony on Spa Creek in the 17th century. As illustrated in the map on this page, the city grew outward from what is today the Annapolis Historic District and the city's downtown, and expanded very modestly until the mid-twentieth century. Between 1951 and 1961, the city grew rapidly and annexed Eastport, Parole, West Annapolis, and the other areas along Forest Drive and Bay Ridge Road. Since then, the City has grown in a more piecemeal and strategic fashion, with specific properties annexed that would logically enable improved services through contiguous land area and connected infrastructure, and expand the city's tax base.

In the coming years, the Annapolis city boundary will not change significantly from its current limits reflected in the map on the facing page. The city's Growth Area, which is defined as the area outside of the City boundary which meets the guidelines for the State's Priority Funding Areas and is therefore deemed sensible for annexation, is very modest. Chapter 3: Municipal Growth provides further discussion on the Growth Area.

The boundaries of the City's eight Wards, each represented by an elected Alderperson, are more likely to change over time. Every ten years following the release of the U.S. Census data which documents population change, the Mayor and City Council are required by the City Charter to reevaluate the boundaries of the Wards to ensure that each has approximately the same number of residents and meets the standards of the 1965 Voting Rights Act, among other factors. In 2023, the boundaries of the Wards did change following the recommendations of the Ward Boundary and Redistricting Commission Task Force appointed by the City Council.

FIGURE 1-3: THIS MAP ILLUSTRATES THE GROWTH
OF ANNAPOLIS OVER TIME AND WAS PREPARED FOR
THE CITY'S 2005 ANNEXATION WORKING GROUP
REPORT WITH A MINOR MODIFICATION TO SHOW
THE ANNEXATIONS SINCE 2005.

Source: City of Annapolis

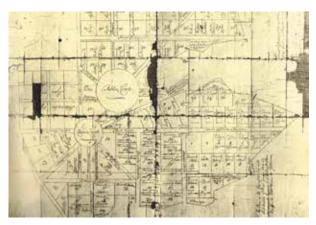
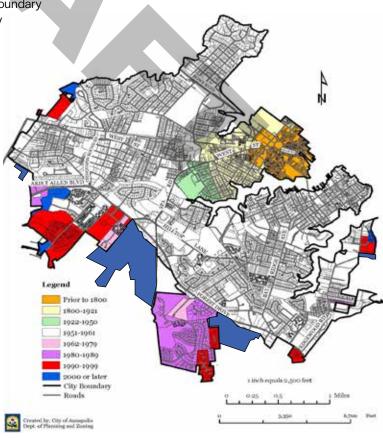


FIGURE 1-2: THIS 1718 PLAN OF ANNAPOLIS BY JOHN STODDERT EXPANDS ON THE CITY'S EARLIEST PLAN BY GOVERNOR NICHOLSON ON 1695

Source: Maryland State Archives



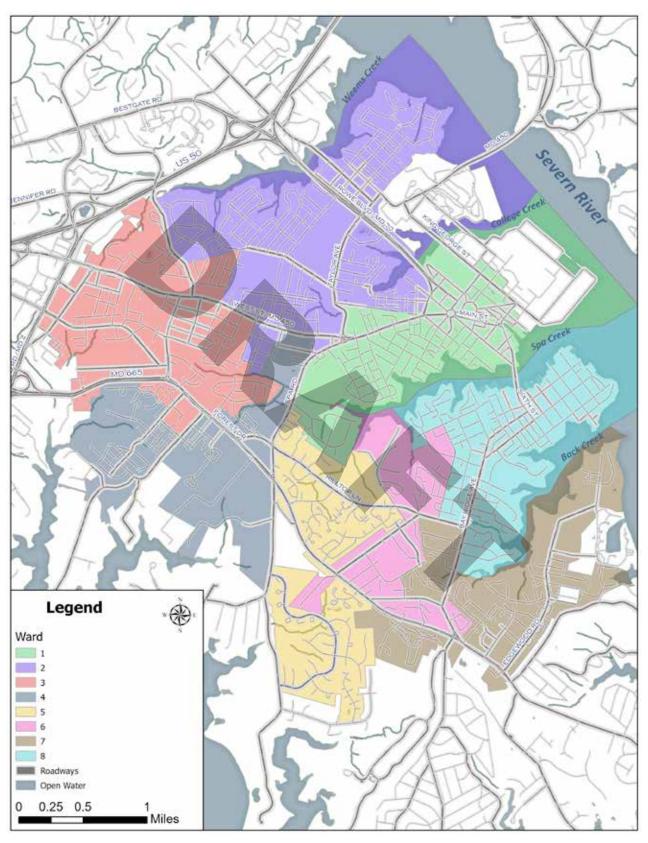


FIGURE 1-4: THIS MAP REFLECTS ANNAPOLIS' CURRENT BOUNDARY AND THE BOUNDARIES OF ITS EIGHT WARDS WHICH WERE ADJUSTED IN 2023 TO REFLECT POPULATION CHANGES REPORTED IN THE 2020 U.S. CENSUS DATA.

#### **ENVIRONMENTAL CONTEXT**

Annapolis' location as a peninsula on the Chesapeake Bay with approximately twenty-two miles of waterfront, and twelve different watersheds within eight square miles, defines the city's identity, culture, and economy, but also makes it extremely vulnerable to the impacts from Climate Change. This Plan is highly responsive to this environmental context.

The water which made Annapolis a fitting location for settlement, and the city we know today, continues to be vital to its existence and to the people who choose to live here, work here, and recreate here. Annapolis' complex and dynamic position between the Severn and South Rivers has always meant that any impact on water inside the city's boundaries has impacts downstream and in the Chesapeake Bay. Conversely, the city is easily inundated with tidal impacts from beyond its city limits. These conditions demand that nearly everyone in Annapolis is in some way accountable for the collective stewardship of the city's water resources, whether they know it or not.

Because future development will primarily occur as infill and redevelopment, the city is largely built out, as detailed in Chapter 4, Land Use. Thus the goals for water resources encompass restoration, protection, and conservation. The health of the city's water resources depends on the health of those Sensitive Areas identified in Chapter 9, Environmental Sustainability. Stream corridors, habitat, and forested areas are a critical lifeline to all creeks and rivers and their respective watersheds in Annapolis.

The city's urban tree canopy is another important natural resource that positively benefits water quality through stromwater filtration and slope stabilization, particularly

along the city's many riparian areas. The tree canopy goals of this Plan are based on studies documenting the correlation between urban tree canopy coverage and water quality. Today Annapolis' tree canopy is extremely challenged. Canopy coverage hovers around 41% of the city's land area but new planting and tree preservation are being outpaced by tree loss.

Nearly all water which hits the surface of the Annapolis Neck peninsula, on which the city is situated, drains through the city's riparian areas to the Severn and South Rivers, with Forest Drive representing an approximate dividing line between the two watersheds. The subwatersheds of Weems Creek, College Creek, Spa Creek and Back Creek, tributaries of the Severn River, contain the majority of the city's population but face varying challenges and opportunities. Likewise, the Crab, Harness, and Aberdeen Creeks, portions of which are in the city, are tributaries of the South River and pose different challenges.

In past plans for Annapolis, it has been common practice to make land use recommendations for neighborhoods, roadway corridors, and other areas of the city based on where there is opportunity for change or for improvement. A major distinction of this plan, as mentioned in Chapter 4, Land Use, and Chapter 9, Environmental Sustainability, is to foreground the important nuances of watershed areas as the basis for future development and improvements to neighborhood quality of life to best meet the needs of residents. If land use decisions at all scales of development from the single family home to a large commercial center are made in the context of the water they will impact, the city will not only get better development but also better maintained natural resources.

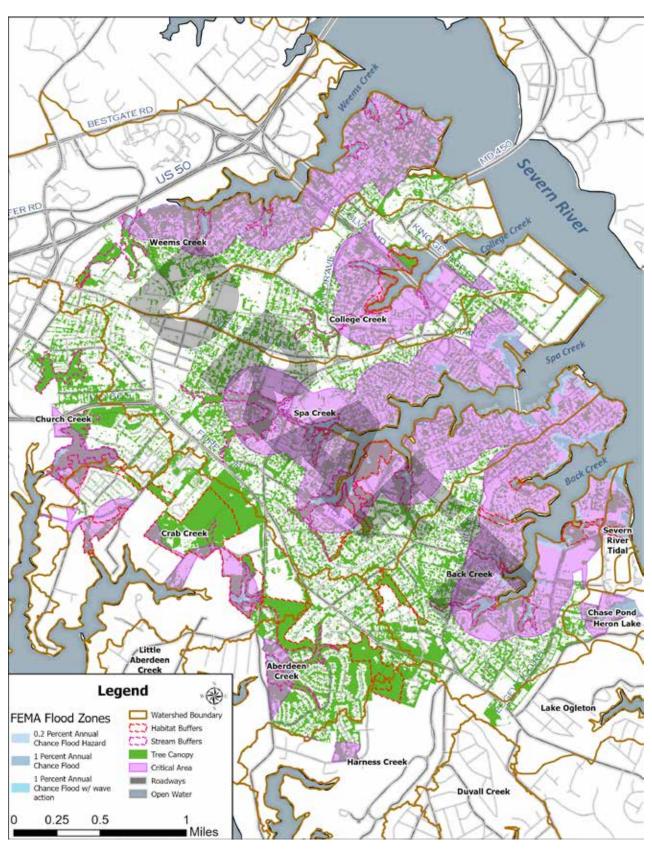


FIGURE 1-5: ANNAPOLIS IS HEAVILY DEFINED BY ITS ENVIRONMENTAL CONTEXT WHICH INCLUDES APPROXIMATELY 22 MILES OF WATERFRONT. TWELVE WATERSHEDS, HUNDREDS OF

#### MARYLAND'S GUIDING VISION

#### State Guidance

Since 1992 with the Maryland General Assembly's adoption of the *Maryland Economic Growth, Resource Protection and Planning Act*, which was later amended in 2000, planning statutes have been set forth in the Land Use Article of the Annotated Code of Maryland. These statutes require local governments that regulate land use development to adopt comprehensive plans and implement strategies to coordinate growth and resource allocation.

In 2009, the Maryland General Assembly adopted the 12 Planning Visions, which reflect the state's ongoing goals to develop and implement sound growth and development policy. These twelve visions summarize the minimum criteria by which any comprehensive plan in Maryland is judged to be valid. It is these criteria that explain why no town, city, or county in Maryland can shut its doors to growth, allow haphazard development, disregard improvements in infrastructure, or neglect protection of its natural resources, among other standards for planning.

These visions are listed below:

#### 1. Quality of Life and Sustainability

A high quality of life is achieved through universal stewardship of the land, water, and air resulting in sustainable communities and protection of the environment.

#### 2. Public Participation

Citizens are active partners in the planning and implementation of community initiatives and are sensitive to their responsibilities in achieving community goals.

#### 3. Growth Areas

Growth is concentrated in existing population and business centers, growth areas adjacent to these centers, or strategically selected new centers.

#### 4. Community Design

Compact, mixed use, walkable design consistent with existing community character and located near available or planned transit options is encouraged to ensure efficient use of land and transportation resources and preservation and enhancement of natural systems, open spaces, recreational areas, and historical, cultural, and archaeological resources.

#### 5. Infrastructure

Growth areas have the water resources and infrastructure to accommodate population and business expansion in an orderly, efficient, and environmentally sustainable manner.

#### 6. Transportation

A well-maintained multimodal transportation system facilitates the safe, convenient, affordable, and efficient movement of people, goods, and services within and between population and business centers.

#### 7. Housing

A range of housing densities, types, and sizes provides residential options for citizens of all ages and incomes.

#### 8. Economic Development

Economic development and natural resource-based businesses that promote employment opportunities for all income levels within the capacity of the State's natural resources, public services, and public facilities are encouraged.

#### 9. Environmental Protection

Land and water resources, including the Chesapeake and coastal bays, are carefully managed to restore and maintain healthy air and water, natural systems and living resources.

#### 10. Resource Conservation

Waterways, forests, agricultural areas, open space, natural systems, and scenic areas are conserved.

#### 11. Stewardship

Government, business entities, and residents are responsible for the creation of sustainable communities by collaborating to balance efficient growth with resource protection.

#### 12. Implementation

Strategies, policies, programs, and funding for growth and development, resource conservation, infrastructure and transportation are integrated across the local, regional, state, and interstate levels to achieve these Visions.



#### **PLAN STRUCTURE**

While State law outlines the essential and shared focus for comprehensive planning throughout Maryland, it is the City's own vision that gives life and meaning to its ongoing development. The Plan's foundational themes discussed on the previous pages, the structure illustrated below and the guiding principles on the facing page reflect the hopes and concerns of residents who have participated in one or more of the many public involvement activities during the planning process including community surveys, public meetings and work sessions, community association meetings, and the meeting of the City's many citizen boards and commissions. Further discussion of the public involvement activities is provided in this chapter.

The Plan is organized into thirteen chapters with an Executive Summary prior to Chapter 1 and an Appendix following Chapter 13. Chapters 2 through 10 constitute the core content of the Plan and are organized into sections based on three distinct City Visions: *The Thriving City*, *The Functional City*, and *The Adaptive City*. Each of these sections addresses issues specific to its vision and are organized into chapters focused on distinct but interrelated Plan Elements. These elements generally follow the foundational policy areas as defined by the Maryland Land Use Code.

Each chapter contains a brief overview, a description of existing conditions, and a listing of goals, performance metrics, and recommended actions.

# City Vision Plan Element Municipal Growth Land Use Housing Transportation Community Facilities Arts & Culture Environmental Sustainability Water Resources IMPLEMENTATION

#### **HOW TO USE THIS PLAN**

In contrast with past comprehensive plans in Annapolis, this Plan has been conceived as resource for not only City staff, elected officials, and other key decision-makers, but also the residents of the city and anyone looking to relocate or invest in the City. The document is written with all of these audiences in mind. Annapolis Ahead 2040 is both the City's guiding vision and its plan of action. It also asserts the values and principles that will be the foundation for the City's evolution over the next twenty years.

The Plan is committed to its role as a community roadmap for the City's leadership, departments, stakeholders, residents, and developers to be able to do three key things integral to realizing the vision of the Plan:

- Easily grasp the clear direction in which the City is heading and how the various Plan elements fit together to form the Plan's vision.
- Make decisions within one's own domain that contribute to or support the desired outcomes of the Plan.
- Measure and track the progress being made toward achieving the goals outlined in the Plan.

As described above in "Plan Structure", this Plan is organized into three City Vision sections, which contain individual chapters focused on specific elements of the city. The chapters each illustrate a distinct aspect of the city, and are interrelated, but and they are designed to be consulted individually, as pieces of the larger Plan. Given the Plan's length, it is not meant to be read continuously from beginning to end. More likely is a scenario in which someone may need to consult the Plan for a specific topic, say Housing, and would simply jump to Chapter 5: Housing. After reading that chapter and seeing its many references and cross-listed goals to Chapter 4: Land Use, the same person might then move onto Chapter 4: Land Use. In this sense, the Plan does not need to be read in a linear or chronological way. Rather, it should be read according to a specific topic, interest, or need. Inevitably, one chapter may point to other related chapters.

#### Are you an Annapolis resident?

Every chapter of this Plan will provide you with a great amount of information about your city, perhaps more than you ever cared to know. If you want to become more engaged in the city, take a look at the Action Matrix within the Implementation chapter to see if there are specific actions that you would like to help advance.

#### Are you an Annapolis property owner?

You will probably find the chapters focused on Municipal Growth, Land Use, Environmental Sustainability, and Water Resources most relevant. The Action Matrix within the Implementation chapter will tell you what projects or initiatives may impact your property.

# Are you a business owner, institution, or someone looking to invest in Annapolis?

While you may need to read all chapters (or at least skim them) to get a complete picture of the City's direction, depending on your interest, individual chapters may suffice. If you have a specific property in mind, the chapters focused on Municipal Growth, Land Use, and Housing will be most relevant. The Action Matrix within the Implementation chapter will tell you what initiatives may impact your project or property.

#### **PLAN PROCESS**

Annapolis Ahead 2040 is the outcome of a substantial community engagement process which stretched across four years and touched thousands of residents and other stakeholders through in-person and virtual meetings, surveys, and requests for public comments.

The process which guides the preparation of comprehensive plans in Maryland comes from the Land Use Article of the Maryland Annotated Code and states that the city's Planning Commission has the authority and responsibility to prepare a comprehensive plan for its jurisdiction and to present the plan with a recommendation to the local governing body, which is the Annapolis City Council. In addition, the Maryland Planning Visions Law of 2009 created twelve visions for plans to follow reflecting the State's ongoing aspiration to develop and implement sound growth and development policy. These visions and the process outlined in the Land Use Article have guided the process to create this Plan. While City staff managed the process and production of the Plan, regular updates and work sessions were held with the Planning Commission which ultimately approved of the Plan.

The community process to create this Plan formally kicked off with a community workshop in Spring of 2019, where the aim was to collect the advice, opinions and the ideas that would ultimately shape this Plan. Various stakeholder groups including civic associations, business associations, the City's many volunteer Boards and Commissions, as well as the City Council and members of the general public, commented regularly on draft Plan content.

In June 2021, draft goals, performance measures, and recommended actions were released for public comment. Over 200 comments were received. More

#### **COVID-19 Impacts**

During the process of making this Plan, the U.S. and the rest of the world instituted necessary measures to try to combat the spread of the SARS-CoV-2 (COVID19) virus. In March 2020, the State began issuing stay-at-home orders for many employees across all industries, effectively shutting down schools and businesses temporarily. As mask-wearing, social-distancing and quarantining became the norm, so too did working-from-home and holding meetings virtually. This Plan not only relied on the continuous feedback of residents, stakeholders and City officials, but also depended on future projections, which, during height of COVID, were very uncertain. The release of the 2020 U.S. Census data which is used throughout this Plan was also delayed. These impacts from the COVID-19 pandemic significantly affected the timeline of the Plan process and the shape of process itself but did not diminish the efforts of City staff to ensure broad opportunities for residents and others to participate in the planning process.

recently in June 2023 when the full Draft Plan was released for a 90-day public comment period, 192 formal comments were received. Approximately 20% of these comments resulted in changes to the Plan.

As part of this planning process, several other special topic plans were also completed including a West Annapolis master plan, a strategic plan for the Maritime industry, a master plan for the revitalization of the Annapolis' largest public housing community, and the city's first ever Public Water Access Plan. These plans informed the content of Annapolis Ahead 2040 and are included in the appendices.

#### **RELATIONSHIP TO PAST PLANS**



FIGURE 1-6: ANNAPOLIS AHEAD 2040 IS ONLY THE CITY'S FIFTH COMPREHENSIVE PLAN WITH PRIOR PLANS ADOPTED IN 1962, 1985, 1998, AND MOST RECENTLY IN 2009.

Source: City of Annapolis

Annapolis Ahead 2040 is only the City's fifth comprehensive plan since adopting its first plan in 1962. Since then, Annapolis has adopted comprehensive plans in 1985, 1998, and most recently in 2009. Each plan represents a particular moment in Annapolis' evolution as a city: It takes stock of current conditions, needs, challenges, and opportunities in an effort to chart a direction for the City's future. Each plan also reflects the changing perspectives of the current population, City staff, the Planning Commission, and the City Council, who put their imprint on the plan and take ownership of it. Each comprehensive plan ultimately reflects the needs and priorities of the stakeholders who participate in its development. In this respect, an Annapolis comprehensive plan is not so much an update of a prior plan but rather an entirely new plan that must be responsive to the times in which it is created. Annapolis Ahead 2040 reflects this reality.

Annapolis Ahead 2040 does build on the legacy of previously adopted comprehensive plans but when it is adopted, it will supersede the 2009 comprehensive plan. Certainly, each comprehensive plan addresses some continuing challenges that were addressed in a prior plan, but rarely are the same goals and recommendations simply copied from plan to plan. Goals and recommendations are driven by the participants

in the planning process, and generally, by the time a new comprehensive plan is drafted there are very few unimplemented recommendations that are still relevant. Times have changed, the City has changed, and the population has changed, which makes it unlikely that ideas from more than a decade ago still hold sway.

Annapolis Ahead 2040 addresses a number of pressing issues that were already relevant at the time of the 2009 comprehensive plan, namely housing affordability, climate change impacts, safer mobility options, and the protection of critical environmental assets. Yet, in each case, the City's efforts to address the issue have not kept up with the accelerating impacts, and today there is far more pressure to act than in 2009. The issues of housing affordability and climate change in particular have reached a crisis stage for the city. The recommendations to address these issues in the 2009 comprehensive plan appear inadequate in the face of the current conditions.

Annapolis Ahead 2040 must be viewed in the context of today and a response to the challenges and opportunities of tomorrow. Once adopted by the City Council, this Plan will become the primary guide for decision-making on policy initiatives, capital projects, proposed development, and City programs.

## **COMMUNITY PARTICIPATION**

This Comprehensive Plan is a plan for the public and shaped by the public, and every individual and group in Annapolis has a stake. Ensuring that all Annapolis residents and stakeholders have ample opportunities to participate in the planning process is of paramount concern.

The engagement strategy employed four key approaches:

- Strength in numbers and reach
- Enlist the advice of active residents
- Bring everyone to the table
- Utilize multiple overlapping tools

Outreach formally kicked off with a public workshop in Spring of 2019, where the aim was to collect advice and opinions and synthesize them into a guiding vision with clear goals for the City's future; the ideas that would ultimately shape this Plan. To promote the workshop, flyers were distributed throughout the City, a dedicated webpage was created on the City's website, and notice was sent out through the City's Notify Me news flash system, its social media channels, and through press release. These methods were replicated for many future public events.

However, the COVID-19 pandemic, which emerged in 2020, added unprecedented challenges to the Plan's community participation goals by limiting in-person meetings, magnifying existing barriers to outreach, and disproportionately impacting minority communities. In response, City staff made two key changes to the planning process: engagement pivoted to using more virtual engagement tools through most of 2020 and much of 2021, and; the participation period for preliminary goals and actions released in June 2021,

was extended until the City emerged from COVID-19 restrictions in 2022.

Even with the challenges posed by the pandemic, City staff consistently leveraged existing community networks to invite diverse voices from across the city to share their vision for the Plan. The City's Boards and Commissions, Task Forces, many established neighborhood associations, business associations, and other interest groups, were critical assets in reaching residents in each ward of the city. The City's various Boards and Commissions in particular served as an important ongoing "focus group" for the Plan given that these volunteer bodies include engaged residents familiar with nearly every facet of City life. A meeting with the Chairs from all of the City's Boards and Commissions happened at the outset of the planning process and this set the stage for periodic updates at many of the Boards and Commissions' regular meetings.

The Annapolis Environmental Commission took a particularly involved role. The group hosted an in-person "environmental summit" at the Pip Moyer Recreation Center in early 2020 which drew approximately sixty participants. A followed virtual summit was held in the Spring of 2021 which drew approximately forty participants.

Prior to the pandemic and after the pandemic when in-person meetings could happen again, City staff met residents where they are, attending their neighborhood association meetings regularly. Further, through the Mayor's One Annapolis initiative, Hispanic Outreach and African American Outreach specialists in the Mayor's Office assisted in reaching communities historically underrepresented in planning initiatives.

From meetings with both civic associations and Boards and Commissions, the Nitty Gritty Committee was formed with representatives from each, to serve as an

49
WORKING GROUP
AND TASK FORCE
MEETINGS

1,131
RESPONSES TO COMMUNITY SURVEYS

early resident advisory group and help to frame the core issues of the Plan. This voluntary group of residents acted as a group of citizen planners, supplementing the work of planning staff.

Over the last four years, residents from all over the City were able to participate and brainstorm with their neighbors on the goals for this Plan through a variety of opportunities.

Meetings alone, whether in-person or virtual, were not a sufficient tool for including everyone interested in participating. Seven different online surveys were released over the duration on the planning process to address specific topics and reach specific audiences. The first community survey was released following the kickoff workshop with similar ideals in mind, gathering public planning priorities, with even greater reach. With 385 survey responses collected, Annapolitans from nearly every neighborhood agreed on the direction this Plan should take. Survey participants lent overwhelming support for conserving open space to form a network of green infrastructure, making the City more resilient to threats, and preserving the character of the City. Later community surveys focused specifically on

200

PUBLIC COMMENTS

ON PRELIMINARY

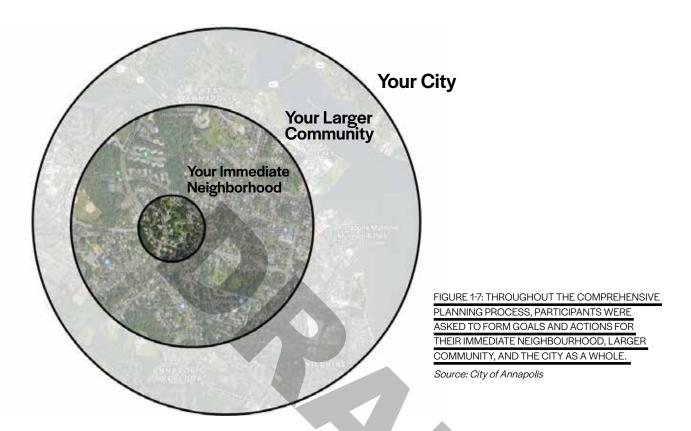
GOALS, METRICS,

**AND ACTIONS** 

PRE-COVID IN-PERSON COMMUNITY MEETINGS

18
CITY COUNCIL
AND PLANNING
COMMISSION
MEETINGS

23
VIRTUAL
COMMUNITY
MEETINGS



redevelopment, transportation, public water access, and youth perspectives.

With the redevelopment survey, residents selected the types of spaces, character, and development they would like to see in the future. A mapping component enabled residents to identify areas they view as ideal for infill development and the types of development they felt are most appropriate. In the transportation survey, participants shared their transportation choices and selected solutions that would improve mobility options and transportation safety across the city.

From as early as 2019, a series of working groups and task forces made up of residents, City representatives, business owners, community leaders, and a whole host of other stakeholders would provide another important means of generating content for the goals, performance measures, and recommended actions of this Plan. Each one served as a platform to explore particular pressing issues. Participants dove deep into discussions about city needs and ways of addressing them that would ultimately be incorporated into this Plan.

#### **Community Surveys**

As a means of reaching more residents and stakeholders, particularly during the COVID-19 pandemic, the planning team released a variety of community surveys designed for specific topics and audiences. With each survey, outreach methods were adjusted in an effort to reach more participants.

- Priority Issues Survey
- Transportation Survey
- Future Redevelopment Survey
- Case Study Site Surveys
- What's in Your Comprehensive Plan? Survey
- Youth Survey (Annapolis High School)
- Public Water Access Survey



FIGURE 1-8: THIS WORD MAP ILLUSTRATES THE RANGE OF PRIORITIES VOICED THROUGH THE COMPREHENSIVE PLAN'S FIRST SURVEY

Source: City of Annapolis

The Resilience Working Group was the first of these mission-driven groups and culminated with a draft "Climate Resilience Action Strategy" that informed several chapters of this Plan but particularly Chapter 9: Environmental Sustainability.

Three different task forces created by City Council also coincided with the planning process. While technically unaffiliated with the Comprehensive Plan, the Task Forces were grappling with issues very critical to the Plan including housing affordability, mobility and land use along Forest Drive, and the maritime industry. Each task force resulted in a strategy report which are included in the Appendix of this Plan, and recommendations from each can be found in many of the goals, performance measures, and recommended actions of the following chapters.

Throughout the community engagement process, the City Council and the Planning Commission were kept informed of the Plan's progress through eighteen different work sessions or briefings, including targeted discussions on specific topics with City Council committees.

# THE VISION

# In the coming years, Annapolis will be a more equitable, healthy, and resilient city.

It will be a more walkable and connected city where multiple safe and reliable transportation options reduce personal vehicle dependency. It will be a city which prioritizes public investments in its most socially vulnerable communities; a city which expands housing options accessible to residents of all income levels; and a city which grows a community of diverse local entrepreneurs aided by inclusive economic programs and opportunities.

Annapolis will be a city which prioritizes the preservation, restoration, maintenance, and enhancement of its natural resources, particularly when planning for new development. It will be a city which ensures that all residents have access to high quality recreational amenities particularly public water access; and it will be a city which values its cultural life through support for arts initiatives, artists and arts organizations, and citywide historic preservation efforts.

And Annapolis will be climate ready. Its infrastructure will be designed to withstand or adapt to the impacts from climate change. The city will protect its communities and institutions most at risk of climate impacts; and the city will reduce its carbon emissions through a variety of coordinated policies, programs, and investments.





# PLAN PRIORITIES

Implementation of this Plan's vision will rely on multiple coordinated efforts but it begins with goals, performance measures, and recommended actions which reinforce the vision. These priorities also help illustrate what distinguishes this Plan from past comprehensive plans. In the coming years, all City projects, programs, and policies should advance these priorities.

# **Thriving City**

# **1** Housing Access for All

Expand the range of housing choices that are accessible both in terms of geography and affordability, and are responsive to the needs of renters and owners of low to middle income.

# 2 Neighborhood Preservation

Promote context-sensitive neighborhood-serving development that reduces blight and physical incongruity while fostering visual harmony and cohesion.

#### 3 Inclusive Economic Growth

Advance policies and programs which expand opportunities for local entrepreneurship and underrepresented groups to contribute to the City's economic growth.

# 4 Sustainable Development

Prioritize walkable places, mixed-use development, greenway connections, small area planning oriented to creeksheds, and minimize the negative impacts to environmentally sensitive areas.

### **Functional City**

5 Pedestrian, Bicycle, and Transit Connectivity

Build safe, comfortable, and connected alternative mobility networks to encourage active transportation, alleviate traffic congestion, and reduce automobile dependency.

6 Equitable Public Water Access

Increase the amount and quality of waterfront space that is publicly accessible for a variety of water-based activities, particularly on creeks and in neighborhoods with limited public water access today.

Citywide Cultural Programming and Preservation

Expand the reach of arts initiatives and historic preservation through the advancement of inclusive programs, the promotion of the City's diverse history, and expanded cultural opportunities for all residents and in all sectors of the city.

# **Adaptive City**

8 Climate Ready Infrastructure

Mitigate the impacts of climate change through infrastructure adapted to be more resilient to rising sea levels, storm surge, flooding, extreme temperatures, and other climate-induced environmental changes.

9 Lower Carbon Footprint

Reduce carbon emissions in the city through coordinated policies and investment that promote renewable energy, energy efficiency and conservation, carbon sequestration, the application of new technologies, and ongoing monitoring.

Prioritized Environmental Assets

Proactively plan for the protection, restoration, enhancement, and maintenance of the City's natural resources as a linked network of greenways that will provide innumerable benefits to **ANNAPOLIS AHEAD** INTRODUCTION 33 residents.

# 2. DEMOGRAPHIC TRENDS

#### **OVERVIEW**

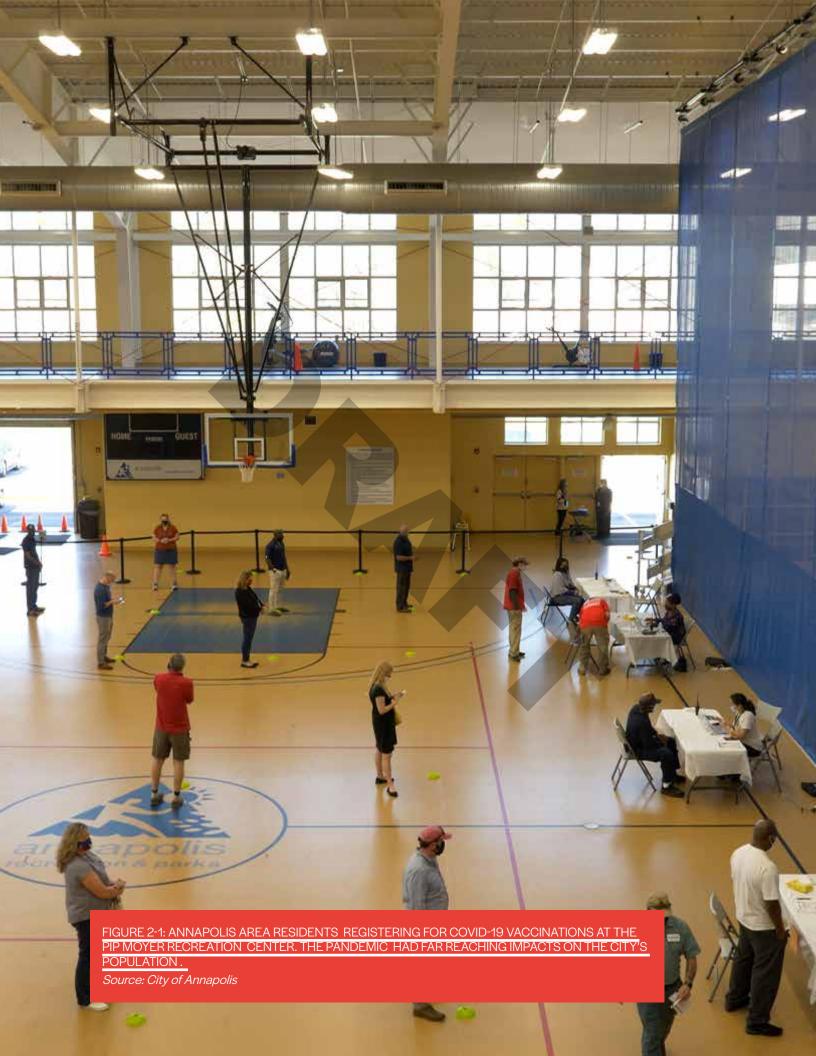
The demographic trends in Annapolis over the past 10 years are a product of the demand to locate in the City, new development or redevelopment, and broader trends in the region and nation. This Plan is designed to address the needs of Annapolitans living in the city today as well as the future residents, so it is imperative to understand the composition of the city and the trends which are driving demographic change. As a historic peninsular city with limited land availability, Annapolis continues to grow at a slower rate than the State and County as a whole. The increase in population between 2010 and 2020 was nearly the same as between 2000 and 2010, but at a slightly slower rate. Unlike at the County and State level, some of this population growth is attributed to an increase in the average household size rather than solely an increase in the number of households, meaning new construction has lagged behind the rate of that outside of Annapolis.

Similar to national and regional trends, Annapolis has an aging and a diversifying population. The fastest growing cohorts are the retirement age households and to a lesser extent new families with children of school age. Recent college graduates and young professionals are one of the few cohorts to decrease in population, meaning more of them are deciding to locate elsewhere. Meanwhile, Annapolis continues to diversify. All minority groups experienced an increase in population, with the largest increase occurring in the Hispanic/Latino population, while the proportion of white residents continues to decrease.

Economic trends within the population are also significant as the gap between the high earning and

low earning households continues to grow. Annapolis has both a relatively large proportion of households at a high income level and households that earn below the regional poverty level. According to the U.S. Department of Housing and Urban Development (HUD), a household is considered housing costburdened if it pays more than 30 percent of its gross monthly income for housing costs. Reflecting national trends, a larger proportion of renter households in Annapolis are cost-burdened while a lesser proportion of owner households are cost-burdened. That the amount of owner-occupied housing in Annapolis increased at the same time that renter-occupied housing decreased has likely exacerbated cost-burden among renters. The cost burden is not only worsening among low-income earners, however. More than half of households that are considered moderate-income earners are also cost-burdened.

Trends in the local economy have been more volatile than in the population itself since the start of the global pandemic in 2020, but overall, employment growth in more advanced professions has been more positive than in service professions. Annapolis continues to host a large number of residents that are highly educated and employed in professional occupations. Retail and food services make up a lesser proportion of employment among residents even with the significant tourism economy, likely given the relatively high cost of living. Even though a large proportion of Annapolis residents work outside of the city, a recent trend has been for more of those that previously commuted to now work from home instead. The unemployment rate has remained lower than in the County and State as a whole throughout the last decade as residents have both the regional economies of Baltimore and Washington, D.C. to draw from.



# POPULATION AND HOUSEHOLDS

As of 2020, the time of the most recent Census count, the population of the City of Annapolis was 40,812 among 16,751 households. That represents a 6.4 percent increase between 2010 and 2020. That compares to a 7.1 percent increase in population between 2000 and 2010, when the population increased by a slightly larger amount. Over the same ten year period ending in 2020, Anne Arundel County increased in population by 9.4 percent and the State of Maryland increased in population by 7.0 percent. Annapolis has traditionally experienced a slower rate of growth than most other localities in Maryland. The total population has increased by less than 18,000 residents since 1960, a time when the City was expanding physically through major annexation. The slower rate of population growth in the City compared with Anne Arundel County can be illustrated when tracking the proportion of the County's residents that live in Annapolis. From as high as around 20 percent of the County's population residing in Annapolis a century ago, that figure has been steadily declining to 6.9 percent as recently as the 2020 Census, the lowest it has ever been.

The increase in population in the City over the last decade did not occur uniformly. The area of Annapolis that includes Old Fourth Ward, Germantown-Homewood, Admiral Heights, and West Annapolis experienced the largest percent increase in population, roughly twice the citywide average. Other neighborhoods along Forest Drive also experienced more substantial population growth. Alternatively, communities at the eastern edge of the City including Victor Haven, Mariners Point, and the many other subdivisions along Edgewood Road, experienced almost no growth, and in some cases even lost population. Downtown Annapolis and Murray Hill combined also did not experience as much growth as elsewhere. These trends in growth are likely to occur into the coming decades as Downtown Annapolis has little room for development and few opportunities for redevelopment while most of the infill opportunities exist throughout the rest of the City. The map of population change below depicts the contrast in rates of growth across the City based on the City's wards.

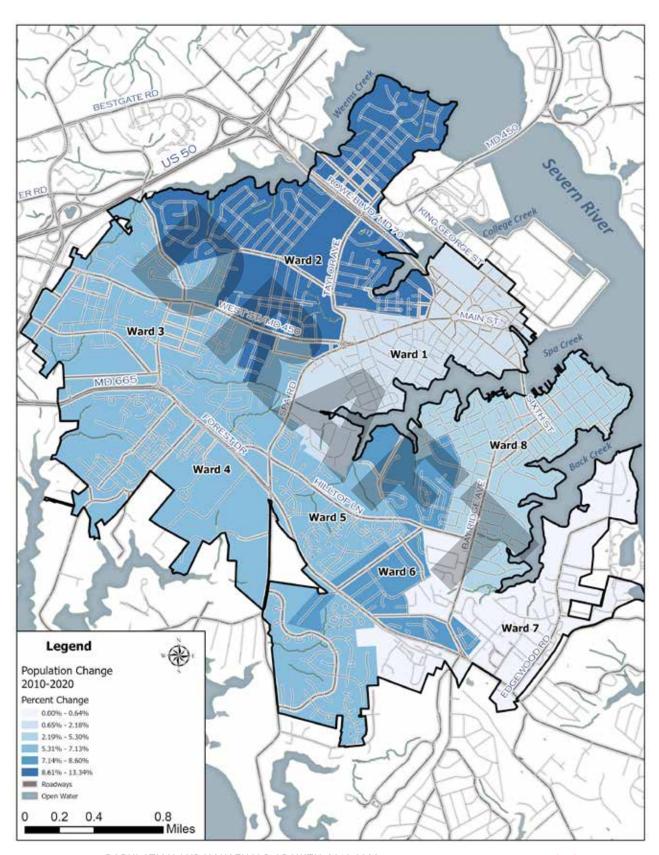
POPULATION	2010	2020	% CHANGE
City of Annapolis	38,375	40,812	6.4%
Anne Arundel County	537,656	588,261	9.4%
State of Maryland	5,773,552	6,177,224	7.0%
HOUSEHOLDS	2010	2020	% CHANGE
City of Annapolis	16,130	16,751	3.8%
Anne Arundel County	199,378	219,971	10.3%
State of Maryland	2,156,411	2,321,208	7.6%
AVG. HOUSEHOLDS SIZE	2010	2020	
City of Annapolis	2.34	2.40	
Anne Arundel County	2.63	2.63	
State of Maryland	2.61	2.61	

Sources: U.S. Census Bureau via ESRI Business Analyst, 2010 Census, 2021; Maryland State Data Center, Department of Planning, 2020 Census, 2021; BAE, 2021

#### TABLE 2-1: POPULATION AND HOUSEHOLD GROWTH: 2010-2020

Source: City of Annapolis

Whereas all of the population growth in the County and State can be attributed to the 10.3 percent and 7.6 percent growth rate in households, respectively, some of the growth in Annapolis is actually due to an increase in the average household size. The average household size increased from 2.34 in 2010 to 2.40 in 2020, while it staved the same for the County and State. As a result, even though the population increased by 6.4 percent the last decade, the number of households only increased by 3.8 percent. This is a continuation of a trend that began in the 2000s, when average household size increased from 2.30 to 2.34, but alongside a larger increase in the number of households. Although household size is not increasing on average outside Annapolis, this is a trend in the City that may continue given the cost of living and especially of housing. Population growth is not expected to accelerate in the coming decades, however, as annexation is expected to remain minimal and most development will likely occur as infill redevelopment.



#### **Household Composition in 2021**

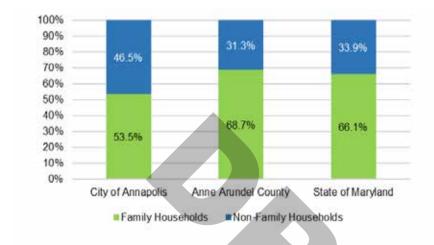
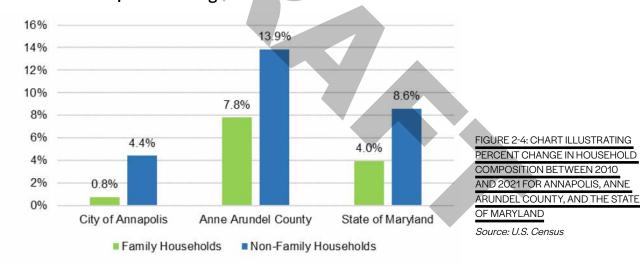


FIGURE 2-3: CHART ILLUSTRATING
PERCENT CHANGE IN HOUSEHOLD
COMPOSITION BETWEEN 2010
AND 2021 FOR ANNAPOLIS, ANNE
ARUNDEL COUNTY, AND THE STATE
OF MARYLAND

Source: U.S. Census

#### Household Composition Change 2010 - 2021



#### **Household Composition**

Annapolis has a large number of non-family households and, despite the average household size increasing slightly, they are increasing in number compared with family households. The number of family households only increased by 0.8 percent between 2010 and 2021 while non-family households increased by 4.4 percent. Over that same period, family households increased by 7.8 percent in the County and 4.0 percent in the State, and non-family households increased by 13.9 percent in the County and 8.6 percent in the State. Still, non-family households

make up roughly a third of all households outside of Annapolis, while in the City, they make up a little less than half of all households. The larger number of nonfamily households in Annapolis is likely attributed to two primary factors: the high number of college-aged adults and young professionals connected to the Naval Academy and to a lesser extent St. John's College; and the growing number of households with empty-nesters and retirees.

#### Age Distribution in 2021

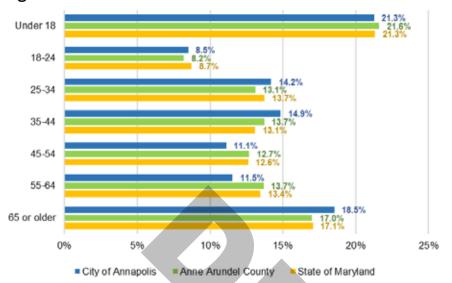


FIGURE 2-5: CHART ILLUSTRATING AGE DISTRIBUTION IN 2021 FOR ANNAPOLIS, ANNE ARUNDEL COUNTY, AND THE STATE OF MARYLAND

Source: U.S. Census

#### Age Distribution Change 2010 - 2021

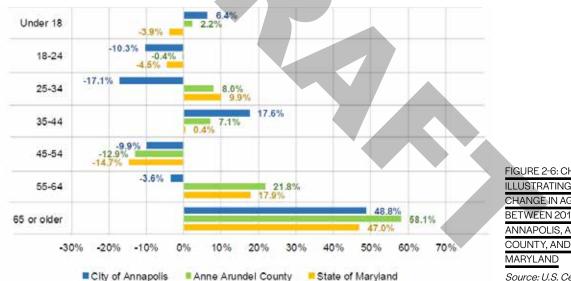


FIGURE 2-6: CHART ILLUSTRATING PERCENT CHANGE IN AGE GROUP BETWEEN 2010 AND 2021 FOR ANNAPOLIS, ANNE ARUNDEL COUNTY, AND THE STATE OF

Source: U.S. Census

#### **Age Distribution**

The distribution of the population among age groups in Annapolis is similar to that of Anne Arundel County and the State of Maryland. The largest age cohort, making up 21.3 percent of the population, continues to be residents under the age of 18, as it was in 2010. However, as of 2020, residents aged 65 and older now make up the second largest age group at 18.5 percent of the population. They are also the fastest growing cohort as they increased their numbers by 48.8 percent since 2010. As a result, even though the number of children increased between 2010

and 2020, that increase was overshadowed by the increase in older adults, causing the median age to increase to 37.3 years. This is a trend that has been occurring in Annapolis over several decades as many of the baby boomer generation decide to retire in the City away from the heart of the Washington, D.C. and Baltimore regions. Alongside this trend is a significant loss of residents aged 25-34 in Annapolis between 2010 and 2021 which goes against County and State trends. This type of change can be a symptom of other issues such as housing affordability which is addressed in Chapter 5: Housing.

#### **SOCIAL TRENDS**

Understanding the factors contributing to a changing demographic is key to planning for a more healthy, resilient and equitable Annapolis. These factors reveal what policies should be implemented and for whom they should be implemented. Like any other City, Annapolis is an ever changing social environment with an influx and outflow of residents and even evolving conditions among long-term residents. The 2020 Census provides a complete picture of the social and economic trends of the populace when comparing to those same variables from ten years ago. This also reveals in what ways communities have become more or less vulnerable to disruptions in society.

#### **Social Vulnerability**

The segments of the population that are vulnerable to current and future risks whether social, economic or environmental are of particular note. Factors such as socioeconomic status, household composition, minority status, and housing type and transportation are the factors dictating social vulnerability. A methodology created by the U.S. Centers for Disease Control and Prevention (CDC), a person or community's degree of social vulnerability is measured by 15 Census variables which the CDC includes in its Social Vulnerability Index (SVI). The social vulnerability index is applied to Annapolis in the accompanying map based on Census Block and is included both in Chapter 7: Community Facilities and Chapter 9: Environmental Sustainability. The process for calculating the SVI for Annapolis is based on the CDC's methodology where each of the 15 variables is weighted evenly and makes up one of two to five variables for each of the four categories as seen below. The sum of the values for each category then produces the overall social vulnerability.

The importance in measuring and tracking social vulnerability in the City lies not only in identifying who is potentially at risk and where the risk is most harmful, but in charting the course for future action to make Annapolis overall healthier and more equitable which in turn will make it more resilient. The four main components of social vulnerability tell each side of the

## What Makes a Community Socially Vulnerable?

A distinguishing feature of this Plan in comparison to past comprehensive plans is its emphasis on equitable outcomes. Of course, to be equitable requires an understanding of those communities which are already at a disadvantage due to social circumstances. Many of these communities are historically disadvantaged, meaning that past investment and policies have not helped these communities to succeed. Today these communities are less equipped and more vulnerable to social, economic, or environmental challenges. To create a baseline for where these communities are located in Annapolis, the Plan uses the Center for Disease Control (CDC) Social Vulnerability Index (SVI) which combines Census data from the following fifteen factors to establish levels of social vulnerability.

## Socioeconomic Status

- Below Poverty
- Unemployed
- Income
- No High SchoolDiploma

#### Housing Type + Transportation

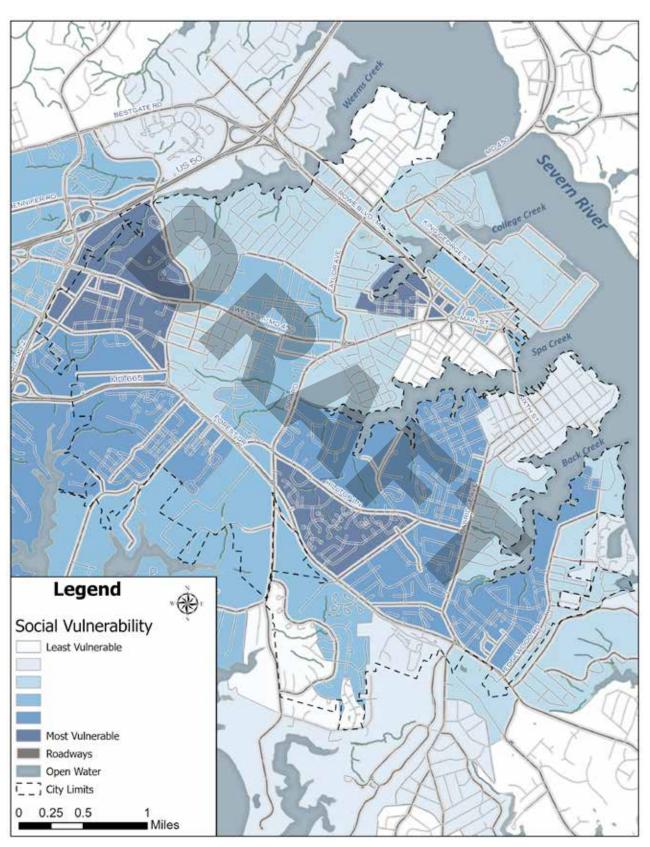
- Multi-UnitStructures
- Mobile Homes
- Crowding
- No Vehicle
- Group Quarters

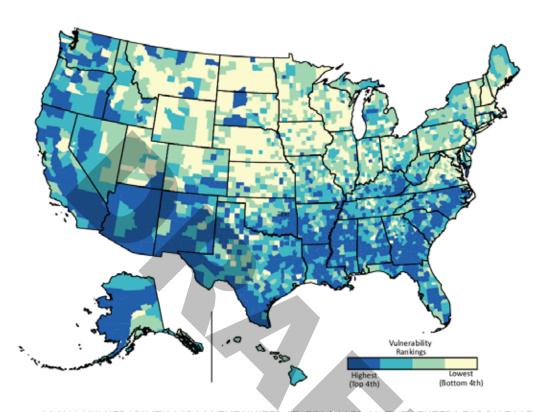
#### Household Composition + Disability

- Aged 65 or Older
- Aged 17 or Younger
- Older than Age 5 with a Disability
- Single Parent Household

#### Minority Status + Language

- Minority
- Speaks English
   "Less than Well"





## FIGURE 2-8: MAP OF SOCIAL VULNERABILITY ACROSS THE UNITED STATES BASED ON THE CENTERS FOR DISEASE CONTROL AND PREVENTION'S SOCIAL VULNERABILITY INDEX FOR 2018

Source: Centers for Disease Control and Prevention (CDC)

story into a community's vulnerability while also having correlation between each other:

- Socioeconomic status describes the economic stability and potential for economic opportunity afforded to a community.
- Household composition and disability denote the potential for self-sufficiency and the supposed dependence on resources outside the household.
- Minority status and language illustrate both the lack of opportunity and investment that is common in non-White communities and the lack of representation or voice.
- Housing type and transportation represent the ability to access resources and the difficulty in receiving resources in more crowded conditions.

All four factors combined show that the Old Fourth Ward, Parole, Tyler Heights, Eastport Terrace/Harbor House, and the communities along Georgetown and Edgewood Roads face the highest levels of social vulnerability. All of these communities have a large minority population, have lower average incomes, and have worse vehicle access, among several other vulnerability indicators. No single neighborhood fares the worst in every indicator. On the other hand, Murray Hill, West Annapolis and Wardour, Upper Eastport, and Hunt Meadows have a much lower level of social vulnerability as a result of greater overall wealth, fewer children, less diversity, and less crowded living conditions. The disparity in vulnerability between Murray Hill south of Inner West Street and Clay Street north of Inner West Street is particularly stark.

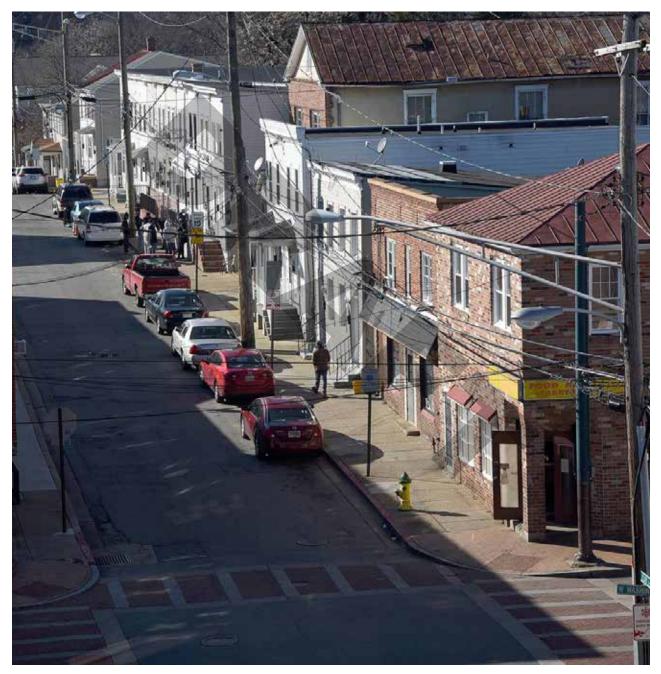


FIGURE 2-9: DECADES OF DISINVESTMENT HAVE MADE THE COMMUNITY NEAR CLAY STREET IN ANNAPOLIS' 'OLD FOURTH WARD' VULNERABLE IN THE CITY BASED ON THE CENTERS FOR DISEASE CONTROL AND PREVENTION'S SOCIAL VULNERABILITY INDEX FOR 2020. WITH STRONG SOCIAL INSTITUTIONS ALREADY IN PLACE, RENEWED PUBLIC AND PRIVATE INVESTMENT IN THE AREA CAN REVERSE THIS TREND.

#### **Race and Ethnicity**

Racial and ethnic background has and continues to have an influence on an individual's potential for socioeconomic stability and political representation both in Annapolis and across the United States.

Although race and ethnicity is but one variable in the vulnerability calculus, it cuts across all other variables. Racial and ethnic minorities are more likely to face unstable work and income, live in more crowded conditions and come from a more unstable household. The history of disinvestment, lack of representation, and poorer access to services among minority communities runs generations deep, though their culture and impact is indelibly stitched into the identity of the City. This Plan strives to celebrate this diversity and to shift the dialogue around racial and ethnic inequity.

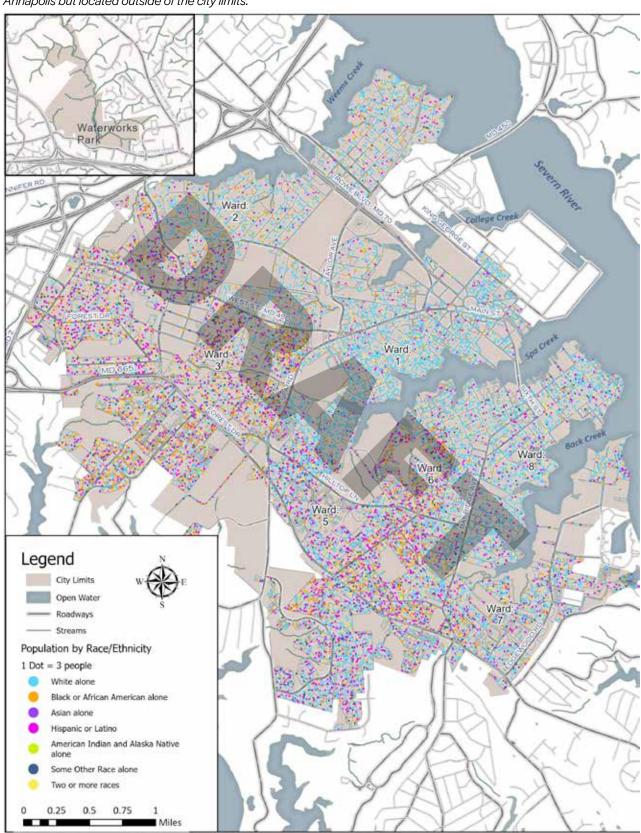
In the last few decades Annapolis has been gradually becoming more diverse, while the White population has been decreasing. In particular, the Hispanic/Latino population has been growing the fastest and accounts for most of the growth in the minority population. Racial and ethnic minorities often have poorer economic outcomes and opportunities and fare worse when faced with change and disruption of any sort. These are longstanding trends that occur within the minority population in all other cities of the U.S. Historically, minority populations have been concentrated in neighborhoods that receive less investment and with a lower quality of life and life expectancy than in neighborhoods with a lesser minority population.

Annapolis continues to have a slightly higher proportion of minority populations than either the

County or the State, though this is closer in proportion to that of the State. The White population peaked at nearly 70 percent of the population in 1970 and has been declining in proportion ever since. The White majority was down to 60.1 percent of the population as of the 2010 Census and more recently as of 2020 was reduced even more to 54.6 percent of the population. In Anne Arundel County, where the White population makes up a larger majority, their population decreased from 72.4 percent of the population in 2010 to 62.5 percent of the population in 2020. The minority populations have been growing faster as a percentage of the population in Anne Arundel County than in Annapolis, but still represent a smaller share than in Annapolis. The Hispanic/ Latino population in Annapolis has been growing extraordinarily quickly in comparison to any other racial or ethnic group. Since 1980, when Hispanics and Latinos made up less than 2 percent of the population, their numbers have been roughly doubling every decade. Their growth has slowed somewhat in the last decade, increasing by 37.7 percent between 2010 and 2020, to 22.2 percent of the total population as of 2020. Both the Black/African American and Asian populations have grown as well, but by 10.9 and 11.2 percent respectively. Although the Black/African American and Hispanic/Latino populations have grown at a faster rate in the County than in Annapolis, this diversification is somewhat offset by the fairly stable White population that only decreased by 1.4 percent over ten years compared with Annapolis' 10.5 percent decrease in the White population. Across the State, the same trend is occurring where all racial and ethnic minorities have grown in population while the White population has decreased in size.

The distribution of racial and ethnic minorities in Annapolis is fairly concentrated in certain areas of the City. Downtown, West Annapolis and Eastport all remain predominantly White while neighborhoods such as Parole and Tyler Heights along Forest Drive predominantly consist of Black/African American and Hispanic/Latino populations. Essentially, the more historic parts of the City closer to the waterfront contain a majority White population

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.



#### Race and Ethnicity Distribution in 2021

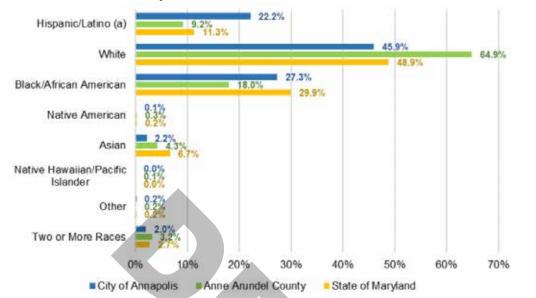


FIGURE 2-11: CHART ILLUSTRATING RACE AND ETHNICITY DISTRIBUTION IN 2021 FOR ANNAPOLIS, ANNE ARUNDEL

COUNTY, AND THE STATE OF MARYLAND.

Source: U.S. Census

#### Race and Ethnicity Distribution Change 2010 - 2021

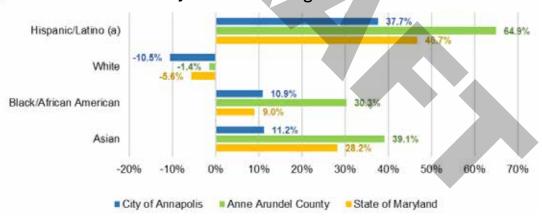


FIGURE 2-12: CHART ILLUSTRATING RACE AND ETHNICITY DISTRIBUTION CHANGE BETWEEN 2010 AND 2021 FOR ANNAPOLIS, ANNE ARUNDEL COUNTY, AND THE STATE OF MARYLAND

Source: U.S. Census

while neighborhoods further inland contain the vast majority of the City's minority population. The accompanying map, while a general approximation of the distribution of race and ethnicity in the City by Ward, depicts the increasing diversity in Wards 3, 4, 5 and 6 in contrast to the less diverse areas of Wards 1, 2, 7 and 8. No minority group alone has a true majority in any ward, meaning more than 50 percent of the population. However, Ward 4, which includes Village Green, Annapolis Walk, and the redeveloped

Newtowne 20 communities, has a larger Black/African American population than any other ward making up 42.7 percent. Similarly, Ward 3, which includes Parole and Upper West Street, for the first time has more Hispanics/Latinos than other demographic groups, making up 37.1 percent of the population in the ward. The Old Fourth Ward community's population, which has been measured to be the most socially vulnerable, gets absorbed into the generally less diverse Ward 2, but has among the highest proportion of minorities anywhere in the City.

#### **Income Distribution in 2021**

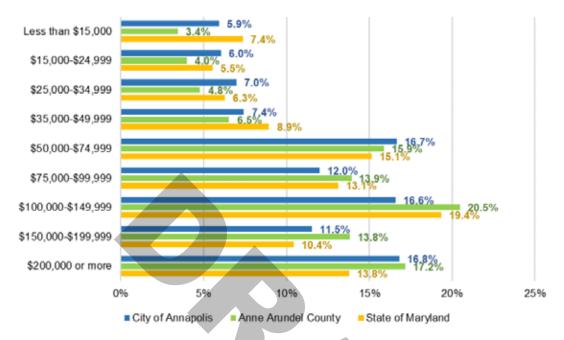


FIGURE 2-13: CHART ILLUSTRATING INCOME DISTRIBUTION IN 2021 FOR ANNAPOLIS, ANNE ARUNDEL COUNTY, AND THE STATE OF MARYLAND

Source: U.S. Census

#### **Income and Poverty**

Annapolis has a large number of high income earners, a large number of low income earners and not as many earning in between, so the median income does not tell much of the story. The city's median household income at \$87,850 is lower than that of Anne Arundel County at \$102,346, however the per capita income is actually higher in Annapolis at \$53,769 than in the County at \$50,101. This is mostly due to the high number of non-family single-person households with higher individual incomes compared with larger family households, more common in Anne Arundel County, where incomes are spread across multiple members of the household. In fact, Annapolis has a comparable median household income to the State, but its per capita income is more than 20 percent higher than the State per capita income.

There is a similar percentage of the highest income earning households (those that earn \$200,000 or more) between Annapolis and Anne Arundel, at 16.8 and 17.2 percent, respectively, but there are more households that earn less than \$50,000 in Annapolis. Household incomes have been slowly pushing

outward from the median household income. In 2000, a larger percentage of households earned between the 80 percent and 120 percent levels of Area Median Income (AMI). As of 2020, that has shifted to where more households earn either below or above that 80 to 120 percent of AMI, which equates to between around \$70,000 and \$105,000.

Still, even though the gap between earners is growing, those households that earn the lowest level of income have been decreasing as a percentage of all households. The poverty rate was as high as 13 percent in 2000 and in 2020 had lowered to 10.5 percent. The percentage of households that earn less than \$50,000 a year was much higher in 2000 and was actually greater than the percentage statewide, but has dropped significantly in 20 years to less than the statewide percentage (26.3 percent versus 28.1 percent). This decline in the proportion of low-income earning households has not correlated with a reduction in the percentage of households that experience a high cost burden as housing prices have risen faster than incomes.

#### **Rising Population Groups**

The population data for Annapolis from the 2020 Census reveals a striking rise in population among two specific groups: 65 and older and Hispanic/ Latino. Since 2010, each population grew more than three times faster than the next closest group with the 65 and older population increasing by 48.8% since 2010, and Hispanic/Latino population increasing by 37.7%. While this Plan aims to address the needs of all Annapolis residents, faster growing populations have the potential to be more impacted by this Plan, and a greater impact on the city, so it's important to understand these groups in detail to ensure that there are adequate recommended actions to address their needs. The needs of these groups also overlap in many ways with the needs of the broader population. It is often noted by the American Association of Retired Persons (AARP):

"If you build a community great for an older adult, you build a community great for everyone".

#### 65 and Older Population

With a quarter of Annapolis households housing a resident aged 65 or older, it is necessary to understand the resources that Annapolis' senior population require and improve resources for this demographic. A growing number of elderly residents within Annapolis are continuing to prolong retirement and stay within the workforce which has implications on access to mobility options. Continuing to ensure ADA compliance in all new development projects and infrastructure upgrades is important to ensuring the walkability and safety for an aging population. Improvements to transit and other mobility options that are reliable and easy to use is also paramount for this population. Chapter 6: Transportation and Chapter 7: Community Facilities include many Goals and Recommended Actions designed with the 65 and older population in mind.

Key metrics of the 65 and older population:



28% of all households in Annapolis have someone aged 65 or older



17% of Annapolis residents are aged 65 or older which is 0.4% above the average within Maryland. The largest demographic group within this population is aged 65-74.



31% of residents aged 65 or older has worked within the past 12 months.



5% of the residents aged 65 or older live below the poverty line which is 4% below the city average.



70% of the residents aged 65 or older identify as White, 23% identify as Black, and 4% identify as Hispanic. The remainder identify as mixed or Asian.

#### **Hispanic/Latino Population**

Annapolis' Hispanic/Latino population will likely continue to be a fast growing demographic as long as the city maintains a robust economy. A defining feature of this population is a much higher than average number of residents living below the poverty line. For lower income residents, affordable and reliable transportation options are a necessity to access work, school, and leisure. An improved Annapolis transit system or micro-mobility network can help Hispanic/ Latino residents navigate the city in a safer manner when they may have few other options. Speaking with Spanish speaking residents to place micro-mobility e-scooter or e-bike share locations at key junctions can help to bring resources to residents that would use them more frequently. Hispanic/Latino residents do attend AACPS schools within Annapolis and therefore require transportation assistance while attending schools but living outside bus service routes.

Annapolis may be drawing these populations for varying reasons, but the Hispanic/Latino and 65 and older populations share some similar needs. Both populations rely on safe and reliable mobility options that must begin with a connected sidewalk network that is ADA-compliant. Both populations will also benefit from community facilities which are accessible and affordable, particularly health services. And perhaps most importantly, both populations are relying on the city to create more housing options to meet their varying income and household needs. The Hispanic/Latino population has a higher than average household size and lower than average household income which makes housing options in today's Annapolis very limited. The 65 and older population is comprised of both new residents to Annapolis and those who have been residents for many years and desire to age in place. According to AARP, nationally 8 in 10 persons in this group wants to stay in their community as they age. For this to be possible, the city must do more to diversiify its housing stock to create more units appropriate for aging adults, many of whom may be on fixed incomes.

Key metrics of the Hispanic/Latino population:



57% of Hispanic/Latino residents carry a high school diploma or higher education degree which is 32% lower than the Annapolis average.



61% of Hispanic/Latino residents are foreign born with 39% being naturalized citizens.



The average household size among Hispanic/Latino residents is roughly 4 people in comparison to an average household size of 2.4 among the broader population.



30% of Hispanic/Latino residents over 5 years old only speak English as a primary language with the remaining residents having a grasp of both English and Spanish.



21% earn below the poverty line which is 7% higher than the city average. 38% of Hispanic/Latino residents live at or above the area median income which is 8% lower than the average for Annapolis.

#### **Housing Affordability**

The cost of housing in Annapolis has been a major obstacle to quality of life for many households and a major factor in determining demographic patterns, a dynamic seen in many other cities across the country over the last decade. This phenomenon has only been worsening as the demand for housing has outpaced the supply. This is particularly acute in Annapolis where limited housing options and rising costs for the housing that does exist have become major determining factors in who gets to live in Annapolis and who does not.

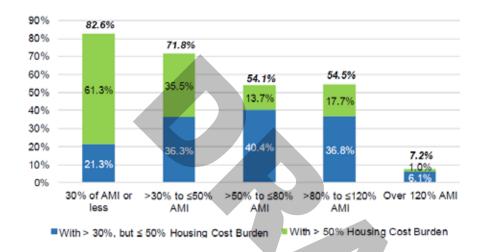
The housing cost burden, defined by the U.S. Department of Housing and Urban Development (HUD) as paying more than 30 percent of gross monthly income on housing, has been on the rise in Annapolis. This includes utility payments in addition to rental or mortgage payments and associated costs. A severely cost-burdened household is one that spends more than 50 percent of its gross monthly income on these housing costs. For more detail on housing and housing prices, refer to Chapter 5: Housing. The product of these faster rising housing prices and increasing proportion of cost-burdened households has been the gentrification of certain neighborhoods that were historically more mixed-income such as in Eastport. It has been shown that neighborhoods with diverse income households are more resilient and have a higher quality of life across all incomes than those where income is skewed in one direction.

In Annapolis, 27.4 percent of owner-occupied households and 43.1 percent of renter households are cost-burdened, while in Anne Arundel County 22.6 percent of owner-occupied households and 42.4 percent of renter households are cost-burdened. Although these numbers are similar, Anne Arundel County has far fewer rental households as a percentage of all households. The City has a near fifty-fifty split between rental and owner-occupied households (46.0 percent versus 54.0 percent), while the County has around a quarter rental households and three-quarters owner-occupied households

(25.2 percent versus 74.8 percent). Between both, the number of owner-occupied housing units has been on the rise. However, in Annapolis, the number of renter-occupied units has actually decreased by 4.5 percent from 2010 to 2020. The squeeze of available rental housing in the City is thus even tighter as more households compete over less available rental housing and are unable to afford owner-occupied housing.

Roughly one in five renter households or 20.3 percent are severely cost-burdened. The median rent for a three-bedroom multifamily unit is \$2,033, unobtainable to 44 percent of all households in the City. Thus, nearly 79 percent of low-income rental households or those that earn between 50 and 80 percent of the area median income (AMI) are costburdened. At approximately \$625,000, the median sale price for a single family unit in Annapolis is also unobtainable for a large portion of the population. Based on a series of merited assumptions regarding down payment, mortgage rate, and monthly payment, only households earning greater than 140 percent of AMI would be able to afford a home at that price level. Just 12.7 percent of single-family units sold between September 2020 and August 2021 were sold below \$400,000, the maximum affordable price for a household earning 80 percent of AMI. As is evident, the number of housing units built in recent years has been more in the higher price range as opposed to a more affordable price range. A variety of strategies to increase the availability of affordable housing are necessary to reduce the high cost-burden among middle- and low-income earning households. Chapter 5: Housing, introduces the affordable housing strategies this Plan intends to implement.

#### Housing Cost Burden Among Owner Households 2013 - 2017

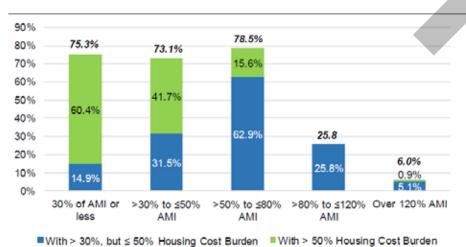


#### FIGURE 2-14: CHART ILLUSTRATING HOUSING COST BURDEN IN ANNAPOLIS AMONG OWNER HOUSEHOLDS BETWEEN 2013-2017.

Source: U.S. Department of Housing and Urban Development, CHAS, 2013-2017 five-year sample period

Note: AMI Levels are HAMFI Levels (HUD Area Median Family Income), the metric used in HUD CHAS data sets.

#### Housing Cost Burden Among Renter Households 2013 - 2017



#### FIGURE 2-15: CHART ILLUSTRATING HOUSING COST BURDEN IN ANNAPOLIS AMONG RENTER HOUSEHOLDS BETWEEN 2013-2017.

Source: U.S. Department of Housing and Urban Development, CHAS, 2013-2017 five-year sample period

Note: AMI Levels are HAMFI Levels (HUD Area Median Family Income), the metric used in HUD CHAS data sets.

#### **Employment**

Reflecting the robust local economy in Annapolis, residents participate in the labor force at a higher rate than those outside of the City and are spread across a variety of professions. The labor force participation rate for the City of Annapolis stands at 72.4 percent as of 2019, lower than the 84 percent participation rate the 2009 Comprehensive Plan reported, but higher than the labor force participation rates for Anne Arundel County and the State of Maryland (69.9 percent for the County and 67.7 percent for the State). These rates likely may have changed since the start of the COVID-19 pandemic, but less in Annapolis than in other locations.

The largest industries in the City are those that generally require a higher education degree. The four most prevalent industries - professional, scientific, and scientific services; public administration; healthcare and social assistance: and educational services - all combine to make up nearly half or 46.3 percent of the employment among Annapolis residents. Accommodation and food services, and retail trade each only consist of less than 10 percent of the jobs available in Annapolis. The four largest employers in Annapolis, albeit that employ many residents of Anne Arundel County and even beyond the County limits, are the State Government, the County Government, the U.S. Naval Academy, and the City Government. They all combine to supply 20,372 jobs, all in the public sector. Notably, all of these large employers are located in the area of the City where some of the wealth is concentrated and where the cost of living is highest.

Occupations that Annapolis residents work in at a higher rate than across the County or State include Management, Business/Financial, and Education/ Training/Library. Management specifically is the type of occupation identified by the largest number of Annapolitans at 16.5 percent. The City notably has a lower percentage of residents who work in technical or healthcare-based occupations such as production,

transportation, installation/maintenance/repair, construction, or healthcare support than the County or State. These are all professions that offer lower barriers to entry for residents who are not as highly educated and have less income to spend on higher education.

#### **Education**

The presence of the State government, County Government, the Naval Academy, St. John's College, and many other institutions has led to Annapolis being a highly educated City compared to others of its size. Of residents aged 25 or greater, 23.6 percent have obtained a graduate or professional degree. With proximity to Washington, D.C. and Baltimore, Anne Arundel County and the State of Maryland also have a fairly educated population on average compared to the nation as a whole, but fewer on average have a graduate or professional degree than in Annapolis (18.5 percent in Anne Arundel County and 19.3) percent in the State of Maryland). By contrast, even though the percentage of residents with a high school diploma or equivalent is very high at 88.1 percent, the number for the County and State is higher at 92.7 and 90.5 percent respectively. Both, the proportion of the population with degrees and the proportion of the population without a high school diploma or equivalent have consistently been greater than the percentages for the County and State.

Overall, the education level has been steadily rising across all three measures: high school diploma or equivalent, bachelor's degree or higher, and a graduate or professional degree; but there is an opportunity to improve even more on the percentage of residents with a high school diploma or equivalent that could improve the economic outcomes for those with fewer opportunities.

#### **Top Ten Major Annapolis Employers in 2021**

COMPANY	BUSINESS TYPE	EMPLOYEES
State of Maryland	State Government	12,132
Anne Arundel County	County Government	5,190
U.S. Naval Academy	Educational Institution	2,500
City of Annapolis	City Government	550
Annapolis Waterfront Hotel	Hospitality	215
St. John's College	Educational Institution	200
Annapolis Yacht Club	Hospitality	200
Comtech Telecommunications Corp.	Telecommunications	200
Main & Market	Hospitality	180
Spa Creek Center Genesis Healthcare	Healthcare	160

TABLE 2-2: TOP TEN ANNAPOLIS

EMPLOYERS IN 2021 WHICH

UNDERSCORES THE SIGNIFICANT SHARE

OF JOBS IN GOVERNMENT, EDUCATION,

AND HOSPITALITY.

Source: Anne Arundel Economic Development Corporation, August 2021

#### Resident Employment By Industry in 2021

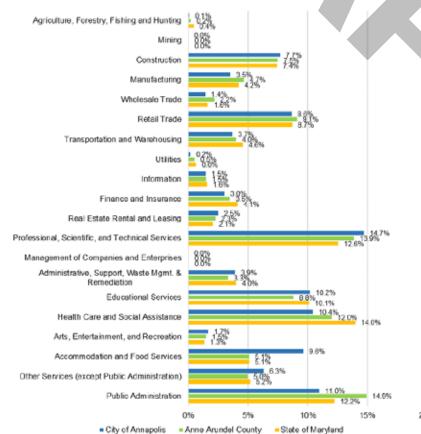


FIGURE 2-16: CHART ILLUSTRATING RESIDENT EMPLOYMENT BY INDUSTRY IN 2021

Source: ESRI Business Analyst, 2021

**Note:** Totals may not match other tables due to independent rounding and use of different sources for the estimates.

#### **Commute Patterns**

As the employment data in this chapter makes clear, Annapolis has a particularly strong public sector economy that supplies jobs at all skill levels, as well as a large hospitality sector. The Bureau of Labor Statistics estimates that the city draws over 8,500 workers each day from outside of the city limits which is significant given that the city's population is only approximately 40,000 people. During the annual legislative session of the Maryland General Assembly, the number of commuters coming into the city grows even higher.

The city is also a hub for workers who commute to jobs beyond the Annapolis. Only 18.4 percent of the more than 16,000 employed residents actually work inside the city. The most frequent destination for residents to work is Anne Arundel County outside of the city limits

which draws 34.2 percent of employed residents. Another 47.6 percent of employed residents commute to destinations further away including 10.2 percent to Prince George's County, 6.5 percent to Washington, D.C., 5.3 percent to Montgomery County, and 4.9 percent to Baltimore City. The number of employed residents commuting to locations further from the City had been increasing during the last decade ending 2020, but since the start of the COVID-19 pandemic, more residents have been able to work-from-home regardless of the location of their employer. This is a trend that is not likely to revert back to the way it was prior to 2020. Chapter 6: Transportation, also covers the commuting patterns of city residents in regard to mode of travel.

#### Commuter Flows for City of Annapolis in 2018

#### **RESIDENTS BY PLACE OF WORK**

	EMPLOYED RESIDENT	
PLACE OF WORK	NUMBER	PERCENT
Anne Arundel County	8,439	52.6%
City of Annapolis	2,954	18.4%
Parole CDP	2,197	13.7%
City of Baltimore	791`	4.9%
Glen Burnie CDP	311	1.9%
Severna Park CDP	261	1.6%
Balance of County	1,925`	12.0%
Prince George County	1,634	10.2%
District of Columbia	1,051	6.5%
Montgomery County	844	5.3%
Baltimore City	791	4.9%
All Other Locations	3,295	20.5%
TOTAL EMPLOYED RESIDENTS	16,055	100.0%

#### **WORKERS PLACE OF RESIDENCE**

	WORKERS		
PLACE OF RESIDENCE	NUMBER	PERCENT	
Anne Arundel County	12,326	49.9%	
City of Annapolis	2,954	12.0%	
City of Baltimore	1,220	4.9%	
Arnold CDP	910`	3.7%	
Glen Burnie CDP	832	3.4%	
Annapolis Neck CDP	800	3.2%	
Balance of County	5,610`	22.7%	
Baltimore County	1,676	6.8%	
Prince Georges County	1,641	6.6%	
Baltimore City	1,220	4.9%	
Queen Anne's County	973	3.9%	
All Other Locations	6,883	27.8%	
TOTAL WORKERS	24,719	100.0%	

#### TABLE 2-3: COMMUTER FLOWS INTO AND OUT OF THE CITY OF ANNAPOLIS IN 2018

Source: Bureau of Labor Statistics Longitudinal Employer-Household Dynamics (LEHD)

#### **SUMMARY OF TRENDS**



FIGURE 2-17: OVER THE LAST THREE YEARS ANNAPOLIS WEATHERED THE IMPACTS FROM THE COVID-19 PANDEMIC WHICH TRIGGERED A WIDE RANGE OF LASTING AFFECTS ON THE CITY'S POPULATION.

Source: Capital Gazette

The Annapolis of today is a function of the immense opportunities its offers and challenges it faces, socially, environmentally, and economically. The COVID-19 pandemic challenged the city in all of these ways more than any other event in memory. The city persevered and is still a small but diverse and culturally dense community. Its neighborhoods have aged and their residents have aged along with them, but the city still stands as a thriving place of opportunity no matter a person's age or background.

The barrier to entry for those in the middle and lower income tiers, however, has had the effect of either pushing out some segments of the population or restricting their ability to live comfortably in their community. The high income and highly educated residents of Downtown, Eastport, and West Annapolis have had the most to gain in recent years even as the rest of the City has rapidly diversified. On the whole, the population has grown slowly but steadily

and will likely continue to do so, especially in newer parts of the City as new development is concentrated in these areas in the form of infill development and redevelopment. This Plan aims to ensure that new development as well as any infrastructural or programmatic changes are equitable and benefit the greater population.

The sum of these demographic snapshots sheds light on what it takes to ensure Annapolis is a Thriving, Functional, and Adaptive City not just for one community but for all communities as a whole. The demographic trends thus provide both a key lens, and a foundation, for the goals, performance metrics, and recommended actions found in the following chapters of this plan. Subsequent chapters highlight the existing conditions of the City's resources and ways in which improvements to these conditions can elevate the quality of life and lower the social vulnerability across all segments of the population.



### THE THRIVING CITY

#### 3. MUNICIPAL GROWTH

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

#### 4. LAND USE

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

#### 5. HOUSING

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

Bridging barriers.
Connecting communities.



## <u>3.</u> MUNICIPAL GROWTH

#### **OVERVIEW**

All cities have a vital interest in the type, character and impact of growth both within and outside their municipal boundaries. In the context of this Plan, growth is interpreted in several ways: as new businesses which open in Annapolis or choose to locate here; as new residents who choose to move to the city or children who are born here; as new development or redevelopment of property; and as land that is annexed to expand the city limits. For example, a maritime business opens a new office in one of the City's maritime districts, the company hires ten people who choose to move to the city to be closer to work, and they move into new housing recently built in an area of the city where they can walk to conveniences and amenities. Growth is represented through all of these decisions, and the City's policies can dictate how it chooses to grow, which in turn holds tremendous consequence. It can dictate how diverse the city Is demographically, how healthy the city is, how well the city's natural resources are managed, and how safe and easy it Is to move around the city, among other outcomes.

In the coming years, growth in Annapolis will be driven by a focus on inclusivity, sustainability, technological innovation, and connectivity. The result will be a city that is diverse, environmentally rich, resource efficient, and where having access to a personal vehicle is not a prerequisite for success.

Projections of household growth and physical expansion are discussed in this chapter and both are

projected to rise in a very measured and limited way. Based on these projections, a forecast is provided for the year 2040 with the anticipated number of housing units, and an assessment of the potential impact of this growth on key community facilities and services. In the development of this Plan, a fiscal impact analysis was also conducted based on the anticipated growth through 2040 to gauge the City's ability to maintain high levels of service to residents. This analysis is included in the Appendices and found the City's fiscal health to be sufficient to accommodate the anticipated growth which will be very modest in comparison to other nearby jurisdictions.

Municipal expansion occurs when properties are formally incorporated into the municipality through annexation, a process which must always be initiated by the property owner, not the City. The Growth Area is the area outside of the City boundary which meets the guidelines for the State's Priority Funding Areas and is deemed sensible for annexation. The chapter presents a modestly revised Growth Area boundary from that recommended in the last Comprehensive Plan (2009). It also provides general land use recommendations for the properties within the Growth Area.

Given the City's limited Growth Area, this Plan's emphasis is on promoting appropriate infill development and the thoughtful redevelopment of properties already in the City limits—that is, when they become functionally or economically obsolete. Chapter 4: Land Use provides guidance on where infill development and redevelopment is most suitable and performance standards to ensure development outcomes benefit the city and surrounding communities.



# ZONING DEVELOPMENT CAPACITY

#### **Estimating Growth Potential**

The term "Zoned Development Capacity" refers to the land available and the housing units which could be built within City limits under current zoning rules. An effective estimate helps answer questions like: Is there generally enough buildable land to meet future demands for housing; and are community facilities such as parks sized to accommodate the growth allowed under current zoning?

Zoned Development Capacity is a measure of the potential for future housing units given the character of the land (whether it is buildable or not), its zoning, and the presence of or plan for public water and sewerage facilities. In estimating the City's capacity for development, "buildable land" refers to acreage that meets each of the following criteria:

- It is undeveloped or clearly under-developed as evidenced by the presence of only one building on a large tract of land for example.
- It is unencumbered by serious environmental constraints.
- It has the zoning to permit residential development.
- It is mapped within either a current or planned water and sewerage service area.
- It is otherwise not actively in use.

In Annapolis, it is not uncommon to find large parcels of residentially zoned land being used for religious or other institutional purposes. Such parcels are not counted when estimating development capacity, and neither are publicly held lands, such as schools. Capacity is based on a parcel's reasonable likelihood of being developed to the extent allowed under its existing zoning.

## Residential Growth Potential Under Current Conditions

There are 13 separate residential zoning districts in the City. Chapter 5: Housing documents dwelling types and densities allowed in each zone. To summarize: only single-family detached houses are permitted in the R-1 and R-2 districts, while the other residential zones allow for duplexes, single-family attached dwellings (such as townhouses), and multi-family buildings. Other housing is allowed in Annapolis as well, including institutions for the care of the aged, nursing homes, and other forms of assisted living communities. These institutional settings are not counted as dwellings or households, but their residents are counted as part of the City's population. From a development perspective, the City does track assisted living communities, and there are currently three such developments under review by City staff. However, these developments, while providing quality housing to senior residents, generate a fraction of the impact on community facilities, such as roadways and schools, in comparison to conventional housing types. They do have a more acute impact on Fire/EMS services and this is addressed in Chapter 7: Community Facilities.

There is another special residential development type allowed under City Zoning, the residential "planned development". Upon the Planning Commission's approval of a planned development, a developer can be granted flexibility in the design and arrangement of a housing project or neighborhood. Planned developments are allowed in each of the residential zones except R-1, C1 and C1-A.

A review of the City's property tax records and maps reveals that there are very few vacant lots within existing neighborhoods and few undeveloped tracts of land within the entire City.

As shown in the table on the facing page, there is no remaining buildable land in the R-3 and R-4 zones, the only zones which currently allow for even modest density such as duplexes and triplexes. Within the R-1

ZONING DISTRICT	NET NEW UNITS
R1, R1-A, R1-B	43
R2	45
R2-NC	0
R-3	0
R3-NC	0
R3-NC2	0
R3-R	0
R-4	0
R4-R	0
C1	0
C1-A	0
Total	88

TABLE 3-1: ZONED DEVELOPMENT CAPACITY: RESIDENTIAL DISTRICTS

Source: City of Annapolis

and R-2 zones, capacity is limited to a combined 88 potential buildable lots which would then equate to the total net new dwellings units allowed in all of the City's residential zones.

Chapter 5: Housing provides greater detail on the types and densities of housing permitted within the City's residential and non-residential zoning districts. It is important to note that City zoning allows some form of residential development in all non-residential districts except the Industrial zone. Presently there are four projects under review in business zones and these combined would add 270 new housing units. In the B-2 District, a development project called Parole Place would add 158 units. Also in the B-2 District, the Lofts at Eastport Landing project would add 98 units. In the BCE District, a project called Chinquapin at Lincoln Drive would add 8 units. And in the MX District a project called West Village would add 6 units. These 270 housing units, because they are known

#### **Recovery Zones**



FIGURE 3-2: MARKET SPACE TRANSFORMED FROM A ROADWAY AND PARKING AREA INTO A SUCCESFFUL PLAZA AS PART OF THE RECOVERY ZONE INITIATIVE

Source: Jeff Voigt

In response to the COVID-19 pandemic which dramatically impacted Annapolis beginning in 2020, the City implemented the Recovery Zones initiative to provide local businesses with a lifeline to stay afloat and endure through the precarious economic times. The initiative allowed restaurants in various locations across the city to expand their service into adjacent outdoor areas when indoor service was curtailed for public health mandates. While many restaurants used off-street parking areas to expand dining, others used public right-of-way areas that were formerly streets and parking spaces. In many cases, places that had been previously designed for cars became safer and more inviting public spaces for people to congregate which then added value to surrounding businesses.

UNDER CONSTRUCTION	NET NEW UNITS	SQ FT	NET NEW SQ FT	MPDU*
9 St. Mary's / 99 Compromise St.	1	n/a	n/a	n/a
100 Ridgely Avenue	4	6,200	4,952	n/a
106-108 Annapolis Street	6	14,186	10,498	n/a
Athens (former Rocky Gorge)	48	n/a	n/a	6
Bay Village Suites****	105	n/a	n/a	n/a
Chinquapin at Lincoln Drive	8	11,600	11,600	n/a
Griscom Square, Taylor Ave./ Bay Ridge Ave.	12	n/a	n/a	1
Parkside Preserve, 745 Annapolis Neck Rd.	130	n/a	n/a	19
South Annapolis Yacht Center**	11	14,600	14,600	n/a
Terrapin Station	5	n/a	n/a	n/a
Thomas Woods**	10	n/a	n/a	n/a
Total Institutional Units	105		•••••	
Subtotal not including Institutional Units	235	46,586	41,650	26
PERMITS PENDING				
Godspeed Senior Housing****	109	27,787	26,930	n/a
Lofts at Eastport Landing	98	11,898	11,898	14
Parole Place	158	30,000	30,000	23
The Willows***	58	n/a	n/a	n/a
Villages at Providence Point****	351	n/a	n/a	n/a
West Village	6	1,755	1,755	n/a
Total Institutional Units	460			· • · · · · · · · · · · · · · · · · · ·
Subtotal not including Institutional Units	320	71,440	70,674	37
Total not including Institutional Units	555	118,026	112,324	63

TABLE 3-2: ACTIVE RESIDENTIAL DEVELOPMENT PROJECTS (COMMONLY IDENTITIFED AS THE "DEVELOPMENT PIPELINE")

Source: City of Annapolis

<sup>\*</sup> Annapolis City Code requires that 15% of the houses for sale or rent in new subdivisions of 10 or more units be moderately priced dwelling units (MPDUs). This means that the sale price or rent is below the market rate for other units in the same development and affordable to households with an income that is 100% or less than the median family income for the Baltimore Metropolitan Statistical Area (MSA).

<sup>\*\*</sup> This project was permitted prior to the current Moderately Priced Dwelling Unit requirement.

<sup>\*\*\*</sup> This projects is 100% affordable housing units and therefore exempt from the Moderately Priced Dwelling Unit requirement.

<sup>\*\*\*\*</sup> Assisted Living developments are exempt from the Moderately Priced Dwelling Unit requirements

and reasonably likely to happen, are counted as part of the City's residential development pipeline. While it is reasonable to assume that other mixed use or residential projects could be proposed in the City's non-residential zoning districts. This Plan only includes those that are clearly known as part of the capacity evaluations in order to avoid speculating about the various factors that could give rise to additional units on commercial land.

#### **The Development Pipeline**

On account of development projects which had already been approved, the number of households can be expected to grow regardless of this Plan's recommendations. The table on the facing page lists these projects and the number of housing units accompanying each.

A total of 235 net units, not including institutional units such as assisted living and college housing, are under construction and may be expected to be occupied by the end of 2025. Another 320 units, not including institutional units, contained in separate projects, are awaiting the issuance of final permits. In all, 555 net new housing units can be expected from these projects if all are approved as currently designed. Importantly, among these expected units are 63 Moderately Priced Dwelling Units-- required by City Code for developments of 10 units or more (excluding assisted living communities).

Of note, the City expects nearly the same number of new units in coming years dedicated to assisted living for seniors, as is projected in the development pipeline. Three specific projects are projected to yield a total of 565 assisted living units: Bay Village Suites, Godspeed Senior Housing, and the Villages at Providence Point. As mentioned above, while these developments are tracked, they do not contribute to the development pipeline from a growth perspective.

#### **Implications**

In summary, the City's capacity for residential development, in its residential districts is nearly exhausted. Based on the developments currently in the pipeline. If all pipeline projects are approved, only 47 acres of undeveloped land zoned for residential use will remain Citywide. At that point, the City's land base will be 99 percent developed, effectively meaning build-out has been reached. Of course, the City can count on there being occasional lot line adjustments creating buildable residential lots or the conversions of single family homes to duplexes, but major development activity on residentially zoned land is near an end.

One of the consequences of this will be that the redevelopment of commercially zoned properties will increasingly be looked at to meet housing demand. As noted above, the Parole Place project, on land zoned B-2, would add 158 units. Another example is the 98-unit Lofts at Eastport Landing, a proposed redevelopment of a portion of the Eastport Shopping Center.

In summary, the pipeline projects plus the existing capacity results in approximately 1,127 new housing units. This represents just seven percent of the total number of existing households in Annapolis based on 2020 Census data.

# PROJECTIONS OF HOUSEHOLD GROWTH

A forecast is an essential step in preparing a comprehensive plan. A forecast allows the City to properly anticipate and prepare for the likely impacts and needs that may arise from growth. Understanding the impacts of future growth on community facilities and services helps ensure that adequate facilities are in place to meet future needs.

This Plan recognizes that accurate forecasting for a city like Annapolis located in a growing metropolitan region can be difficult; therefore the Plan evaluates various alternative projections including a projection prepared by the Baltimore Metropolitan Council. It arrives at a selected forecast in light these comparative

POPULATION	2010	2020	% CHANGE
City of Annapolis	38,375	40,812	6.4%
Anne Arundel County	537,656	588,261	9.4%
State of Maryland	5,773,552	6,177,224	7.0%
HOUSEHOLDS	2010	2020	% CHANGE
City of Annapolis	16,130	16,751	3.8%
Anne Arundel County	199,378	219,971	10.3%
State of Maryland	2,156,411	2,321,208	7.6%
AVG. HOUSEHOLDS SIZE	2010	2020	
City of Annapolis	2.34	2.40	
Anne Arundel County	2.63	2.63	
State of Maryland	2.61	2.61	

Sources: U.S. Census Bureau via ESRI Business Analyst, 2010 Census, 2021; Maryland State Data Center, Department of Planning, 2020 Census, 2021; BAE, 2021

TABLE 3-3: POPULATION AND HOUSEHOLD GROWTH: 2010-2020

Source: City of Annapolis

projections and the goals of this Plan. This Plan does not accept an unrealistic forecast of growth and then "force" a design on the City to accommodate that growth.

Four alternative projections are documented in the table and graph on the facing page. Each represents a possible future track for household growth through 2040. Each begins with the 2020 estimated baseline of 16,407 households.

- Projection 1 is the projection for Annapolis from the Baltimore Metropolitan Council. It assumes an increase of only about 433 housing units over 20 years and probably undercounts actual household growth because the City already has 554 units in the pipeline, 414 of which are under construction. The growth rate under this scenario would be substantially less than recent trends.
- Projection 2 assumes that all the units in the pipeline are built and each of the potential 292 infill capacity units are also built and occupied by 2040. In this scenario the City would add about 850 units and grow at an average annual rate of 0.25 percent, again slower than the past 20 years.
- Projections 3 projects the City will add households at the same rate over the next 20 years as it did between 2000 and 2020. Under this scenario, 1,463 units would be added.
- Projection 4 assumes the City maintains its current 7.58% share of County households through 2040. Under the scenario the City would grow at a somewhat higher rate than it did over the previous 20 years and add about 1,753 households.

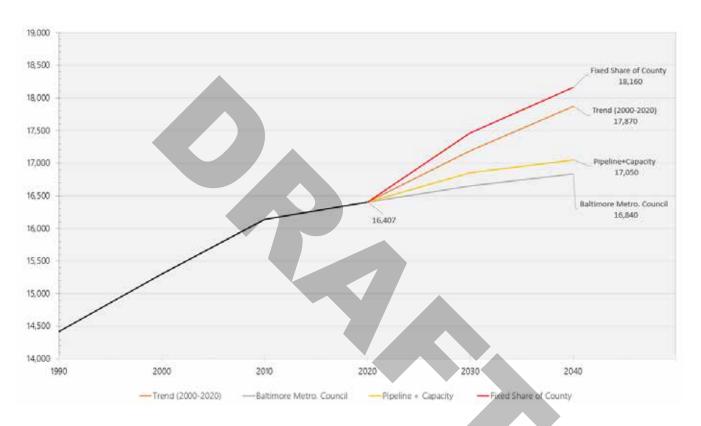


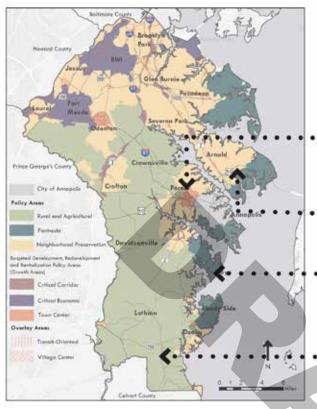
FIGURE 3-3: ALTERNATIVE PROJECTIONS OF HOUSEHOLD GROWTH: 2020 - 2040, GRAPHED

Source: City of Annapolis

PROJECTED SCENARIOS	2020	2040	CHANGE	AVG. ANNUAL RATE OF GROWTH (%)
SCENARIO 1: Baltimore Metropolitan Council	16,407	16,840	433	0.13
SCENARIO 2: Pipeline Development + Capacity	16,407	17,050	643	0.19
SCENARIO 3: Trend (2000 - 2020	16,407	17,874	1,467	0.43
SCENARIO 4: Fixed Share of County (7.58% of County)	16,407	18,160	1,753	0.51

TABLE 3-4: ALTERNATIVE PROJECTIONS OF HOUSEHOLD GROWTH: 2020 - 2040

Source: City of Annapolis



Plan2040 recognizes and supports the diverse landscapes and communities of Anne Arundel County. The scale and character of natural features, neighborhoods, and activity centers varies across the County. While the needs and priorities of each community may vary, in general, Plan2040 takes the following approaches:

- Targeted Development, Redevelopment and Revitalization Areas promotes public and private investment in designated Town Centers, Commercial Revitalization Areas and Sustainable Communities
- Neighborhood Preservation Areas primarily limits new development with public investments in walking and biking infrastructure, parks, and schools
- Peninsulas supports protection of natural shorelines, road improvements, stormwater management, adaptation to sea level rise, and decreases development potential on the planned land use map
- Rural and Agricultural continues policies to protect rural lands, support the agricultural economy, and improve public transportation and services

FIGURE 3-4: THIS MAP SUMMARIZES THE GROWTH STRATEGIES FOR THE AREAS AROUND ANNAPOLIS AS ADOPTED IN ANNE ARUNDEL COUNTY'S PLAN 2040 GENERAL DEVELOPMENT PLAN

Source: Anne Arundel County

YEAR	CITY	COUNTY	% SHARE OF COUNTY
1990	14,1415	149,114	9.7%
2000	15,303	178,670	8.6%
2010	16,136	199,375	8.1%
2020	16,407	216,500	7.6%

2040 SCENARIOS	CITY	COUNTY	% SHARE OF COUNTY
SCENARIO 1	16,843	239,578	7.0%
SCENARIO 2	17,406	239,578	7.3%
SCENARIO 3	17,874	239,578	7.5%
SCENARIO 4	18,160	239,578	7.6%

## TABLE 3-5: HOUSEHOLD PROJECTION AS A SHARE OF ANNE ARUNDEL COUNTY POPULATION

Source: City of Annapolis

PIPELINE + FORECASTED HOUSING DEVELOPMENT	NET NEW HOUSEHOLDS
Housing Under Construction (as of June 2023)	299
Permits Pending (as of June 2023)	828
Remaning Infill Capacity (Market Driven)	258
SUBTOTAL	1,385
Option A: New Affordable Housing Units Goal	500
Option B: New Affordable Housing Units Goal	600
Option C: New Affordable Housing Units Goal	700

PLANNED HOUSING FORECAST	NET NEW HOUSEHOLDS
2040 Planned Forecast - A	1,885
2040 Planned Forecast - B	1,985
2040 Planned Forecast - C	2,085

#### TABLE 3-6: HOUSING GROWTH FORECAST

Source: City of Annapolis



FIGURE 3-5: MIXED USE INFILL DEVELOPMENT SUCH AS THIS PROJECT RECENTLY APPROVED BY THE PLANNING COMMISSION WOULD ACCOUNT FOR APPROXIMATELY 44% OF FORECASTED HOUSING GROWTH

Source: West Village LLC

In light of this Plan's policies which seek to complete currently proposed development plans, build out of the City's limited infill potential, and encourage the production of more affordable housing through redevelopment, this Plan forecasts that the number of households will track between Projections 3 and 4 noted above; likely closer to Projection 3. Therefore, the adopted forecast for the City would result in adding roughly 1,500 households through 2040. How these households are distributed from a policy standpoint is the basis of the Future Land Use Plan (see Chapter 4: Land Use). This growth will generally be allocated to three groups:

- About 37% to completing the remaining development pipeline;
- About 19% to building out the remaining zoned capacity (e.g. vacant lots); and

 About 44% to mixed use infill and/or strictly residential redevelopment with a priority focus on delivering new affordable housing units.

Under this general scenario therefore, 44 percent of the forecast growth, or 660 housing units, would reflect the potential latent in the City's current commercial zones that the City will plan for.

# IMPACT TO COMMUNITY FACILITIES

# ECONOMIC DEVELOPMENT

For the sake of estimating the potential impact of residential demand on key community facilities, the Plan assumes the addition of approximately 1,500 total housing units. A fiscal impact analysis was completed as part of this Plan, and included in the Appendices, and this study found that the City is equipped to deliver the same level of service to the anticipated household growth over the next twenty years. City's water and sewer systems are adequately sized to accommodate the anticipated growth. Roadways, parks, and stormwater infrastructure, while generally adequate to support this growth, will receive targeted investment with each new development as determined by the City's Adequate Public Facilities ordinance. Public schools, except for the Annapolis High School, have sufficient capacity to accommodate forecast household growth. Annapolis High School is currently at capacity which will constrain larger market rate housing developments. To address this issue, Anne Arundel County Public Schools, which manages all schools in the Annapolis area, is currently developing strategies including redistricting for the entire county.

Police resources, which are already below the ratio of officers to resident population will need to expand personnel to keep pace with added population to maintain mandated service levels. However, Fire resources are equipped to handle the projected growth due to existing capacity, partnerships with County and Navy fire stations, and the limited growth potential of the city In terms of outward expansion.

For more detailed information on the levels of service and capacities of these facilities or services, please see Chapter 7: Community Facilities. This Plan's approach to economic development is closely aligned with its approach to growth. Given that the city will grow very modestly over the coming years, economic development will focus on the city's existing assets and niche industries that distinguish Annapolis both regionally, nationally, and even internationally. These niche industries are the city's maritime industry, its cultural sector, and perhaps most importantly city's hospitality industry which draw millions of visitors to the city each year. While each of these economic areas has grown in recent years, there is still considerable room for expansion and evolution as trends and markets continue to change over time.

Another important economic development focus that connects to each of these niche industries and all commerce in the city is the need to provide equitable opportunities for all residents and those looking to invest in the city. Annapolis is a diverse and inclusive city and it must remain so. It is the a major facet of the city's history and identity, it contributes to quality of life and the culture of the city, and it allows the city to be competitive with other places attracting investment. But for the city to remain sufficiently diverse and inclusive, it must do more to address longstanding inequities. Policies and programs must be put in place to ensure equity. For example, unlike many other jurisdictions, the City currently does not have a procurement policy in place that prioritizes small businesses, minority-owned businesses, womanowned businesses, or veteran-owned businesses. This type of policy would reinforce the city's values and ensure that historically marginalized communities have a better chance at landing City contracts. If the City sets a high standard for its own practices, others in the business community will follow.

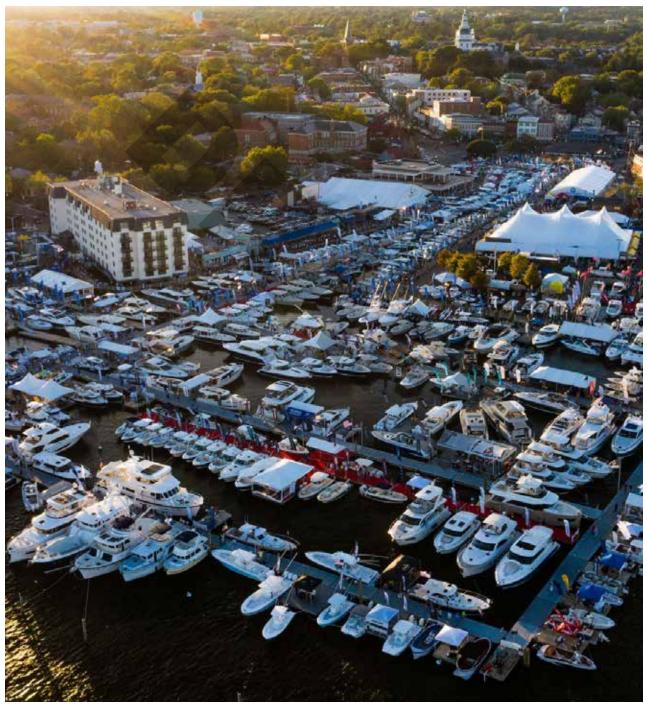


FIGURE 3-6: THE UNITED STATES BOAT SHOWS THAT TAKE PLACE IN ANNAPOLIS ARE BOTH AN ECONOMIC BOOST FOR THE CITY AND CONFIRMATION OF THE IMPORTANT VALUE OF THE CITY'S MARITIME INDUSTRY.

#### **Economic Development Themes**

#### **Evolving Tourism**



FIGURE 3-7: BOUTIQUE LODGING IN DOWNTOWN ANNAPOLIS

Source: Capital Hotel

Tourism has been a singular economic theme for Annapolis for hundreds of years and it remains so. However, as an industry it has not remained static and reflects constant change in visitor preferences, travel trends, and market conditions. Annapolis has long adapted to these changes and will continue to do so which may relate to the development of new attractions that highlight a more diverse and inclusive history of the Annapolis, new ways of getting around the city, new lodging options, and new visitor services. In the coming years, tourism will also expand more beyond the downtown area which has historically driven the majority of tourism interest. The city's other neighborhoods have their own stories to tell and will enliven the tourism experience with greater representation.

#### **Inclusive Opportunities**



FIGURE 3-8: NEW LOCALLY OWNED BUSINESS OPENING Source: City of Annapolis

Equity is a foundational theme of this Plan, and opportunities to improve in this area can be found in nearly every chapter. As it relates to Municipal Growth and economic development, equity can be improved in how the City provides inclusive opportunities for entrepreneurism. Small businesses are the lifeblood of the Annapolis and lend much to the character and attractiveness of the city. As a small city of only eight square miles and almost no area to expand, Annapolis also has limited room for large business developments. Small business is a primary means for an aspiring entrepreneur to establish a foothold in the city and invest in it. While the City currently provides significant support to existing businesses through technical resources, promotion, grants, and other programs, additional investment is needed to ensure opportunities for new businesses are accessible to all and particularly underrepresented populations. A commitment to recruitment, support for Minority-owned and Woman-owned businesses, and other targeted policies will ensure inclusive business opportunities are a signature aspect of Annapolis' economic landscape.

#### **Strengthening the Maritime Industry**

# WE'RE MOVING TO THE HEART OF EASTPORT 104 SEVERN AVE. SEPTEMPER 2021

FIGURE 3-9: MARITIME BUSINESS ADVERTISEMENT

Source: Quantum Sails

Annapolis is one of very few cities in the nation and internationally that provides such a rich assortment of maritime services within a relatively small area. The city is a virtual "one-stop-shop" for the maritime industry and this aspect of the city's economy has lent much to the city's heritage and cultural landscape. However, over the last thirty years, the maritime industry has evolved, and with those changes the need for the City to recalibrate its maritime districts to ensure that Annapolis continues to thrive as a boating center for the Mid-Atlantic. In 2021, a Maritime Task Force was created by City Council to propose recommendations that would strengthen the industry. From these recommendations, the City Council adopted zoning code changes to the maritime districts for the first time since 1987 when the districts were first created. The Annapolis Maritime Industry Fund was also created and will spur the preservation, enhancement, and expansion of maritime businesses in the city. In the coming years, Annapolis should focus on both expanding traditional maritime businesses but also attract companies from the growing "Blue Technology" sector which focuses on ocean research and sustainability.

#### **Cultural Economy**



FIGURE 3-10: ANNAPOLIS FILM FESTIVAL BANNER

Source: Capital Gazette

Annapolis' cultural economy presents itself in many ways-- through the businesses and marketing efforts of its Arts & Entertainment District and other artsoriented businesses throughout the city, through the year-round cultural events which draw thousands of visitors to the city, through the city's diverse cultural institutions, and perhaps most importantly through the city's historic preservation efforts which have created a "museum without walls". These elements of the city stimulate a robust cultural economy and have helped to make Annapolis truly a cultural center for the region. Annapolis will continue to support the foundations for this economy and expand the investment to support and attract more arts-oriented businesses, working artists and other cultural producers, events and cultural programs for residents and visitors alike, and the venues which provide space for these events.

#### **Ensuring Inclusive Economic Opportunities**

The goal of ensuring inclusive economic opportunities is about expanding participation in the local economy, and specific industries, by populations who have been historically under-represented. In Annapolis, as in most of the United States, this means Black and Hispanic populations, as well as women. These are populations which have historically had fewer opportunities to participate in the economy in meaningful ways as business owners or in business leadership roles. Reversing these trends requires targeted programs, funding, and City staff resources to assist these populations with critical support so they can be competitive and pursue more opportunities. There are several programs already in place working toward this goal that should be continued and expanded as well as new initiatives that are needed.

Ultimately, for the goal of ensuring inclusive economic opportunities to be successful, the City of Annapolis will need to be a model in its own purchasing and investment practices. The City will need to establish clear purchasing goals that prioritize investment in locally-owned, minority-owned, and women-owned businesses with realistic and achievable standards; the City will need to monitor its performance in meeting these standards; and the City will need to ensure that it is in compliance with its standards.

Two specific studies have been identified as important steps to diversifying participation in the City's economy by focusing on the City's own purchasing practices: a Procurement Study, and a Disparity Study. Although they are related, each study would provide distinct information needed to understand the current economic conditions. The Procurement Study would gather data on what types of goods and services are typically purchased by the City of Annapolis using tax dollars, and in what quantities, and then how much of that purchasing is going back to local businesses, minority-owned businesses, and women-owned businesses. The Disparity Study would focus more explicitly on equitable policies and the treatment of minority-owned businesses and womenowned businesses historically by City purchasing. In addition to analyzing some of the same purchasing



FIGURE 3-11: A NEW WOMAN-OWNED BUSINESS OPENING IN THE CITY'S ARTS & ENTERTAINMENT DISTRICT WHERE INCENTIVES EXIST FOR ARTS ORIENTED BUSINESSES.

Source: City of Annapolis

data as the Procurement Study, the Disparity Study would also look at racial and gender dynamics within the Annapolis business community in an effort to understand whether there has been a history of unfair treatment or even discrimination, and if so, to what degree.

Although not explicitly focused on equity issues, the City Council established a Small Business Recovery Task Force during the COVID-19 Pandemic which yielded some insights that inform the goal of advancing inclusive economic opportunities. One insight was the lack of a Chamber of Commerce dedicated to Black or Hispanic business development which limits advocacy or programming for these underrepresented businesses. Another insight was that existing Black and Hispanic businesses are prevalent in only certain specific industries, and need to diversify their participation in other areas but may not have the resources to do so.



FIGURE 3-12: THE 2022 GRADUATES OF THE AAEDC INCLUSIVE VENTURES PROGRAM WHICH AIMS TO HELP SMALL, MINORITY-OWNED WOMAN-OWNED, AND VETERAN-OWNED BUSINESSES IN ANNE ARUNDEL COUNTY BY PROVIDING BUSINESS EDUCATION, ACCESS TO CAPITAL, AND MENTORSHIP.

Source: What's Up Media

#### **Current Programs to Preserve and Expand:**

- Inclusive Ventures: This is a program led by the Anne Arundel Economic Development Corporation (AAEDC) with support from the City of Annapolis that uses a peer cohort model to help small, minority-owned, womanowned, and Veteran-owned businesses in Anne Arundel County succeed and grow. The program offers a robust menu of resources including business education, mentorship, and access to capital.
- Meet the Primes: This is an annual event supported by the City of Annapolis to connect small and minority-owned businesses to larger companies and larger procurement programs outside of Annapolis.
- Speed Lending: This is a program led by the Baltimore field office of the U.S. Small Business Administration (SBA) and the Small Business Development Center with support from the City of Annapolis. The program helps connect small and minority-owned businesses in Annapolis to lenders at an annual event.
- African-American Business Grants: This is a new initiative authorized by the City Council in the fiscal year 2024 budget. \$105,000 has been allocated to assist African-American owned businesses with business development costs. The program that will manage this fund is still being developed.

## DESIGNATED GROWTH AREA

The foregoing discussion addressed projected growth through 2040 primarily within the City limits. This Plan must also address the potential expansion of the city. A designated Growth Area is a planned extension of the municipal boundary to encompass lands to be annexed in the future. Under Maryland law, properties must be within a designated Growth Area to be eligible for annexation by meeting the guidelines for the State's Priority Funding Areas and therefore deemed sensible for annexation.

To further define the Growth Area, the State of Maryland, through the Sustainable Growth and Agricultural Preservation Act of 2012, established a "growth tier" framework based on availability of sewer service. By mapping future growth in "tiers," the intent of the law was to limit the spread of septic systems on large-lot residential development to reduce the last unchecked major source of nitrogen pollution into Chesapeake Bay.

Maryland defines municipal growth tiers as:

- Tier I: Areas currently served by City Sewer
- Tier II: Future growth areas planned for sewer
- Tier III: Large lot development and "rural villages" on septic systems
- Tier IV: Preservation and conservation areas

Annapolis is defined as a Tier I Growth Area with highlighted areas in Figure 3-14 showing potential Tier II Growth Areas. Land within a growth tier highlight potential areas that could be sensibly annexed into the City but it is ultimately the landowners' choice to be annexed and responsibility to pay for the cost of connecting to the City's sewer system.

Only a modest Growth Area is recommended and much of it was previously designated in the 2009 Comprehensive Plan. This area is located along MD-2, from Aris T. Allen Blvd. north to and along US-50, the Annapolis Middle School property along Forest Drive, and two other property clusters along Bay Ridge Road at the southern limits of the City.



FIGURE 3-13: THIS AGING SHOPPING CENTER IN PAROLE IS AT AN IMPORTANT GATEWAY TO THE CITY BUT IS CURRENTLY BISECTED BY THE CITY BOUNDARY AND SHOULD BE ANNEXED INTO THE CITY.

Source: City of Annapolis

A large portion of the Growth Area sits at a major gateway to the city, which holds significant potential to enhance the experience of arrival into the city. The area, particularly at the intersection of MD-450 (West Street) and MD-2 (Solomon's Island Road), provides a logical and coherent western boundary. At present, the existing commercial center in this area is awkwardly bisected by the City boundary. If consolidated, the area could accommodate 270 residential units and about 100,000 square feet of new commercial space. There is also an environmentally sensitive forest in this growth area, which is significant to the health of Church Creek that can be permanently preserved as open space.

The properties along Bay Ridge Road provide an opportunity for infill development that could set a higher standard for this aging auto-oriented corridor. Within both sites, a variety of housing options could be developed with improved bike and pedestrian infrastructure In close proximity to nearby retail, parks, and schools. Both sites also have opportunities for a significant investment in Integrated green Infrastructure In the form of improved stormwater management and tree canopy enhancement.

Finally, the Annapolis Middle School property is included in the Growth Area merely on the basis of regularizing the City's boundary. No change from its current use is envisioned.

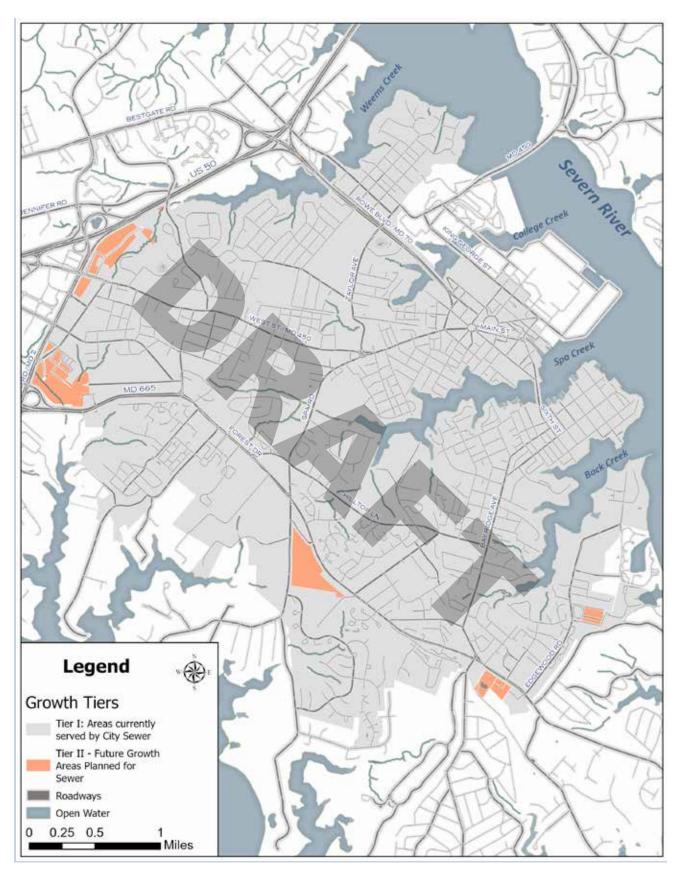


FIGURE 3-14: MAP OF FUTURE GROWTH AREAS WHICH MEET STATE GUIDELINES FOR SMART GROWTH.

# GROWTH BEYOND ANNAPOLIS



FIGURE 3-15: THE ANNAPOLIS TOWNE CENTER MIXED USE DEVELOPMENT REPLACED THE PAROLE SHOPPING CENTER AND HAS BECOME AN ANCHOR FOR CONTINUED REDEVELOPMENT IN THE GREATER PAROLE AREA BEYOND THE ANNAPOLIS CITY LIMITS.

Source: Homes.com

Development within Anne Arundel County beyond the City limits impacts Annapolis in a variety of ways, but with the exception of the limited Growth Area addressed on the previous pages, the City has no regulatory influence on development outcomes. However, the City can work with Anne Arundel County staff and elected officials to advocate for optimal urban design solutions that will benefit both the residents of Annapolis and the broader County area. This informal process relies on establishing clear protocols to ensure that information is regularly shared about ongoing development activities, small area plans, capital projects, and policy initiatives. Some of these protocols already exist.

In recent years, City staff have coordinated extensively on planning efforts led by Anne Arundel County to guide development at the edges of Annapolis. These have included Plan2040 general development plan, the Parole Mobility Plan, the Parole Town Center

Master Plan, Move! Anne Arundel transportation plan, Anne Arundel County Green Infrastructure Master Plan, Anne Arundel County Region 7 Plan, Vision Zero Plan, the Forest Drive Safety Study, and the Walk & Roll Anne Arundel! bicycle and pedestrian master plan. City staff also coordinate frequently with County staff on all transportation initiatives impacting Annapolis. New protocols recommended by the County's Region 7 Plan will further this coordination with regular meetings between the planning staff from the City and County related to Current Planning, Long Range Planning, and Mobility Planning.

In the coming years, continued coordination between City and County staff and elected officials will be critical to achieving a more seamless and well-designed region, and addressing issues that cross the City limits. The following focus areas warrant particular attention.

#### **Focus Areas**

#### Housing

Annapolis has much to gain from coordinating with Anne Arundel County on new housing initiatives. The housing affordability crisis facing the City, as described in Chapter 5: Housing, is not limited to the City and is a regional issue with the median sales and rental prices for housing reaching historically high levels. As a major job center for the County, the greater Annapolis area will continue to support a diverse population and require housing that meets all income levels. Furthermore, as the County's most densely populated area with adequate infrastructure, it is more sensible to invest in new housing within the Annapolis area rather than less developed areas of the County. Even as the City will continue to advance its own policy solutions to create additional housing options, it can support County initiatives that expand the supply of affordable housing options allowing those who work in Annapolis to live closer to their jobs.

#### **Transportation**

The impacts of transportation policy decisions on Annapolis do not stop at the City limits. Development at the edges of the City has an enormous impact on traffic safety, congestion, pollution, and equitable access to the City. The major gateways to Annapolis see high concentrations of crashes and none of these areas are designed for pedestrians or cyclists to safely navigate. The City must continue to advocate for investments in safer mobility options with all new development around Annapolis, particularly investments that encourage more walking, biking, and transit use. This a major focus of this Plan in Chapter 6: Transportation, and City staff are already actively engaged with County staff on a number of priority transportation initiatives including a planned transit facility to be located at the Annapolis Mall.

Annapolis' geographic location on a peninsula leaves few options for roadway expansion to create more space for personal vehicles. The City's best strategy



FIGURE 3-16: CONCEPT DESIGN FOR A PLANNED TRANSIT

Source: Baltimore Regional Transportation Board

for reducing traffic congestion both within and outside of the city is a continued focus on mobility improvements that reduce automobile dependency within Annapolis and the broader region.

#### Greenways

Similar to housing and transportation, greenways add substantial value to the greater Annapolis area, are a significant focus of this Plan, and do not stop at the City limits. Anne Arundel County's recently adopted Green Infrastructure Master Plan included coordination with Annapolis and information from the Greenways Map included in this Plan. As the City looks to protect and restore its greenway network, there are a number of opportunities to collaborate with Anne Arundel County. Priorities greenway initiatives should include the Forest Drive greenway corridor, the tributaries to Weems Creek which begin within the County, the Broad Creek greenway corridor that includes the City's Waterworks Park, the restoration of

areas along Church Creek, and additional greenway connections to the other creeks adjoining the city with feed into the South River.

#### **Greater Parole**

No area of Annapolis has experienced more dramatic change over the years than the Parole area, and this trend continues today with major redevelopment projects under construction. An excerpt from the 1994 Parole Urban Design Concept Plan illustrates this rapid change:

"The impact on the farmland that was once Camp Parole has been drastic. Trees were cleared and grubbed and hundreds of acres of earth were moved, shaped and overlaid with buildings, roads, and parking lots. Impervious surfaces now cover nearly two-thirds of the area lying in the Church **Creek and Weems Creek watersheds. Even** outlying areas draining into Saltworks and Gingerville Creeks are about one-half impervious. Only the Broad Creek area has been spared such extensive coverage, largely because of rugged topography and County ownership of most of the land. The overall impression of the Parole area is of roads and parking lots, scattered buildings, and very little green relief. Peripheral areas have retained a somewhat suburban character with more uniform building setbacks, lawns and buffer strips."

The area includes communities within both the City and the County, and are extremely diverse in character. These facts combined with a high concentration of State roadways, and it is easy to understand why Greater Parole is a challenging area to plan.



FIGURE 3-17: THE CONVERSION OF PARKING LOTS INTO PICKLEBALL COURTS IS AN INDICATOR OF SUBSTANTIAL AMOUNT OF UNDERUTILIZED SPACE EXISTING AT THE ANNAPOLIS MALL IN 2023 Source: City of Annapolis

In the coming years, greater attention must be given to creating a more seamless Greater Parole area through design improvements to roadways that currently divide the area; through the preservation of cultural landmarks which can help orient the area; through design guidelines that can help create a more cohesive appearance to the area; and through the protection and restoration of greenways which can link neighborhoods;

#### **Annapolis Mall area including Waterworks Park**

Within Greater Parole, the Annapolis Mall area holds significant potential for positive impact to Annapolis. The area is defined by a substantial amount of vacant



FIGURE 3-18: HISTORIC PHOTOGRAPH OF THE DAVID TAYLOR RESEARCH CENTER IN 1952

Source: Tom Warring Public Affairs NSWCCD

land and underutilized parking which could be put to better use and help transition the area into a pedestrian-oriented mixed use district that includes a variety of new housing options, a dramatic increase in green space and tree canopy, and improved roadways and trail connections. Plans for a new transit hub are funded and will soon break ground at the intersection of Bestgate Road and Generals Highway, and the City's nearby Waterworks Park could serve as a central park for the area with improved trail connections and new amenities planned for its historic buildings.

#### **David Taylor Research Center**

The former David Taylor Research Center sits across the Severn River from Downtown Annapolis and is nearly encompassed by Navy-owned property. Long stalled plans for the site's redevelopment as a mixed use community would impact the City but can be coordinated to best serve the City's needs. Diverse uses including housing, retail, office, and hospitality space, have the potential to complement city offerings, or potentially compete with existing options in the city. An expansive public waterfront would draw Annapolis residents and visitors, but also expand the City's waterfront experience including access via the City's planned electric ferry service.

# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

#### **MUNICIPAL GROWTH GOAL MG1**

GROW IN A WAY THAT ASSURES
PUBLIC FACILITIES AND
INFRASTRUCTURE, INCLUDING
BOTH HARD INFRASTRUCTURE
SUCH AS ROADWAYS AND CITY
SERVICES SUCH AS POLICE,
ARE ADEQUATELY SIZED
AND EQUIPPED TO DELIVER
EXCEPTIONAL SERVICE
TO EXISTING RESIDENTS,
INSTITUTIONS, AND BUSINESSES.

#### **PERFORMANCE MEASURE**

The levels of service of public facilities documented in this Plan are not reduced over time but instead kept the same or improved.

- MG1.1 Implement a revised Adequate Public Facilities
  Ordinance which updates and clarifies the
  requirements for all categories of public
  facilities.
- MG1.2 Expand parks and public open spaces and ensure any major land use proposals incorporate open spaces and trails that can help link together the City's public amenities.
- MG1.3 Maintain disciplined plans for the allocation of water and sewer connections in keeping with State of Maryland Department of the Environment regulations and guidelines (see the Chapter 10: Water Resources).
- MG1.4 The City will extend no facilities or services to any property without annexation. However, on a case-by-case basis, the City may consider a preannexation agreement a contract requiring the owner to annex when the City is ready to do so.
- MG1.5 Work with Anne Arundel County Public Schools (AACPS) to proactively plan for maintaining sufficient capacity at public schools serving Annapolis residents, particularly at Annapolis High School.

#### MUNICIPAL GROWTH GOAL MG2

PROMOTE EXCEPTIONAL
DEVELOPMENT WITHIN THE
DESIGNATED GROWTH AREA
THAT ADDRESSES THE CITY'S
PLANNING GOALS AND, IN
PARTICULAR, CONTRIBUTES TO
AFFORDABLE HOUSING OPTIONS,
THE CREATION OF GOOD
PAYING JOBS, AND THE FISCAL
STRENGTH OF THE CITY.

#### **PERFORMANCE MEASURE 1**

Any redevelopment plans for properties annexed into the City will be reviewed and approved by the Planning Commission and be found consistent with this Comprehensive Plan.

#### **PERFORMANCE MEASURE 2**

Each annexation approved by the City will be found to make a net positive fiscal impact to the City when comparing the cost of servicing the annexed property to the potential for tax revenue from the property.

- MG2.1 Apply the recommended land use plan designation and appropriate mixed use zoning to each annexation as described in Chapter 4: Land Use.
- MG2.2 Require that development proposals in the growth area protect and/or restore sensitive areas such as forests, stream buffers, and wetlands and where possible incorporate these resource areas into the Greenway Map discussed in this Plan. (see Chapter 4: Land Use for more detail on the Greenway Map)
- MG2.3 Conduct fiscal impact studies of each proposed annexation.
- MG2.3 Explore the potential for State legislation that authorizes the City of Annapolis and Anne Arundel County to work together to rationalize the City's boundary for the purpose of simplifying and making more efficient service delivery and land use decisions.

#### MUNICIPAL GROWTH GOAL MG3

#### GROWTH IN THE NUMBER OF HOUSEHOLDS WILL PRIORITIZE INCREASING WORKFORCE AND AFFORDABLE HOUSING.

#### **PERFORMANCE MEASURE**

The workforce and affordable housing performance measures included in the goals of Chapter 5: Housing will be achieved.

- MG3.1 Require a conceptual development plan and firm commitments to delivering workforce or other affordable housing as a condition of annexation.
- MG3.2 Study and adopt strategic updates to the zoning code and other city policies that can incentivize workforce housing, which is housing priced for households earning between 80% and 120% of the area median income. These updates might include policies which help to prioritize plan approvals and permits, and reduce fees for workforce housing. (also listed in Chapter 5: Housing under goal H1)
- MG3.3 Utilize zoning district changes to identify "housing priority" areas where access to transit, jobs, and amenities are already available within a 1/2 mile radius. (also listed in Chapter 5: Housing under goal H1)
- MG3.4 Remove the barriers in the City's current zoning regulations that are preventing Annapolis from meeting the Federal Fair Housing Act standards, which include expanding the areas where more "missing middle" workforce housing options are permitted. (also listed in Chapter 5: Housing under goal H1)
- MG3.5 Amend the policies regulating for Short Term Rentals (STR's) to prioritize local ownership and occupancy as a strategy for housing affordability and neighborhood preservation.
  (also listed in Chapter 4: Land Use under goal LU3, and Chapter 5: Housing under goal H2)

#### MUNICIPAL GROWTH GOAL MG4

ENCOURAGE AND INCENTIVIZE
REVITALIZATION AND
REDEVELOPMENT THAT BEST
CONNECTS RESIDENTS TO RETAIL,
SERVICES, NATURAL RESOURCES,
AND OTHER AMENITIES.

#### **PERFORMANCE MEASURE**

The percent of land area in the City zoned for mixed use increases from 8% to 20% by 2030

- MG4.1 Update the Zoning Ordinance and zoning map to significantly expand the places where mixed-use development is permitted and/or required.
- MG4.2 Provide expanded technical assistance from City staff to business owners, property owners, and/or developers where new retail and housing opportunities will improve the quality of life for residents, particularly in areas of high social vulnerability (see Chapter 2: Demographic Trends for more detail on social vulnerability)
- MG4.3 Explore reductions in parking requirements for redevelopment in areas where direct access to transit, bike, and pedestrian networks already exist, and allow for greater flexibility in utilizing shared parking solutions.
- MG4.4 Leverage parking districts in the City's most walkable commercial areas, including the expansion of the existing downtown parking district and implementation of a new parking district for Eastport, as a way of better managing limited parking resources and mitigating conflicts.

## 4. LAND USE

#### **OVERVIEW**

Annapolis has grown up against geographic constraints that have mostly defined its boundaries for decades. For that reason since the 1990's, the City's comprehensive planning has prioritized mixing land use through the planned renewal and in some case intensification of properties already within city limits. This is infill development and it can happen via improvements to vacant property or wholesale redevelopment of sites that have become economically obsolete.

The Annapolis community has learned from 30 years of practical experience blending use types and promoting infill and redevelopment. This development policy has resulted in revitalized properties and neighborhoods. More specifically it has brought about employment gains, grown the tax base, modernized infrastructure, created new green spaces, and improved the quality of the stormwater entering area waterways. When this Plan refers to "development" in the broadest sense of the term, these are the properties of change that are intended. Without "development", these things do not happen within a City.

The City has also learned that infill proposals can change the character of a place, provoke controversy, and create unnecessary costs to both residents and developers. This plan seeks to improve how infill and redevelopment is accomplished. It seeks to bring more intention and greater focus to ensure real estate development in fact contributes to the City's development. Of critical importance, this Plan seeks to bring mixed use infill proposals into alignment with the qualities of the neighborhoods where they are located.

The Planning Commission has found that as the City has become more interconnected and complex, greater subtlety is needed to guide its development. For example, the same infill project that is cheered in one location because it enhances the community might well be vilified in another because it diminishes the community. When projects are advanced without deep regard for neighborhood differences, new buildings and sites do not develop the City, they weaken it. The City's current regulations are not quite designed to be sensitive to this understanding which means that infill projects can comply completely with zoning standards and still adversely impact their surroundings and cause conflict.

So, while this plan on one hand recommends simplification and clarity of intention, it also acknowledges the need for nuance and a thoughtful touch in the administration of project reviews and approvals. The plan recommends specific ways to fine-tune the City's zoning maps, standards and administration. The success of any future infill development project will be judged on its ability to fit compatibly within its immediate context and meet the goals of this Comprehensive Plan.

A pattern of change has emerged as evidenced by the list of currently approved (pipeline) projects set forth in Chapter 3: Municipal Growth. Many of these projects propose the redevelopment of older suburban models of site development into more compact projects that affirm the City's transition into a walkable and environmentally sustainable city. In clear and practical ways, the City's comprehensive planning is working. New projects are transforming under-used parking

lots and outmoded buildings into sites and buildings that are more energy efficient, better landscaped, less water polluting, and more accessible to pedestrians. Some also blend compatibly with their neighborhood context. This new plan builds on this success and the lessons learned and applies them with the intent to achieve a renewed set of planning and development goals through 2040, exemplified by the Thriving City principles presented in Chapter 1 of this Plan.

This land use plan is of course about more than mixing uses and infill redevelopment. This plan includes new recommendations for conserving the City's remaining natural areas and linking them into a broader network of recreational and institutional spaces. It includes a renewed commitment to the City's industrial base and new goals that addresses the desire that the restaurants and tourism sectors bounce back following the pandemic. It also aligns land use recommendations with the housing goals of Chapter 5, addressing the challenge of housing affordability.

Following this introduction, the chapter reviews the existing land use pattern and conditions, introduces a new Future Land Use Map, and sets goals, performance measures and recommended actions for land use through 2040.

#### **Maritime Districts**



FIGURE 4-1: MARITIME DISTRICT ON BACK CREEK

Source: Bert Jabins Yacht Yard

Annapolis' maritime zoning districts were first established in 1987 to help preserve and sustain the city's working waterfront which was being threatened by a wave of new residential and tourism development. Since then, not only have the districts succeeded in growing the city's maritime economy but also reinforcing the authentic character of the waterfront. Annapolis is still one of the few cities on the eastern seaboard that can offer the full breadth of marine services within a relatively small urban area. With an interest to maintain this distinction and adapt to a changing economy, in 2021, the City Council formed the Maritime Task Force to study and propose refinements to the maritime zoning districts and other city policies for the first time in 35 years. The result was a strategy plan entitled "Strengthening the Industry" that led to an immediate zoning update and the City's first ever Public Water Access Plan.

#### **EXISTING CONDITIONS**

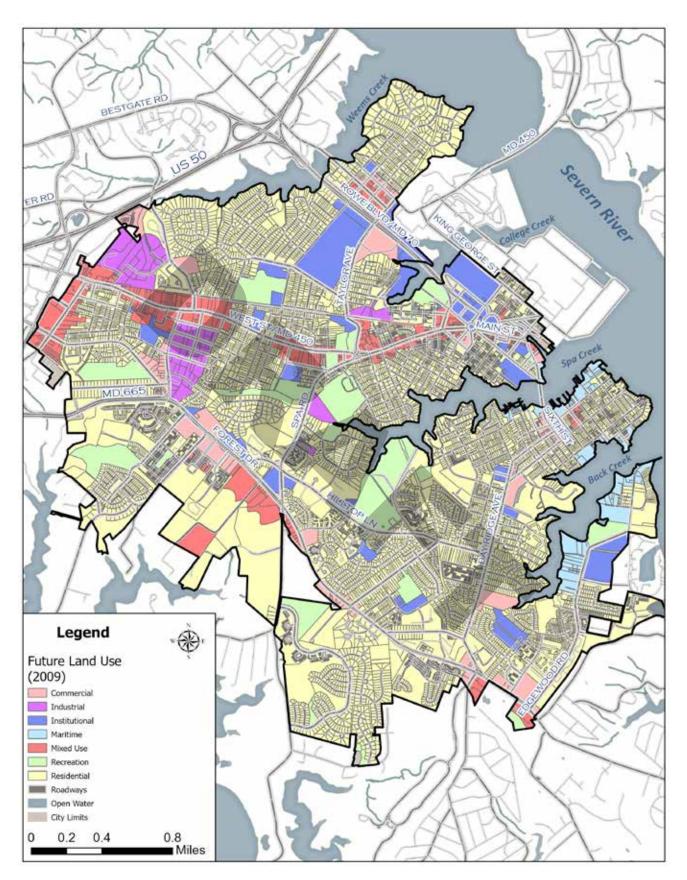
#### **Existing Land Use Patterns**

The map on the facing page shows the existing land use plan for City as adopted in the 2009 Comprehensive Plan. As shown, the major land use type is residential. Commercial uses, shown in light red and mixed-use shown in dark red, are aligned mainly along major roads, (Solomon's Island Road, West Street, Forest Drive, and Bay Ridge Avenue) and in downtown. Institutional uses dominate the Rowe Boulevard corridor.

The following summarizes the City's land use pattern.

- Historic downtown remains a center for tourismrelated retail and entertainment, government, and housing. With its enduring city plan and advantaged waterfront location, downtown remains a unique and special American place. The U.S. Naval Academy, St. John's College, and the Maryland State Government are located there.
- The City's historic core, including downtown, is a largely intact pre-industrial colonial city. It is designated a National Historic Landmark for possessing exceptional value in illustrating the heritage of the United States. Annapolis boasts the largest collection of 18th century buildings in the nation.
- The City's core is surrounded by residential neighborhoods that vary in age, character, and cost of housing.
- Large sections of the Spa Creek and Back
  Creek shorelines are devoted to water related
  and/or water dependent enterprises—maritime
  uses. The maritime industry consists of about
  300 maritime businesses, dozens of grassroots
  organizations and yacht clubs, hundreds of yearround local, national, and international regattas
  and championships, and more than 3,000 private
  and commercial boat slips and public moorings.

- Eastport remains mostly residential, with singlefamily detached housing and still features a mix of maritime uses, restaurants and local commercial uses on the waterfront.
- The Inner West Street Commercial District, extending 0.6 miles from Church Circle to Westgate Circle, was revitalized as a center of arts and entertainment. It has evolved into a very walkable hotel and restaurant district.
- Upper West Street (from Legion Avenue west to the City-County line), long characterized by low intensity, automobile-oriented commercial sprawl, is transitioning into a more walkable and mixeduse commercial corridor.
- The primary concentrations of industrial land in the City remain in the Upper West Street corridor, the Annapolis Business Park along Gibraltar Avenue, and in areas along Chinquapin Round Road and Legion Avenue. These areas feature heavy commercial services, light industrial businesses, warehousing, and other employment uses. These areas remain at or near build-out capacity, but intensification is still possible because in many cases buildings comprise a very small share of the area.
- Professional office space is located along West Street extending to downtown and encompassing governmental functions of the State Capital, in West Annapolis where access to both U.S. Route 50 is convenient, and to a lesser extent along Forest Drive.
- Neighborhood-level retail is distributed throughout the City including along Forest Drive, Bay Ridge Avenue in Eastport, at Forest Drive and Taylor Avenue, on Annapolis Street in West Annapolis, along West Street, and at Bay Ridge Road and Hillsmere Drive.



The table on this page shows the breakdown of the City's land area into various land use categories in 2009 and 2023. The substantial changes in some categories between 2009 and 2023 are due in large measure to policy changes at the core of this Plan. For example, the "Commercial" category present in 2009 has been completely merged with "Mixed Use" in 2023. "Recreation & Open Space" has expanded dramatically due to many natural resource areas formerly absorbed into other categories now listed as "Environmental Enhancement" or "Recreational Enhancement" in 2023. The areas formerly identified as "Vacant" are now reclassified within other categories. While "Residential" continues to be the largest use in the City, comprising nearly half of the

city's land base, its reduction in 2023 is due to some larger multifamily properties being reclassified as Mixed Use where opportunities for compatible retail and/or institutional uses could be integrated without diminishing the predominant residential use.

LAND USE CLASSIFICATION	2009		2023		CHANGE	
	ACRES	PERCENTAGE OF TOTAL LAND	ACRES	PERCENTAGE OF TOTAL LAND	ACRES	%
Commercial	160	3.52%	0%	0%	-160	-3.52%
Industrial	123	2.70%	76	1.67%	-47	-1.03%
Institutional*	276	6.07%	325	7.15%	+49	+1.08%
Maritime	84	1.85%	90	1.98%	+6	+0.13%
Mixed Use	273	6%	497	10.93%	+224	+4.93%
Recreation &** Open Space	317	6.97%	884	19.44%	+567	+12.47%
Residential	2,638	58%	2,037	44.79%	-601	-13.21%
Roadways	677	14.88%	639	14.05	-38	-0.83%

#### TABLE 4-1: LAND USE 2009 AND 2023

Source: City of Annapolis

<sup>\*</sup> Does not include Navy properties

<sup>\*\*</sup> Includes Environmental Enhancement and Recreational Enhancement areas for 2023













FIGURE 4-3.SNAPSHOTS OF RECENT INFILL DEVELOPMENT PROJECTS THAT ARE REPRESENTATIVE OF LAND DEVELOPMENT PATTERNS (CLOCKWISE FROM TOP LEFT): 1901 WEST STREET; 424 4TH STREET; 106-108 ANNAPOLIS STREET; PARKSIDE PRESERVE; BAY VILLAGES SUITES; TERRAPIN STATION;

Source: City of Annapolis

#### **Current Zoning**

The Future Land Use map and the city's zoning map are intimately related but very different planning tools. Whereas the future land use map articulates a vision for how the city's land should be utilized, the city's zoning, or more broadly its land development code, is the primary tool for implementing the future land use vision. Yet, as stated at the beginning of this chapter, the city's current zoning system does little to address the city's prevailing goals and needs, and in many cases is limiting the city's potential.

There are in fact 31 separate standalone zoning districts in all, plus the Critical Areas and its three separate zones which cover all land within 1000 feet of the shoreline, the Annapolis Historic District, and other specialized overlay districts. Of the 31 standard districts, thirteen are devoted to residential uses, nine are devoted to commercial uses, three are limited to professional office uses, four to waterfront-maritime uses, and one district dedicated to industrial uses.

There is no limit on the number of zoning districts a community might have, but at some point there is diminishing value in differentiating geographic areas in an otherwise small city. This Plan recommends that a significant consolidation of the zoning districts takes place to align zoning with the Future Land Use Plan presented on the following pages. Because many of the commercial zoning districts allow residential uses to one degree or another, they can readily be consolidated into far fewer zoning districts that complement the mixed use planning outlined in this Chapter. Because there is little difference among many of the residential categories, they too can be consolidated without undoing important land use policies. Most of the City's future zoning districts, especially those that may encompass planned mixed use area, can focus on the physical form that new buildings and sites will take and less on the types of uses that currently is the basis for many of the separate districts.

#### **Zoning Impacts**

The relationship between the urban character of Annapolis and its zoning code cannot be overstated. The city's built environment, including the look of its buildings and public spaces and the land uses they support, are largely a function of the zoning code which determines what can or can't be built in the city. While on the one hand, zoning has been leveraged effectively to protect the city's maritime districts and industrial zone, it has also inevitably led to commercial corridors dominated by parking lots and is the primary reason for the city's housing shortage.

A stroll through the Historic District reveals that Annapolis was once flush with a diversity of housing options for residents of seemingly any income level. However, present day Annapolis reveals a far different reality where the majority of the city's residential neighborhoods are comprised of one housing type only: single family homes. In fact, more than 60% of the properties in the city zoned for residential use do not permit a simple duplex, meaning two independent housing units on a lot. A large percentage of the city's remaining two, three, and four unit apartment buildings that were once so prevalent in Annapolis could not be built by today's zoning standards. And yet, these are exactly the type of buildings that give the city its unique character and appeal.

The consequence of the city's restrictive residential zoning standards is far reaching. By not being able to produce a more diverse housing stock, Annapolis is limiting who is able to live in the city which ultimately undercuts the City's genuine desire to be diverse and inclusive. It also impacts the city's economy by making it harder for the businesses to find qualified workers, and it impacts the city's environment by forcing workers to commute from farther distances which adds traffic and polluting emissions to the city. In addition to this chapter, Chapter 5: Housing and Chapter 12: Development Regulations provide detail on how the Annapolis can strategically reform its zoning code in the coming years to better address the goals of this Plan.

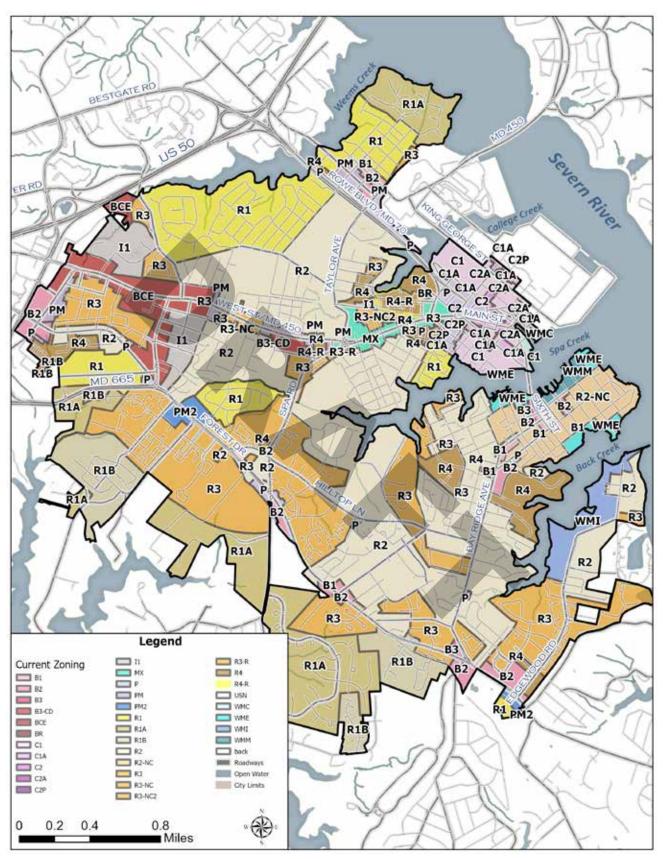


FIGURE 4-4. MAP OF EXISTING ZONING DESIGNATIONS

#### **Future Land Use**

This Comprehensive Plan guides the pattern, distribution, and relative intensity of land uses. The Future Land Use Map embodies the plan and succinctly illustrates its vision. This map, shown on the facing page, is to be used along with the supporting text in this chapter to guide the location, type, intensity and character of development and redevelopment. Every parcel of land is assigned a general land use category.

The City's successive land use plans, adopted nearly every ten years, reflect a long term continuity in development policy. When adjustments are made to that policy, even modestly as recommended in this Plan, they can be understood by comparing the existing plan with the newly proposed plan. Implementing this new plan over the coming years would not reshape or transform the City or alter its essential character. In fact, the adjustments are subtle but important and include:

- Elevating the protection of the City's remaining forests, wetland and natural resource areas, by specifically designating them for conservation as "Environmental Enhancement" areas.
- Removing the standalone "commercial" classification and merging all commercial areas to "mixed-use" which is already established by City zoning. Through the expansion of mixed-use, housing is permitted by right in all commercial areas.
- The conversion to mixed-use of some specific parcels along major corridors currently assigned as residential, institutional, and industrial uses.
   These are locations which could serve their communities better as mixed use.
- "Recreational Enhancement" replaces
   "Recreation" as a new land use designation that
   encompasses all existing parks as well as other
   open spaces best intended for recreation such as
   school yard properties which are community open
   space assets.

Each of the major land use categories are described on the following pages with emphasis on how this plan envisions their role in the larger approach to land use.

The Future Land Use Map is not a zoning map, but the terms are often confused. The Future Land Use Map proposes a vision in broad strokes for how the city's land should be best utilized. The zoning map should ultimately reflect this vision but provide far more specific guidance that organizes the broad land use areas using zoning districts and standards to clarify what can or cannot be built in each area of the city. For example, while the Future Land Use Map shows all residential areas as a single color, this does not mean that the zoning map should only have one residential zoning district.

The zoning map is not updated with this Plan. That process must be initiated as a separate action after this Plan is adopted; it must involve additional analysis and community input; and ultimately any zoning map changes must be approved by the City Council. This Plan merely provides guidance for future zoning map changes through the Future Land Use Map in combination with the various goals and recommended actions in this chapter and others, and through the Implementation section of this Plan.

#### **Natural Resource Conservation**

The City is on a peninsula and land use conditions have a direct bearing on its coastal environment.

The Environmental Enhancement designation on the Future Land Use Map identifies natural lands and open spaces that cannot safely support development, would be irreparably harmed by development, or whose loss would impair local water quality, flood management, wildlife habitat, and scenic beauty.

As discussed in Chapter 9: Environmental Sustainability, natural areas play vital roles in sustaining the quality of life, public health and natural beauty in Annapolis. Wetlands help attenuate flooding, improve local water quality, and provide habitat for native plants, fish and wildlife. Steep slopes and shorelines left in a

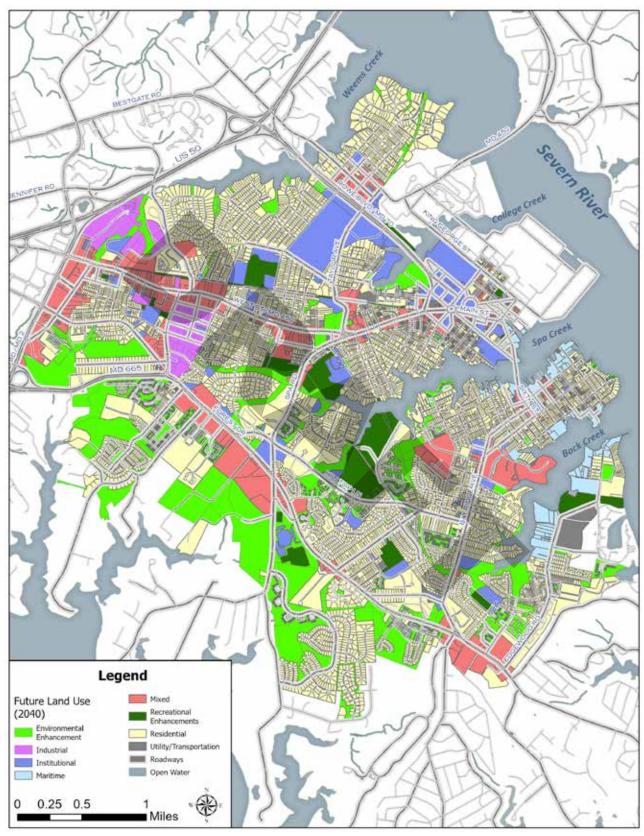


FIGURE 4-5: MAP OF FUTURE LAND USE DESIGNATIONS. THE MAP ALSO INCLUDES PROPERTIES IDENTIFIED IN THE CITY'S GROWTH AREA WHICH IS PROVIDED IN CHAPTER 3: MUNICIPAL GROWTH.

natural wooded conditions minimize soil erosion and pollutant runoff to Weems Creek, College Creek, Spa Creek, Back Creek, Church Creek, Crab Creek and Aberdeen Creek and by extension the Severn and South Rivers and the Chesapeake Bay. Forested areas moderate local temperatures for nearby residents and provide habitat for the birds and wildlife that visit the City's parks and the back yards of residents. This Plan recommends:

- The preservation and protection of land designated as Environmental Enhancement on the Future Land Use Map. Some areas shown on the map may be part of larger tracts of land that are already developed, and these may be restricted by deed to use as only open space. Others may not be but could be protected through the site plan or subdivision plat review process as tracts are developed or redeveloped over time.
- The adoption of a Natural Areas zoning district in the zoning ordinance and as a district on the Zoning Map. Supporting regulations would define permitted land use types and allowable intensities of land development on lands so zoned which are not otherwise constrained by environmental conditions.

The conservation of the remaining natural areas is critical to achieving other goals in this Plan including increasing overall tree canopy and reducing impervious surface area. It is also a precondition of creating an interconnected greenway plan that could extend throughout the City linking together the City's best amenities and recourses. Natural areas are the framework for such a plan onto which can be added public parks, major institutional uses that feature large green spaces such as public schools and the U.S. Naval Academy, reserved or deed restricted open spaces, public trails, and City's most beautiful future streets where street trees and landscaping can be prioritized.

The following are descriptions of the major land use designations of the Future Land Use Map.



FIGURE 4-6: NEW AFFORDABLE HOUSING FOR VETERANS ON CLAY STREET

Source: Pennrose

#### Residential: Diversify and Expand

The Residential category encompasses residential areas of the City, the largest land use category in the city, in which the principal permitted use has been and will be residential. This includes historic homes near downtown, high density waterfront buildings, multi-family housing complexes, post-war suburban neighborhoods, and modern subdivisions. Yet, Annapolis today is still a city of predominantly single family homes on large lots, primarily due to its enormous suburban expansion during the 1950's and 1960's. This lack of housing options is severely limiting who is able to live in the city as it drives up the cost of housing. Chapter 5: Housing describes the primary housing types in the City and the multiplicity of residential zoning districts. While the majority of the city will remain residential, particularly its established neighborhoods, the residential land use must diversify to include other housing options and expand into new mixed use areas to better accommodate the city's changing demographic needs.



FIGURE 4-7: MIXED USE BUILDING IN EASTPORT

Source: Google

#### Mixed Use: Consolidate and Refine

For the first time in the City's Comprehensive Planning, the plan does not provide a designation specifically for commercial use. Instead it classifies land presently in commercial use as mixed use. Land recommended for mix use may be improved with commercial and residential side by side on adjoining lots or within the same building. This recommendation is not meant to imply that existing or future commercial development must contain residential uses. Instead the designation signals the City will allow and encourage it. The designation also provides guidance about where to change zoning rules to facilitate mixing where none might exist today. This Plan also goes a step farther than past comprehensive plans to recommend various types of mixed use based on place context and desired goals.



FIGURE 4-8: MARITIME DISTRICT IN EASTPORT

Source: Yacht haven of Annapolis

#### Maritime: Preserve and Strengthen

The maritime designation includes water dependent activities like boat marinas, yacht clubs, sailing schools, and boat maintenance and storage. This designation reinforces the City's intent that these waterfront properties remain intrinsically tied to maritime business and tourism sectors. The continued use of these waterfront locations for water dependent uses is the foundation of the City's maritime economy. In order for the City to assist property owners and businesses in the boating industry to remain competitive, the City will study and implement programs and policies with the objective of maintaining a supportive business climate. These include ongoing assessments of the City's rate structures and regulations that apply to the industry, recruitment of new blue technology businesses, and promotion of Annapolis as the premier sailing center nationally and internationally.

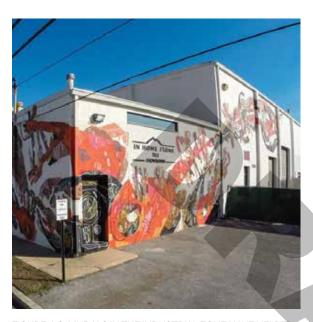


FIGURE 4-9: MURALS IN THE INDUSTRIAL ZONE HAVE HELPED TO BRAND THE AREA AS THE ANNAPOLIS DESIGN DISTRICT.

Source: Visit Annapolis & Anne Arundel County

#### Industrial: Invest and Evolve

The Industrial land uses category is clustered on along the east side of Chinquapin Round Road between Forest Drive and West Street and along Moreland Parkway. This is the traditional industrial and heavy commercial zone for the City and is a major private sector employment center. The identity of these areas has evolved organically over time to accommodate a greater variety of uses and the emergence of the Annapolis Design District as a place. Despite this evolution, there has been relatively little investment in public infrastructure. There is significant value in retaining these industrial areas in close proximity to other uses but sufficiently separated to mitigate conflicts. This Plan recommends that these areas remain light industrial with strategic adjustments to allowed uses in specific areas close to the planned West East Express trail corridor to facilitate a greater mix of uses that will complement the trail.



FIGURE 4-10: TYLER HEIGHTS ELEMENTARY WAS FULLY RENOVATED IN 2022 BY ANNE ARUNDEL COUNTY PUBLIC SCHOOLS AND IS A HUB FOR THE COMMUNITY.

Source: City of Annapolis

#### Institutional: Leverage and Support

The Institutional designation includes governmental, religious, educational, cultural, non-profit and, quasipublic uses such as schools, churches, museums, and libraries. Most significantly it also includes the buildings and properties that form the Maryland State Capital, the County seat of Anne Arundel County, and St. John's College all of which, when combined with the adjoining U.S. Naval Academy, create perhaps the most prominent combined center of government and higher education in Maryland. In terms of use, these areas will remain largely unchanged, but they are critical assets which add value to surrounding properties. In many cases there are opportunities to leverage the use of these properties for greater benefit, such as the newly established Farragut Farmers Market at the Navy Marine Corps Memorial Stadium, or the recent improvements to play areas at several Anne Arundel County Public Schools which benefit the broader community.



FIGURE4-11: THE NOAH HILLMAN PARKING GARAGE IN DOWNTOWN WAS COMPLETELY REDEVELOPED IN 2022-23

Source: City of Annapolis

#### **Utility/Transportation:** Protect and Manage

This category encompasses the City's Wastewater Treatment Plant, water towers, electrical substations, parking garages, and similar smaller uses. Past plans have limited this use to primarily water and electrical utility areas, but this plan modifies the use slightly to encompass the city's dedicated parking structures which provide substantial value to neighboring areas by limiting the need for surface parking. The intent of designating both utility and transportation infrastructure properties on the Plan is also to help mitigate incompatible developing uses that may occur nearby. The Plan anticipates minimal change in this category from current conditions or any new major utility uses. This Plan does recommend new parking garage development in areas of higher density mixed use but these structures will be designed in combination with other compatible uses.

#### **Environmental and Recreational Enhancement:** Conserve and Integrate

The Environmental and Recreational Enhancement areas represent new land use designations that replace the recreation and open space use of past plans in favor or greater specificity and intention. Whereas recreation and open space areas have



FIGURE 4-12: THE HEADWATERS OF SPA CREEK IS AN EXAMPLE OF AN ENVIRONMENTAL ENHANCEMENT AREA.

Source: City of Annapolis

been historically limited to existing parks and a few planned park expansions, these new designations capture far more area of environmental and recreational value. Areas identified for Environmental Enhancement prioritize the environmental benefits that certain parcels provide which includes stormwater management, tree canopy preservation, habitat value, and biodiversity. While many of these sites are currently undeveloped, some are paved and/ or minimally developed areas in close proximity to waterways that should be enhanced to provide improved environmental benefit. Recreational Enhancement encompasses all existing parks and other areas best intended for active recreational open space.

Much of what is now identified as Environmental or Recreational Enhancement has previously been subsumed by other land use areas and largely unmapped despite significant ecological, economic, and cultural value. The new designations dramatically enhance the functionality of the Future Land Use map by identifying strategic opportunities for conservation and improved recreational amenities integrated with existing and future development. The intent of these designations is also to encourage more deliberate and intentional management of the city's natural resources and facilitate the linking of contiguous green spaces to create a comprehensive greenway network.

#### **Mixed Use**

At the individual parcel and area wide level, land use is cyclical: at any given time, there are areas that are underutilized and buildings that are obsolete when compared to community needs. A City can target and promote specific areas for redevelopment as part of a sound land use policy and guide development decision making.

Future housing, institutional and commercial projects and their improvements should respect and restore, not distract from, the character of the community that surrounds them. A community is physically characterized by the scale and patterns of its roads and buildings, by the placement of buildings and automobiles within the landscape, by the types and granularity of its buildings, by the diversity and intricacy of their designs and their materials, by the relationship of buildings and landscape to the human scale, and by the mix of land uses and building types. Character is location dependent.

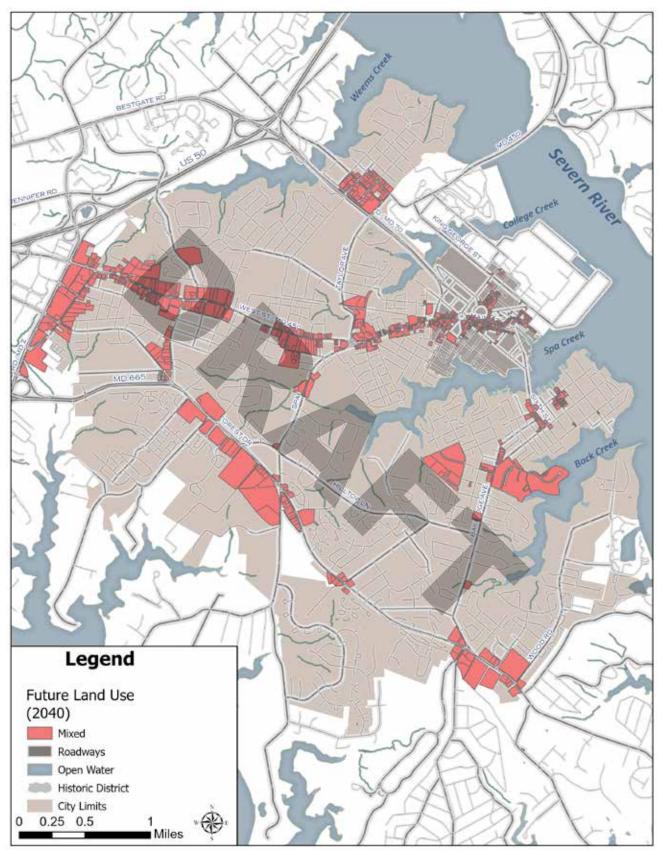
This Plan recommends the refining of the mixed use designation ultimately into mixed use sub-districts tailored to neighborhood context. An example of what this might look like can be found in the West Annapolis Master Plan (2021) which is an appendix to this Plan. For the existing commercial area of West Annapolis, four new mixed use zones were created to replace the existing zoning districts.

The primary goal is to promote and guide infill and renewal into arrangements that contribute to the development of Annapolis as defined in the Introduction to this Chapter. Central to this goal is to ensure that development projects are compatible with the neighborhoods where they are located and are aptly matched with their position and role within the overall pattern of the City. This section of the Plan describes the basic urban design principles that would guide mixed use infill development and redevelopment, and recommends an optimal zoning approach.

This Plan's focus on Mixed Use infill development is intended to spur more sensible and efficient use of the City's limited land base, and leverage its social, economic, and environmental value. To this end, the redevelopment of properties with a Mixed Use designation on the Future Land Use Plan will be guided by the performance standards below. These are criteria against which City staff, the Planning Commission, and other decision makers will determine if a Mixed Use infill development project is consistent with this Plan.

#### Why Mixed Use?

Annapolis has a long history of successful Mixed Use development in Downtown and Eastport, but since the inception of its zoning code in the 1960's, the city has had relatively little area identified specifically as mixed use in its future land use map or zoning map. This is primarily due to the suburban expansion of the city which favored strict separation of uses. In developing this Plan, there was a strong consensus among residents that mixed use development is needed to better address current goals including more walkabie communities, sustainable and resilient natural resources, economic and community development, and cultural preservation. Mixed use development is able to address these seemingly disparate goals because it is the most efficient use of the city's limited land, allowing for the joining of compatible land uses on smaller development footprints that then require fewer resources to be serviced. Designating areas for mixed use development does not dictate what they will be, it simply provides more flexibility to adapt to changing needs.



#### Mixed Use Precedents in Annapolis

Despite Annapolis having few areas specifically zoned for mixed use development, mixed use development already exists throughout the city in various forms and locations, and is generally far more compact and efficient in its use of land than comparable development that only includes a single use (such as residential, commercial, office, etc.). Examples of these existing mixed use developments reveal that mixed use is typically designed to be highly compatible with surrounding community character. These developments are neighborhood assets that not only fit well in their community context but also provide amenities and services that respond to community needs.



FIGURE 4-14: OFFICE USE ABOVE RETAIL USE IN EASTPORT

Source: Google



FIGURE 4-15: RESIDENTIAL USE ABOVE RETAIL USE IN WEST ANNAPOLIS

Source: City of Annapolis



FIGURE 4-16: RESIDENTIAL USE ABOVE OFFICE USE IN EASTPORT

Source: Google



FIGURE 4-17: RESIDENTIAL USE ABOVE RETAIL USE IN DOWNTOWN ANNAPOLIS

Source: City of Annapolis



FIGURE 4-18: RESIDENTIAL USE ABOVE OFFICE/RETAIL USE ON

FOREST DRIVE

Source: Google



FIGURE 4-19: RESIDENTIAL USE ABOVE RETAIL USE ON WEST STREET

Source: City of Annapolis

#### Performance Standards for Mixed Use Development

The following standards are provided in the Plan to help clarify the outcomes of good development practices consistent with the goals of this Plan, and to guide decision-making when new development is proposed. These standards should be used by anyone helping to guide future development including community members.

#### **Enhanced Neighborhood Character**

- Architecture that harmonizes with an adjacent residential neighborhood through design which references its context.
- Street trees and landscape design that harmonizes with nearby surroundings.
- Distribution of parking into smaller pods and away from primary street frontage.
- Appreciation of local culture through preservation and/or artful design elements.

#### **Enhanced Public Realm**

- Public spaces for community gathering such as small parks, plazas, and outdoor dining spaces.
- Architecture that improves the pedestrian experience with active ground floors and facade variation.
- Architecture which creates place through distinctive building features and site elements.

#### **Compact and Connected**

- Extension of neighboring land use types to promote continuity and gradual transitions from lower to higher intensity uses and site design.
- Placement of buildings on the street and in arrangements based on patterns that encourage walkability and less dependence on personal vehicle use.
- Buildings are oriented to linked public spaces which help to connect communities.

#### **Connected Street Networks**

- Extension of existing streets into and through the site to foster connectivity.
- Extension of existing bicycle and pedestrian connections into, around, and through the site, and/or establishment of new connections.
- Repair and enhancement of needed sidewalks and streetscapes within the nearby neighborhood.

### Commercial and Institutional Uses Balanced with Community Needs

- Retain or expand shopping and services to meet everyday community needs.
- Facilitate major civic uses, commercial office, professional services, and community level retail along major thoroughfares.

#### **Green Infrastructure**

- Functional use of setback areas for green infrastructure and public use.
- New and preserved tree canopy planted to provide multiple benefits including shade, stormwater management, and habitat.
- Paved areas are broken up with planted areas designed to capture and treat stormwater runoff.
- Innovation in environmental and energy performance.



#### **Infill Redevelopment Priorities**

Future development is challenging to predict and Annapolis' existing zoning code provides very few incentives to stimulate or encourage specific development in specific locations. The 2009 Comprehensive Plan included a focus on "Opportunity Areas" with an intent to steer development to four key areas identified as primed for infill redevelopment. Yet, without any accompanying zoning changes aimed at these areas, the envisioned redevelopment has largely not happened.

This Plan takes a different approach than the 2009 Comprehensive Plan by not trying to predict a few places where development will happen but by articulating the key criteria to consider for infill redevelopment priorities. These criteria provide an infill redevelopment framework that can be used to both evaluate proposed projects and prioritize sites for redevelopment over the next twenty years. This plan acknowledges that while the city's context may change over time, the following criteria will provide an adaptable guide for evaluating development opportunities.

#### Proximity to a Major Corridor:

Redevelopment will leverage nearby mobility infrastructure;

#### Proximity to Public Facilities:

Redevelopment will leverage nearby public facilities;

#### Catalytic Value:

Redevelopment will add value to surrounding properties, and trigger other positive impacts;

#### Environmental Value:

Redevelopment will bring improved environmental performance;

#### Character Value:

Redevelopment will enhance the character of the surrounding area;

#### Land Use Synergy:

Redevelopment will reflect the City's future land use goals of the optimize existing site features;

#### Why Infill Redevelopment?

Infill redevelopment refers to strategic redevelopment of land so that it better reflects the city's goals. Although Annapolis has very few undeveloped areas, it has many sites developed in the last several decades which are either functionally obsolete, or not serving their surrounding communities and larger city as well as they could be. Over time, as populations change, city goals also change to better respond to resident needs, the economy, and impacts to the natural resources. While many cities grow outward to address their changing goals, Annapolis is located on a peninsula and otherwise bordered by some of the most developed areas of Anne Arundel County within the Parole area. The City's only option is to therefore more efficiently use the land already within its limits. This Plan prioritizes the infill redevelopment of many large sites dominated by single uses that could better address the city's housing and environmental goals and help to change the prevailing land use pattern from one that is designed for cars to one that is designed for people. In general, these are sites that are located on major corridors, adjacent to transit, and in close proximity to higher densities of residents. Converting these areas into more dynamic and walkable mixed use places that will combine retail, residential, and institutional uses with updated stormwater management, public open space, and more strategic use of parking is a signature strategy for implementing the vision of this Plan.



**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

#### **Large Infill Sites**

Although Annapolis is considered "built out"-- meaning there are very few undeveloped parcels of land in the city-- there are many aging properties that may transition to new uses through redevelopment in the next twenty years. The largest of these sites are shown in the map on the facing page and their redevelopment could have transformative effects on surrounding neighborhoods. This Plan envisions all of these sites becoming exemplary models of mixed use redevelopment including a residential component and generous public realm investment. While the sites have a variety of existing conditions, they share a consistent set of values which make them ideal opportunities for mixed use redevelopment:

This Plan offers no predictions on when these sites will transition to new uses, and the definition of the sites may change over time as properties are consolidated, ownership changes occur, and the surrounding context is altered. Yet the value in identifying the sites now, in this Plan, is to raise the visibility of their potential value to the city, and provide guidance on how they could best advance the goals of this Plan. The chart on the following pages offers a summary of opportunities and considerations for each site.

#### Former Public Works Facility

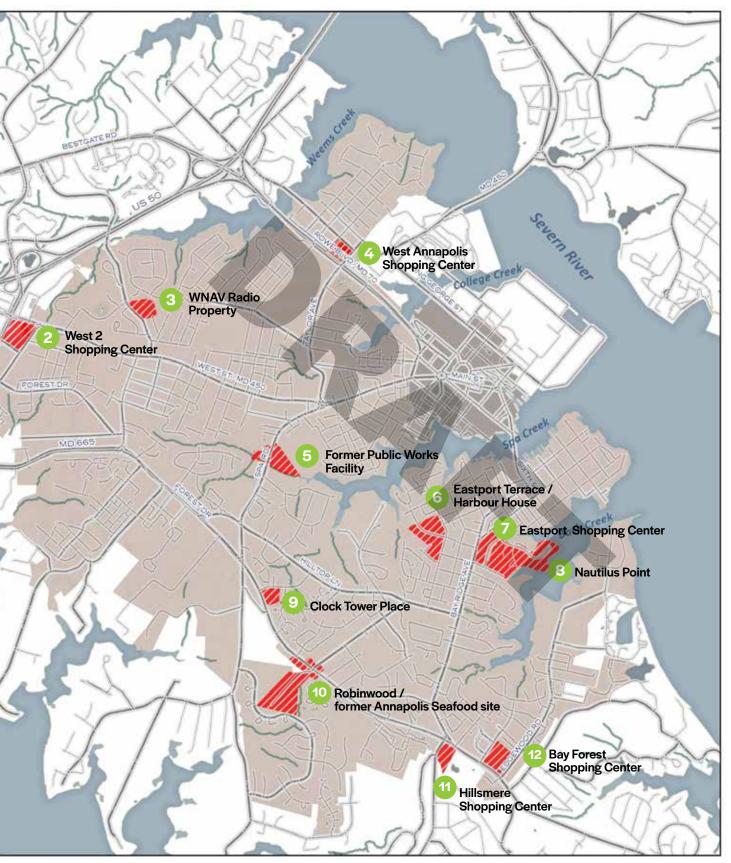
The City's former Public Works facility is unique among large potential infill redevelopment sites in Annapolis given that it is both City-owned and a documented brownfield based on the likelihood of contamination from past industrial practices on site. No redevelopment of the site will happen until a comprehensive Phase I and Phase II environmental assessment is conducted on the site to determine the extent of contamination and appropriate remediation completed. Both the environmental assessment and potential remediation will be reviewed by the Maryland Department of the Environment and the scope of both are based on the specific future use anticipated for the site. For example, testing of soils will go deeper if the site is envisioned for future residential use, or less deep if it is envisioned as a park use. In fact, a portion of the site, the former Weems Whelan Field, has already been adequately tested and remediated to become a sports field once again.



In 2022, the City Council unanimously adopted resolution R-20-22 which supports the ultimate use of the site as a mixed-use development with affordable housing as a key component. However, it is a relatively small portion of the overall site—the area closest to Spa Road and farthest from Spa Creek—that is suitable for the mixed use development. This is reflected on the Future Land Use map included in this chapter. The remainder of the site that would not be developed would be restored as a forested buffer to Spa Creek and expanded park space for the adjacent Bates Athletic Complex.

FIGURE 4-22: MAP OF LARGE SITES ANTICIPATED FOR INFILL MIXED USE REDEVELOPMENT

Source: City of Annapolis



#### 1 WATERWORKS PARK

#### Note: Rezoning Needed for Mixed Use

- A small portion of the City's Waterworks Park property close to MD-450 should be restored, repurposed, and rezoned for one or more uses which will complement the adjacent park and generate revenue for the City's park system.
- Appropriate uses might include a destination restaurant/food service, brewery, distillery, event space, educational or research facility, sports retail, or a combination of multiple uses.
- Three significant historic buildings-- the 1907 pump house, the 1929 water treatment building, and the engineer's house from the 1880's-- and various abandoned infrastructure should be adaptively used in the redevelopment.

#### 3 Former WNAV Radio Site

#### Note: Rezoning Needed for Mixed Use

- The predominant use of the site should be housing affordable to household incomes 80%-120% of the area median income.
- Compatible community -serving retail and/ or institutional uses should be included in the redevelopment.
- Open space and/or other resident amenities should be accessible to the broader community.
- Vehicular access to site should include multiple points of access to mitigate potential congestion on Admiral Drive.
- Improvements to Admiral Drive should include a shared use path for pedestrians and cyclists and intersection improvements at Poplar Ave and Moreland Parkway for safer pedestrian crossings.

#### 2 WEST 2 SHOPPING CENTER

- A portion of the site is in the City's Growth Area and should be annexed into the City to create a more seamless redevelopment.
- The site is located at a prominent gateway to the city and its architecture and site design should reflect this in quality.
- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- A substantial portion of housing should be affordable to household incomes 80%-120% of the area median income.
- Major improvements are needed to MD-450 and particularly the intersection with MD-2 to improve safety for pedestrians and cyclists.
- The West East Express (WEE) trail should be integral to the development along both MD-450 and MD-393.

#### 4 WEST ANNAPOLIS SHOPPING CENTER

Refer to the West Annapolis Master Plan (2021) for more specific guidance on this site.

- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- A substantial portion of housing should be affordable to household incomes 80% -120% of the area median income.
- Structured parking should be integrated into any future redevelopment to replace the existing surface parking and serve both the immediate development and the broader neighborhood.
- A grocery store should continue to anchor any future redevelopment.

## FORMER PUBLIC WORKS FACILITY

#### **Rezoning Needed for Mixed Use**

- The predominant use of the site should be housing affordable to household incomes 80%-120% of the area median income, with a portion dedicated to artist live/work housing.
- The site's close proximity to the headwaters of Spa Creek will require an integral stormwater management strategy and should be a key aspect of the project identity.
- The project should include cultural program uses and/or retail uses which complement Maryland Hall and the Arts & Entertainment District.
- Improvements to the former Weems Whelan Field and the Spa Creek Trail will be needed including new connections.

## **EASTPORT SHOPPING CENTER**

- Future redevelopment should include housing with a substantial portion affordable to household incomes 80%-120% of the area median income.
- Redevelopment should provide a similar amount of community-serving retails as provided at the current shopping center.
- A small grocery should be included in future redevelopment to address a well-documented gap in food access.
- A dedicated shared use path for pedestrians and bicyclists, at least 8ft in width, should be included along the Chesapeake Avenue and Bay Ridge Avenue frontages to improve safety.
- Connecting Madison Street to Norman Drive should be considered as a means of improving connectivity.
- Improvements to the intersections of Bay Ridge Avenue at Madison Street and Chesapeake Avenue are needed for pedestrian safety.

## 6 EASTPORT TERRACE / HARBOUR HOUSE

Refer to the Eastport CNI Transformation Plan (2023) for more specific guidance on this site.

- The Eastport Choice Neighborhood Initiative (CNI)
   Transformation Plan should be fully implemented as a partnership between HUD/HACA, the City, and a private developer.
- The restoration and water access improvements already underway at Hawkins Cove should be integral with the larger park envisioned in the Eastport CNI plan, and trail improvements should be made to better connect residents to Truxtun Park.
- Streetscape improvements to President Street and Madison Street as envisioned in the Eastport CNI plan should be prioritized as capital projects by the City.
- The City should explore options for preserving the affordability of existing homes adjacent to Eastport Terrace / Harbour House to mitigate the potential effects of gentrification.

## 8 NAUTILUS POINT

#### Note: Rezoning Needed for Mixed Use

- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- A substantial portion of housing should be affordable to household incomes 80%-120% of the area median income.
- Structured parking should be integrated into any future redevelopment to replace the existing surface parking and serve both the immediate development and the broader neighborhood.
- A continuous public esplanade should be a defining feature of any redevelopment with multiple points of access throughout the development.

## 9 CLOCKTOWER PLACE

- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- A substantial portion of housing should be affordable to household incomes 80%-120% of the area median income.
- Structured parking should be integrated into any future redevelopment to replace the existing surface parking and serve both the immediate development and the broader neighborhood;
- Wide shaded sidewalks or shared use path, at least 8ft in width, should be provided along both the Forest Drive and Gemini Drive frontages.
- Improvements are needed at the intersection at Forest Drive and Gemini Drive for pedestrian safety.

## 11 HILLSMERE SHOPPING CENTER

- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- A substantial portion of housing should be affordable to household incomes 80%-120% of the area median income.
- Structured parking should be integrated into any future redevelopment to replace the existing surface parking and serve both the immediate development and the broader neighborhood.
- Options should be explored for integrating a new Eastport-Annapolis Neck Public Library into a future redevelopment.
- A dedicated shared use path for pedestrians and bicyclists, at least 8ft in width, should be included along the Bay Ridge Road and Hillsmere Drive frontages to improve safety.
- Implement the recommendations of the Forest Drive Safety Study (2023).

# 10 ROBINWOOD / FORMER ANNAPOLIS SEAFOOD PROPERTY

- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- The same number of existing housing units affordable to household incomes below 60% of the area median income must be preserved.
- A substantial portion of new housing should be affordable to household incomes 80%
   -120% of the area median income.
- Improvements are needed at the intersection at Forest Drive and Tyler Avenue for pedestrian safety.
- Future redevelopment should integrate the Forest Drive Trail, a planned trail that will ultimately extend for the full length of Forest Drive.

## 12 BAY FOREST SHOPPING CENTER

- Future redevelopment should provide a diverse mix of uses including apartments, retail, and public park.
- A substantial portion of housing should be affordable to household incomes 80%-120% of the area median income.
- Structured parking should be integrated into any future redevelopment to replace the existing surface parking and serve both the immediate development and the broader neighborhood.
- A grocery store should continue to anchor any future redevelopment.
- Wide shaded sidewalks or shared use path, at least 8ft in width, should be provided along Bay Ridge Road, Georgetown Road, and Edgewood Road frontages.
- A small transit hub should be integrated with any redevelopment to include new connections with Annapolis Transit and regional commuter services.



FIGURE 4-23: A CONCEPT VISION OF THE WEST ANNAPOLIS SHOPPING CENTER FROM THE WEST

ANNAPOLIS MASTER PLAN (2021) WHICH SHOWS THE POTENTIAL FOR MORE EFFICIENT USE OF THE SITE

WHERE UNDER UTILIZED PARKING EXISTS TODAY. THOUGH NOT A REAL PROJECT, THE CONCEPT SHOWS

HOW ADDITIONAL RETAIL SPACE HOLISING PARK SPACE, AND GARAGE PARKING COLUDER INTEGRATED.

## **Parking**

Parking policy is an often overlooked aspect of land use and transportation planning but is a critical component of this plan's approach to both. Dedicated parking is currently required in nearly all new development in Annapolis. How much space is allocated for parking is ultimately a reflection of the city's approach to land use and how much it values its land. In 2022, more than 10% of Annapolis' land base is dedicated to parking. This statistic and the city's parking requirements for new development suggest that parking is deemed a valuable use of land although it is rarely priced as such. With the exception of Downtown, parking is typically provided at no cost although it provides no tax revenue, has adverse environmental impacts through vehicle emissions and untreated stormwater runoff from paved surfaces, and discourages alternative modes of travel such as walking, biking, and public transit. There is a growing awareness in Annapolis, as well as in comparable communities across the U.S., that current parking mandates for new development are excessive, not the best use of finite land assets, and not helping communities shift to more sustainable mobility options.

Parking utilization studies for various areas of the city were conducted in 2011, 2016, 2017, and 2018, with each offering a variety of recommendations for how to better leverage the city's parking assets. The City Dock Action Plan in 2020 also provided numerous recommendations for downtown parking which are now being implemented with the reconstruction of the Hillman Garage, the expansion of metered parking into the Downtown residential streets, and the planned reduction of parking at the City Dock. Substantial as these changes are for Downtown, they are a dramatic exception to the city's parking policies which have generally not changed across most of the city in decades despite the many studies.

Parking will continue to be a need as long as personal vehicles are the primary means of transportation in the city. Yet the city's parking assets, particularly street

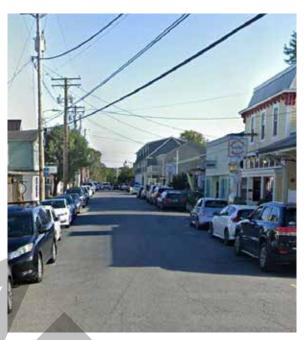
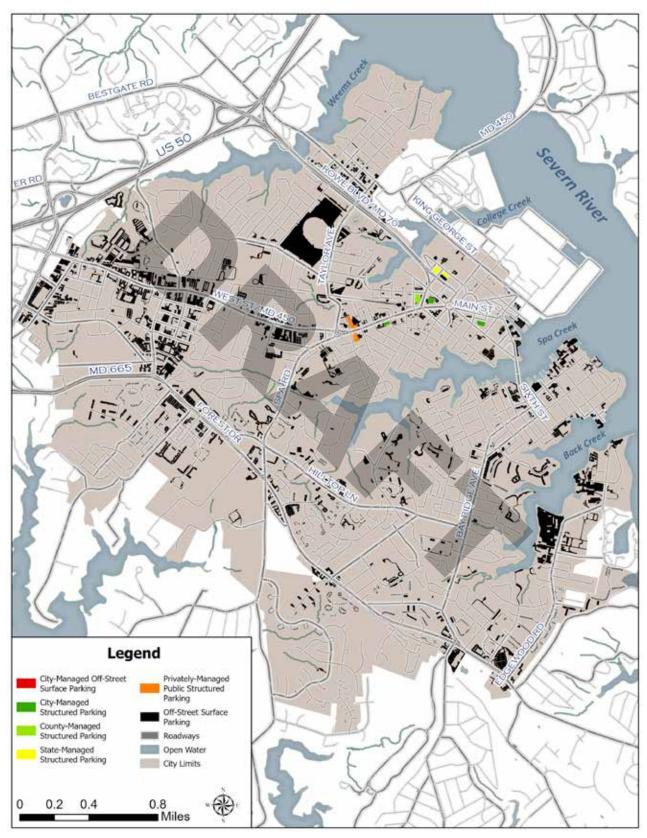


FIGURE 4-24: FOURTH STREET IN EASTPORT IS AN EXAMPLE
OF AN AREA THAT WOULD BENEFIT FROM REGULATED
STREET PARKING.

Source: City of Annapolis

parking, can be managed more effectively, both as a source of revenue for other transportation initiatives and in a way that doesn't unnecessarily subsidize personal vehicle use. Indeed, the city's current parking policies are heavily subsidizing personal vehicle use at the expense of other forms of transportation.

The example of Eastport, north of Sixth Street, is perhaps the best example of this where because the street parking is free and otherwise minimally regulated, visitors to the area have no incentive to arrive by any other means, and owners of personal vehicles are encouraged to leave there vehicles parked on the streets for extended periods of time. These observations were well documented in both the Eastport Transportation Study (2016) and the Eastport Parking Report (2018). Several of the recommendations of these studies are still relevant and have been carried forward in this Plan.



#### Implementation Tools:

#### **Form Based Code**

A city's zoning code is the most consequential tool to addressing desired land use outcomes and it can be calibrated to be more effective. Form Based Codes have become an popular means of guiding new development to be more predictable and more compatible to existing neighborhood context. While more extensive information on this tool can be found in Chapter 12: Development Regulations, the images on this page and the facing page provide a snapshot of how Form Based Code zoning districts would work in a particular area of Annapolis.

Form Based Code provides greater direction to new development by regulating the look, or *form*, of the building and how it should be situated on its site. This allows zoning districts which follow Form Based Code to better respond to local context.

As part of the planning process for Annapolis Ahead 2040, new Form Based Code zoning districts were developed in concept for the commercial area of West Annapolis as part of the West Annapolis Master Plan. Unlike the existing zoning districts which appear more arbitrary in shape, the Form Based Code districts shown on this page reflect existing neighborhood features such as the established residential area, Rowe Boulevard, and the popular existing shopping center.

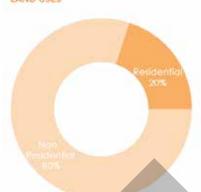
The zoning districts proposed are ultimately reflective of the adjacent features and the Form Based Code of each of these districts would then include requirements that produce building suited to these contexts. In addition to the building forms, the allowed uses of the buildings are also tailored to their context, as shown on the facing page.



FIGURE 4-26: PROPOSED FORM-BASED ZONING DISTRICTS FOR WEST ANNAPOLIS FROM THE WEST ANNAPOLIS MASTER PLAN (2021)



#### LAND USES



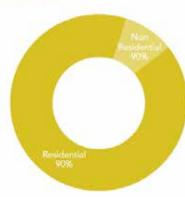
#### **Primary Uses**

- Retail
- Office

#### Complementary Uses

- Apartments (above retail or office)
- Civic





#### Primary Uses

- · Multifamily Residential
- Townhomes

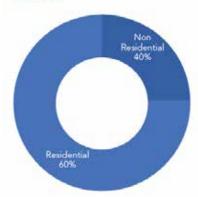
#### Complementary Uses

- Retail & Service Commercial
- Detached Residential
- Retail Commercial
- Office
- Institutional



#### VILLAGE CORRIDOR

#### LAND USES



#### **Primary Uses**

- Multifamily Residential
- Retail & Service Commercial
- **Entertainment Commercial**
- Office

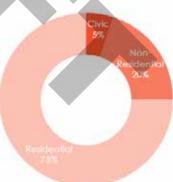
#### Complementary Uses

- Townhomes
- Civic
- Institutional



#### VILLAGE SQUARE

## LAND USES



#### Primary Uses

- Multifamily Residential
- · Retail & Service Commercial
- Office

#### Complementary Uses

- Live/Work
- Entertainment Commercial
- Civic
- Institutional

#### **Implementation Tools:**

#### Form-Based Code Precedent from Kingston, NY

Kingston, NY, is a small historic waterfront city in the Hudson Valley region of New York which recently adopted a new citywide zoning code ordinance that uses formbased zoning standards to achieve more predictable development outcomes. Annapolis and Kingston are very comparable in size and context with prominent historic, maritime, and natural resource elements. The two cities are also dealing with similar challenges and priorities including housing affordability, safer mobility options, equitable access to amenities, and natural resource conservation. Kingston's zoning code addresses all of these issues and provides the best recent precedent for what is needed in Annapolis to achieve many of the goals in this Plan. The key elements of Kingston's zoning code that Annapolis should emulate are the following:

- A zoning map which is simple and straightforward to understand with only twelve zoning districts compared to Annapolis' thirty-one different districts;
- Zoning districts which acknowledge the varying development patterns of the city while also allowing for incremental changes to occur in each zone;
- Zoning districts which privilege neighborhood character and appearance through the use of architectural standards;
- Building type standards which are specific to the city, acknowledging a variety of traditional building types which have defined the city and which should be prioritized.
- Street frontage standards designed to create more consistent and walkable streetscapes.
- Parking standards which are sensible and encourage a more pedestrian-oriented city.
- Street type standards designed to create complete streets: an accessible, interconnected network of streets that accommodate all ages, abilities, and modes of transportation, including walking, cycling, driving, and public transit.

Additional information about Kingston's form-based code is provided in Chapter 11: Development Regulations.

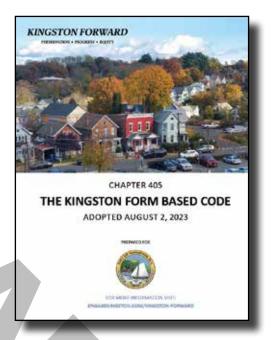


FIGURE 4-28: THE CITY OF KINGSTON, NY, SHARES MANY QUALITIES WITH ANNAPOLIS AND IN 2023 SUCCESSFULLY UPDATED ITS DEVELOPMENT REGULATIONS USING THE PRINCIPLES OF FORM-BASED CODE.

Source: City of Kingston



#### T5 Main Street (T5MS)

Intent: A walkable, vibrant urban main street serving multiple neighborhoods and the City with commercial, retail, entertainment and civic uses, public transportation, and smallto-large footprint, medium-tohigh density Building Types.



#### TS Flex (TSF)

vibrant serving from that can accommodate a very diverse range of uses and Building Types, including civic uses, on, and small-nedium-to-ng Types.

Intent: To provide an urban from that can accommodate a very diverse range of uses and Building Types, including some light industrial as well as livelwork combinations, to reinforce the pattern of existing walkable neighborhoods and to encourage revitalization and investment.



#### T5 Neighborhood (T5N)

Intent: To provide a variety of housing choices, in small-to-large footprint, medium-to-high density Building Types, which reinforce the walkable nature of the neighborhood-serving retail and service uses adjacent to this zone, and support public transportation alternatives.



urban main stree

multiple neighbo

with commercial

entertainment ar

public transports

to-medium footp

to-high density B

FIGURE 4-29: KINGSTON'S TEN BASIC ZONING DISTRICTS

Source: City of Kingston

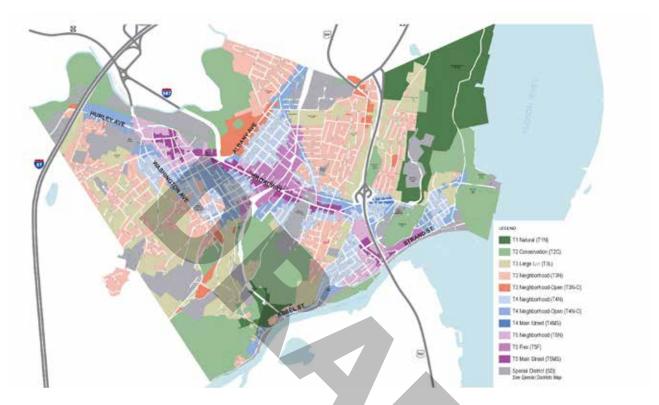


FIGURE 4-30: KINGSTON'S UPDATED ZONING CODE IS BASED ON THIS ZONING MAP INCLUDES JUST TEN BASIC ZONING DISTRICTS. "FLEX" DISTRICT, AND A SPECIAL DISTRICT CATEGORY, ALL DEFINED BY NEIGHBORHOOD CONTEXT. BY COMPARISON, ANNAPOLIS HAS THIRTY-ONE ZONING DISTRIC

Source: City of Kingston





et (T4MS)

T4 Neighborhood & T4 Neighborhood-Open (T4N & T4N-O)

for a more diverse mix of uses.

e, vibrant Intent: To provide a variety of serving housing choices, in small-tohoods medium footprint, medium-toretail, high density Building Types, d civic uses, which reinforce the walkable ion, and smallnature of the neighborhood, int, mediumsupport neighborhood-serving uilding Types. retail and service uses adjacent to this zone, and support public transportation alternatives. An Open Sub-Zone provides the same building form but allows



T3 Neighborhood & T3 Neighborhood-Open (T3N & T3N-O)

Intent: To protect the integrity of existing, small-to-medium lot detached homes and reinforce their role within walkable neighborhoods and to allow new neighborhoods with this component. An Open Sub-Zone provides the same building form. but allows for a more diverse mix of uses.

T3 Large Lot



T3 Large Lot (T3L)

Intent: To protect the integrity of existing, medium-large lot detached homes and reinforce their role within the City.

#### TZ Conservation



T2 Conservation (T2C)

Intent: To protect the integrity of existing natural land with low density detached homes as well as areas of steep slopes and natural vegetation, and reinforce their role within the City.

## T1 Natural



T1 Natural (T1N)

Intent: Preservation of open spaces and natural resources.

# SD Waterfront \*

Waterfront Mixed-Use (SD-WMU)

Intent: To allow for a walkable, mixed-use destination district that celebrates the rich cultural, historic, and natural resources of the waterfront, and furthers the policies of the Kingston Local Waterfront Revitalization Program (LWRP). District standards shape mixed-use development and public spaces that support a healthy relationship between people and the environment.

#### Implementation Tools:

#### **Creekshed Framework**

A defining feature of Annapolis is its location on a peninsula with approximately twenty two miles of shoreline. Land use decisions therefore have a direct bearing on the conditions of the city's creeks, waterfront, and generally its riparian and coastal environments. This particular context, and the value that it provides to the city in terms of environmental and community benefits, property values, cultural heritage, tourism, and other economic opportunities, guides many of the goals and recommendations of this Plan.

Comprehensive planning has traditionally used small area planning as a tool for determining neighborhood scale land use recommendations following the adoption of a citywide comprehensive plan. Whereas small area planning commonly uses established neighborhood boundaries or roadway corridors to define the limits of a plan's focus, a signature strategy recommended by this Plan is to use creekshed boundaries instead. A creekshed is a type of watershed that represents the drainage area to a specific creek and encompass all elements of the built environment within that area. The map on the facing page illustrates that Annapolis has four major creeksheds connected to the Severn River: Weems Creek, College Creek, Spa Creek, and Back Creek. The city also has small portions of five other creeksheds that feed into the South River: Church Creek, Crab Creek, Aberdeen Creek, and Harness Creek.

Although creekshed boundaries in Annapolis do split some established neighborhoods-- for example, half of Eastport drains into Spa Creek and the other half into Back Creek-- a small area plan focused on Back Creek could still address the issues that do not end at the creekshed boundary such as mobility.

A precedent for using the creeksheds as a planning framework can be found nearby in Ellicott City, another small historic city. Following the impact of devastating floods in 2018, the city pivoted its need for a comprehensive plan update into the *Ellicott* 

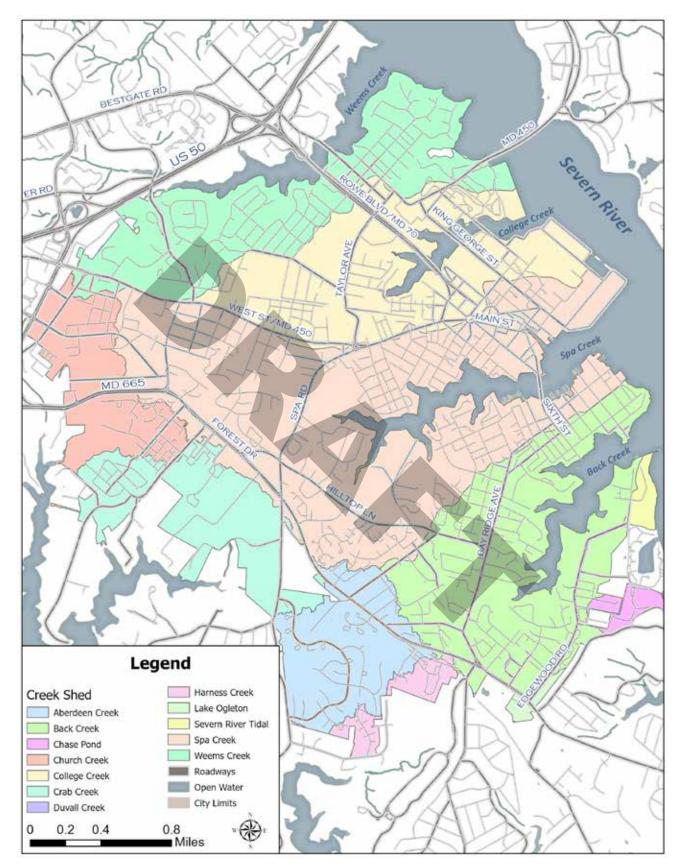


FIGURE 4-31: THE PLANNING FRAMEWORK FROM ELLICOTT CITY'S AWARD-WINNING URBAN WATERSHED MASTER PLAN IS THE MODEL FOR FUTURE SMALL AREA PLANNING IN ANNAPOLIS.

Source: Mahan Rykiel Associates / Ellicott City

City Urban Watershed Master Plan which uses the boundary of the Tiber Hudson watershed and the impacts to it from land use decisions as the foundation for the plan. Common planning issues like transportation, economic development, and community character are addressed through the watershed lens as well as issues of flood mitigation and environmental stewardship which are also highly relevant to Annapolis.

By elevating a creekshed planning framework for the city, the environmental impact of policy decisions can be better calibrated, and residents, property owners, and business owners will become more aware of the impact of their own land use decisions on the city's waterways.



#### **Implementation Tools:**

#### **Greenway Map**

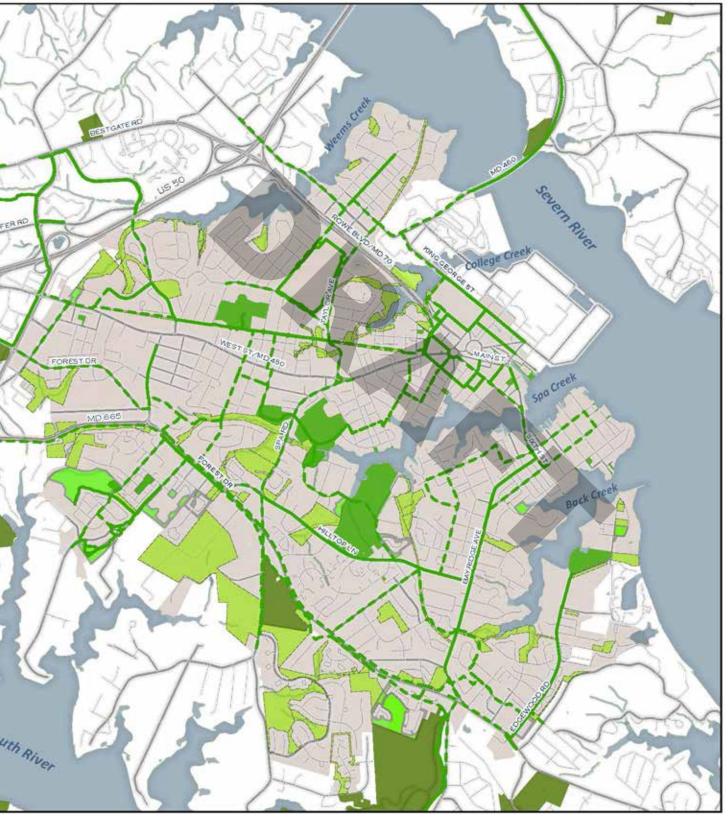
The intent of identifying Environmental and Recreational Enhancement areas on the Future Land Use map is to better integrate and protect lands of high natural resource or recreational value into the city's comprehensive planning and development process. A primary means of doing this is through a formalized Greenway Map that depicts all land parcels worthy of conservation. In many cases, these are areas that are simply not developable for various reasons, perhaps because they lie in the flood plain, or along a riparian corridor, or awkwardly configured remnants of earlier developments. Nevertheless, these lands retain value and can provide significant ecological benefits to the city if managed with intention. These values include providing tree canopy, stormwater management, wildlife habitat, recreational trails, and water access. Moreover, with these ecological benefits come broader economic and public health benefits such reduction in harmful impacts from flood events and other natural hazards. The ultimate goal in identifying, organizing, prioritizing, and visualizing these lands is to create a coherent greenway network which links together these diverse parcels across the city and complementing the built fabric. The Greenway Map featured on the facing page is relevant to other elements of this Plan, and is also addressed in Chapter 7: Community Facilities, Chapter 9: Environmental Sustainability, and Chapter 10: Water Resources.

FIGURE 4-33: GREENWAY MAP SHOWING POTENTIAL CONSERVATION EASEMENTS AND EXISTING PROTECTED AREAS.

Source: City of Annapolis

**Note:** Waterworks Park is owned by the City of Annapolis but located outside of the city limits.





# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

#### LAND USE GOAL LU1

SIMPLIFY THE ZONING CODE SO THAT IT IS EASIER TO DEVELOP INFILL PROJECTS THAT COMPLEMENT THE NEIGHBORHOODS AND CREEKSHEDS WHERE THEY ARE LOCATED.

#### **PERFORMANCE MEASURE 1**

New zoning standards are adopted for a set of new mixed use place types which help to consolidate and simplify the City's zoning districts.

#### **PERFORMANCE MEASURE 2**

By 2030, the City has an established framework for using creeksheds to guide land use planning.

- LU1.1 Amend the Zoning Ordinance using form-based code standards, as recommended by this Plan, to bring its requirements into better alignment with the desire for compatibility between new and existing development.
- LU1.2 Prepare small area plans for each of the City's creek watershed areas that coordinate land use with environmental goals to support both the continued improvement of the City's waterways and a model for sensible infill development. (also listed Chapter 10: Water Resources under Goal WR3)
- LU1.3 Create illustrations of acceptable building design principles for all development types addressed in new zoning standards.
- LU1.4 Specifically promote infill development and redevelopment in the Upper West Street and Forest Drive corridors to facilitate the creation of walkable communities where new housing options and neighborhood commercial uses coexist with, and enhance, the existing communities. (also listed in Chapter 5: Housing under goal H1)

## PROMOTE THE IMPROVEMENT AND RE-INVESTMENT IN VACANT OR UNDERUTILIZED PARCELS.

#### **PERFORMANCE MEASURE**

By 2040, the aggregate assessed value of property designated as vacant or underutilized will have increased at a rate at least twice that of the City's

- Implement a policy of assertively promoting LU2.1 and incentivizing the repurposing and redevelopment of existing buildings and sites within the City, particularly those with high impervious coverage and no stormwater facilities. This includes removing unnecessary obstacles and delays in the plan review and approval process and overall streamlining of redevelopment applications.
- LU2.2 Assemble a suite of tax and other incentives to bring about the redevelopment of vacant and underutilized properties, especially those projects with designs that create more walkable environments and deliver public benefits within the neighborhoods where they are located.
- LU2.3 Utilize the redevelopment priority framework provided in this chapter to map and clarify those properties which should be prioritized for improvement and re-investment.
- LU2.4 Study and propose reductions to the City's parking requirements for all land uses to incentivize the sensible development of underutilized land, reduce impervious coverage, improve stormwater management performance, and encourage walking, biking, and transit use, among other benefits to the City. (Also listed in Chapter 6: Transportation under Goal T3, and in Chapter 9: Environmental Sustainability under Goal ES6).

IDENTIFY ZONING LANGUAGE
ADJUSTMENTS TO THE
RESIDENTIAL DISTRICTS THAT
WILL HELP TO BRING ABOUT
MORE HOUSING OPTIONS FOR
WORKFORCE AND MIDDLEINCOME RESIDENTS.

#### **PERFORMANCE MEASURE 1**

The number of housing units per acre will increase commensurate with the quality of their community design and provided public services and facilities are available

#### **PERFORMANCE MEASURE 2**

The share of total housing units in Annapolis in housing types with two, three and four units will grow from 6% to 15% by 2030 and to 30% by 2040.

- LU3.1 Explore incremental adjustments to the city's residential zones to allow for more diversity of housing types such as townhomes and duplexes that are compatible with existing neighborhoods, using architectural standards if needed to ensure compatibility. (also listed in Chapter 5: Housing under Goal H4)
- LU3.2 Explore using zoning incentives and/or regulations to spur the construction of housing types that offer more home ownership opportunities for workforce households. Workforce households, as defined by the State of Maryland, are those which have an aggregate annual income between 60% -120% of the Area Median Income for home ownership opportunities. (also listed in Chapter 5: Housing under Goal H1)
- LU3.3 Explore using zoning incentives and/or regulations to prioritize long-term rental options for workforce households over short-term rental options.

  Workhouse households, as defined by the State of Maryland, are those which have an aggregate annual income between 50%-100% of the Area Median Income for rental opportunities. (also listed in Chapter 5: Housing under Goal H1)
- LU3.4 Amend the allowed uses and regulations in the residential zones of the Historic District to encourage more multifamily housing options responsive to current housing needs and the preservation of neighborhood character.
- LU3.4 Amend the policies regulating Short Term Rentals (STR's) to prioritize local ownership and occupancy as a strategy for housing affordability and neighborhood preservation. (also listed in Chapter 3: Municipal Growth under goal MG3, and Chapter 5: Housing under goal H2)

SUPPORT AND SUSTAIN THE **EXPANSION OF BUSINESSES AND** PRIVATE SECTOR EMPLOYMENT, AND THE REVITALIZATION OF THE TOURISM SECTOR (INCLUDING RESTAURANTS, RETAIL, AND LODGING) WHICH WAS ADVERSELY IMPACTED BY THE **COVID-19 PANDEMIC.** 

#### **PERFORMANCE MEASURE 1**

Between 2020 and 2040, the number of jobs

#### **PERFORMANCE MEASURE 2**

have surpassed its economic productivity levels

- LU4.1 Maintain the City's zoning for light industrial use and explore the interest among major industrial landholders for preparing a master plan to promote the expansion of existing firms and the modernization of the industrial district.
- LU4.2 Focus the City's economic development efforts on business retention, intensification and expansion within areas zoned for mixed use, light industrial use, and in areas zoned for maritime businesses.
- LU4.3 Coordinate with the maritime sector to facilitate its modernization and response to evolving economic conditions in the maritime and tourism industries.
- LU4.4 Consider economic development incentives to support the return of businesses into street level storefronts and restaurants.

PROTECT AND SECURE THE HISTORIC RESOURCE VALUES OF DOWNTOWN ANNAPOLIS WHILE PROMOTING BOTH ITS ECONOMIC VITALITY AND ITS ROLE AS THE CENTRAL CIVIC GATHERING PLACE FOR THE CITY'S RESIDENTS.

#### **PERFORMANCE MEASURE 1**

The estimated number of downtown visitors (and hotel occupancy rates) remain at or exceed levels set prior to COVID-19 pandemic through 2040.

#### **PERFORMANCE MEASURE 2**

The square footage of leased commercial floor area remains at or exceeds levels set prior to COVID-19 pandemic through 2040.

#### **PERFORMANCE MEASURE 3**

Between 2020 and 2040, the population of full time residents within the Historic District will increase.

#### **PERFORMANCE MEASURE 3**

The number of apartments above retail in the Historic District will increase each year through 2040.

- LU5.1 Build the infrastructure needed to protect downtown from both routine nuisance flooding and the flooding associated with sea level rise and storm surge, and facilitate the enhancement of the most at-risk buildings.
- LU5.2 Implement the consensus plan of the City Dock Action Committee. (also listed in Chapter 8: Arts, Culture & Historic Preservation, under Goal AC4)
- Continue to maintain stringent historic preservation requirements in downtown to protect the City's architectural and city planning heritage.
- LU5.4 Ensure that zoning standards for the Historic District are updated to address recommendations from all recent hazard mitigation plans including the Citywide Hazard Mitigation Plan (2022) and Weather It Together: Cultural Resource Hazard Mitigation Plan (2018). (also listed in Chapter 8: Arts, Culture & Historic Preservation under Goal AC4)
- LU5.5 Enact legislation that compels property owners within the Historic District, prioritizing those on Main Street, to update sprinkler systems by 2028. (also listed in Chapter 8: Arts, Culture & Historic Preservation under Goal AC4)
- LU5.6 Explore expansion of the current historic tax credit budget, with priority offered to projects that activate upper floors with moderately-priced dwelling units.
- LU5.7 Explore the potential to create a Business Improvement District for the Downtown and Inner West Street areas to augment funding for public realm enhancements, security, and maintenance.

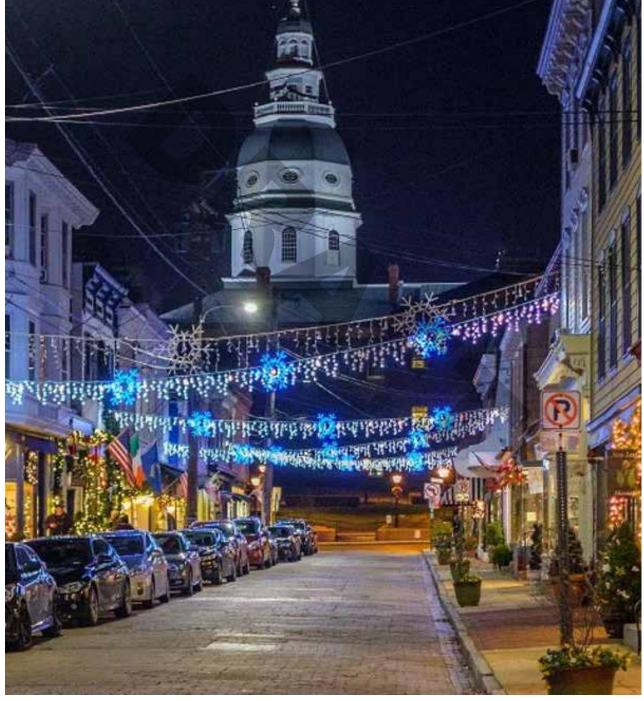


FIGURE 4-34: MARYLAND AVENUE IN THE ANNAPOLIS HISTORIC DISTRICT.

LINK THE CITY TOGETHER WITH A
NETWORK FORMED BY THE CITY'S
REMAINING NATURAL AREAS,
IMPROVED OPEN SPACES, PARKS,
AND INSTITUTIONAL USES.

#### **PERFORMANCE MEASURE 1**

The Greenway Map is updated annually.

#### **PERFORMANCE MEASURE 2**

Establish at least one contiguous greenway within each of the City's creek watersheds by 2030.

- LU6.1 Design, adopt and implement a Greenway Plan that identifies lands which provide significant environmental, recreation, aesthetic, and/or health benefits and details strategies to maintain the values these lands provide; The plan should be managed jointly by the Annapolis Conservancy Board and the Department of Planning and Zoning, updated annually, and coordinated with Anne Arundel County's Green Infrastructure Plan. (also listed Chapter 7: Community Facilities under Goal CF1)
- LU6.2 In the review and approval of infill and redevelopment projects, align parkland dedications and required open space set-asides to promote the interconnection of open spaces across parcels.
- LU6.3 Require that public access easements be established within areas set aside for future open space or planted for required forest conservation.
- LU6.4 Recognizing the innumerable benefits of street tree planting including reducing the heat island effect, air quality improvement, carbon sequestration, wildlife habitat, and traffic calming, design certain streets to be part of the Greenway Plan and elevate the importance of street tree planting and coordinated landscaping along properties with street frontage.
- LU6.5 Use the City's forest conservation requirements to direct conservation and afforestation in ways that build larger networks of connected forests in Annapolis. (Also listed in Chapter 9: Environmental Sustainability under goal ES 2)

- LU6.6 Explore opportunities to plant trees on institutional properties within the city limits such as those owned by HACA, Anne Arundel County schools and libraries, State of Maryland offices, and the Navy, for the purposes of meeting mitigation requirements and the general tree canopy goals. (also listed in Chapter 9: Environmental Sustainability under Goal ES 2)
- LU6.7 Amend the zoning ordinance and map to create and apply Environmental Enhancement areas guided by the Future Land Use Map of this Plan. Environmental Enhancement areas are property parcels that either already offer ecological benefits or should be improved to do so, but are not appropriate to serve as active parkland.
- LU6.8 Enact an agreement with the County that establishes the City's right to direct and use its share of Program Open Space funds for the protection and enhancement of lands within its jurisdiction. Such an agreement should detail the specific uses of the funds.
- LU6.9 Improve coordination between City departments and City Boards/Commissions tasked with environmental protection, including the Annapolis Conservancy Board, to ensure properties being reviewed for development or permitting are considered in a fuller context, taking into account the property's opportunities for conservation and easements within the property as well as connections to surrounding open space, conservation and trail systems.

# <u>5.</u> Housing

## **OVERVIEW**

## **Background**

For many decades Annapolis has been challenged with housing affordability. In 1939 the City created the Housing Authority of the City of Annapolis (HACA) to provide affordable housing for families that lacked the means to purchase or rent at market prices. This problem is not unique to Annapolis. It is shared by communities throughout Maryland and the United States. Many households do not have income sufficient to afford housing without public subsidy and public subsidy has not been up to the task. It is worth mentioning this because housing affordability is an economic issue that extends well beyond the City's borders and the City's ability to fully affect.

There is a related challenge that Annapolis faces, as do other communities, and this challenge is within the capacity of the City to more directly affect. Zoning rules and land availability constrain the supply of housing to levels below that which it is demanded, which elevates housing prices. On one hand, zoning minimizes the adverse impacts and costs of development borne by existing residents, but on the other, it increases the benefits and rewards that existing residents accrue at the expense of others looking for better housing. Restrictive zoning protects or enriches housing investments previously made by property owners and it restricts housing choices available to others. Where raw land for new housing is in short supply, which is the future for Annapolis, restrictive zoning rules worsen affordability.

The above is a simple formulation of the problem because there are many variables at work both on the demand and supply sides of housing, but it is useful because it focuses our long-term attention on what

the City can accomplish; and it can accomplish much. Over the next 20 years, more housing will be needed at prices that low- and middle-income households can afford if the health, equity, resiliences goals of this Plan are to be achieved. Increasing the availability of housing, like all urban planning goals can conflict with other planning goals but the housing goals and objectives of this Plan are the most important of this Comprehensive Plan as they directly dictate who is able to live in Annapolis.

The Maryland General Assembly recognized the consequence of housing to local communities when it enacted HB 1045 in 2020 and HB 90 to require all jurisdictions to not only include a housing element in their comprehensive plan that specifically addresses the preservation and expansion of affordable housing for low income and workforce households (HB 1045) but also explicitly further the goals of the U.S. Fair Housing Act. The goals, performance metrics, and recommended actions of this chapter are designed to fulfill the intent of this State legislation.

During recent decades, as documented in the last Comprehensive Plan and in this current Plan's Chapter 2: Demographic Trends, increases in housing prices in Annapolis have far outpaced growth in median household income, worsening a housing problem that now envelops both low- and middle-income households.

As things stand the median house price in Annapolis, at \$625,000, is five times greater than the median annual income of \$104,000. In fact, the City's consistent finding, over many years, is that there is a lack of housing priced at levels that can be afforded by a sizable share of households.



FIGURE 5-1: TWO OF THE 78 NEW HOMES DEVELOPED IN 2022 BY THE HOUSING AUTHORITY OF THE CITY OF ANNAPOLIS (HACA) IN PARTNERSHIP WITH THE CITY, COUNTY, STATE AND PRIVATE PARTNERS AS PART OF THE WILBORN ESTATES WHICH REPLACED THE FORMER NEWTOWNE 20 PUBLIC HOUSING COMMUNITY.

## **Housing Approach**

The State legislation that this Plan follows is explicitly designed to aid low income and worforce households and it's important to clarify how we define these populations in regard to housing as they are referenced throughout this chapter and rest of the Plan. The following definitions are also included in the Glossary at the beginning of the Plan.

**Low Income Housing:** Housing that is affordable for a household with an aggregate annual income that is below 60% of the area median income.

Workforce Housing: (1) rental housing that is affordable for a household with an aggregate annual income between 50% and 100% of the area median income; or (2) homeownership housing that: (i) except as provided in item (ii) of this item, is affordable to a household with an aggregate annual income between 60% and 120% of the area median income; or (ii) in target areas that are recognized by the Maryland Secretary of Housing and Community Development for purposes of administering the Maryland Mortgage Program, is affordable to a household with an aggregate annual income between 60% and 150% of the area median income.

These two focus populations are also reinforced in the Consolidated Plan for Housing and Community Development which the City updates every five years, as required by the U.S. Department of Housing and Urban Development (HUD), to track progress on meeting housing goals and guide policy. As stated in the Consolidated Plan, the City's housing goal is:

To increase the amount of decent, safe, and accessible housing for homeowners, renters, and homebuyers that is affordable to low-to-moderate income persons and families by improving the quality of the existing housing stock, increasing the supply of affordable housing and increasing opportunities for homeownership.

## **Towne Courts Apartments**



FIGURE 5-2: TOWNE COURTS

Source: City of Annapolis

Completed in the Spring of 2021, the 42-unit affordable housing development known as the Towne Courts is one of the city's best recent examples of new housing in Annapolis that helps address a critical lack of housing options. The mixed income workforce housing includes (8) 2-bedroom apartments and (34) 3-bedroom apartments in the form of flats and stacked townhome style units. Located in the Parole neighborhood and adjacent to the Monarch School and future West East Express trail, the project also includes a playground, community center, and bike trail connection. The development was designed to provide homes for families making 80% or less of the area median income and received over 900 inquiries from interested families even prior to opening. Some of the units are offered with a project-based voucher, where a tenant pays 30% of their income regardless of their housing.

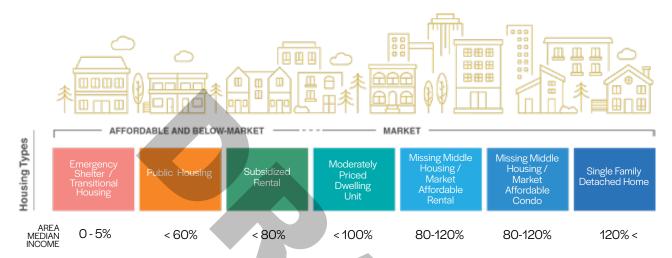


FIGURE 5-3: THE HOUSING CONTINUUM REPRESENTS THE SPECTRUM OF HOUSING TYPES AVAILABLE FROM VERY LOW TO ABOVE. MODERATE-INCOME HOUSEHOLDS, INCLUDING PUBLIC HOUSING, SUBSIDIZED HOUSING, AND MARKET-RATE HOUSING TYPES. DEFINITIONS OF THE VARIOUS HOUSING TYPES CAN BE FOUND IN THE GLOSSARY AT THE BEGINNING OF THE PLAN.

Source: Adapted from graphic by City of Victoria, BC

The focus of this Plan is much broader than the focus of the City's Consolidated Plan and its concerns about housing affordability and availability extend well into the future. This Plan recognizes that a city's lack of housing options can lead to housing overcrowding, the conversion of buildings into housing that does not conform to codes, the creation of health and safety hazards to residents and emergency first responders, and adverse impacts on neighborhoods. A long term deficiency in this most central element of a city's land use base can hollow out an otherwise vibrant and diverse community as people with options move away, or don't come at all, leaving fewer residents with a direct interest in the wellbeing of local institutions like public schools. Additionally, by forcing those who work in town to live farther away from their jobs, pressure is placed on streets and highways and neighborhood level investments are diverted to expanding roads and operating buses.

This Plan seeks to rebalance the City's land use in favor of creating more housing options and improved affordability over the next two decades. It will take longer than 20 years, but by 2040 the City could be

close to ensuring that every Annapolis household will have an opportunity for a healthy, pleasant and affordable place to call home.

#### The Importance of Home Ownership

Although this chapter provides goals and recommended actions to increase the supply of housing for rent and home ownership, there is an important distinction between the two. Only home ownership helps a person or household to build wealth and stability, which in turn provides access to a range of other benefits including improved health, education, and career outcomes. The equity in the home can then be passed down to future generations which helps break cycles of poverty. While the economics of housing development make it more expedient to increase the supply of rental housing in the short term, policies which incentivize or require home ownership options must be prioritized to ensure there is a continuing supply of home ownership opportunities for a diversity of households.

## **EXISTING CONDITIONS**

Substantial data has been compiled and used in producing this chapter, including the information on population, income and housing in Chapter 2: Demographic Trends of this Plan, the *Demographic and Economic Profile and Real Estate Market Analysis report* in the Appendices, and the City's most recent *Consolidated Plan for Housing and Community Development*. While effort has been made to always use the most current data available, the data are drawn from multiple sources reflecting multiple reporting periods.

## Primary Housing Types in Annapolis

The availability of housing in Annapolis for varying household sizes and income levels is heavily dependent on having a range of housing type options. There are five primary housing types in Annapolis today described on these pages, but the large majority of housing in the city falls into the broad category of detached single family homes, which are also the least affordable housing type. Historically, Annapolis had a large percentage of small apartment homes -- duplexes, triplexes, fourplexes, etc.-- many of which were accommodated within buildings similar in scale and building footprint to single family homes. Today, these housing types are a smaller fraction of the overall housing stock as they are not permitted in much of the city, yet remain one of the best means of addressing housing supply in Annapolis.





FIGURE 5-5: SINGLE FAMILY DETACHED HOMES NEAR EDGEWOOD ROAD

Source: Google

#### Type 1: Modern single-family subdivisions

These were platted and developed over the past 30 years and were subject to modern zoning, street design and stormwater management codes. These lots can be as large as one-quarter of an acre in size. While development and building activities in these communities are subject to City zoning, they may also be regulated by Homeowners' Associations with covenants and architectural standards addressing the use and design of buildings. These may include restrictions on the use of other housing types, even those that may easily blend into the single-family character, such as duplexes. An example of Housing Type 1 is the Hunt Meadow neighborhood.

## Type 2: "In-town" single-family

Making up the largest share of residential land area are traditional residential lots in single-family neighborhoods featuring detached residences. Many of these neighborhoods were platted before modern zoning and subdivision controls. In addition to single-family detached dwellings, these areas are generally well suited to a variety of other housing types that fit compatibly within neighborhoods and blend with existing patterns in traditional single-family areas.

FIGURE 5-4: SINGLE FAMILY DETACHED HOMES NEAR WEST STREET

Source: Google



FIGURE 5-6: TOWNHOMES ALONG SPA ROAD

Source: Google



Townhouse groupings are distributed throughout the City: in waterfront locations like Chesapeake Landings in Eastport, in the Bay Ridge Road / Forest Drive corridor such as Beechwood Hill and in historic downtown Annapolis such as on Fleet Street. Townhouse groupings include market rate projects as well as subsidized or public housing projects such as Bloomsbury Square at Bladen Street.



FIGURE 5-7: RENTAL APARTMENTS AT 1901 WEST STREET

Source: City of Annapolis



FIGURE 5-8: CONDOMINIUM APARTMENT BUILDINGS ALONG HILLTOP LANE

Source: Google

# Type 4: Low-rise building complexes buildings under 4 stories

There are multiple examples of this housing type, including very large stand-alone developments like Annapolis Overlook, suburban character development like the Admiral Farragut garden apartments, and smaller developments like Mariner's Cove in West Annapolis. Increasingly, infill redevelopment projects have delivered housing units in this type of building. Again, this housing type is found in both market rate and subsidized housing.

# Type 5: Mid-rise buildings, minor, between 4 & 7 stories

There are few examples of this housing type. They include Belle Annapolis at 1901 West Street which includes street level retail fronting West Street and the Morris H. Blum Senior Apartments on Glenwood Street. This residential land use type features either open air or under-building parking, shared amenities for the owners or lessees, and can include a mix of non-residential uses.

## **Housing Stock**

#### **Number and Unit Types**

According to the most recent City of Annapolis Consolidated Housing Plan, it was estimated that in 2015 there were 15,800 housing units in the City. The table below shows how they were distributed among building types. For example, single family detached and attached units combined make up 61% of the units. Only 6% of all units are in duplexes or in 3 and 4 unit buildings. These housing types can fit compatibly within most residential settings and can be produced at a lower units costs than other housing types if City zoning did not restrict them only to higher density zoning districts.

Nearly 32% of the City's housing units, or 5,050 of all units, are rental units in multi-family buildings. Of those, 1,312 were Tax Credit or Section 8 units and 790 were units within the six public housing projects: Bloomsbury Square, Eastport Terrance, Morris H. Blum, Senior Apartments), Harbour House, Wilbourne Estates (formerly Newtowne 20), and Robinwood.

Another characteristic of housing units is unit size, as measured by the number of bedrooms. The table below shows how the City's housing stock is distributed among the various unit sizes. Note only 30% of rental units have 3 or more bedrooms. Larger families have fewer options in the renter housing market.

PROPERTY TYPE	NUMBER	%
1-UNIT, DETACHED STRUCTURE	6,985	40 %
1-UNIT, ATTACHED STRUCTURE	3,690	21%
2-4 UNITS	970	6%
5-19 UNITS	3,995	23 %
20 OR MORE UNITS	1,905	11 %
MOBILE HOME, BOAT, RV, VAN, ETC.	4	0%
TOTAL	17,549	100%

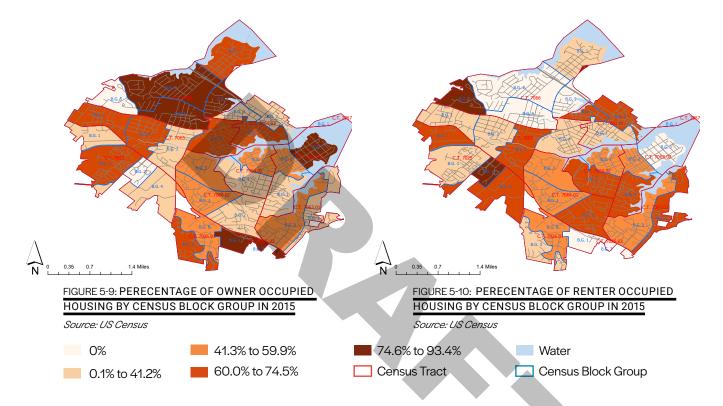
#### TABLE 5-1: HOUSING UNIT TYPES BY NUMBER AND PERCENTAGE

Source: City of Annapolis

PROPERTY TYPE	OWN	IERS	RENTERS		
	NUMBER	%	NUMBER	%	
NO BEDROOM	0	0 %	260	3 %	
1 BEDROOM	165	2 %	1,955	26 %	
2 BEDROOMS	1,905	23 %	3,125	41 %	
3 OR MORE BEDROOMS	6,140	75 %	2,235	30 %	
TOTAL	8,210	100%	7,575	100%	

TABLE 5-2: HOUSING UNIT SIZES BY TENURE

Source: City of Annapolis



#### **Tenure**

The City's households are equally split between renters and owners. The City's Consolidated Plan includes maps that show the relative concentration between renters and owners throughout the City. Rental housing is concentrated in neighborhoods along Bay Ridge Avenue and Hilltop Lane. Ownership concentrations include Eastport, West Annapolis, and Homewood.

#### **Vacancy Rates and Vacant Lots**

The housing unit vacancy rate is roughly 10% citywide, however when vacancy is studied at the census block-group level it becomes clear that high vacancy rates are clustered. As shown in the exhibit below, the highest concentration of vacant housing is in the historic district and Eastport, where rates range between 17 and 31 percent. The tourist and

second home nature of these parts of the City likely accounts for this imbalance. The lowest rates coincide with those parts of the City where rental housing is clustered.

As noted in the Land Use and Municipal Growth Chapter, there are few vacant lots within existing neighborhoods and few undeveloped tracts of land within the City for housing construction. The potential number of new dwellings allowed in all of the City's residential zones approximates 366.

## **Existing Zoning**

#### **Fair Housing**

In 2021, the Land Use Article of the Maryland Annotated Code was amended to require that comprehensive plans contain a fair housing assessment to ensure they "affirmatively further fair housing". Fair housing refers to the ability of persons with similar incomes to have the same housing choices regardless of the following characteristics: race, color, religious, sex, age, national origin, familial status, or disability. "Affirmatively furthering fair housing", per Section 2-401 of the Housing and Community Development Article of the Maryland Annotated Code, means preventing discrimination and taking actions aimed at overcoming patterns of segregation and fostering communities free from barriers that restrict access to housing and opportunity based on the above mentioned characteristics.

The City of Annapolis has commissioned multiple analyses of impediments to Fair Housing Choice, most recently in 2020 and that report is included in the Appendices of this Plan. Each analysis has shown that Annapolis' current zoning standards are too restrictive and do not "affirmatively further Fair Housing". To address these shortcomings, each of the four housing goals at the end of this chapter includes a variety of recommended actions aimed at reversing this trend. These actions, in combination with Land Use Goals LU1 and LU3 and Municipal Growth Goal MG3, will help Annapolis to preserve its existing affordable housing stock, produce an adequate supply of new housing, and prevent the displacement of low to moderate income families.

#### **Residential Zones**

The Annapolis Zoning Ordinance provides 13 separate residential zoning districts. The existing City-wide Zoning Map is shown on the facing page. The tables on the following pages summarize the dwelling types and densities allowed in each zoning district.

City zoning restricts the R1, R1-A, R1-B, R2, R2-NC, C1 and C1-A districts to single-family detached houses. Duplexes, townhouses, and multi-family buildings are allowed in all other zones. The list below shows how

some of the districts impose restrictions that limit the production of housing even though such housing would be consistent with the underlying purpose of the district.

#### **R1A and R1B Districts**

As shown on the Zoning Map, the R1A and R1B Districts mostly apply to the suburbanized parts the City south of Forest Drive (such as Hunt Meadow) and in the waterfront community of West Annapolis. In these locations, minimum lots sizes range from one half to one-quarter of an acre, which is substantially larger than elsewhere in Annapolis and atypical for a municipality in Maryland. Even with their large lot sizes, these districts prohibit accessory apartments.

#### R-1 and R-2 Districts

As shown on the Zoning Map, the R-1 and R-2 Districts prohibit accessory apartments on residential lots where one would expect to see them. Accessory dwelling units in towns and cities throughout the United Sates have historically provided these small scale and inexpensive housing options especially for family members of the homeowners.

#### **R-3 Districts**

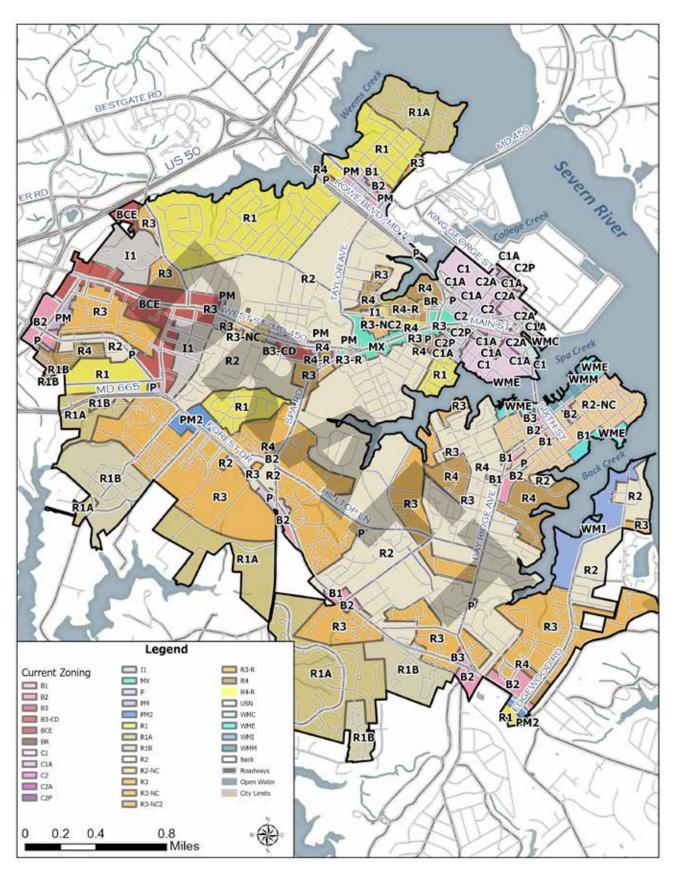
As shown on the Zoning Map, the R-3 District covers substantial land devoted to two-story walk-up garden-style apartments, a character of housing more in keeping with suburban communities, than vibrant urban centers like Annapolis (see photo under Housing Type 4). The allowable density is only 12 units per acre which is restricted further by regulations limiting building occupancy to 10 units and height to 35 feet, along with open space mandates.

#### **R-4 Districts**

As shown on the Zoning Map, the R-4 District covers existing multifamily development projects such as Watergate Apartments. This district caps residential density at 25 units per acre, which is unachievable in practice because of other regulations on floor-area-ratio, parking, and stormwater management. The only building site in the R-4 District exceeding three stories is the Morris H. Blum Senior Apartments operated by the HACA.

#### All Districts, Except C1

Group homes are excluded from all residential districts, except the C1 District.



ZONING DISTRICT	PURPOSE	STA	NDARD DW	ELLING TYPE	S	OTHER DWELLING TYPES  X = PERMITTED				
		SINGLE FAMILY DETACHED	TWO- FAMILY	SINGLE FAMILY ATTACHED	MULTI- FAMILY	INSTITUTIONS FOR CARE OF AGED	REST, NURSING HOMES	ABOVE STREET LEVEL COMMERCIAL	PLANNED DEVELOP- MENTS	GROUP HOMES
		MIN LOT SIZE (SQ. FT.)		DENSITY (SQ. FT. LOT AREA / UNIT)						
R1	Single family residence	7,000				X	Х			
R1-A	Single family residence	21,780				X	X		x	
R1-B	Single family residence	12,500				х	×		X	
R2	Single family residence	5,400				х	х		x	
R2-NC	Single family residence, neighborhood conservation	5,400				×	×		x	
R3	General residence	5,400	7,200	3,600	3,600	X	X		х	
R3-NC	General residence, neighborhood conservation	5,400	7,200	3,600	3,600	X	x		X	
R3-NC2	General residence, neighborhood conservation	5,400	7,200	3,600	3,600	x	×		X	
R3-R	General residence, neighborhood revitalization	5,400	7,200	3,600	3,600	x	×		X	
R4	General residence	4,800	4,800	1,700	1,700	Х	×		х	
R4-R	General residence, neighborhood revitalization	4,800	4,800	1,700	1,700	X	X		X	
C1	Conservation residence 2	3,600	3,600	1,800	1,800		Х			Х
C1-A	Special conservation residence	3,600	3,600							

TABLE 5-3: PERMITTED DWELLING TYPES AND DENSITIES: RESIDENTIAL DISTRICTS

Source: City of Annapolis

ZONING DISTRICT	PURPOSE	STANDARD DWELLING TYPES				OTHER DWELLING TYPES  X = PERMITTED					
		SINGLE FAMILY DETACHED	TWO- FAMILY	SINGLE FAMILY ATTACHED	MULTI- FAMILY	INSTITUTIONS FOR CARE OF AGED	REST, NURSING HOMES	ABOVE STREET LEVEL COMMERCIAL	PLANNED DEVELOP- MENTS	GROUP HOMES	
				OT SIZE IN SQ. FT., OR AS A M.		(EXPRESSED AS MIN SITE AREA / UNIT IN SQ. FT. OR AS A MAX. FAR)					
B1	Convenience shopping	4,800						2,400/unit	X	X	
B2	Community shopping							1,800/unit	х		
В3	General business			<b>.</b>					X		
B3-CD	General commercial corridor design								x		
BCE	Business corridor enhancement				1,244/ unit			x	x		
BR	Business revitalization				X			FAR 2.0			
C2	Conservation business	5,400	5,400	5,400	FAR 2.25			FAR 2.0			
C2-A	Special conservation business							FAR 2.0			
PM-2	Professional mixed office park	3,600/ unit	7,200/ unit	3,600/ unit	3,600/ unit						
11	Industrial	•	•		•						
Р	Professional office	3,600/ unit		3,600/ unit	3,600/ unit	x	х		Х	X	
PM	Professional mixed office	3,600/ unit	3,600/ unit	3,600/ unit	1,800/ unit					x	
MX	Mixed use	5,400		5,400	FAR 2.25			x	х		
C2P	Conservation professional office	1,500/ unit			FAR 2.0	FAR 2.0	FAR 2.0	FAR 2.0		FAR 2.0	

#### TABLE 5-4: PERMITTED DWELLING TYPES AND DENSITIES: NON-RESIDENTIAL DISTRICTS

Source: City of Annapolis

Note: FAR stands for Floor Area Ratio, a ratio of the total floor area in a building to the total site area. Shown is the maximum allowed.

#### **Restricting City Expansion**

Broadly speaking, zoning and regulatory authority has been used along the City's boundary with Anne Arundel County to restrict the creation of neighborhoods that could have supplied housing to meet a growing demand. Housing development in the Forest Drive corridor has been restricted by zoning, environmental regulations, and political opposition to annexation. Housing development, even where permitted within the Forest Drive corridor, can face years of special planning studies, opposition, and legal challenge. Opportunities for annexation appear to be mostly limited to the designated Growth Area discussed in Chapter 3: Land Use and Municipal Growth. This area is located along MD Route 2 (Solomon's Island Road), from Aris T. Allen Boulevard north to and along U.S. Route 50 and contains 82.6 acres.

#### Missing Middle Housing

The direct relationship between Annapolis' zoning requirements and its housing shortage is best illustrated by the map on the facing page which shows that more than 60% of all areas zoned for residential use in the city do not allow a simple duplex-- that is, two rental or home ownership units on a lot. What

is particularly striking about this statistic is that Annapolis's architectural character has been heavily defined over centuries by a great variety of small-scale apartment buildings, many of which could not be built under the city's current zoning code. This trend is not unique to Annapolis and in fact is so prolific nationally that the term 'Missing Middle Housing' was coined in 2010 by the architect Daniel Parolek to describe the diversity of small scale apartment dwellings that have been zoned out of existence in many cities. Zoning reform that legalizes modest apartment dwellings such as duplexes, triplexes, and fourplexes is one of the key recommendations of this Plan's approach to housing.

#### Moderately Priced Dwelling Unit Program

One policy currently in place to address the need for Missing Middle Housing in Annapolis is the Moderately Priced Dwelling Unit (MPDU) program. This inclusionary zoning program requires housing developers building more than 10 units to provide 15% of the units priced for households earning no more than 100% of median area income, and to maintain this affordability over time. The program has produced 18 rental units and 35 ownership units in its sixteen years of existence. An effective MPDU program requires strong housing demand and zoning that supports a range of housing types.



FIGURE 5-12: THIS ILLUSTRATION SHOWS THE RANGE OF HOUSING TYPES THAT ARE CONSIDERED 'MISSING MIDDLE HOUSING', A TERM CREATED BY ARCHITECT DAN PAROLEK OF OPTICOS DESIGN TO DESCRIBE THE VARIETY OF SMALL SCALE HOUSING OPTIONS SURPRISINGLY NO LONGER ALLOWED BY THE ZONING REGULATIONS IN MANY CITIES AND COUNTIES ACROSS THE U.S. INCLUDING ANNAPOLIS.

Source: Opticos Design

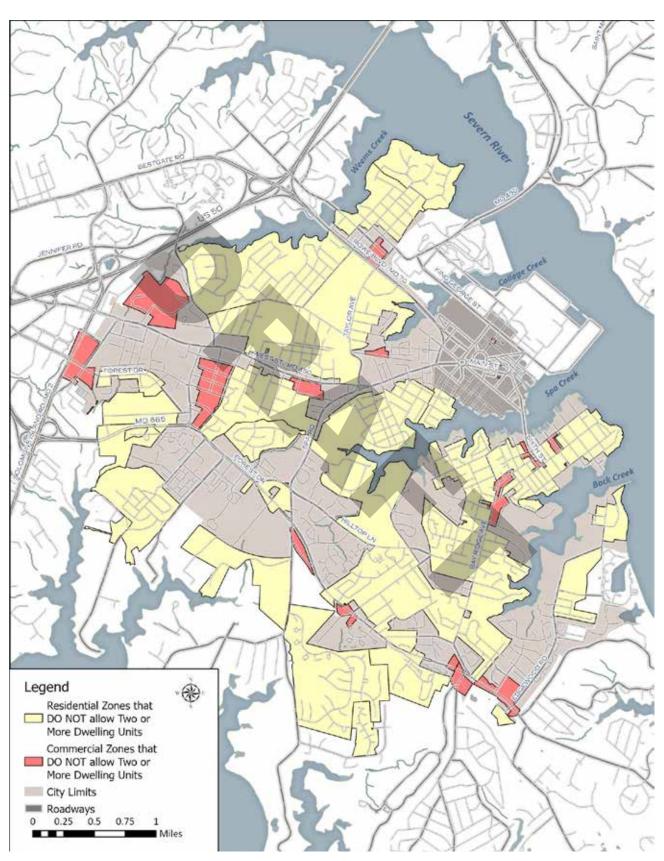
















































FIGURE 5-14: EXAMPLES OF COMMON MISSING MIDDLE HOUSING TYPES SUCH AS DUPLEXES, TRIPLEXES, AND FOURPLEXES ABOUND IN ANNAPOLIS. ALTHOUGH ALL ARE CONSISTENT WITH THE ARCHITECTURAL CHARACTER OF THE CITY, MOST ARE NOT PERMITTED BY CURRENT ZONING STANDARDS.

Source: Missing Middle Annapolis

# **Housing Supply**

#### **Housing Supply within Annapolis**

Housing supply holds great consequence for Annapolis as it generally determines who is able to live in the city, which in turn has a direct impact on the city's working population, its diversity, its cultural identity, and its economy among other defining features.

An analysis of residential building permits since 2010, when Annapolis' last Comprehensive Plan was adopted, reveals that the vast majority of approved permits have been for single family homes as illustrated by the map on the facing page. In fact, this trend is even further exaggerated by the fact that most of the multifamily permits approved, which include both rental apartments and condominiums, were for two redeveloped public housing communities-- Obery Court/College Creek Terrace and Wilbourne Estates-where most of the units were simply replaced one for one. This pattern means that the city is not creating a supply of housing options that could accommodate the varying needs of the current resident population not those who might want to relocate to the city. While single family homes can come in many sizes and price points, they are generally considered the least affordable and most inefficient form of housing because they require the most land of all housing types and are the most costly to service in regard to infrastructure.

These common traits of single family homes are in fact exaggerated in Annapolis because the cost of land is extremely high and the city's residential zoning standards privilege single family homes. The consequence of these factors is that single family homes are more commonly built in Annapolis than any other housing type and are generally more expensive than the same homes outside of the city in Anne Arundel County. Housing supply in Annapolis is so limited and disproportionately aimed at higher income population that the idea of a "starter home" for a young household is essentially obsolete within the city's current zoning districts.

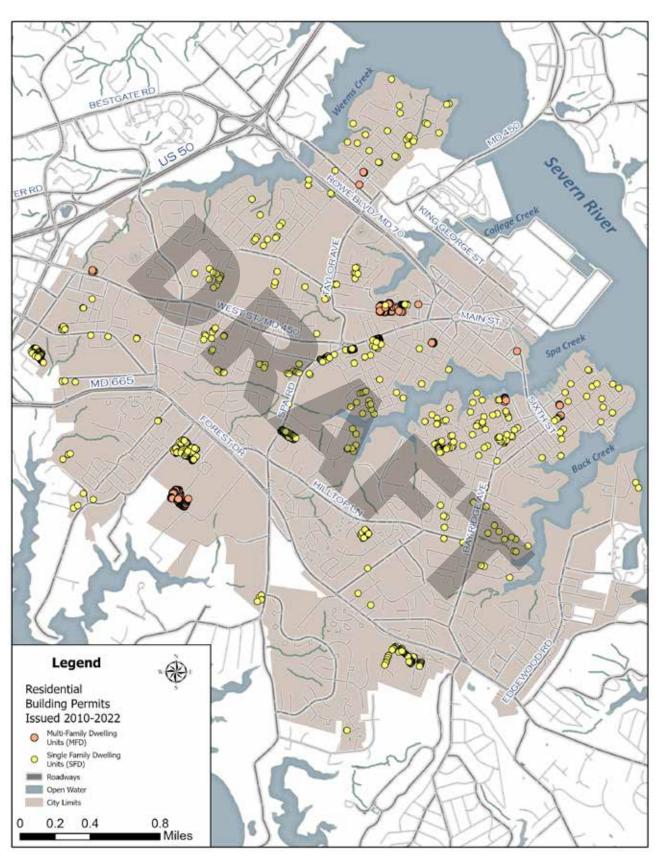


FIGURE 5-15: THIS SIGN FOR AN APPROVED PLANNED
DEVELOPMENT ON TYLER AVENUE IS EMBLEMATIC OF THE
PREDOMINANT HOUSING BEING BUILT IN ANNAPOLIS TODAY:
LARGE SINGLE FAMILY HOMES THAT ARE UNAFFORDABLE
TO THE MAJORITY OF THE CITY'S HOUSEHOLDS. WITHOUT
CHANGES TO THE CITY'S ZONING STANDARDS, THIS TREND
WILL CONTINUE.

Source: City of Annapolis

Even a cursory inspection of the housing stock in Annapolis' oldest neighborhoods reveals that the city was once providing a great diversity of housing types to meet its needs. Zoning changes over the years have dramatically limited the city's ability to meet its evolving needs.

For the city to properly address its housing supply needs today and into the future, zoning changes must be prioritized to incentivize more housing options of varying sizes and price points in all areas of city.



#### **Income-Restricted Housing**

Annapolis has a substantial share of income-restricted rental housing within its multifamily housing stock but nearly all of these units are restricted to the lowest income households, not moderate income workforce households increasingly challenged to find affordable housing in the city.

Admiral Farragut Admiral Oaks Allen Apartments	290 159			•	
	159				
Allen Apartments			159		
	98				
Annapolis Gardens	150		150		
Arundel Apartments	32				
9888 Spa	216				
Annapolis Roads	282				
Bay Shore Landing	303				
Bay Forest Senior	120		120		
Bay Ridge Gardens	198	<u> </u>	198		
Bloomsbury Square	.51	51			
Bywater I & II	306		230		
College Creek Terrace/Obery	174		174		
Eastport Terrace	84	84			
Eagle Rock at Quiet Waters	237	\			
Forest Hills	153				
Gardens of Annapolis	106				
Morris H. Blum Senior Housing	154	154	-		
Harbour House	273	273			
Wilbourn Estates	78	78			
Homes at the Glen	56		56		
Bell at West	300			18	
Robinwood	150	150	/		
Homes at Monument	21				
Bowman Place	60		21		
Watergate Village	608		60		
Wardour Bluffs	27				
Westwinds/1029 Spa	210				
Woodside Gardens	144		144		
Bowman Commons	6		6		
Parkside Preserve	130			19	
Anchor House	3				3
Wiley H. Bates Senior Housing	71				71
TOTAL UNITS	5,250	790	1,312	37	74

TABLE 5-5: THIS CHART TALLIES THE NUMBER OF INCOME-RESTRICTED HOUSING UNITS IN ANNAPOLIS BUT THESE UNITS REPRESENT A SMALL FRACTION OF THE CITY'S TOTAL HOUSING SUPPLY AND ARE MOSTLY AIMED AT THE LOWEST INCOME HOUSEHOLDS.

Source: City of Annapolis

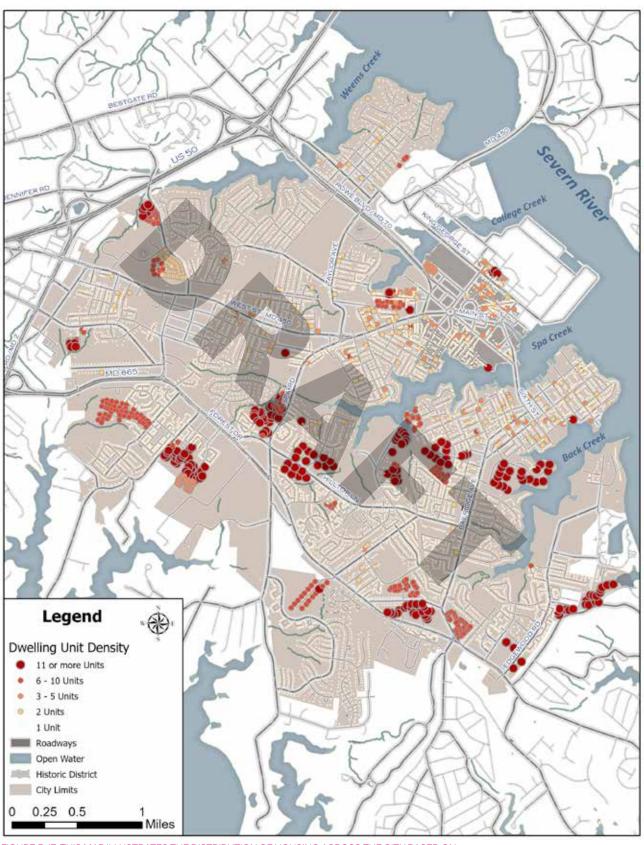
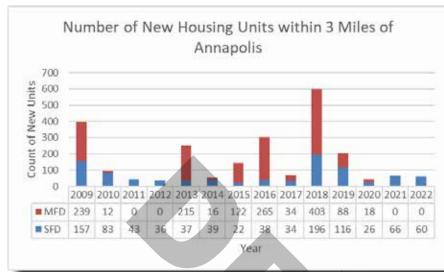


FIGURE 5-17: THIS MAP ILLUSTRATES THE DISTRIBUTION OF HOUSING ACROSS THE CITY BASED ON DENSITY. HOUSES WITH ONLY ONE UNIT (SINGLY FAMILY HOMES) ARE THE PREDOMINANT HOUSING TYPE ACROSS THE CITY, AND OTHER HOUSING TYPES EXIST IN SHORTER SUPPLY



**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

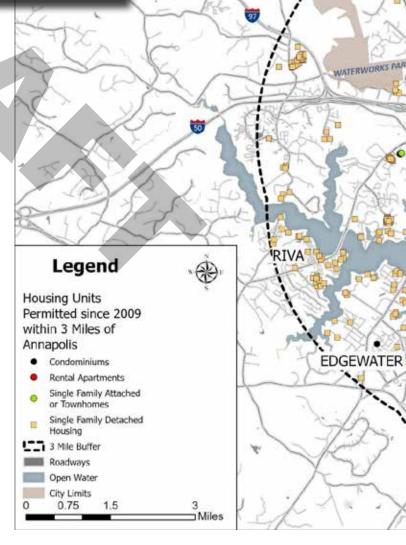
## **Housing Supply Outside of Annapolis**

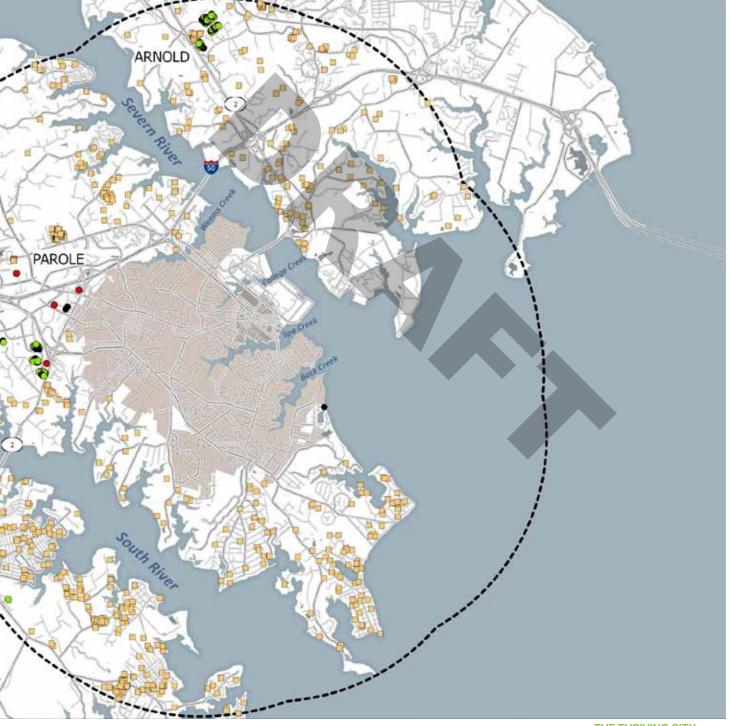
As a small municipality of only eight square miles and encompassed by Anne Arundel County, Annapolis has long depended on housing beyond its city limits which is in greater supply and more affordable than housing within the city. However, since 2009, housing affordability in Annapolis has been exacerbated over by that fact that, of the 1,412 multifamily dwelling units and 953 single family dwelling units permitted, none are income restricted or priced for workforce households. Moreover, Anne Arundel County faces the same housing cost burden as Annapolis with approximately 46% of county renters paying over 30% of their income toward rent in 2019 and close to 10,000 households cannot be accommodated by the current stock of affordable rental units in the county.

In 2019, to address this lack of housing affordability, Anne Arundel County adopted Bill 54-19 which provides several new provisions to incentivize more workforce housing. However, as of 2023, there are still no planned workforce housing developments in the pipeline within the greater Annapolis area.

FIGURE 5-18: THIS MAP AND THE CHART ABOVE SHOWS THE HOUSING PERMITS APPROVED BY ANNE ARUNDEL COUNTY SINCE 2009 WITHIN 3 MILES OF ANNAPOLIS, NONE OF WHICH ARE INCOME RESTRICTED OR PRICED FOR WORKFORCE HOUSEHOLDS.

Source: City of Annapolis





# **Demographics and Housing**

Chapter 2: Demographic Trends detailed demographic and economic information on the City's households. The information relevant to existing and future housing conditions is summarized here.

#### **Existing and Future Households**

Between 2010 and 2018, the number of households grew from 16,130 to 16,407 or by 277 households, representing an increase of 1.7%. Over that past decade, the size of the average household is estimated to have increase from 2.34 to 2.38. The average household size is projected to increase further over the next two decades with direct consequences for housing occupancy.

The Baltimore Metropolitan Council (BMC) projects that the City will add 4,400 residents but only 450 households though 2040. This variance between population and households is largely due to a projected increase in the average household size to 2.57 by 2040, an increase of about 8%. This seemingly small increase accounts for a population increase of about 3,120. One way of thinking about this is as follows: If no housing units were produced over the next 20 years, the City could still expect about 3,120 new residents and these would be added to the occupancy of existing households. Put another way, over two-thirds of the City's population growth over the next two decades would occur because households are getting bigger, not necessarily because new housing units are developing and attracting new residents.

But the BMC's projections are just that, projections, and they do not take the existing pipeline of approved and active developments, which are expected to supply 554 units in the near term, which is more units than the BMC projects for 20 years. The BMC projection is based in part on growth trends previously

established and thus it tells us the City has not added households in a measurable way for decades. However, the 20-year projection may not be too far off, because under existing zoning rules and current land availability, only about 366 more units, above and beyond the existing pipeline, could readily be provided. The City is maxing-out its capacity for new housing development at a time when it is needed most. Absent changes to zoning, housing in Annapolis will become even less affordable than it is today, and the result will be a less diverse and inclusive city, and one where many who choose to work in the city must commute from farther away, which then has collateral environmental and health impacts.

#### Household Structure and Composition

#### Family and non-Family Households

In 2018, U.S. Census data for Annapolis showed that 54% of households were families and 46% were nonfamily households, meaning they were composed of either unrelated people or just one person. For context, non-family households in Anne Arundel County account for only 30.9% of the total. An estimated 34% of all the households in the City, or about 5,600, are single-person households. About 36% of these, or 2,015 people living alone, are 65 years of age or older. The population in the 65 and over age cohort increased by 36.3% over the last decade and now comprises 17% of the population. Interestingly, since 2010, the City has lost population in the following young adult and family formation age cohorts: 18 to 23 (by 8.1%), 24 to 34 (by 9.3%) and 45 to 54 (by 6.1%).

#### Household Income

The 2020 current estimate of median household income in Annapolis, which is from the federal Department Housing and Urban Development, is \$104,000. Roughly 13% of City households earn \$200,000 or more per year and 15.4% earn less than \$25,000.



#### FIGURE 5-19: CHART OF POPULATION CHANGE BY AGE GROUP BETWEEN 2010-2021

Source: City of Annapolis

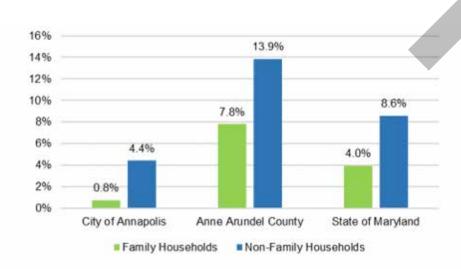


FIGURE 5-20: CHART OF POPULATION CHANGE BY HOUSEHOLD COMPOSITION BETWEEN 2010-2021

Source: City of Annapolis

# **Housing Need Indicators**

#### **Cost Burden**

The "cost burden" standard, from the U.S. Department of Housing and Urban Development, is the most frequently used measure of housing affordability in the United Sates<sup>5</sup>. According to the standard, households that are cost-burdened pay 30% or more of their gross income for housing expenses (rent, mortgage, utilities, condominium and HOA fees, and taxes) and thus have difficulty affording other necessities such as food, clothing, transportation, and medical care. Not surprisingly those that are most cost burdened are those with the lowest incomes. Those that pay 50% or more are considered "severely cost burdened". A full 45% of the City's renting households or 3,620 households, are cost burdened and 20%, or 1,690, are severely cost burdened. Among households that own their house, about 29% are cost burdened and 16% are severely cost burdened.

The City and Anne Arundel County experience similar cost burdens among owners and renters. As shown in the chart below, in both places, renter households are cost burdened at a higher level than homeowners. In fact, for the State of Maryland, nearly one-half of all renter households pay 30% or more in housing costs<sup>6</sup> which exceeds the 45% share in the City. What is particularly significant for housing affordability in Annapolis, however, is that renter households comprise one-half of the City's households (compared to only 27% in the County and 34% in the State). With renters comprising one-half of all households, the affordability problem is much more pronounced and concentrated in Annapolis.

In considering renters and owners together, about one in every six households (17%) in Annapolis, or 2,777 households, are severely cost burdened, meaning these households have few resources remaining for food, transportation, medical care, etc. This places Annapolis among a group of the most severely cost burdened cities in the United States; on par with Los Angeles (18.5%) New York City (17.6%) and Boston (15.4%).

Housing affordability in Annapolis is a significant challenge for low- and middle-income families. The exhibit below shows the share of home-owning households in each income group that are housing cost burdened or severely burdened. As with renters, the home-ownership cost burden is most pronounced among lower-income households, but it is still significant for middle income households. Among those home-owning households earning between 80 and 120 percent of the area median income, 44.9% are cost burdened and 12.9% are severely cost burdened. With the median sales price in 2021 recorded at \$625,000, home ownership is becoming unattainable to an increasing number of existing renters who may want to buy and to new home buyers who wish to move to Annapolis. Maintaining homeownership may also be very difficult for many households, especially when severely cost burdened.

#### Overcrowding

The increasing average household size and high renter population mentioned above may indicate that overcrowding may become an issue, but this is not sufficient to imply there is an overcrowding issue right now. The Annapolis Consolidated Housing Plan shows that 420 housing units meet the definition of being

<sup>5</sup>This derives from the Brooke Amendment, Section 213(a) of the Housing and Urban Dev Development Act of 1969, which amended the federal Housing Act of 1937. It capped the rent in public housing at 25% of a tenant's income. It was revised to 30% in 1981 through another amendment. The 30% standard has since been commonly used as the criteria to measure the affordability of housing generally. This method of measuring housing affordability is mostly effective at describing the problem of affordability for the lower- and middle-income households. Households with higher incomes generally have the capacity to take on higher housing costs without impacting the ability to provide for the other necessities. It is in this way that the standard can exaggerate the affordability problem so care must be taken to evaluate household incomes of those classified as "housing burdened".

<sup>6</sup>American Housing Survey, U.S. Census Bureau, 2017.

over-crowded, that is, they have 1.01 to 1.5 persons per room. It also shows that 170 units are severely overcrowded, with 1.52+ persons per room. Combined, these units, which are all rental units, represent 3.5% of all housing units in the City. This likely results from the fact that 3 or more-bedroom units comprise only 30% of the rental housing stick.

#### Supply and Waiting List for Public Housing

There are 1,114 public housing units (in publicly owned and publicly subsidized developments) in Annapolis distributed among nine communities, six of which are publicly owned housing developments. There are 1,071 households on the waiting list for a public housing unit and 45% of them are families with children. There are 557 housing choice voucher participating households and 499 other households on the waiting list of which 60% are families with children. Vouchers basically supplement a

household's rent up to a level where they can more easily afford a market rate. Federal Section 8 vouchers provide subsidy payments directly to the landlord, which help close the gap between what poor renters can afford and the market rate for rent. In total, there are approximately 1,312 Section 8 units in the City. In all there are 2,120 subsidized rental housing units in Annapolis including public housing and voucher subsidized units, representing 14% of the City's housing stock.

#### **Prices**

In the single-family market, housing prices differ substantially between the City and Anne Arundel County. In 2021, the median price of a house in the City was \$625,000, 33% greater than the \$375,000 median price in the County. The map below shows that the highest single-family housing prices (priced at \$650,000+) were clustered in and around the downtown historic district, in Eastport, and near the

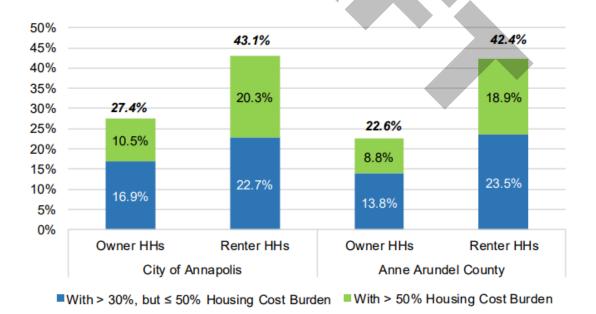


FIGURE 5-21: PERCENT OF HOUSEHOLDS WITH COST BURDENS BY TENURE, 2013-2017 FIVE YEAR DATA

Note: AMI Levels are HAMFI Levels (HUD Area Median Family Income), the metric used in HUD CHAS data sets.

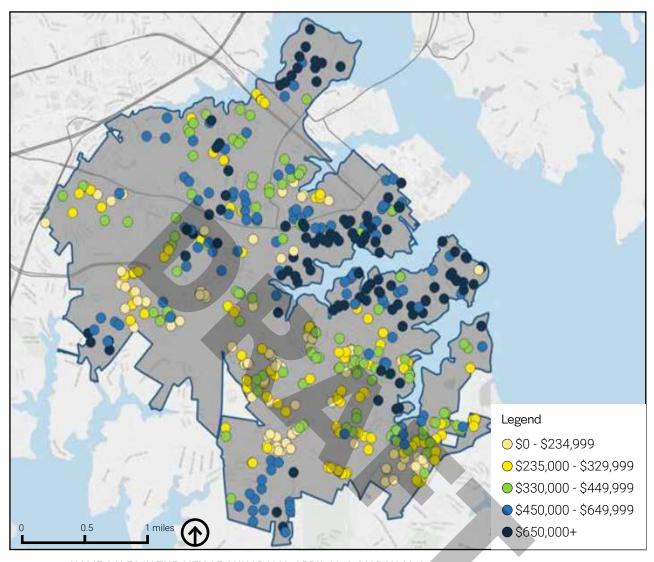


FIGURE 5-22: HOME SALES IN THE CITY OF ANNAPOLIS, APRIL 2018- MARCH 2019

Source: Corelogic/ListSource via DQNews; ArcGIS Pro; U.S. Census Bureau; BAE, 2019.

water in West Annapolis. The lowest sale prices were distributed throughout the City, including especially south of Hilltop Lane, east of Bay Ridge Avenue, and in the Forest Drive corridor. These prices continue to escalate making Annapolis one of the least affordable cities in the U.S.

The 2019 average monthly rent for a one-bedroom apartment in the City was \$2,033, which is about 5% higher than in the County. As with home sales, rental costs continue to escalate dramatically. The average rent estimate in the City is moderated somewhat by the presence of public housing where rents are capped at or near 30% of a renter's household income.



Area Median Income = \$105,100

#### FIGURE5-23: MAXIMUM AFFORDABLE SALE PRICE BY AMI (4-PERSON HOUSEHOLDS) 2021

Source: Redfin, 2021; BAE, 2021.



Area Median Income = \$105,100

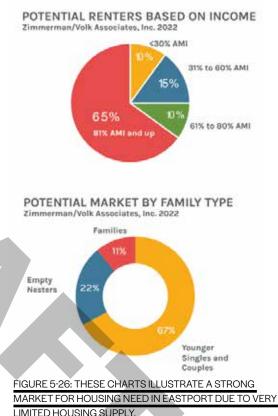
THE THRIVING CITY HOUSING 157

# **Eastport**

# **Choice Neighborhood Initiative**

As discussed earlier in this chapter, the preservation and revitalization of existing public housing is one of the key strategies to addressing housing needs and ensuring that Annapolis is home to a diverse population. With this in mind, in 2022, the Housing Authority of the City of Annapolis in partnership with the City applied for and was awarded a major planning grant from the U.S. Department of Housing and Urban Development (HUD) Choice Neighborhood Program to plan a transformational revitalization of Annapolis' largest public housing community.

The adjacent communities of Eastport Terrace and Harbour House are today home to approximately 540 residents, 72% of whom live below the poverty line, and 96% are Black. Although the community is close to many public facilities and amenities such as Truxtun Park, Eastport Elementary, and the Eastport Shopping Center, it is also the City's only food desert and despite being located on the waterfront, has no easy access to the water. Through a community led planning process, a framework plan was created to completely redevelop the existing public housing and better integrate it with the surrounding city. The same number of existing deeply affordable housing units will be preserved and additional units will be added to create a mixed-income and mixed use community with better access to opportunities and services. It is important that the City continue to work closely with HACA to implement the plan.



LIMITED HOUSING SUPPLY.

Source: Zimmerman/Volk Associates Inc., 2022

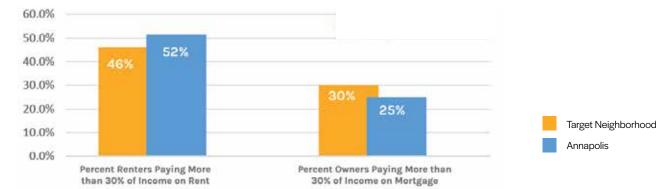


FIGURE 5-25: THIS CHART ILLUSTRATES THAT COST BURDEN FOR RENTERS IN THE AREA AROUND THE EASTPORT CHOICE NEIGHBORHOOD PROJECT IS AS BAD AS ANYWHERE IN THE CITY AND WORSE FOR HOMEOWNERS DUE TO RAPIDLY ESCALATING COSTS.

Source: ACS 5-year Survey, 2020



FIGURE 5-27: FRAMEWORK PLAN FOR THE REDEVELOPMENT OF EASTPORT TERRACE AND HARBOUR HOUSE, ANNAPOLIS' LARGEST PUBLIC HOUSING COMMUNITY. THE PLAN PRESERVES THE SAME NUMBER OF DEEPLY AFFORDABLE UNITS IN THE COMMUNITY TODAY BUT ADDS ADDITIONAL UNITS AND AMENITIES TO TRANSFORM THE NEIGHBORHOOD TO A MIXED INCOME AND MIXED USE COMMUNITY. THE COMMUNITY LED PLANNING PROCESS THAT LED TO THIS PLAN WAS FUNDED BY MAJOR CHOICE NEIGHBORHOOD INITIATIVE GRANT FROM HUD IN 2022

# **Sustainable Design**

Building design in Annapolis, as elsewhere, plays an important role in the health of the city. Cumulatively, buildings are a major source of carbon emissions into the environment due to their energy demands; buildings and their site development impact water quality and surrounding natural resources; and the quality of building design, particularly the indoor environment, is a major factor in the wellbeing of the city's residents. All of these issues are amplified with housing given that there are more buildings in Annapolis dedicated to residential use than any other use and many residents spend the majority of their time in their homes.

Annapolis adopted green building standards in 2008 but has made very few updates to these standards since then despite the evolving impacts of climate change, significant advances in building technology, and greater awareness of sustainable design strategies.

Annapolis' current green building standards when applied to housing are only required for single family homes in excess of 3,250 square feet and subdivisions of five or more attached or detached homes. With this Plan's substantial focus on the creation of more housing options for moderate income workforce households, there is an urgent need to ensure that the City's green building standards lead to positive outcomes for all new housing. The standards should be amended to address all new housing regardless of size; construction inspections should include at least a partial checklist related to green building requirements to ensure the intent of the standards is being met; and for larger projects, a post-occupancy review should be considered to assess the performance of the standards.

FIGURE 5-28: THE RECENTLY COMPLETED GREEN VILLAGE VISITOR COTTAGES AT THE SMITHSONIAN ENVIRONMENTAL RESEARCH CENTER (SERC) NEAR ANNAPOLIS INCLUDES A VARIETY OF HIGH PERFORMANCE GREEN BUILDING STANDARDS WHICH MAY PROVIDE A MODEL FOR NEW AND RENOVATED HOUSING IN ANNAPOLIS.

Source: Nina Tan / SERC





#### **Short Term Rentals**

Short Term Rentals (STR) in Annapolis help fill a housing gap for tourists visiting Annapolis with a convenient, affordable, and authentic experience while providing homeowners with extra space an additional source of income. However, in recent years as the popularity of STRs has grown, they have negatively impacted the long-term rental market by reducing the supply of available housing and thereby driving up rental costs. Furthermore, in areas where there is a high concentration of STRs, the decrease in residents—who are replaced by tourists—has impacts on the types of retail establishments which can survive and ultimately the character of the neighborhood.

Annapolis has seen steady growth of Short Term Rental properties over the last ten years due to a strong tourism market and gaps in the hospitality sector for lodging options. While there is clear economic value in allowing short term rentals for the tourism economy, it is important to regulate STRs to mitigate their negative impact on long-term housing and neighborhood preservation.

Annapolis is not unique in facing this issue. Cities large and small across the U.S., and internationally, are amending local policies to strike a balance between the benefits and costs of allowing STRs.

Host Compliance is a service used by City of Annapolis to monitor STRs. According to Host Compliance, 92% of the STRs in Annapolis are an entire single family home being rented. Since 2021 when Host Compliance has tracked STRs within Annapolis, total listings of STRs has grown at a pace of 27.5% while rented STRs grew at a rate of 16.4% which mirrors national trends for STRs.

Short Term Rental distribution across Annapolis is focused along the most urban neighborhoods of the city, specifically Downtown, Eastport, and Inner West Street and this has led to a shift in neighborhood complexion. Neighborhood Preservation should encourage the building of wealth, community involvement, and continuing to provide a service for tourists to Annapolis. Reforms to Short Term Housing should:

- Prioritize locally-owned short term rentals
- Be conscientious of racial, ethnic, and generational gaps in communities
- Maintain the existing sense of neighborhood
- Continue to provide economically viable housing for tourists

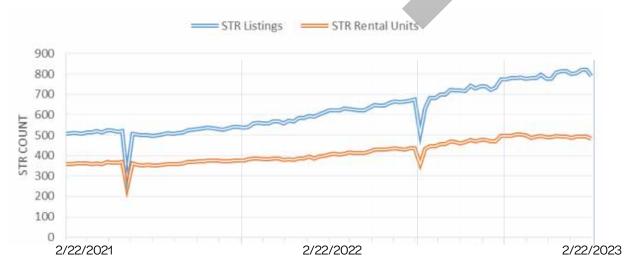


FIGURE 5-29: THIS CHART ILLUSTRATES THE GROWTH RATE OF STR'S IN ANNAPOLIS IN THE TIME SINCE THE CITY HAS USED THE HOST COMPLIANCE SERVICE TO TRACK STR'S. THE GROWTH RATE MIRRORS NATIONAL TRENDS.

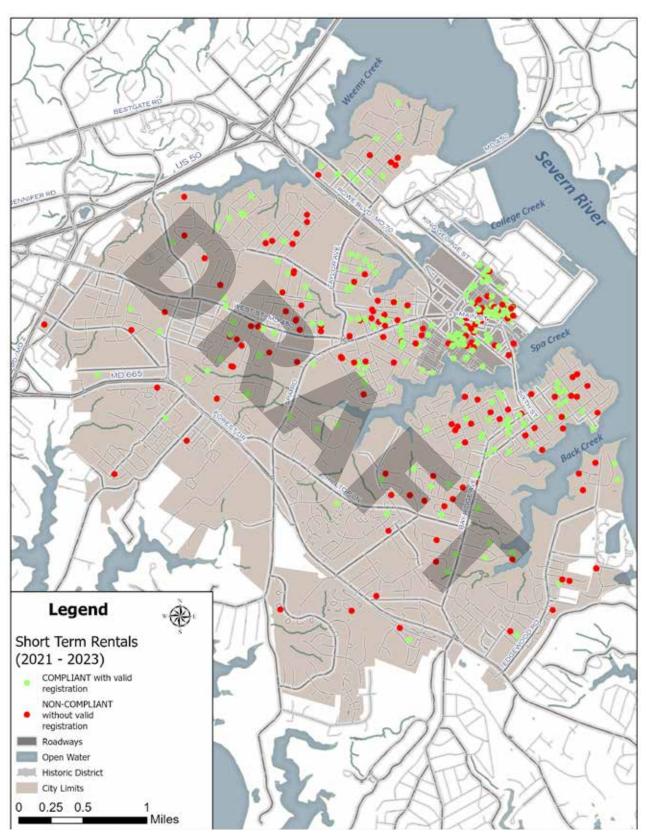


FIGURE 5-30: THIS MAP SHOWS THE LOCATION OF SHORT TERM RENTAL (STR) PROPERTIES IN THE CITY AND WHETHER THEY ARE COMPLIANT WITH CITY REQUIREMENTS FOR REGISTRATION. THE LARGEST CONCENTRATION OF STR'S IS IN THE DOWNTOWN AND EASTPORT AREAS.

# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

#### **HOUSING GOAL H1**

PRODUCE A SUPPLY OF AFFORDABLE RENTAL AND OWNERSHIP HOUSING IN ORDER TO MEET CURRENT AND PROJECTED NEEDS.

#### **PERFORMANCE MEASURE 1**

The percent of total renter households that are "severely cost burdened" is reduced to 10% by 2040

#### **PERFORMANCE MEASURE 2**

The percent of total home-owner households that are "severely cost burdened" by 2040 is reduced to 6.5%

- H1.1 Coordinate with Anne Arundel County and the State of Maryland on new policy mandates and regulatory incentives to expand the development of affordable and moderately priced rental and owner-occupied housing within the greater Annapolis area.
- H1.2 Specifically promote infill development and redevelopment in the Upper West Street and Forest Drive corridors to facilitate the creation of walkable communities where new housing options and neighborhood commercial uses coexist with, and enhance, the existing communities. (also listed in Chapter 4: Land Use under goal LU1)

- H1.3 Use the City's authority to annex and permit development to promote housing development in the City's Growth Area, which is defined as the area outside of the City boundary which meets the guidelines for the State's Priority Funding Areas and is therefore deemed sensible for annexation.
- H1.4 Reevaluate the Moderately Priced Dwelling Unit (MPDU) program and consider how it could be more effective including opportunities to expand the requirement for MPDUs within planned developments and extending the length of time before the units expire.
- H1.5 Remove the barriers in the City's current zoning regulations that are preventing Annapolis from meeting the Federal Fair Housing Act standards, which include expanding the areas where more "missing middle" workforce housing options are permitted. (also listed in Chapter 3: Municipal Growth under Goal MG3)
- H1.6 Explore using zoning incentives and/or regulations to spur the construction of housing types that offer more home ownership opportunities for workforce households. Workforce households, as defined by the State of Maryland, are those which have an aggregate annual income between 60%-120% of the Area Median Income for home ownership opportunities. (also listed in Chapter 4: Land Use under Goal LU3)
- H1.7 Explore using zoning incentives and/or regulations to prioritize long-term rental options for workforce households over short-term rental options. Workhouse households, as defined by the State of Maryland, are those which have an aggregate annual income between 50%-100% of the Area Median Income for rental opportunities. (also listed in Chapter 4: Land Use under Goal LU3)
- H1.8 Utilize zoning district changes to identify "housing priority" areas where access to transit, jobs, and amenities are already available within a 1/2 mile radius. (also listed in Chapter 3: Municipal Growth under goal MG3)

#### **HOUSING GOAL H2**

# PRESERVE THE SUPPLY OF **QUALITY HOUSING FOR LOW** AND MODERATE INCOME HOUSEHOLDS.

#### **PERFORMANCE MEASURE**

Achieve no net loss in the supply of housing meeting the needs of low and moderate income

- Formalize a policy of no net loss in quality affordable units to be managed by the Community and Economic Development division of the City's Department of Planning & Zoning.
- H2.2 Mitigate displacement of low- and moderateincome households by facilitating strategies aimed at reducing the costs of maintenance and property taxes. The strategies will be developed by Planning & Zoning staff in coordination with the City Council and City Manager.
- H2.3 Maintain and regularly update an inventory of naturally-occurring affordable housing (NOAH) in the greater Annapolis area and develop triggers and criteria for preservation actions.

- Give greater preference at the highest level of City staff, in time and resources, to working closely with residents in low and moderate income neighborhoods who may not be formally organized to advance their interests, especially where owner occupied housing is generally affordable.
- Amend the policies regulating for Short Term Rentals (STR's) to prioritize local ownership and occupancy as a strategy for housing affordability and neighborhood preservation. (also listed in Chapter 3: Municipal Growth under goal MG3, and Chapter 4: Land Use under goal LU3)
- H2.5 Create legislation that helps to preserve the city's existing stock of small scale apartment buildings - including duplexes, triplexes, fourplexes, and other configurations- and limits their consolidation into single family dwellings.

#### **HOUSING GOAL H3**

PLAN FOR CHANGING HOUSING NEEDS OVER TIME IN RELATION TO BOTH THE PRODUCTION OF NEW HOUSING AND PRESERVATION OF EXISTING UNITS.

#### **PERFORMANCE MEASURE**

Annual reporting on the status of housing affordability in the city coupled with expert recommendations to the Mayor and City Counci for improvement.

- H3.1 Formalize a system of regular monitoring and reporting on the production and preservation of affordable housing units.
- H3.2 On an ongoing basis, postulate and test zoning changes related to density and unit types and select and adopt zoning amendments that reduce regulatory barriers to the production of affordable housing units.
- Formalize a policy of regular coordinated reporting with Anne Arundel County on the production and preservation of affordable housing units in the greater Annapolis area.
- H3.4 Leverage the insight and support of the Affordable Housing and Community Equity Development Commission to develop and review strategies for the production of new housing and the preservation of existing units.

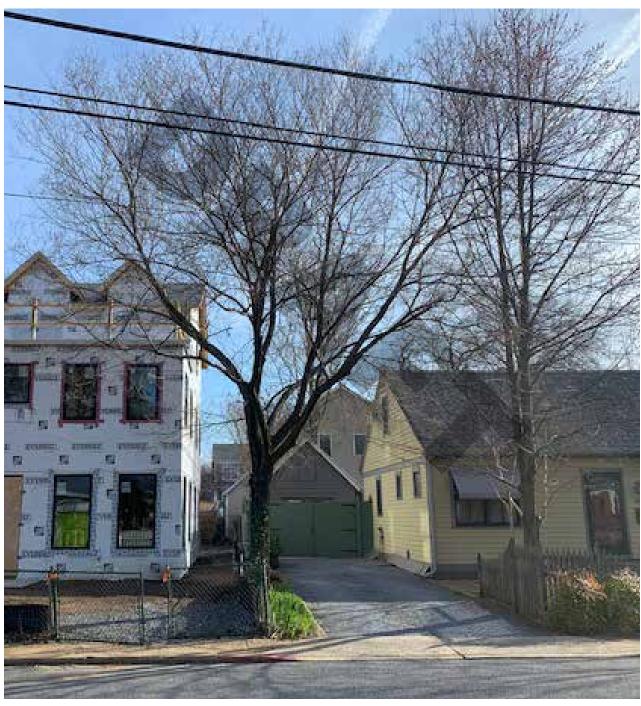


FIGURE 5-31: ONE OF THE CURRENT TRENDS IMPACTING HOUSING AFFORDABILITY IN ANNAPOLIS IS
THE CONVERSION OF MORE MODEST AND AFFORDABLE HOMES INTO LARGER AND LESS AFFORDABLE
HOMES. THIS TREND IS A FUNCTION OF LAND COSTS AND THE CITY 'S EXISTING ZONING STANDARDS
WHICH PRIVILEGE SINGLE FAMILY HOMES OVER ALL OTHER HOUSING TYPES.

#### **HOUSING GOAL H4**

INCREASE THE SUPPLY, VARIETY, AND QUALITY OF HOUSING TYPES THROUGHOUT THE CITY TO MEET THE NEEDS OF A DIVERSE POPULATION IN REGARD TO INCOME, AGE, HOUSEHOLD SIZE, DISABILITY, AND OTHER FACTORS.

#### **PERFORMANCE MEASURE 1**

The percentage of housing units in housing types with two, three and four units will grow from 6% to 15% of the total by 2030, and to 25% by 2040.

#### **PERFORMANCE MEASURE 2**

The number of accessory dwelling units will increase by 500 units by 2040.

- H4.1 Explore incremental adjustments to the city's residential zones to allow for more diversity of housing types such as townhomes, duplexes, and triplexes, that are compatible with existing neighborhoods, using architectural standards if needed to ensure compatibility. (also listed in Chapter 4: Land Use under Goal LU3)
- Update the City's Green Building requirements to include new standards for energy efficiency, water efficiency, and site design for all new residential buildings regardless of size; new inspections protocols; and explore the feasibility of a post-occupancy study requirement for larger projects. (also listed in Chapter 9: Environmental Sustainability under Goal ES6)
- H4.3 Create legislation that incentivizes and removes barriers to building accessory dwelling units.
- H4.4 Foster new opportunities for mixed income and mixed-use communities including through the redevelopment of the Eastport Terrace and Harbor House communities, and potentially other properties currently owned and managed by the Housing Authority of the City of Annapolis (HACA).



FIGURE 5-32: DUPLEX (BOTH SIDE-BY-SIDE AND OVER-UNDER). A DUPLEX IS A BUILDING CONTAINING TWO-UNITS ON THE SAME LOT. THE OVERALL BUILDING CAN BE ESSENTIALLY INDISTINGUISHABLE FROM A SINGLE-FAMILY HOUSE.

Source: City of Annapolis



FIGURE 5-33: COURTYARD BUILDING: A DETACHED BUILDING TYPICALLY LARGER BUT NOT NECESSARILY TALLER THAN A SINGLE FAMILY HOUSE, CONTAINING MULTIPLE DWELLING UNITS SITUATED AROUND A SHARED COURTYARD WITH A SHARED BUILDING ENTRANCE.

Source: City of Annapolis



FIGURE 5-34: TRIPLEX AND QUADPLEX: A DETACHED BUILDING PROIVIDING THREE OR FOUR DWELLING UNITS, WITH SEPERATE OR SHARED ENTRANCES.

Source: City of Annapolis



FIGURE 5-35: COTTAGE CLUSTER: A GROUP OF VERY SMALL DETACHED HOUSES ON A SHARED DRIVEWAY WITH SHARED OPEN SPACE.

Source: Ross Chapin Architects



# THE FUNCTIONAL CITY

# 6. TRANSPORTATION

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

# 7. COMMUNITY FACILITIES

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

# 8. ARTS, CULTURE & HISTORIC PRESERVATION

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

Bridging barriers.
Connecting communities.



# <u>6.</u> TRANSPORTATION

# **OVERVIEW**

Few aspects of the public realm are as important to as many people as transportation; fewer still are controlled by so few public sector entities. Local, state, and federal governments have created a transportation system in the United States that has been the standard of excellence for nearly every other country in the world. The development of the Eisenhower Interstate System beginning in the late 1950's propelled the economy forward for millions of people.

Times change. While other countries have moved ahead on high speed passenger rail or separated bicycle networks, for example, the U.S. lags far behind. More importantly, cultural shifts building on smart growth and walkable places, greater awareness of historic transportation inequities, changing family structures, increasing construction costs, declining rates of driver licensing for younger people, aging populations, and concerns about environmental degradation from vehicle emissions have shifted the goals for many cities in the United States, including Annapolis. Congestion levels on public roadways, parking management, and a greater desire for streets that offer a complete set of mobility options are at the forefront of a new transportation paradigm. Overlaying these changes are advances in micro-mobility and enhanced technologies that may make some systems less important or in need of innovative redesigns to remain relevant. Many of these 21st century considerations became the foundation for the Infrastructure Investment and Jobs Act (IIJA), which was signed into law in 2021 and is the most significant investment in America's infrastructure in nearly fifty years.

Annapolis today is at a crossroads in shaping its transportation policies in response to these rapidly changing urban needs and preferences. These policies will in turn shape the transportation modes that residents and visitors will use in the future to move more efficiently, safely, comfortably, and with less environmental impact. Transportation policy changes and infrastructural investments can have far reaching positive impacts on the broader environment of the city.

"Almost no matter what you want to do with cities, transportation is the fastest and most cost-effective way of achieving your goals. If you want to reduce CO2 emissions, if you want to advance social equity, if you want to foster small business success, if you want to increase land value, if you want to increase public health, if you want to reduce fatalities and injuries—transport is the place to do it."

- Jeff Tumlin, San Francisco MTA

The following chapter will outline the current context of Annapolis both internally and with respect to the external changes and challenges mentioned. Reviews of this information and future amendments will address recommendations to meet the most pressing transportation needs of Annapolis' residents, businesses, and visitors.

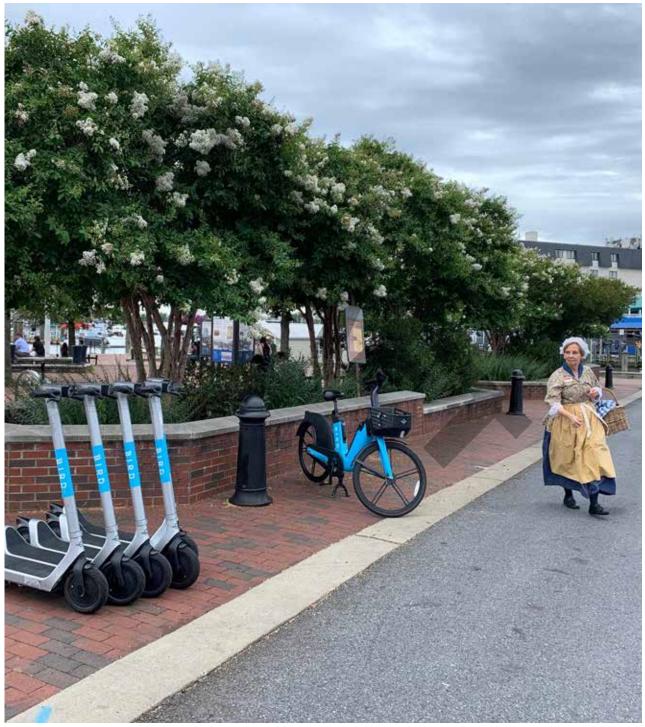


FIGURE 6-1. AN ELECTRIC BIKESHARE AND SCOOTER SHARE PROGRAM IS ONE OF THE WAYS THAT ANNAPOLIS IS ADAPTING TO CHANGING TIMES

# **EXISTING CONDITIONS**

# Transportation Policy is Land Use Policy

In Annapolis, as in most other places, transportation policy has always been closely related to land use policy and housing policy. For example, when rail service existed in Annapolis, neighborhoods were oriented around the stations with homes and businesses situated in close proximity to the rail network. After the arrival of the personal vehicle, the city was redesigned to serve this new mode of transportation with roads widened, parking lots and driveways now dominating the landscape, and homes and businesses now situated farther apart because it was no longer necessary to walk between places.

The impacts from the transformation of the city to enable personal vehicle use have been profound as Annapolis today is a challenging place to live and be successful without a personal vehicle: the sidewalk network has many gaps and obstacles, the bicycle network is fragmented and not connected, and transit service is infrequent and not as reliable as it could be. For the last seventy-five years, a disproportionate amount of investment has improved the infrastructure needed for personal vehicles at the expense of other modes of transportation, and this policy has changed very little over the years. Being closely related to transportation, policies guiding land use and housing haven't changed much either. Unfortunately, many of the everyday challenges the city now faces, including housing affordability, traffic congestion and safety concerns, polluted air and water, and inequitable access to opportunities, can be attributed to our interrelated policies guiding transportation, land use, and housing.

From its very beginnings as a city on a peninsula, the geography of Annapolis has been the major determining factor in building out a transportation network. Major transportation corridors are therefore constrained to the shape of this peninsula, with the City being connected to the rest of the state by highways at the edges of the peninsula. With train service long since departed from the city, today the major links between Annapolis and nearby cities are roadways that include US-50. That same highway provides a critical regional connection across the Chesapeake Bay Bridge to the east and Washington DC to the west. Baltimore is accessed via I-97 or MD-2. MD-450 provides another east-west mobility option and is generally a two/three-lane roadway inside Annapolis, widening out considerably to accommodate movements on and off of US-50 in the Parole area. Important secondary streets include Hilltop Lane/Tyler Avenue, Spa Road, Taylor Avenue Bay Ridge Avenue, and Forest Drive which is owned and managed by Anne Arundel County.

This pace of growth represents a sharp decline in population growth from some previous decades. This growth rate since 1990 is lower than some other Maryland communities around the area: Frederick (80%), Rockville (51%), Gaithersburg (74%), and Anne Arundel County (56%) have grown considerably faster since 1990 than Annapolis (Hagerstown has not, as one counter-example). The pace of growth in Annapolis since 1990 is more similar to that of many smaller towns and cities around Maryland, which have populations that have grown slowly and sometimes almost not at all. The rate of growth has slowed from previous decades, although much of the growth in the mid- to late-20th century was due to annexation. Outside of the city limits is either water or low-density, suburban development separated by green space, giving the city a fairly distinct "edge" to development.

The transportation environment in Annapolis is best characterized by its extremes. Downtown Annapolis,

Inner West Street, Eastport, and West Annapolis are highly walkable areas, while much of the rest of the city is not. In the less walkable majority of the city, pockets of walkable neighborhoods often lack safe pedestrian connections to adjacent areas, particularly nearby retail conveniences, which then forces residents to drive short distances that could otherwise be accessed on foot or bike.

Solving the challenges of connectivity between Annapolis' diverse communities is straightforward in one respect: there are relatively few major arterial roadways. West Street (MD-450) and Forest Drive are roughly parallel commercial corridors that connect the majority of the city's residential population to retail, services, and major destinations. Forest Drive sees 30,000 vehicles per day (vpd) and up to nearly 60,000 at its west end in the vicinity of its interchange with Solomons Island Road, while West Street is typically hosting 20,000 vpd to 30,000 vpd. Between West Street and Forest Drive are four primary north-south corridors: Old Solomon's Island Road, Chinquapin Round Road, Spa Road, and Bay Ridge Avenue. Today, with few exceptions, all of these roads have been designed for one mode of transportation only: the personal automobile. In the coming years, if the City wants to implement the goals of this Plan, it must ensure that its primary roadways form a network of complete streets, that is, streets designed to improve the safety and comfort for all street users regardless of whether they are automobile drivers, pedestrians, cyclists, or transit riders.

# **West East Express**



FIGURE 6-2: THE WEST EAST EXPRESS

Source: City of Annapolis

The extensions of the Poplar Trail, both east and west, comprises the planned bike corridor known as the West East Express (WEE). This bikeway project has been a longtime priority to connect Downtown Annapolis with the Parole area, and major trails outside of the City including the twelve miles of trails at the City-owned Waterworks Park. With all funding now in place, the project is moving toward construction.

The Poplar Trail is today the most heavily biked trail in Annapolis, part of the East Coast Greenway, and its extensions would address key missing connections linking Anne Arundel County's B&A Trail and South Shore Trail to create a large regional trail loop. When complete, the WEE will link diverse communities to jobs, schools, shopping and conveniences, parks and other public services, and will provide an incredible new recreational amenity for all residents.

# **Demographic Perspectives**

It is important to note that statistics on employment, income, poverty, and related measures were impacted by the COVID-19 pandemic, and are therefore likely to adjust in the coming years. Chapter 2: Demographic Trends includes a more detailed review of Annapolis' population characteristics.

Some observations and their relevance to transportation planning in Annapolis follow.

#### **Employment**

The workers in Annapolis have undergone some changes in their occupations and location in recent years. Data obtained from the U.S. Business Census indicates that in 2018 less than 10% of Annapolis workers lived in Annapolis. As the city becomes less affordable to live, this number will continue to decrease. Figure 6-3 illustrates the disparity within the city between where workers reside and where they work.

#### **Aging Population**

Resident of Annapolis have a median age of 36.7 years, a figure 20% higher than the median age in 1980 (sources: US Census). The 65 and older population is the fastest growing population in Annapolis based on change since the last comprehensive plan. As people age, their mobility needs change. Reaction times and sight acuity degrade, making driving an automobile in fast or dimly lit conditions more problematic. Investment in all of the other transportation modes particularly public transit and the sidewalk network will be a boon for the city's aging population.

#### **Social Vulnerability**

About 1 in 10 (11%) of Annapolis residents live under the federal poverty threshold definition. This definition has been criticized for being insensitive to regional variations in prices as well as not keeping pace with inflation generally. A better measure of income stress with respect to affording transportation options is the number of people below 150% of the federal poverty threshold - a condition that about 20% of Annapolis residents find themselves in now.

## **Getting to Work**

The means of transportation (to work) chosen by Annapolis residents is diverse, with a relatively low number (73%) driving alone. Here, income makes a major difference: while people earning less than federal poverty rates comprise about 6% of the Annapolis population, they comprise 15% of transit ridership, a factor of 2.5. However, people with higher-than-poverty threshold incomes make up 81% of total public transportation riders.

## Rise of Technology

The ways that technology is influencing transportation choices and trends are hard to summarize because they are both massive and evolving. The challenge with transportation is managing the change to avoid creating inadequate or incompatible systems with highly tech-enabled and personalized transportation systems.

"We don't expect cars to be single-owner in the future [the trend is for shared vehicles]...In the span of your comprehensive plan you could have another Uber that completely disrupts transportation."

- Shelley Row, PE, CSP (5.14.2020)

#### Where employed residents Live within the city

#### Where employed residents work within the city

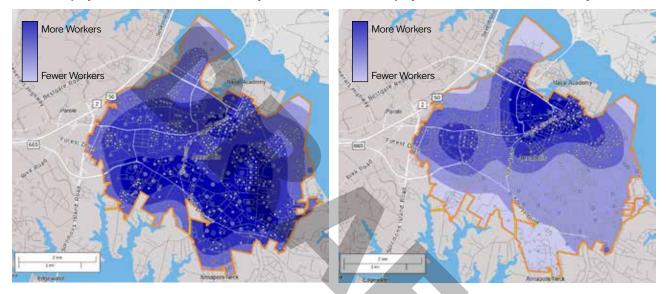


FIGURE 6-3. LESS THAN 10% OF ANNAPOLIS WORKERS LIVE IN THE CITY, BUT THERE IS ALSO SOME DISPARITY EVEN WITHIN ANNAPOLIS BETWEEN WHERE WORKERS LIVE AND WHERE THEY ACTUALLY WORK. IMPROVING TRANSPORTATION OPTIONS TO JOB CENTERS CAN HELP REDUCE TRAFFIC CONGESTION, VEHICLE EMISSIONS, AND THE NEED FOR PARKING.

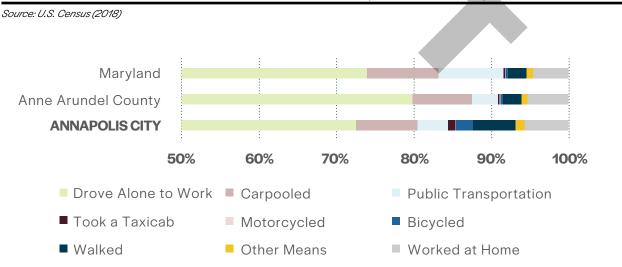


FIGURE 6-4. CHART ILLUSTRATING THE VARIOUS MODES OF TRAVEL USED BY ANNAPOLIS COMMUTERS IN RECENT YEARS IN COMPARISON TO COUNTY AND STATE TRENDS. THE COVID-19 PANDEMIC TRIGGERED A SIGNIFICANT INCREASE IN RESIDENTS CHOOSING TO WORK FROM HOME WHICH IS PROJECTED TO CONTINUE.

## **Functional Classification**

The federal government has assigned a methodology of classifying all roadways in the country according to their level of use and design. Each category of roadway (refer to Figure 6-7 legend) is allowed to comprise a certain percentage of the metropolitan planning organization's (MPO) total road mileage, and typically gets updated every 10 years. The amount of accessibility to adjacent land is a major factor in determining a roadway's classification: controlled-access roads (like interstate highways) have high mobility but low land accessibility while local streets are typically the opposite. Roadways that start off having one design and function sometimes change over time, creating problems like speeding in residential areas or congestion around closely spaced interchanges.

Figure 6-5 provides roadway classification mileage (centerline miles, not lane miles) in and around Annapolis. Figure 6-7 identifies the location of the roadways by functional classification.

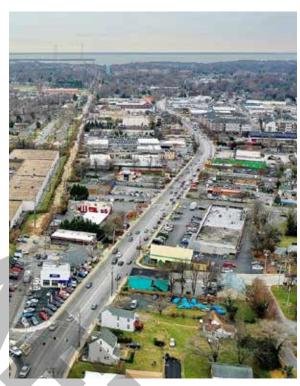


FIGURE 6-6: MD-450 (WEST STREET) IS A MINOR ARTERIAL ROADWAY

Source: Jeff Voigt

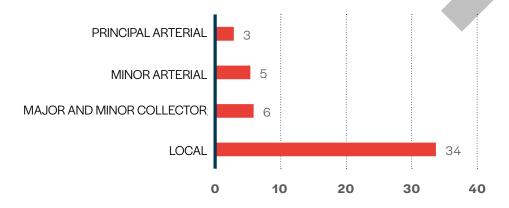
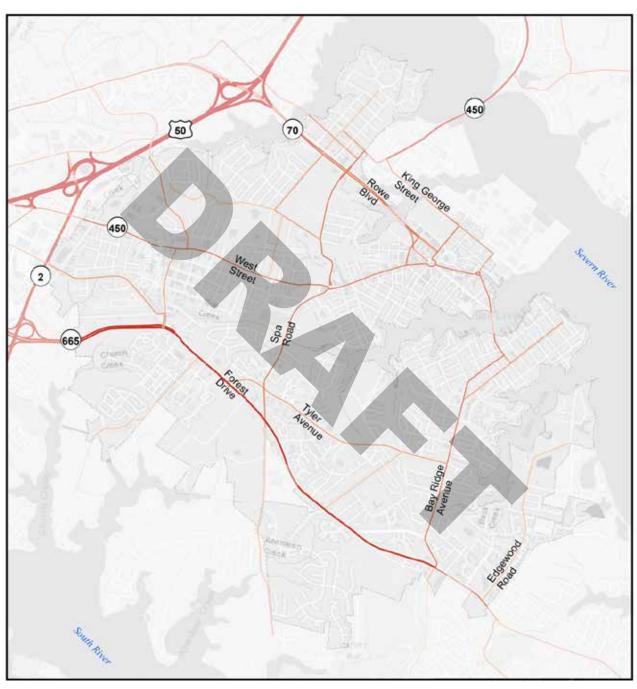


FIGURE 6-5: MILES OF ROADWAY, BY FUNCTIONAL CLASS

Source: MDOT





# **Other Roadway Functions**

#### **Emergency Evacuation**

Being a coastal community, emergency evacuations are an omnipresent possibility in Annapolis, and the evacuation routes as well as roadways that connect directly to them are of great importance. The designated routes are MD 2 and US 50, but other secondary roadways create a northern system of connectors to these primary roads.

#### **Freight Movement**

While the port and peninsula no longer serve as origins or destinations for major freight movements, Forest Drive and US 50 are critical routes. The Maryland State Freight Plan produced by MDOT in 2022 identified US 50 from MD 179 (St. Margaret's Road) to MD 18, which includes the Bay Bridge, as a top 25 congested road segment in the State based on truck delay per mile.

#### **Urban Character**

The Annapolis Historic District is an example of how the design of roadways can reinforce the identity and character of a place. The Historic District Design Guidelines (2007) provides for specific features of streetscaping, including lighting, mobility aids, fencing, street trees, street furniture, and sidewalks. "The intersections of radiating streets with rectilinear streets contained in the Nicholson plan created unusual triangular shaped lots, dramatic visual axes and vistas." While the rest of Annapolis need not emulate the Historic District's design details, the design of streets in other ways can have a dramatic effect on commerce, safety, and comfort, and environmental benefits.

#### **Economic and Community Development**

Investment in the public realm, specifically roadways that are critical to a community's livelihood, is a proven means of sparking broader investments in the community. The transformation of Inner West Street over many years is an example of how the redesign of an important roadway corridor coupled with community support can accelerate other investments from the private sector as perceived risk is minimized.

231

The number of times the word "street" is mentioned in the 2007 Annapolis Historic District Design Manual: Building in the Fourth Century.

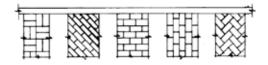


FIGURE 6-8: BRICK PAVING PATTERNS ALLOWED IN THE ANNAPOLIS HISTORIC DISTRICT

Source: Annapolis Historic District Design Manual, 2007



FIGURE 6-9: STREETSCAPE IMPROVEMENTS MADE BY THE CITY TO INNER WEST STREET ARE A VIVID EXAMPLE OF HOW TRANSPORTATION INFRASTRUCTURE CAN HAVE A DRAMATIC IMPACT ON ECONOMIC DEVELOPMENT.

# Safety

# **Crashes and transportation injuries**

The negative consequences of vehicular crashes in the lives of Annapolis residents, drivers, and the economy is substantial. About 93% of crashes are caused by driver error: these events should be called "crashes," not "accidents," since almost all of them are preventable. A ban on texting while driving has been in effect in Maryland since 2009, and roadway design changes can also make a tremendous difference in the number and severity of crashes. Controlling access points along major roadways, improving sight distance, separating bicycle / pedestrian traffic from cars, and managing speeds are important components of safety programming. Crashes, especially in urban areas, are a major source of vehicular delay (25% to 40% of all delay), and this is delay that is felt particularly keenly since it is unexpected and cannot be anticipated.

Understanding crash data includes several considerations. For example, a large number of pedestrian-related crashes or injuries likely means that the location has a large pedestrian generator of traffic (like a shopping area nearby or is in a generally favorable area for walking). Crashes should be considered against the volume of traffic, since larger number of vehicles moving around translate into more collisions - note the cluster of crashes at the high-volume intersections around US 50 and MD 2. On the opposite page is a "heat map" of the crashes in Annapolis between 2015 and 2021, and on this page is a chart showing the distributions of crashes by time of day in comparison to trends across the county and state.

Finally, it should be kept in mind that the number of reported crashes doesn't represent all crashes: estimates suggest that 30% of all crashes go unreported, mostly property damage-only but some injury crashes as well (source: USDOT National Highway Safety Administration, Report DOT HS 812 183, July 2015).

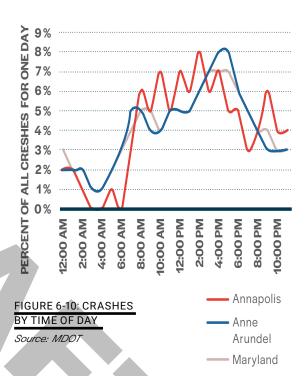
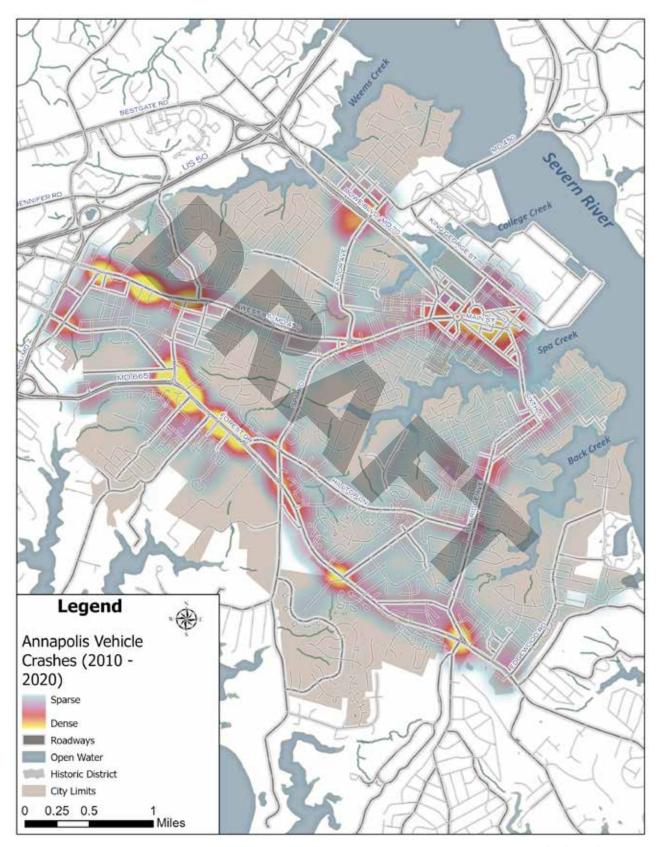




FIGURE 6-11: TRAFFIC FATALITIES TO PEDTRIANS AND CYCLISTS ARE ON THE RISE BOTH IN ANNAPOLIS AND NATIONALLY. THE INCIDENT ABOVE OCCURRED ON CHESAPEAKE AVENUE IN 2023.



#### Vision Zero

Annapolis is not unique among municipalities is seeing an increase in traffic crashes. In fact it is an alarming trend across the country. In 2021, the National Highway Traffic Safety Administration (NHTSA) reported that an estimated 42,915 people -- approximately the population of Annapolis -- died in motor vehicle crashes. Not only was this a 10.5% increase from the previous year but also the largest annual percentage increase in the history of NHTSA reporting on this data. Millions more people were injured in traffic crashes on the same roadways.

In response to these trends, communities across the country, and the world, have adopted Vision Zero action plans aimed at dramatically reducing, if not eliminating, all traffic fatalities. The idea for Vision Zero originated in 1997 when the Swedish parliament addressed a similar rising trend of traffic fatalities by adopting a "Vision Zero" approach to transportation planning and construction, directing the government to manage the nation's streets and roadways using policies and practices to implement the ultimate goal of preventing fatalities and serious injuries. Since then, the principles of Vision Zero planning for roadways have been adopted at the federal, state, county, and local levels of government with Chicago becoming the first city in the U.S. to commit to Vision Zero in 2012.

In 2022, Anne Arundel County prepared its own Vision Zero Draft Plan, which City of Annapolis helped to author as a key stakeholder, and on July 5, 2022, County Executive Steuart Pittman signed Executive Order Number 58, endorsing a commitment to adopt the Vision Zero strategies in Anne Arundel County.

Based on extensive analysis of traffic safety and crash data, the Vision Zero Plan identifies the following Emphasis Areas on which to focus efforts. These categories reflect the types of crashes that caused the highest number of deaths or serious injuries over the last five years in Anne Arundel County:

Infrastructure Related: run off the road, intersection, and work zone collisions

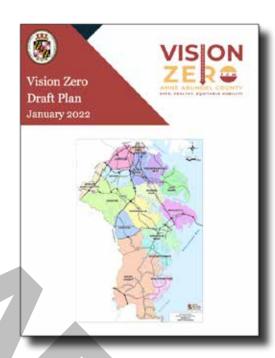


FIGURE 6-13: ANNE ARUNDEL COUNTY'S VISION ZERO PLAN IS INCLUDED IN FULL AS AN APPENDIX TO THIS PLAN

Source: Anne Arundel County

- Human Behavior: impaired driving, speeding, and distracted driving crashes
- Vulnerable Road Users: pedestrian, bicyclist, and motorcycle involved crashes
- Road User Age: younger (ages 16-20) and older (ages 65+) drivers and pedestrians

To address these factors in traffic fatalities, the plan includes many of the hallmarks of Vision Zero policy including an emphasis on the "6 E's" of traffic safety: Emergency Services, Enforcement, Engagement, Engineering, and two overarching categories which guide the others, Evaluation and Equity.

The following descriptions on these guiding principles are taken directly from the Anne Arundel County Vision Zero Plan.

 Engagement: The goals of engagement will be to provide education and outreach to citizens of

- Anne Arundel County. The term engagement was chosen because it means not only informing the public, but engaging them in the process when possible.
- Enforcement: Law enforcement plays a key role in traffic safety. Police perform enforcement such as drunk driving checkpoints, and educational campaigns such as Click it or Ticket. It is important to ensure that the Vision Zero strategies and implementation plan recognize that there have been historic inequities with regard to traffic enforcement and disenfranchised communities. The strategies will aim to encourage equitable use of law enforcement.
- Engineering: At its core, Vision Zero focuses on designing roads for the fallibility of humans. The engineering strategies will determine locations of high crash incidents and facilitate designing the roads in a manner that prevents road users from serious injury or death.
- Emergency Medical Services (EMS): Efficient EMS is critical to ensuring those affected by traffic crashes are expeditiously treated. Traffic Incident Management encompasses all that is required to avoid additional secondary accidents, which often result in injury severity greater than the initial incident. The strategies of this plan will focus on ensuring that those working in EMS have the technological resources and training they need and a safe roadway network in which to operate. EMS partners will also support educational outreach efforts.
- Equity: Equity will be considered at all stages of planning, implementation, and review of safety initiatives or projects. It is critical to consider equity in all safety work because the Vision is to save lives and prevent serious injury to all users of the roadway network. Diversity, equity, and inclusion are focuses of all County and Statewide plans as well as a mission of the US Department of Transportation, as evidenced in discussions to develop a federal transportation bill.

Evaluation: A key component of any strategic plan is to evaluate both the positive and negative outcomes of projects and initiatives in order to measure success and failures and plan for alternative approaches if necessary. Evaluation is an overarching concept in this plan because it is considered during the planning phases through implementation and is the final exercise to determine the plan's effectiveness. Evaluation must be considered in the first stages of project planning to identify metrics by which the project will be monitored. The different types of evaluation that will be employed include process evaluation (to understand if the implementation of a project was successful), impact evaluation (to identify any societal or cultural changes reported by the target community), and outcome evaluation (to measure the total effect on reductions in crashes, injuries, serious injuries, and fatalities). Each of those evaluation types are applicable at different stages of project implementation and allow for ongoing monitoring and adjustment based on the findings. As the action plan is developed for this Vision Zero plan, every project included will contain a performance metric and timeline to be used for evaluation.

# **Complete Streets**

Policies which guide street improvements that benefit the safety of all street users-- particularly those most vulnerable such as pedestrians-- are a critical tool for creating a safe transportation network. In recent years, municipalities all over the United States have adopted "Complete Street" policies as a way to standardize and prioritize the types of improvements that will have the most impact on safety. The U.S. Department of Transportation has helped to expand these policies by promoting best practices and dramatically increasing the funding to state and local governments looking to create Complete Street plans and implement the improvements. The State of Maryland's "Context-Driven" program initiative is another example of how Complete Street policy has become the standard approach to roadway planning and design.

The exact look and feel of a Complete Street will vary by community context, but the idea is always the same: provide design features that improve the safety and comfort for all street users such as wider sidewalks, street parking, and bike lanes; improve the environmental functions of the street through features such as street trees and rain gardens; and enhance the identity of the street through features such as wayfinding signage and public art. All of these features can be scaled up or down depending on the available space and specific community needs.

While Annapolis has not yet established a policy for implementing Complete Streets, Anne Arundel County did adopt a policy in 2014 through Resolution 45-14 which established guiding principles and a framework for ensuring that future roadway improvements would follow a Complete Street approach.

Unlike Anne Arundel County, Annapolis builds very few new or widened roadways, and the roads which the City already maintains are generally constrained for space. Therefore, any Complete Street policy tailored to Annapolis will need to first acknowledge that future improvements in many cases will be highly strategic and surgical -- a particular project might only improve an intersection or an individual segment of a longer street. That being said, there are streets in Annapolis

that could benefit from Complete Street makeovers, namely Upper West Street and Forest Drive. These are streets where a high concentration of crashes occur, where vehicles drive at high speeds, and where walking is usually a last resort because it does not feel safe or comfortable.

"Complete Streets are streets designed and operated to enable safe use and support mobility for all users. Those include people of all ages and abilities, regardless of whether they are travelling as drivers, pedestrians, bicyclists, or public transportation riders. The concept of Complete Streets encompasses many approaches to planning, designing, and operating roadways and rights of way with all users in mind to make the transportation network safer and more efficient."

# - U.S. Department of Transportation

For Annapolis to establish a Complete Street policy that is specific to the unique conditions of the city, it needs two essential things: it needs the support of City Council to recognize that improvements to streets should be treated as a major investment in the health and character of the city and not simply basic road repairs; and Annapolis needs a Complete Street design manual that will help staff, property owners, developers, and community stakeholders make decisions on context-sensitive improvements that will add value to the city.



FIGURE 6-14: RENDERING OF A PROTOTYPICAL NEIGHBORHOOD COMPLETE STREET FROM THE 'URBAN STREET DESIGN GUIDE' BY THE NATIONAL ASSOCIATION OF CITY TRANSPORTATION OFFICIALS (NACTO)

Source: NACTO



FIGURE 6-15: THIS RECENT INTERSECTION IMPROVEMENT ON CHESAPEAKE AVENUE SHORTENS THE CROSSING DISTANCE FOR PEDESTRIANS, CALMS VEHICULAR TRAFFIC, AND ADDS PLANTINGS.



FIGURE 6-16: THROUGH A PLAN CALLED 'CONTEXT DRIVEN: ACCESS AND MOBILITY FOR ALL USERS', MDOT/SHA HAS CREATED A SET OF PROTOTYPICAL MARYLAND ROADWAY CONTEXTS WITH TAILORED RECOMMENDATIONS TO IMPROVE SAFETY. THE EXAMPLE ABOVE SHOWS THE 'TRADITIONAL TOWN CENTER' CONTEXT WHICH IS BROADLY APPLICABLE TO MOST OF ANNAPOLIS' MOST DANGEROUS ROADWAYS

Source: MDOT/SHA



# **Active Transportation**

As previously noted, Annapolis' location on a peninsula and being largely built-out means that it has fewer tools than other places for improving mobility. One tool that it does have, but has yet to fully leverage, is active transportation, which refers to walking and biking as a primary means of transportation. In fact, dollar for dollar, active transportation is the best investment the City can make in improving mobility. When more people choose to walk or bike, not only do they lessen the vehicles on the road, thereby reducing traffic and vehicle pollution, they also improve their own health, stimulate the economy, and make streets safer simply by being present and providing "eyes on the street".

As a relatively flat and compact city, and one which welcomes millions of visitors each year who come to enjoy the city by foot or bike, Annapolis should have a far more developed active transportation network than it currently does. The city's bicycle network is fragmented and poorly marked, and many of the city's sidewalks are too narrow, blocked by utilities, or otherwise not ADA compliant. Of course many of these conditions are due to the City being hundreds of years old and not designed to contemporary standards. But at the same time, the City has not until recently prioritized active transportation and the significant investment it requires.

Using the Walkscore methodology which analyzes the urban features of the city, the "walkability" of Annapolis varies dramatically from the historic downtown core with a Walkscore of 84 to the edges of the City with Walkscores in the 30s (the overall Walkscore of Annapolis is 50 - "Somewhat Walkable"); The image above is a citywide "heat map" of the walkability scores.

The app Strava records travel by bicycle and on foot by its users for the prior two years to produce compelling maps of where people are travelling. While downtown ranks highly again for walking and biking, it is noteworthy that other, higher-level roads are used by cyclists and pedestrians, like Rowe Boulevard, Forest Drive, West Street, Spa Road, and Bay Ridge Avenue. However, in many cases, those who walk or bike as a

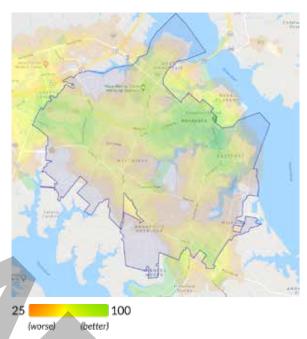


FIGURE 6-17: ANNAPOLIS WALKSCORE HEAT MAP

Source: Walkscore.com

\*The Walkscore metric is used broadly to compare relative "walkability" between cities and neighborhoods, but actually measures the proximity and number of destinations within a 5-(high score) to 30-minute (low score) walk, population density, and block sizes to calculate these reported values -barriers like sidewalk gaps aren't a factor.

primary means of transportation do not have a choice which street they take to get to their destination. They simply take the most direct route.

If more people do choose to walk or bike, the national data is clear that roads become dramatically safer for walking and biking. There is "safety in numbers" as drivers become more aware of other road users and their behavior adjusts accordingly. The chart above clearly shows how cities with more bicycle commuters on their streets see a dramatic reduction in traffic fatalities.

In 2022, Annapolis launched its first "Micro-mobility Program" as a means of offsetting the impacts of the Hillman Garage reconstruction and providing alternative ways to get into and around Downtown



FIGURE 6-18: BICYCLING PATTERNS IN ANNAPOLIS BASED ON 2-YEAR DATA FROM THE APP STRAVA (LIGHTER LINES INDICATE MORE HEAVILY USED STREETS)

Source: Strava



FIGURE 6-19: WALKING PATTERNS IN ANNAPOLIS BASED ON 2-YEAR DATA FROM THE APP STRAVA (LIGHTER LINES INDICATE MORE HEAVILY USED STREETS)

Source: Strava

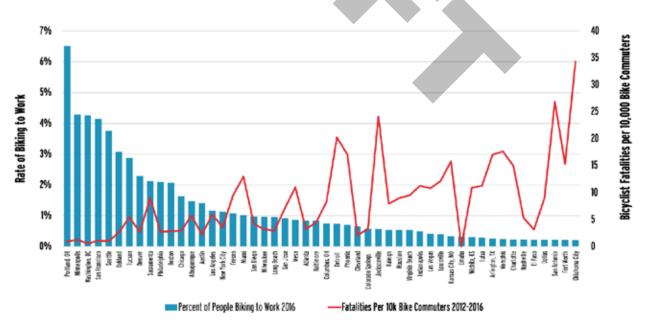


FIGURE 6-20: DATA FROM CITIES ACROSS THE U.S. SHOWS A STRONG TREND THAT WHEN THERE ARE MORE BICYCLE COMMUTERS, BICYCLIST FATALTIES REDUCE DRAMATICALLY

without a vehicle. Through the program, the City contracted with the micro-mobility company Bird to operate an e-bike and e-scooter share program that could be used citywide through Bird's user app. The program has proven to be highly successful based on collected data which shows high rates of e-bike and e-scooter use, thousands of miles of travelled, a wide diversity of uses, and hundreds of trips by commuters to jobs. The program has also accelerated interest in active transportation by both residents and visitors to the city.

The ultimate goal of expanding active transportation as a viable means of getting places is not to replace driving a vehicle, it is simply to provide more mobility options. There are many Annapolis residents who will never feel safe or comfortable to walk or ride a bike in the city, but there are also many who will. By providing safer connections to walk or bike between the places where people live and key destinations -- such as schools, shopping centers, and parks -- there are many Annapolis residents who will feel encouraged to walk or bike, particularly when it is a short distance. This ultimately benefits everyone by easing traffic congestion, improving roadway safety, and reducing greenhouse gas emissions.

It will take many years for active transportation to become truly viable in Annapolis, but the maps on following pages show priorities for an improved bike network and pedestrian network and offer a guide for how Annapolis can start to create the conditions for necessary for more people to walk and bike to more places.



FIGURE 6-21: USING RIDER DATA PROVIDED BY BIRD,
THE MAP ABOVE SHOWS THE ROADWAYS MOST USED
BY E-BIKES AND E-SCOOTERS IN A TYPICAL WEEK AND
CAN HELP TO PRIORITIZE ROADWAY IMPROVEMENTS
FOR ACTIVE TRANSPORTATION

Source: Bird



FIGURE 6-22: ANNAPOLIS' MICROMOBILITY PROGRAM WAS LAUNCHED AT AN EVENT ON MAY 17, 2022 TO COINCIDE WITH BIKE-TO-WORK WEEK.

Source: City of Annapolis



FIGURE 6-23: THE BENEFIT OF A DOCKLESS E-BIKE AND E-SCOOTER SHARE PROGRAM IS THAT THE VEHICLES CAN BE ACCESSIBLE ANYWHERE THAT PEOPLE NEED THEM.

Source: City of Annapolis



FIGURE 6-24: THE WEST EAST EXPRESS TRAIL PROJECT IS A LONG ENVISIONED CONVERSION OF WHAT WAS ONCE THE WB&A RAILROAD CORRIDOR INTO A COMMUNITY ASSET THAT WILL BECOME THE SPINE OF THE CITY'S ACTIVE TRANSPORTATION NETWORK.

#### **Pedestrian Network**

A city's sidewalk network is the best indicator of just how accessible and equitable the larger transportation network is. Indeed walking may be a great form of exercise but for many residents it is the only means of getting where they need to go, often in combination with public transit. A walkable city is one in which someone does not need to think twice about whether walking will put them in danger or will be less pleasant than driving. A walkable city unlocks a range of related benefits from improved health outcomes, to public safety, to community investment, and economic vitality.

For these reasons, cities aspire to have a completely connected sidewalk network that allows someone to walk safely and comfortably wherever they need to go. This means sidewalks of adequate width (the Annapolis City Code requires 5' width for new sidewalks), free of barriers such as utility poles, with ramps at the corners compliant with the American Disabilities Act (ADA), and crosswalks at major intersections. These are the basic criteria for a connected sidewalk network. Street trees which provide shade and managed curb cuts that limit how often the sidewalk is interrupted for a driveway are among other features that can make a sidewalk network truly comfortable for all users.

In 2022, to help analyze gaps in the city's sidewalk network and help prioritize improvements, Annapolis participated in the development of a Pedestrian Infrastructure Assessment Tool (PIAT) led by a team from the Baltimore Metropolitan Council. As part of the tool development, Annapolis was one of two jurisdictions in the Baltimore region which served a test location. The PIAT uses highly precise sidewalk infrastructure data -- including locations of barriers, ramps, and crosswalks -- combined with Geographic Information Systems analysis tools to identify where adequate sidewalks exist and where they do not.

The map on the facing page is an outcome of the PIAT's analysis and is combined with the city's Social Vulnerability data to understand where sidewalk



FIGURE 6-25: SIDEWALK CONDITIONS IN ANNAPOLIS VARY WIDELY AND ARE RARELY ABLE TO BE IMPROVED WITHOUT IMPACTING OTHERS PARTS OF THE STREET SUCH AS PARKING, DRIVE LANE, OR ADJACENT PROPERTY WHICH REQUIRES COMPROMISE.

Source: City of Annapolis

improvements could have the most impact. There are several neighborhoods adjacent to Forest Drive that score poorly on the sidewalk analysis and have high social vulnerability.

Improving sidewalk connectivity is often more challenging than it might seem and frequently involves balancing multiple needs that might all seem equally important. With Annapolis' streets generally very constrained for space, widening a sidewalk might impact an adjacent parking lane, a vehicular lane, or might require using part of an adjacent property. It might require the relocation of a utility pole or a tree. All of these scenarios add time, cost, and complexity. Regardless of these challenges, this Plan seeks to make Annapolis a more walkable city and to do this the City must recognize that improving the sidewalk network -- to make it truly connected -- requires commitment and often difficult compromises. However, the return on investment will be substantial in terms of social, environmental, and economic value.

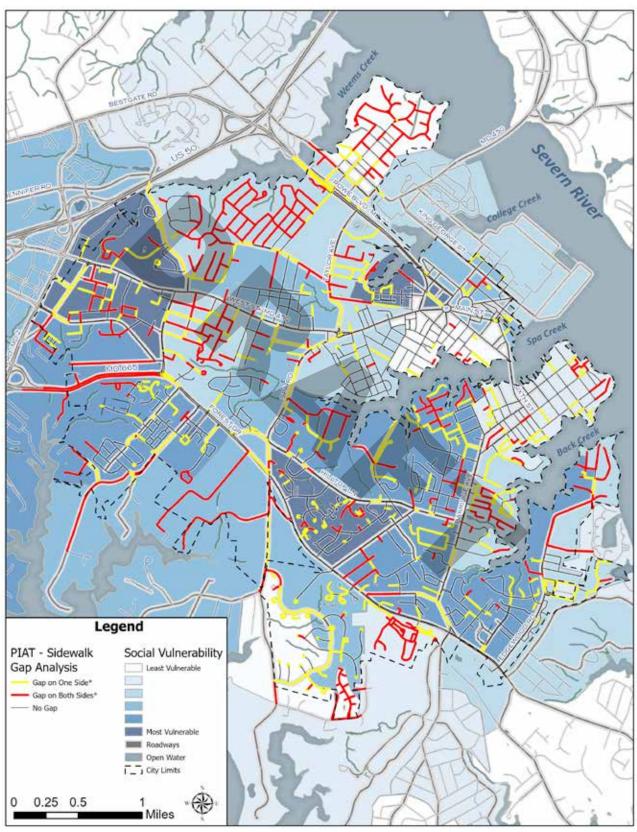


FIGURE 6-26: MAP OF EXISTING GAPS IN THE SIDEWALK NETWORK COMBINED WITH SOCIAL VULNERABILITY DATA TO HELP PRIORITIZE FUTURE IMPROVEMENTS.

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

# **Bicycle Network**

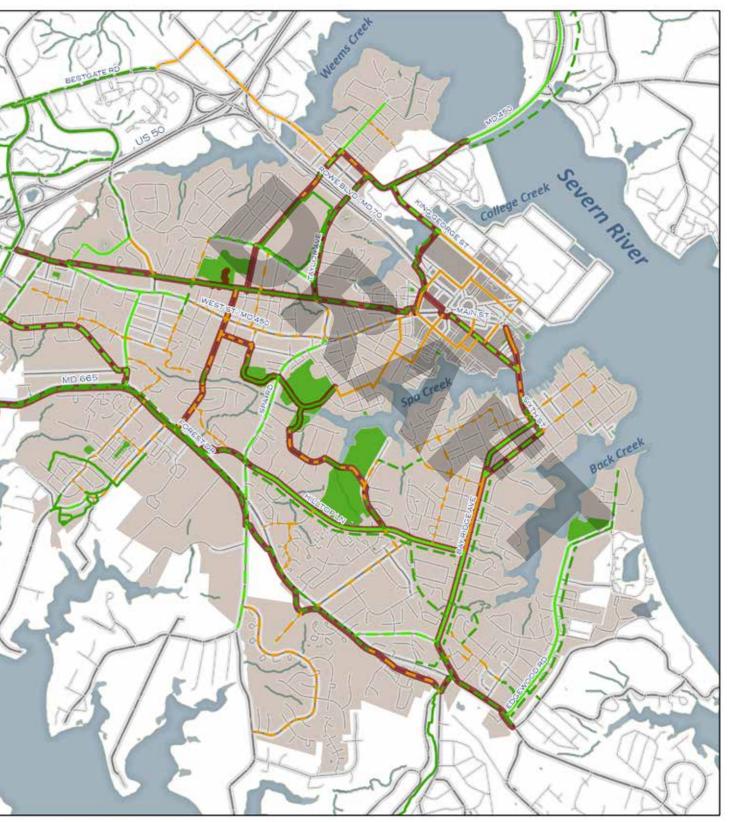
Annapolis' bicycling infrastructure network includes a variety of different facilities including off-street shared use paths, striped bike lanes, and shared lane markings, but the network overall is extremely fragmented and not serving the city well. Similar to the pedestrian network described on the previous pages, bicycling is great exercise but for many residents, it is the primary means of getting around the city whether to a job, to services, or another destination. And just like a walkable city, a bikeable city is one in which someone does not need to think twice about whether biking will put them in danger or will be less pleasant than driving. Along with walking, a safe and connected bike network unlocks a range of related benefits from improved health outcomes, to public safety, to community investment, economic vitality, and reduced traffic and vehicle emissions. Indeed, for many residents and visitors to Annapolis, biking has even more potential to replace trips that would typically require a personal vehicle trip in today's Annapolis because the roadways are either not safe for bicycling or adequate bike infrastructure is not available.

Annapolis adopted its first Bicycle Master Plan in 2011 which provided direction on how to better invest in this key component of the city's mobility network. However until recently, very little was done to improve safety and connectivity for cyclists in the city. Beginning in 2018, the City launched a new initiative to prioritize the bicycle network based on recommendations from the 2011 Master Plan as well as new strategies. Over the last five years, the City has focused on investments into major bike corridors such as the West East Express, College Creek Connector, and Spa Creek Trail, as well as more straightforward lane marking improvements when streets are repaved. With this renewed focus, the City has raised over \$5 million in funds through State and Federal grants, the most funding dedicated to bike network improvements in the City's history.

FIGURE 6-27: MAP OF EXISTING AND PLANNED BICYCLE FACILITIES INCLUDING PRIORTY ROUTES.

Source: City of Annapolis





# **Major Trail Initiatives**

In recent years, the City has made headway on several major trail initiatives that will each have a substantial impact on connecting the city's-- and the region's-- bicycle and pedestrian network, improving safety, and providing more options for residents and visitors to get around. Primarily funded by State and Federal grants, these trails are being designed in close coordination with adjacent communities and property owners.

#### West East Express (WEE)

The most important of the major trail initiatives is the West East Express, or the WEE as it is commonly known. The project extends the existing and heavily used Poplar Trail in two directions, east to Downtown, and west to Parole, to create a 2.4 mile bike and pedestrian corridor along the former WB&A railroad. The trail will safely connect many diverse neighborhoods -- including areas with highest social vulnerability in the city -- to parks, schools, the library, jobs, community services, shopping, and other destinations.

# **College Creek Connector**

The College Creek Connector will provide water access, and a pedestrian and biking trail, along College Creek, one of our most under-utilized waterways. Situated at a key gateway to the city, the trail connects King George Street to Calvert Street along the shoreline of College Creek. Along the way, it passes significant cultural sites including St. John's College and St. Anne's Cemetery. This will be the city's first boardwalk trail and allow pedestrians and cyclists new access to the creek's riparian habitat. The project also connects to another important trail project underway which will provide a safer route between the B&A Trail and downtown Annapolis, bringing significant mobility and recreational tourism benefits.

# **Forest Drive Trail**

This project will create a continuous trail running the full length of Forest Drive, Annapolis' longest major corridor and currently one of the most dangerous roadways in Anne Arundel County. The trail extends



FIGURE 6-28: THE COLLEGE CREEK CONNECTOR
TRAIL WOULD HELP CYCLISTS MORE SAFELY ACCESS
DOWNTOWN VIA COLLEGE CREEK AND PROVIDE A
NEW PUBLIC WATER ACCESS AMENITY..

Source: City of Annapolis



FIGURE 6-29: RENDERING OF THE WEST EAST EXPRESS (WEE) AS IT APPROACHES PLEASANT STREET FROM THE PARKING LOT OF THE GRADUATE HOTEL.

Source: City of Annapolis

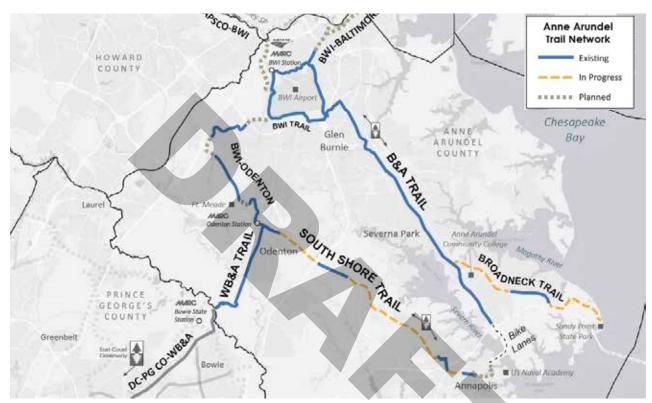


FIGURE 6-30: ANNAPOLIS IS A CRITICAL LINK IN A REGIONAL TRAIL NETWORK WHICH MEANS THAT ACTIVE TRANSPORTATION IMPROVEMENTS HERE WILL BENEFIT A MUCH LARGER REGIONAL POPULATION. IMPLEMENTING THE WEST EAST EXPRESS AND COLLEGE CREEK CONNECTOR TRAILS (ILLUSTRAED ON THE FACING PAGE) WILL ADDRESS MUCH OF THIS MISSING LINK.

Source: Bicycle Advocates for Annapolis and Anne Arundel

the existing shared use path between Bywater Road and Hilltop Lane to connect with Peninsula Park and Quiet Waters Park at the edge of the city limits. The trail will provide safe access to three elementary schools, a middle school, and is recommended by the Forest Drive Safety Study completed by Anne Arundel County in 2023.

#### **Hilltop Lane Connector**

The Hilltop Lane Connector is a relatively short trail segment but fills a critical gap in the city's bike network between the existing bikeway on Hilltop Lane and the existing shared use path on Forest Drive. The trail will dramatically improve a corridor that is already widely

used by cyclists but is extremely unsafe, with one cyclist fatality in 2023.

# **Bay Ridge Avenue Bikeway**

This project will create a safer trail connection between Downtown and Quiet Waters Park along Sixth Street, Chesapeake Avenue, Bay Ridge Avenue, and Hillsmere Drive. While corridor already has some bike facilities, they do not provide adequate safety and do not connect the full corridor. The trail will improve access to two major shopping centers, two elementary schools, and improve active transportation along one the city's most heavily used north-south corridors.

# **Public Transit**

Public transit, like active transportation, is an available but under-invested tool that could be far better leveraged to improve mobility in Annapolis. The city has no shortage of existing public transportation services which connect residents to destinations within the city as well as the larger metropolitan region. These services include transit lines operated by the City, Anne Arundel County, Maryland Transit Administration (MTA), as well as private operators. In fact, 80% of Annapolis residents are within a quartermile of a public transit stop as illustrated by the graphic on this page, and the most socially vulnerable communities in the city are all served by public transit, as illustrated in the map on the following pages. However, despite all of the existing service, transit is not considered a viable option by many city residents and is not growing ridership. Moreover, although the various transit services are coordinated between City, County, and State agencies, they still lack a unified resource for providing route information across all systems which is needed to create a truly efficient and seamless regional transit system.

The foundation of the city's transit services is Annapolis Transit which operates six fixed-bus routes within the City, referred to as the "Rainbow Routes", and two downtown shuttles. Since 2019, two routes historically operated by Annapolis Transit are now operated by Anne Arundel County: the Gold which services Edgewater and Arnold and the Yellow which services Riva Road. Frequencies for Annapolis Transit range from 30 minutes during peak hours to 120 minutes during off-peak hours, with a base fare of \$2.00. Senior, student, and disabled-eligible fares are \$1.00, while 7-day, 30-day, 90-day passes, and annual passes are available at reduced prices. On regular school days Annapolis students K-12 ride for free from 6am to 6pm. Annapolis Transit also offers complimentary on-demand service known as "paratransit" for seniors and those with disabilities unable to use the normal fixed-route service.



FIGURE 6-31: SHOWN IN DARK GREEN ON THIS MAP ARE THE PERCENT OF ANNAPOLIS RESIDENTS (82%) AND WORKERS (93%) WITHIN 0.25-MILES OF A TRANSIT STOP

Source: City of Annapolis

"Much of the input collected from riders, stakeholders, and the general public focused on improvements that would make service more reliable and convenient. These improvements included changes to existing services, new services, more information and marketing, and capital needs. Improved services would benefit existing riders and attract new transit users – subsequently resulting in ridership growth and contributing to service performance improvements (though the latter also depends on the amount and costs of services provided)."

- Annapolis Transit Development Plan (2019)



FIGURE 6-32: ANNAPOLIS TRANSIT'S FREE DOWNTOWN CIRCULATOR SHUTTLE WAS REBRANDED AND ITS SERVICE SCHEDULE EXPANDED IN 2022 TO INCREASE RIDERSHIP DURING THE HILLMAN GARAGE RECONSTRUCTION. THE CHANGES HAVE PROVEN TO BE SUCCESSFUL AND PROVIDE A POTENTIAL MODEL OF IMPROVED SERVICE IN OTHER AREAS OF THE CITY.

Source: City of Annapolis

MTA requires Annapolis Transit to update its Transit Development Plan every five years and the most recent plan was completed in 2019. The top issues that emerged from the analyses, reviews of existing documents, and public inputs through surveys and stakeholder interviews were:

- The need to increase ridership, and
- More reliable and convenient service

It is important to note that these issues are related and became more dominant following the Annapolis Transit service reduction in November 2014. Annapolis Transit lost about one-quarter of its ridership in the first year following the cuts and an additional 13% in the second year. A ridership loss of 36% between 2017 and 2019 has resulted in lower productivity on every route.

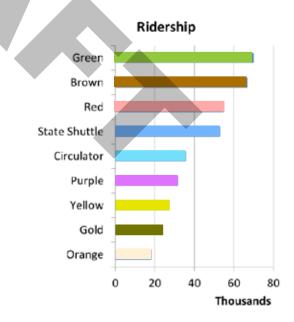


FIGURE 6-33: RIDERSHIP RANKING BY ANNAPOLIS TRANSIT ROUTE. THE GOLD AND YELLOW ROUTES WERE CONSISTENTLY AMONG THE LOWEST PERFORMING ROUTES BUT ARE NOW OPERATED BY ANNE ARUNDEL COUNTY WITH MODIFICATIONS AND PERFORMING BETTER.

Source: Annapolis Transit Development Plan (2020)

Ultimately, the performance of public transportation relies heavily on land use densities, design, and accessibility that support this mode of travel.

According to Annapolis' most recent Transit

Development Plan, "Typically, an area with a density greater than 2,000 persons per square mile will be able to sustain daily fixed route bus service. Areas with higher population densities generally can support and often warrant higher frequency transit service."

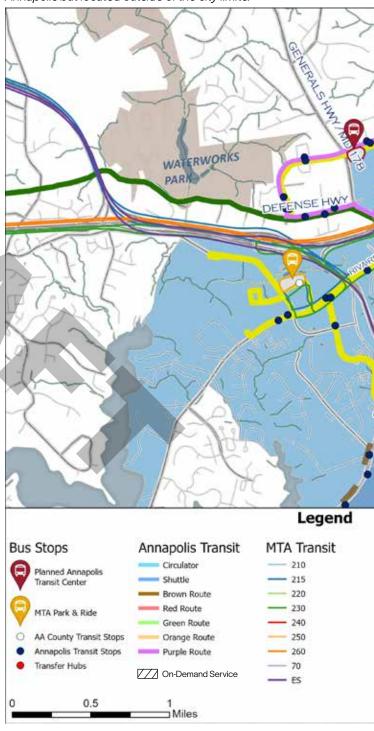
With a citywide population density of approximately 5,000 persons per square mile, and large portions of the city at more than 8,000 persons per square mile, Annapolis does support higher frequency transit.

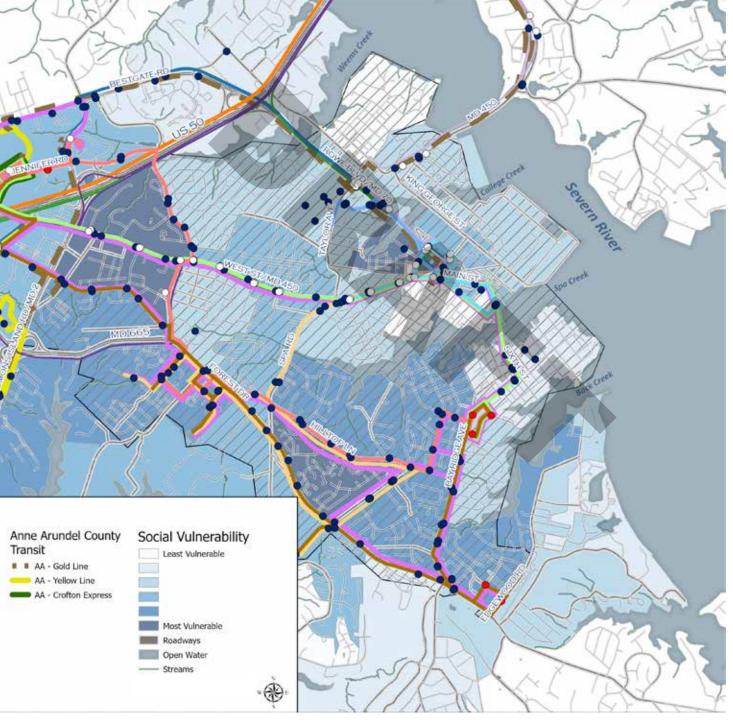
Thus, for Annapolis Transit to increase ridership and become a truly viable transportation mode, it needs to focus on design and accessibility. In 2022, the free Downtown Circulator shuttle addressed both of these needs to great success. In an effort to improve mobility into and around Downtown during the reconstruction of the Hillman Garage, the exterior of the Circulator's buses were rebranded with a highly visible color wrap and graphics showing the route and stops, its service schedule expanded, and the stops were better identified with new signage. These investments may offer a model for investments into other parts of the Annapolis Transit.

FIGURE 6-34: THIS MAP OVERLAYS EXISTING PUBLIC TRANSIT SERVICES WITH POPULATION DATA RELATED TO SOCIAL VULNERABILITY TO SHOW THAT THE CURRENT ROUTES ARE SERVING THE POPULATIONS THAT NEED THEM MOST. WHAT THE MAP DOES NOT SHOW IS THE RELIABILITY AND FREQUENCY OF THE SERVICE.

Source: City of Annapolis

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.





# **Electric Mobility**

Transitioning the Annapolis Transit bus fleet from conventional diesel buses to zero-emissions electric vehicles is another means of improving efficiency and ridership. The transition can also have a dramatic impact on reducing the city's carbon footprint given that the transportation sector is the largest emitter of greenhouse gas emissions in the city (Chapter 8: Environmental Sustainability addresses the broader goal of carbon reduction). However, transitioning the bus fleet requires more than simply purchasing new vehicles. New maintenance facilities and equipment, new staff capacity and expertise, and new scheduling based on electric charge durations and requirements are all aspects of a successful transition.

In 2022, to jumpstart this effort, a conceptual plan was created to envision an initial investment in an electric transit system. The plan focused on three primary electric modes: transitioning the successful Downtown Circulator buses to an electric vehicles, creating new 10-minute trolley service in the Downtown and Eastport areas with small General Electric Motor (GEM) vehicles, and creating a new electric passenger ferry that would connect Eastport to Downtown. Separate from this plan, the privately-operated Annapolis GO service, designed and operated by Via, was created in conjunction with the Hillman Garage reconstruction and offers on-demand service for \$2 per ride using electric SUVs. The City also launched its first e-bike and e-scooter share program operated by Bird. Both of these programs have proven to be successful and expanded since their inception which shows that there is both strong public support for and significant value in electric mobility in Annapolis. However, there needs to be far more coordination and integration among the various programs as they evolve. Currently each service operates on its own platform through a proprietary app which is neither efficient nor serving the broader goal of providing more convenient and connected service.

Investing in and promoting electric mobility is a huge opportunity for the City, and specifically Annapolis

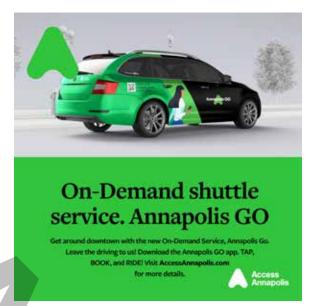
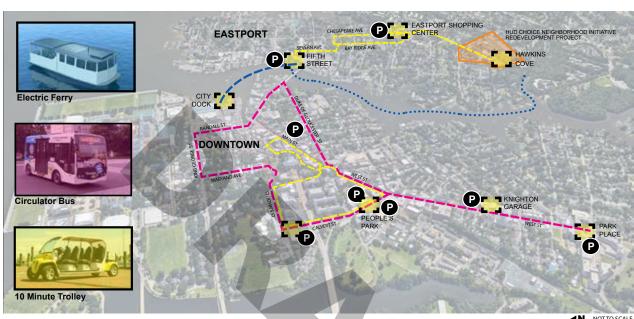


FIGURE 6-35: AN ADVERTISEMENT FOR ANNAPOLIS
GO, THE PRIVATELY-MANAGED ON-DEMAND TRANSIT
SERVICE THAT WAS LAUNCHED AS A PILOT PROGRAM,
IN CONJUNCTION WITH THE HILLMAN GARAGE
RECONSTRUCTION. THE NEW SERVICE WAS POPULAR
AND BECAME A MODEL FOR EXPANDED SERVICE BY
ANNAPOLIS TRANSIT.

Source: City of Annapolis

Transit, to promote the value of public transit and to reimagine public transit for the 21st century. There are clear lessons to be learned from the success of the privately managed transportation services—the ease of use, the real-time information provided to users, the reliability, the branding, and the visibility of their marketing efforts. In fact, these are precisely the areas of improvement for Annapolis Transit recommended in the City's Transit Development Plan.

It is difficult to imagine public transit in Annapolis becoming a more viable transportation option without embracing current technologies. To fully update its technology will require additional investment but Annapolis Transit is well positioned to take on more of a leadership role for a greener and cleaner Annapolis.



# ZERO EMISSIONS MICROTRANSIT NETWORK





FIGURE 6-36: THE MAP ABOVE SHOWS A CONCEPT PLAN FOR THE ANNAPOLIS ELECTRIC MOBILITY PILOT PROGRAM WHICH PROPOSES A SUITE OF ELECTRIC MOBILITY PUBLIC TRANSIT OPTIONS.

Source: City of Annapolis



FIGURE 6-37: AS PART OF
THE ANNAPOLIS ELECTRIC
MOBILITY PILOT PROGRAM
THE CITY LAUNCHED TWO
GEM ELECTRIC VEHICLES
AS 10-MINUTE TROLLEYS
AND BRANDED THEM THE
'ANNAPOLIS CURRENT'.

Source: City of Annapolis

# Connected and Autonomous Vehicle (CAV) Technology

Connected and Automated Vehicle (CAV) technology, commonly known by the self-driving cars which use the technology, is evolving quickly and could have significant impacts on transportation, land use, and economic development. Both the Maryland Department of Transportation (MDOT) and Maryland Department of Planning (MDP) are working to prepare for the technology through various initiatives including the creation of a dedicated State program within MDOT and a dedicated website to share information. In 2020, the Maryland CAV Working Group was formed and produced the Maryland CAV Strategic Framework and in 2021, the two agencies released the "Connected & Automated Vehicle Toolkit for Maryland Local Jurisdictions" as a resource for cities such as Annapolis to become more familiar with the technology. While there are no current efforts to introduce the technology in Annapolis, it's important to be aware of its implications on the city should it gain traction as a viable service.

Self-driving taxi pilot programs using CAV technology are being run within San Francisco, Austin, and Phoenix with a growing number of jurisdictions inviting the program to enter new markets. An autonomous vehicle program wishing to enter the Annapolis area would require extensive review by City Council, City staff, and potentially a task force to weigh the potential benefits and risks of a CAV program in the city. By this point, the technology would have also been vetted in other markets comparable to Annapolis.

The introduction of CAV service in Annapolis would need to be coordinated with other mobility options including conventional automobiles, public transit, biking, and walking, and would require new regulatory policy at State and local levels. As the technology continues to improve, Annapolis should monitor its progress in regard to safety, and measurable costs and benefits to the city.

The Maryland CAV Strategic Framework uses the following definitions to describe the range of vehicle types and technology encompassed by CAV:

Connected Vehicles (CV) "talk and listen" to infrastructure, other vehicles, and mobile devices. This communication enables applications that can warn a human driver of an impending hazard, enables a vehicle to operate more efficiently, or guides a vehicle to take appropriate action given the surroundings.

**Automated Vehicles (AV)** use sensors and other technologies to understand the environment to assist drivers and eventually perform driving tasks in place of a human driver. The Society of Automotive Engineers (SAE) has categorized various levels of automation often used by the industry when deploying these vehicles4.

Connected and Automated Vehicles leverage connected capabilities with automated features to bring the best of both worlds into one vehicle.

# **CAV Examples**



FIGURE 6-38: PERSONAL DELIVERY VEHICLES

Source: City of Austin TX PDD Pilot

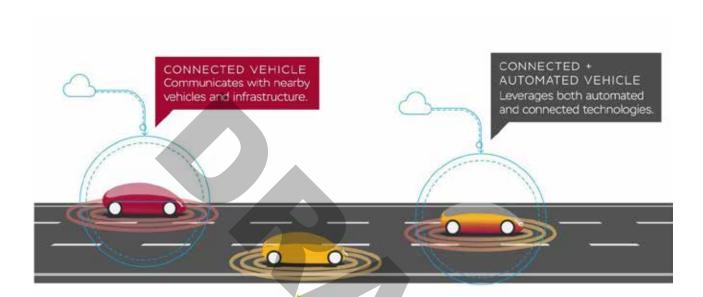


FIGURE 6-39: CAV VEHICLE TYPES

Source: Maryland CAV Strategic Framework

AUTOMATED VEHICLE Operates in isolation from other vehicles using onboard sensors.



FIGURE 6-40: MOBILITY AS A SERVICE (MAAS)

Source: Ars Technica / Waymo One



FIGURE 6-41: TRUCK PLATOONING

Source: Locomotive

# **Regional Transit**

Annapolis is fortunate to be located within a metropolitan region that includes two major cities, multiple airports, multiple commuter train lines, and Amtrak's Northeast Corridor service, which is the most heavily used rail corridor in the U.S. Proximity to these connections adds value to the city for economic development, quality of life, and sustainable transportation options. At the same time, it has been over sixty years since Annapolis was directly served by passenger rail, and traffic congestion along the major highways linking Annapolis to the region has increased over time. Annapolis should be far better connected to the region via improved transit options which include rail and bus rapid transit (BRT).

Annapolis coordinates with Anne Arundel County, Maryland Department of Transportation (MDOT) / Maryland Transit Administration (MTA), and the Baltimore Metropolitan Council (BMC) on regional transit plans, and there have been three significant plans completed in recent years that affect Annapolis with both short-term and longer-term recommendations.

# **Move Anne Arundel!**

Anne Arundel County's Transportation Functional Master Plan, Move Anne Arundel!, was adopted in 2019 and recommends improved commuter bus service along US-50 connecting Annapolis to College Park, Silver Spring, and Bethesda to complement existing service to downtown Washington, D.C. The plan also stresses the importance of establishing an Annapolis Transit Center near the interchange of US-50 and I-97as a regional multimodal transportation hub which could accommodate City, County, MTA and private bus services, with the potential for a future rail connection. A site selection study was completed in 2020 which identified a site at the intersection of Bestgate Road and Generals Highway as the preferred site. As of 2022, this project is in the design phase and fully funded.

#### Maximize 2045

Maximize 2045: A Performance-Based Transportation Plan was completed in 2019 is the regional long-range transportation plan (LRTP) that is produced every four years by the Baltimore Metropolitan Council (BMC). BMC is the metropolitan planning organization representing the Baltimore region which includes the City of Annapolis, seven nearby counties, and the City of Baltimore. A key component of the plan is a list of priority capital transportation projects totaling \$12 billion, which the region expects to implement from 2024 to 2045 and while there are no projects within the City of Annapolis limits, there are several within Anne Arundel County that will have direct benefit to Annapolis. These include a new BRT service on US-50 between Parole and the New Carrolton METRO station, roadway improvements to MD-2 to accommodate improved bus service between Annapolis and Baltimore, and improvements to US-50 between I-97 and MD-2 that will support improved bus service.

# **Connecting Our Future**

Connecting Our Future is the regional transit plan (RTP) for Central Maryland completed in 2020 by MDOT/MTA. Short-term improvements recommended by this plan that will benefit Annapolis include improvements to fixed route bus service to/from Parole (Westfield Annapolis Mall), new local or express bus service between Annapolis and Crofton, and the planned Annapolis Transit Hub at Parole. The plan also advances two long-term recommendations benefiting Annapolis and illustrated in the map on the facing page: dedicated transit corridors between Annapolis and Glen Burnie, and Annapolis and Union Station in Washington, D.C.

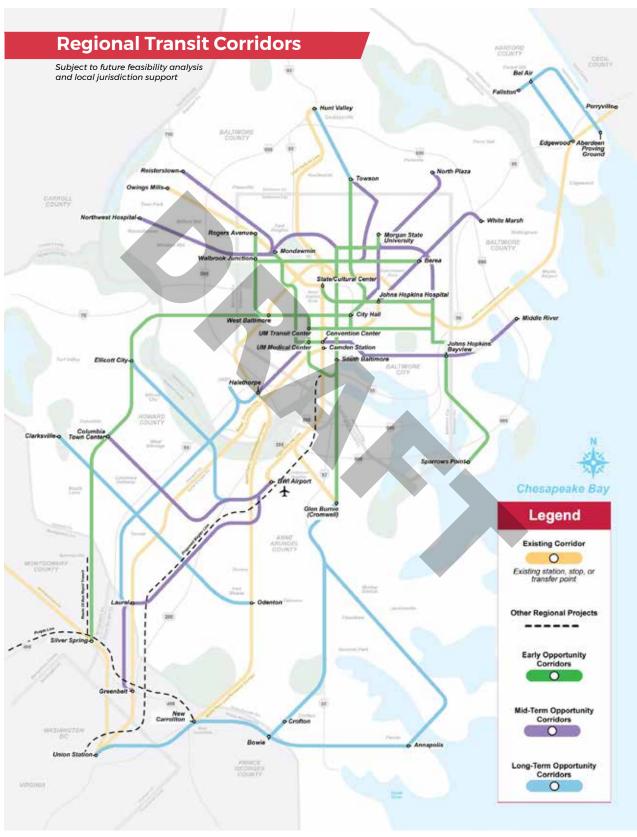


FIGURE 6-42: MAP OF RECOMMENDED REGIONAL TRANSIT CORRIDORS FOR CENTRAL MARYLAND AS IDENTIFIED IN THE 2020 REGIONAL TRANSIT PLAN (RTP) FOR CENTRAL MARYLAND CONNECTING OUR FUTURE.

THE FUNCTIONAL CITY TRANSPORTATION 209

# **Ferry Service**

Although passenger ferry service, like train service, no longer connects Annapolis to the region, it warrants attention in this Plan as it remains a viable alternative form of transportation, and a return of ferry service is currently in the planning stages.

Prior to the construction of the Bay Bridge, ferry terminals at the City Dock and later at the future location of Sandy Point State Park provided service to the Eastern Shore and Kent Island. The service ended in 1952 with the completion of the bridge and ferry service elsewhere on the Chesapeake Bay would soon become obsolete.

Renewed Interest in ferry travel service both within Annapolis and regionally is spurred by a few different factors. First, the redevelopment of the City Dock has aimed to improve mobility into and around Downtown Annapolis and it set in motion several new mobility options addressed in this chapter and together form the City's vision for an electric mobility plan. Among these new options, the City conceived a new fixed route electric ferry service that would run between Eastport and the City Dock and similar to the downtown circulator, it would be fare-free to make it truly accessible. The ferry was conceived as a way to expand the city's existing water taxi service that is privately operated and services many locations on Spa Creek and Back Creek. The route for the planned service can be seen in the section of this chapter focusing on Electric Mobility. Funding for these types of innovative mobility solutions increased dramatically with the passage of the Infrastructure Investment and Jobs Act (IIJA) by the Federal government and in 2021. The next year, Annapolis was awarded a \$3 million grant from the Federal Transit Administration's newly established Electric or Low Emitting Ferry Pilot Program to implement the electric ferry project.

The City Dock redevelopment has also brought new thinking about the role of Annapolis as a gateway to the broader Chesapeake Bay region. The National Park Service reconceived its role in the Chesapeake



FIGURE 6-43: POSTCARD OF THE ANNAPOLIS TO CLAIBORNE FERRY SERVICE WHICH THRIVED DURING THE YEARS PRIOR TO THE BAY BRIDGE CONSTRUCTION. FERRY SERVICE FROM ANNAPOLIS MAY SOON RETURN AS FACET OF THE REGIONS EVOLVING TOURISM ECONOMY AND AN INTEREST IN ALTERNATIVE MODES OF TRAVEL.

Source: N/A

region and developed a new vision for its longtime Chesapeake Gateways program. The Chesapeake National Recreation Area (CNRA), with Annapolis as a major hub, was proposed by Sen. Chris Van Hollen and Rep. John Sarbanes as a way to elevate protection and appreciation of the Chesapeake Bay watershed in a model similar to the San Francisco's Golden Gate National Recreation Area. Although passage of the Federal legislation needed to authorize the CNRA is still pending, the proposal has triggered a wave of enthusiasm for new tourism opportunities across the Chesapeake.

With this in mind, in 2022, Visit Annapolis and Anne Arundel County (VAAAC) was awarded a grant from the U.S. Economic Development Administration (EDA) for a feasibility study of new cross-bay ferry service that would operate between Annapolis and many other locations on both sides of the Chesapeake Bay. The study is being led by VAAAC alongside a five-county consortium that includes many locations-- Kent Island, Crisfield, Chesapeake Beach, Solomons-- which were once served by passenger ferries before the prevalence of the automobile.



FIGURE 6-44: WITH OVER 60,000 DAILY TRIPS AND MANY MORE ON BUSY HOLIDAY WEEKENDS, THE BAY BRIDGE PROVIDES ENORMOUS ECONOMIC BENEFIT TO ANNAPOLIS AS WELL AS TRAFFIC CONGESTION. AS MDOT/SHA ADVANCES THE DTHE BRIDGE EXPANSION, ANNPOLIS HAS A VESTED INTEREST IN DESIGNS THAT WILL IMPROVE TRAFFFIC MANAGEMENT AND PROMOTE MORE ALTERNATIVE MODES OF CROSSING.

Source: MDOT/SHA

# **Bay Bridge Expansion**

Ironically, although the construction of the Bay Bridge essentially ended ferry service across the Chesapeake Bay, current plans for expanding the bridge may help to bring ferry service back.

Following a nearly five-year study of eight different corridor alternatives for improving traffic flow across the Bay in central Maryland, adding a third span to the current bridge alignment was determined to be the best option. In 2023, the Maryland Transportation Authority will commence the Tier 2 Study of this preferred option which will explore a wide range of design options for new span that will ultimately have great bearing on the Annapolis area.

The City has much to gain from being an active participant in the planning process for the bridge expansion. It is an important gateway to the Annapolis area and despite the challenges from summer traffic,

the bridge generates significant economic benefits as well. With the expansion, the City and region have an opportunity to gain new options for crossing the Bay that could both offset the impact of the current design and provide new ways of experiencing the Bay.

These options could include ferry service, but also bus rapid transit, a future rail connection, and of course a dedicated trail for safe crossing by bike or foot. While these alternative modes of travel may not all have a sizable impact on vehicular traffic, they could have a dramatic impact on how visitors experience the region. For example, at the approach to the bridge, a ferry landing at Sandy Point State Park could provide visitors improved access from Annapolis to the park without a car. From there, new trail connections could connect Sandy Point State Park to Holly Beach Farm and across the Bay to connect with Kent Island's Cross Island Trail. This type of experience could be integral to the reimagined Bay Bridge.

# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

# TRANSPORTATION GOALT1

SHIFT THE MIX OF MOBILITY
INVESTMENTS TOWARDS PUBLIC
TRANSIT, MICRO-MOBILITY
/ RIDESHARING, ACTIVE
TRANSPORTATION, AND SUPPORT
FOR TELEWORK OPTIONS TO
DOUBLE THE USAGE OF THESE
MODES BY 2040.

#### **PERFORMANCE MEASURE 1**

Capital investments in transportation for public transit, walking, biking, and Mobility-as-a-Service (MaaS) will increase from 7% to 15% of General Fund expenditures by Fiscal Year 2025 and 25% by 2030.

#### **RECOMMENDED ACTIONS**

- T1..1 Complete the Bike network improvements identified in the 2011 Bike Master Plan and this Plan, and regularly track progress on all proposed improvements.
- T1.2 Ensure that all approved bike facility recommendations are budgeted and implemented with CIP roadway improvements.
- T1.3 Prioritize the design and construction of the West East Express (WEE) bike corridor as the spine of the City's bike network.

- T1.4 Continue to support and expand micro-mobility options particularly to improve mobility into and through the downtown area, including microtransit, bikeshare, paddleshare, ridesharing services, carshare, ferries, and an integrated Annapolis Mobility App integrated with Annapolis Transit and Anne Arundel County Transit.
- T1.5 Implement a no-fare pilot program for public transit to encourage more ridership and test its feasibility.
- T1.6 Reimagine Annapolis Transit including its route network, frequency, and vehicle fleet, to provide improved service and expand ridership.
- 71.7 Implement a micro-transit pilot program to expand ridership and test the feasibility of ondemand service.
- T1.8 Coordinate and connect Annapolis Transit to regional transit options including park-and-ride stations, Anne Arundel County's planned multimodal transit center, and MTA's express route stops.
- T1.9 Work with MTA and private commuter bus services to establish rush hour stops along Forest Drive and explore the feasibility of a dedicated intermodal transit hub in the Bay Ridge/Hillsmere area.
- T1.10 Implement the planned electric ferry pilot program connecting Eastport to downtown Annapolis and work with regional partners to envision Annapolis as a hub for ferry connections to other destinations.



FIGURE 6-45: 'GHOST BIKES' SUCH AS THIS ONE INSTALLED ON HILLTOP LANE IN EARLY 2023 SERVE AS INFORMAL MEMORIALS TO CYCLIST FATALITIES. ANNAPOLIS HAS SEEN AN ALARMING SPIKE IN PEDESTRIAN AND CYCLIST FATALITIES IN RECENT YEARS.

# TRANSPORTATION GOALT2

BUILD A POLICY ENVIRONMENT IN ANNAPOLIS THAT IS MODE-NEUTRAL, EQUITABLE, ORIENTED TO SAFETY, AND PRIORITIZES CONNECTIVITY OF THE CITY'S STREETS, SIDEWALKS, AND TRAILS.

# **PERFORMANCE MEASURE 1**

Crash rate is lower than rate of population and employment increase by 2030; Reduce serious injuries from car crashes to 3.0 per million Vehicle Miles Travelled (VMT) by 2040.

# **PERFORMANCE MEASURE 2**

Allow no new full-movement driveways on major arterials (and reduce the total number of existing driveway cuts).

# RECOMMENDED ACTIONS

- T2.1 Adopt a Complete Street policy and design manual to guide every public and private development project through planning, design, and maintenance.
- T2.2 Adopt standards for implementing bicycle facility infrastructure that improve safety for cyclists and are tailored to Annapolis.

- T2.3 Revise the Traffic Impact Analysis requirements to incorporate safety assessments and to be fully multimodal, including Quality/Level of Service (Q/LOS) assessments for bike, pedestrian, and transit modes.
- T2.4 Adopt a Vision Zero policy, which is an initiative aimed at eliminating all traffic fatalities and severe injuries, that includes at minimum coordinated guidance on engineering, education, enforcement, and emergency medical services, and is aligned with Anne Arundel County's Vision Zero policy.
- Prioritize bike and pedestrian facility improvements to the City's major thoroughfares, where the highest number of traffic fatalities and injuries currently happen, as means of improving safety, minimizing conflicts between modes of travel, and lessening congestion.
- T2.6 Prioritize improved bike and pedestrian connections to schools, particularly along Cedar Park Road, Forest Drive, and Spa Road.
- T2.7 As part of future small area planning, address all physical barriers to mobility in the City and identify targeted actions for improving connections between neighborhoods particularly along the Forest Drive corridor.
- T2.8 Prioritize the hiring of a fulltime transportation engineer for the City's Department of Public Works who will help to accelerate improvements to the City's street network.

# TRANSPORTATION GOAL 13

TRANSPORTATION WILL TAKE A LEADERSHIP ROLE IN CREATING A GREENER AND HEALTHIER ANNAPOLIS TO SUSTAIN THE ECONOMIC, ENVIRONMENTAL, AND SOCIAL QUALITY OF THE CITY.

# **PERFORMANCE MEASURE 1**

Triple the mileage of walking and biking facilities from 2020 to 2040

#### **PERFORMANCE MEASURE 2**

Increase bike and walk mode share to 15% by 2040

#### **PERFORMANCE MEASURE 3**

Expand the number of publicly accessible EV charging stations tenfold by 2025.

#### **RECOMMENDED ACTIONS**

T3.1 Adopt "Green Street" design standards that include maximum tree planting, use of silva cells, micro bioretention, permeable pavers, and other integrated stormwater best management practices. (also listed in Chapter 10: Water Resources under goal WR2)

- F3.2 Plan for the transition of the City's fleet vehicles and transit vehicles to zero emissions vehicles with the goal of complete transition by 2030 (also listed in Chapter 9: Environmental Sustainability under Goal ES6)
- T3.3 Work with BGE and other partners to establish more public car-charging stations in Annapolis, particularly downtown, as well as incentives to establish charging stations at existing multifamily and commercial developments. (also listed in Chapter 9: Environmental Sustainability under Goal ES6)
- T3.4 Revise the City's parking standards to require car-charging parking spaces for new or redeveloped residential and commercial properties that require major site plan review.
- T3.5 Require existing parking lots to include one EV charging unit for every 50 parking spaces.
- T3.6 Study and propose reductions to the City's parking requirements for all land uses to incentivize the sensible development of underutilized land, reduce impervious coverage, improve stormwater management performance, and encourage walking, biking, and transit use, among other benefits to the City. (Also listed in Chapter 4: Land Use under Goal LU2, and Chapter 9: Environmental Sustainability under Goal ES6)
- T3.7 Become a Silver-level bike-friendly and Bronzelevel walk-friendly community, designated by the League of American Bicyclists and Walk Friendly Communities, respectively.

# TRANSPORTATION GOAL 14

EXPAND PARTNERSHIPS WITH KEY PUBLIC AND PRIVATE STAKEHOLDERS TO IMPROVE MOBILITY, SAFETY, AND CONNECTIVITY FOR RESIDENTS AND VISITORS ALIKE.

# **PERFORMANCE MEASURE 1**

At least one transportation related capital project in conjunction with Anne Arundel County, and one project with SHA, each year through 2040.

#### **PERFORMANCE MEASURE 2**

By 2028, the B&A Trail will be connected to downtown Annapolis through current project partnerships with MDOT/SHA, Anne Arundel County, St. John's College, HACA, and St. Anne's Parish.

# **RECOMMENDED ACTIONS**

- T4.1 Continue to meet quarterly with Anne Arundel County Transportation staff to coordinate and accelerate improvements to Forest Drive which address safety and mobility options, particularly for pedestrians and bicyclists, and at all signalized intersections along the Forest Drive corridor.
- Work with MDOT/SHA, NSA-Annapolis, and Anne Arundel County to implement the planned MD 450 Bicycle Retrofit project which will provide a safe bike connection from the B&A Trail into Annapolis.
- T4.3 Continue to work with Anne Arundel County and MDOT/SHA to advance and prioritize the redesign of the Chinquapin Round Road intersection at Forest Drive / MD-665 (Aris T. Allen Boulevard).
- T4.4 Work with MDOT/SHA, Anne Arundel County, civic business associations, and private stakeholders to improve wayfinding signage throughout the city; new signage should utilize the City's approved wayfinding standards to the best degree possible.
- T4.5 Work with partnering agencies including Anne Arundel County, EMS, Fire, and Police to develop advanced routing for bus and emergency response vehicles on Forest Drive.
- T4.6 Partner with MDOT/SHA, Anne Arundel County, NSA-Annapolis, and the Resilience Authority on the design and implementation of an Intelligent Traffic System (ITS) for traffic signals on all evacuation routes as recommended in the MIRR Study.

- T4.7 Partner with St. John's College, St. Anne's
  Parish and HACA to design and implement the
  planned College Creek Connector trail between
  King George Street and Calvert Street.
- T4.8 Partner with MDOT/SHA, Anne Arundel County, HACA, and private property owners to create the West East Express (WEE), a dedicated bike corridor that extends the Poplar Trail east and west along the former WB&A railroad corridor.
- T4.9 Continue to collaborate with Bicycle Advocates for Annapolis and Anne Arundel County (Bike AAA), Mid-Atlantic Off-Road Enthusiasts (M.O.R.E.), Pedal Power Kids, and other biking advocates to plan and implement improved access to the City's bike network, as well as programs for riders of varying skill levels.
- T4.10. Work with MDOT/SHA to improve State-owned roadways in the City for multi-modal travel, particularly MD 450 (West Street), MD 435 (Taylor Avenue), and MD 436 (Ridgely Avenue)
- T4.11 Work with the Naval Academy Athletic
  Association (NAAA) to explore the feasibility
  of a transit hub at the Navy-Marine Corps
  Memorial Stadium where tour buses could park
  and visitors could be shuttled into downtown
  via micro-transit options.
- T4.12 Continue to work with the MDOT/SHA, Anne Arundel County, and the Baltimore Regional Transportation Board to accelerate the improvement of regional transit options that will better connect Annapolis to the Washington DC and Baltimore areas.

T4.13 As part of the Bay Crossing Study and future design phases of the Bay Bridge expansion, continue to work with the Maryland Transportation Authority, Anne Arundel County, Queen Anne's County, Bike AAA, Visit Annapolis & Anne Arundel County, and other partners to advocate for multi-modal options including a dedicated bicycle and pedestrian trail, dedicated transit lanes and space for future rail service, and coordinated facilities for ferry service.



# 7. COMMUNITY FACILITIES

#### **OVERVIEW**

Community facilities in Annapolis provide a wide range of public services designed to ensure an optimal quality of life, safety, and wellness of residents. At no time in the City's recent history was this more evident than during the COVID-19 pandemic in which community facilities were in high demand to provide critically needed support to residents. From around the clock use of parks and trails, to distant learning at schools, touchless technologies at libraries, and of course the overwhelming demand for hospital space, community facilities were strained and forced to adapt to an unprecedented public health nightmare.

While the factors that determine one's health are complex, a great many of them are guided by the quality of a person's surrounding environment. The social and environmental determinants of health include income level, particularly for those who live in poverty, access to healthy food and health services, emotional stability, the cleanliness and safety of the environment, and access to nature and recreational opportunities.

Numerous recent studies have confirmed a direct correlation between health outcomes and stress reduction with access to parks, open space, or even just tree-lined streets. Fundamentally, when people have access to parks and trails, they breathe better and exercise more.

According to a 2013 study conducted by the RAND Corporation for the National Institutes of Health,

approximately 14 percent of moderate exercise and 50 percent of vigorous exercise deemed "heart healthy" takes place in nearby neighborhood parks.

Although Annapolis has a high standard of living overall, high density pockets of poverty and limited access to health resources create wide disparities in health outcomes among communities sometimes in very close proximity to one another. The COVID-19 Pandemic highlighted many of the inequities already present among Annapolis communities.

As Chapter 1 of this plan makes clear, healthy and resilient communities are those that have ample access to the resources that support healthy lives. Thus, in regard to community facilities, priorities lie in expanding equitable access so that anyone in Annapolis regardless of where they live, their income, their race, their age, or other social factors, has the same opportunities for recreation and other quality of life amenities.

At present, not all residents have access to the same quality of park facilities, and investments could be prioritized to ensure equity for every Annapolitan to enjoy parks of all shapes and sizes. Taking it one step further, our creeks and rivers are a major defining feature of the City and community asset to all residents as a place to recreate or relax. Yet today, only a small percentage of the shoreline is truly accessible to all and much more can be done to strategically invest in public water access throughout the City. The following chapter will expand on these examples in assessing community facilities in Annapolis today and providing a vision for enhanced service in the future.



#### **EXISTING CONDITIONS**

#### **Parks & Open Space**

#### **City Park System**

Annapolis contains more than 40 parks owned and operated by its Department of Recreation and Parks. The larger parks, namely Truxtun Park, Ellen O. Moyer Nature Park at Back Creek, and Waterworks Park, form the backbone of the citywide system as the most heavily utilized parks. The facilities are complemented by other large and popular parks within the City which are owned by Anne Arundel County, but managed by the City of Annapolis. These include the Bates Athletic Complex (adjacent to Wiley H. Bates Middle School), and the park facilities located between Germantown Elementary, Phoenix Academy and Studio 39. The system's smaller neighborhood parks such as the City's playgrounds and street-end parks serve more limited options for recreation, passive use, leisure, and enjoyment but are typically located closer to residents and just a short walk away.

As a way of better addressing equitable access to parks and open space, in 2020 the City moved to organize its parks based on their size and appropriate service area. All parks are now identified as one of the following park types: Mini-Park, Neighborhood Playground, or Community Playfield. Each of these park types is defined by its size and the activities it supports, as well as a specific service area. For example, Mini-Parks are the smallest of the park types and generally support very basic park use, often no more than a nice place to sit and enjoy the view. The service area for a Mini-Park is 1/4 mile, meaning it is intended to serve a population that is located 1/4 mile from the park, which is an approximately five minute walk.



FIGURE 7-2: SIXTH STREET PARK IS AN EXAMPLE OF A MINIPARK AND ONE OF THE CITY'S MANY STREET END PARKS. THE PARK HAS BEEN PRIORITIZED FOR A NEW FLOATING DOCK IMPROVEMENT WHICH WILL DRAMATICALLY IMPROVE WATER ACCESS.

Source: City of Annapolis

#### Mini-Parks

Sometimes referred to as a "tot lot" or "pocket park", these parks are typically located on a small lot, generally a 1/4 acre or less, within a residential neighborhood or commercial business district. The City's many street-end parks fit into this category, and the service area for Mini-Parks is 1/4 mile, meaning that every City resident should live within 1/4 mile of a Mini-Park. This park type generally lacks active recreational facilities and is designed for low maintenance with few amenities. These amenities may consist of gardens, benches, gazebos, fountains, or other small social gathering facilities. Mini-parks typically do not have off-street parking or restroom facilities. Over time, if space is available, some Mini-Parks may develop into neighborhood playgrounds should adequate space exist.



FIGURE 7-3: ANNAPOLIS WALK PARK IS AN EXAMPLE OF A NEIGHBORHOOD PLAYGROUND. IN ADDITION TO THE PLAYGROUND PICTURED HERE WHICH WAS ADDED IN 2021, THE PARK OFFERS A FLEXIBLE SPORTS FIELD AND MULTI-USE SPORT COURTS.

#### **Neighborhood Playgrounds**

A neighborhood playground mainly serves the active recreational needs of children from 5 to 15 years of age, and it may offer passive recreation opportunities to adults. The service area for Neighborhood Playgrounds is ½ mile, meaning that every City resident should live within ½ mile of a Neighborhood Playground. These parks typically consist of one or more playground structure, small green space/general purpose fields, and associated benches. Some neighborhood playgrounds may develop over time to include additional amenities to become Community Playfields should adequate space exist for expanded facilities. Neighborhood playgrounds typically do not have off-street parking, shelters, or restroom facilities.



FIGURE 7-4: AT 70 ACRES, TRUXTUN PARK IS ANNAPOLIS'
LARGEST PARK WITHIN THE CITY LIMITS AND IS AN EXAMPLE
OF A COMMUNITY PLAYFIELD. THE PARK ALSO OFFERS THE
WIDEST RANGE OF PARK FACILITIES IN THE CITY.

Source: Capital Gazette

#### **Community Playfields**

As the largest of the three park types, the Community Playfield provides for the active recreational needs of several neighborhoods. The service area for Community Playfields is 1 mile, meaning that every City resident should live within 1 mile of a Community Playfield. It provides more specialized facilities than a Neighborhood Playground and the capacity to serve more visitors. The City's Community Playfields are diverse in their offerings, with Truxtun Park offering the most comprehensive variety of facilities including dedicated ball courts for tennis, pickleball, and basketball, and fields for softball, baseball, and kickball; an outdoor swim center; nature trails; bmx and skate park; playgrounds; and a full service recreation center. Ellen O. Moyer Nature Park and Waterworks Parks are both geared to nature-oriented recreation with extensive trails and waterfront. While technically not a City park, the Bates Athletic Complex, adjacent to Wiley H. Bates Middle School, complements the City's Community Playfields with numerous ballfields for soccer, football, lacrosse, baseball, softball, and kickball, as well as a track. Community playfields also include off-street parking, restroom facilities, and concessions at some locations.

#### **County, State and Private Parks**

Annapolis residents benefit from parks and recreation areas provided by other entities such as Anne Arundel County Recreation and Parks, Anne Arundel County Public Schools, the U.S. Naval Academy, St. John's College, and several smaller institutions. These parks complement the amenities and services provided by the City's parks and form a larger regional network of park spaces. For example, Quiet Waters Park, located just outside of the City limits, offers the longest stretch of public waterfront in the Annapolis area and the only formal dog park in the area. The park and trail goals of the City frequently align with the County's goals, and coordination between the two jurisdictions has become increasingly important to meet the needs of residents. Approximately every five years Anne Arundel County updates its Land Preservation Parks and Recreation Plan (LPPRP) which includes an inventory of current City of Annapolis park projects and priorities for future investment. The plan serves as an important document for coordinating projects and funding, particularly from State and Federal sources who often require that projects have been identified in the LPPRP. The current LPPRP was updated in 2022 and included extensive review by City of Annapolis staff.

### Changes Since the 2009 Comprehensive Plan

Annapolis continues to be a regional hub for physical activity and recreation, and is attracting new residents and businesses drawn to the City's quality of life, its watersport culture, and its ample opportunities for outdoor recreation. Yet the City is faced with a number of the same trends facing most parks and recreation departments across the country including outdated infrastructure, maintenance challenges, cost of new land for park development, demand for increased services and programs, and the need for additional funding opportunities to augment conventional budget sources such as property taxes. The overwhelming demand for parks and recreational programs during

#### Kenneth R. Dunn Pool



FIGURE 7-5: THE KENNETH R. DUNN MUNICIPAL POOL AT TRUXTUN PARK

Source: City of Annapolis

The Kenneth R. Dunn Municipal Pool that reopened in July 2020 on the site of a former pool after a complete \$4 million rebuild, is one of the centerpieces of Truxtun Park's recreational assets. It was designed with a variety of contemporary features to offer a range of aquatic recreation options and programs for residents young and old. The new pool boasts a new bathhouse, changing rooms, water slide and tot pool, and is fully ADA compliant. A redesigned parking area and new native plantings around the facility complement the project. With its location within a short walk of many neighborhoods including several of the city's most socially vulnerable communities, the Kenneth R. Dunn Municipal Pool has already proven to be a remarkable investment in the city's future and health of its residents.

#### Parks, Trails & **Playgrounds**

ittle Free Libra annapolis recreation & parks Healthy Living Starts Here. Multiuse Park Truxtun Park Hilltop Ln / Pumphouse Rd / Truxtun Park Rd 70.0 • • • Nature Parks Ellen O. Moyer Nature Park at Back Creek 7314 Edgewood Road 12.0 • • Waterworks Park 260 Defense Highway 40.0 West Street at Westgate Circle Brown-Leanos Park 0.1 Rev. John T. Chambers, Sr. Park 14 Dorsey Avenue 1.0 Fleet Street Park Fleet Street, Historic District 0.1 Fowlkes Community Park McGuckian Street, Homewood 0.1 Post Office Park Americana Drive, Eastport 0.5 Shiley Park Shiley St near Giddings Ave, West Annapolis 0.1 Rev. Joseph J. Turner Park 3rd Street & Chester Avenue 1.0 Tolson Street Park Monterey Avenue, West Annapolis 0.1 Wiseman Park first block of West Street 0.3 Waterfront Parks 1st Street & Spa Creek 3rd Street & Back Creek 0.1 Eastport 5th Street & Spa Creek 0.1 Eastport 6th Street & Back Creek Fastnort 0.1 Acton Landing Park South Street & Anne Lane, Spa Creek 0.5 Amos Garrett Park 0.3 Spa View Avenue, Spa Creek Annapolis Maritime Museum 2nd Street & Back Creek 0.5 Barbara Neustadt Park Monticello Avenue & Spa Creek 0.2 Burnside Park Burnside Street & Spa Creek, Eastport 0.1 College Creek Park Clay Street & College Creek 0.2 Commodore John Barry Park Prince George Street George Washington Davis Park 4th Street & Back Creek, Eastport 0.1 Horn Point, Chesapeake Avenue Eastport 0.1 Jeremy's Way (off of 1st Street) Eastport 0.1 Lafayette Park Lafavette Avenue & Spa Creek 0.2 Leon Wolfe 4th Street & Spa Creek 0.1 Northwest Street End Park Northwest Street 0.1 Richard B. "Dick" Sims Park 2nd Street & Back Creek 0.5 Susan Campbell Park Dock Street (downtown Annapolis) 1.0 Severn Avenue & Spa Creek Eastport 0.1 Tucker Street & Weems Creek West Annapolis 0.2 Naval Academy Stadium Trail 1.3 • Poplar Park and Trail Poplar Avenue & Windell Avenue 1.5 • Spa Creek Trail 2.0 Annapolis Walk Community Center 200 Belle Drive 3.0 Bywater Park Bywater Road 2.0 Rev. John T. Chambers, Sr. Park 14 Dorsey Avenue 1.0 Newman Street Playground Newman & Compromise Streets 0.5 Pats Playground Pumphouse Road in Truxtun Park 0.5 "Pip" Moyer Recreation Center Hilltop Lane 0.5 Primrose Acres Garden Gate Lane & Edelmar Drive 0.2 Rev. Joseph J. Turner Park 3rd Street & Chester Avenue 1.0

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the COVID-19 Pandemic of the last two years has reinforced these challenges.

Although little has changed in terms of overall park area in the City in the last 10 years, significant investments to existing parks have responded to dramatic changes in how parks are used and the recreational programs desired by residents. New park development is challenging in a city with so little land available, but there remain a variety of informal open space areas in need of preservation through formal land acquisition or easement. These include street-end parks, trail connections, upland forest, and riparian areas. Many acres of new conservation open space has been borne out of the City's forest conservation requirements accompanying new development which result in binding conservation easements, although not all of this acreage results in publicly accessible land.

Despite the numerous challenges of park development in a city of constrained land and resources, the City has been successful at leveraging diverse resources to invest in its existing parks, particularly those which reach underserved populations. The result has been renovation and enhancement of existing recreational facilities to increase the quality of experience, available programs, and accessibility. Recent accomplishments include:

- The Truxtun Park Pool received a \$4 million reconstruction into the state-of-the-art Kenneth R. Dunn Municipal Pool, boasting additional amenities and facilities than the previous pool complex.
- The 16 racquet courts at Truxtun Park were completely reconstructed to now include eight tennis, six pickleball, and two blended courts at a cost of \$1 million.
- The City contracted with M.O.R.E. (Mid-Atlantic Off-Road Enthusiasts) to design and construct 12 miles of multi-use natural surface trails across rolling hills in Waterworks Park at minimal cost to the City. M.O.R.E. also designed and built a new trailhead to Waterworks Park at Housley Road.

- Following a 20-year lease agreement to manage Ellen O. Moyer Nature Park on Back Creek, Annapolis Maritime Museum has successfully restored and renovated the former Waterworks building and activated more of the 12-acre site for nature-oriented programming. This includes improved trails and a paddle craft rental kiosk managed through a concession agreement. Several additional capital improvements are scheduled to be completed in the coming years including a pavilion structure, boardwalk trail, and nature playground.
- New playgrounds were installed at Annapolis
  Walk Community Park and Truxtun Park through
  Maryland Department of General Services
  funding.
- Numerous building improvements at the Stanton Community Center including new windows on the historical classroom section; roof repairs; new flooring for the foyer, lobby, hallway, and multipurpose room; rubberized interior steps; new exit doors from the gymnasium; three new HVAC units on the roof; and a new boiler system. Additional improvements to the basketball court and shower room are also funded.
- The last remnant of the historic Elktonia/Carr's
  Beach was protected through a partnership of
  City, County, State, Federal and private partners
  and will become new park featuring the city's first
  sizeable public beach.
- New and improved waterfront parks are funded in two of the city's highest need areas: the Clay Street community where improvements to Robert H. Eades Park (formerly College Creek Park) will be complete in 2023; and in Eastport at Hawkins Cove where an underutilized open space adjacent to the city's largest public housing community is being designed as a park and living shoreline.
- Several new street-end parks were established or formalized in neighborhoods across the City, many created in partnership with local residents and civic associations.



FIGURE 7-7: WATERWORKS PARK'S HOUSLEY ROAD
TRAILHEAD WAS DONATED AND INSTALLE BY MID-ATLANTIC
OFFROAD ENTHUSIASTS (M.O.R.E.). WITH THE SELF-SERVE
FIXIT STATION DONATED BY BIKE AAA

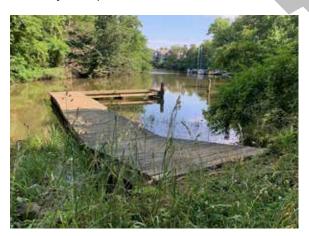


FIGURE 7-8: HAWKINS COVE ON SPA CREEK IS BEING DESIGNED WITH A NEW COMMUNITY PARK AND LIVING SHORELINE

Source: City of Annapolis

 Chambers Park in Parole attracted global attention following the creation of a monumental mural honoring the tragic death of Breonna Taylor and the senseless loss of many other Black lives.
 The mural was developed by the local nonprofit Future History Now in partnership with the Banneker Douglass Museum and the Maryland Commission on African History and Culture, and included contributions from hundreds of volunteers.



FIGURE 7-9: THE BREONNA TAYLOR MURAL WAS INSTALLED AT CHAMBERS PARK IN 2020 AND RECEIVED INTERNATION AL ATTENTION.

Source: Capital Gazette



FIGURE 7-10: NEW PICKLEBALL COURTS WERE PART OF A MAJOR INVESTMENT AT THE TRUXTUN PARK.

- Funded through a unique public-private partnership, the design process for the redesigned City Dock is underway with an anticipated completion in 2025.
- The City acquired the historic Burtis House which will be restored and renovated as part of the redesigned City Dock.

#### **Access to Parks & Open Space**

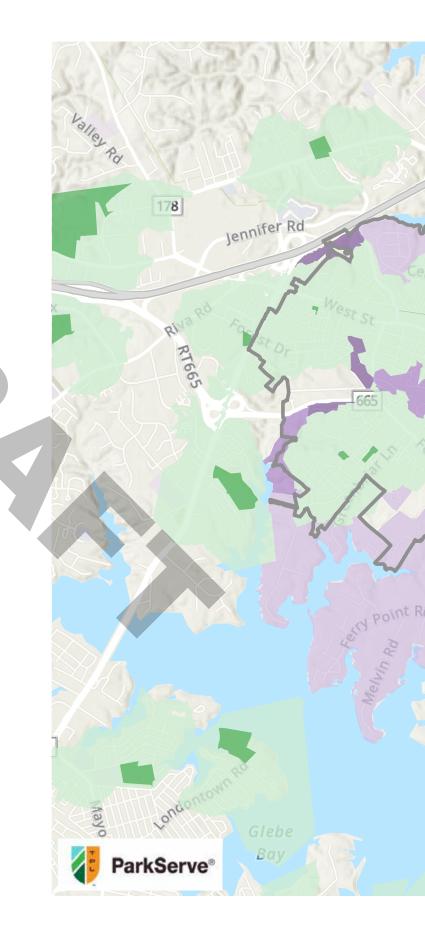
#### **General Access Considerations**

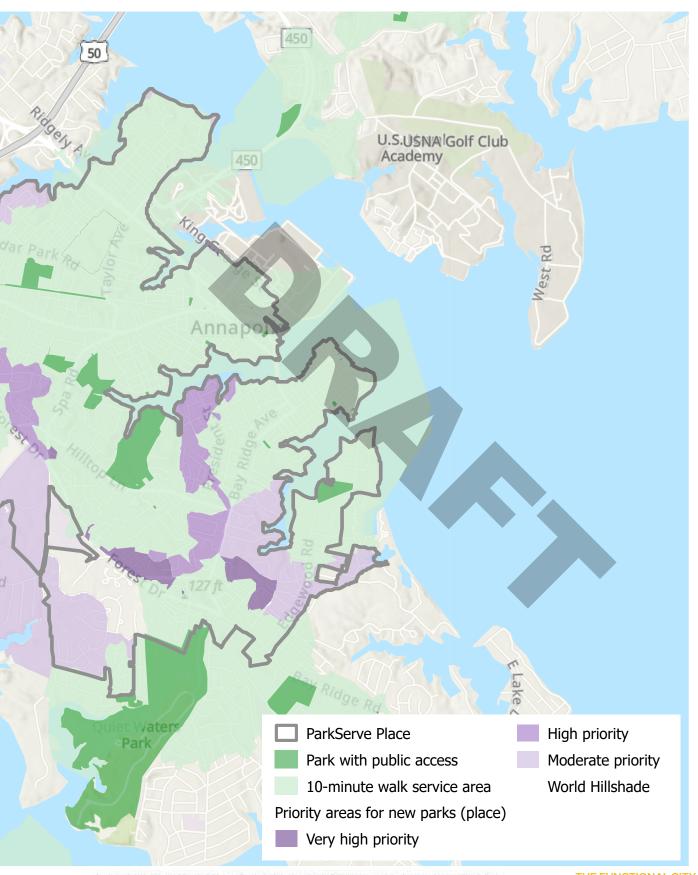
Access to parks and open space by all residents of Annapolis is one of the keys to more equitable health and economic outcomes. The vision in this Plan of what equitable access to parks and open space looks like is the ability to walk or bike to all desired types of recreation and open space regardless of one's background, ability, or place of residence. Particular attention is given to areas of higher social vulnerability, which are those areas that have more residents of residents living under the poverty line, with lesser access to a personal vehicle, and have a larger proportion of minority populations, among other characteristics. The City's map of social vulnerability was developed using the Center for Disease Control's Social Vulnerability Index which uses 15 U.S. Census variables to determine the communities of greatest need. Chapter 2: Demographic Trends provides additional information about the social vulnerability methodology.

The tale that social vulnerability tells is that within the distance of only a few short blocks, wealth and opportunity can change drastically. South of West Street, the Murray Hill neighborhood, with high income and almost no persons from a minority community, has among the lowest vulnerability, while immediately north of West Street, the Clay Street neighborhood has the highest vulnerability in the whole city, due to a large minority population combined with high poverty and unemployment. Other areas with higher vulnerability include the Tyler Heights and Parole neighborhoods - Tyler Heights for low educational attainment and high unemployment, and Parole for a high minority population and low vehicle access. Access to parks and recreational opportunities must be prioritized particularly in these areas.

FIGURE 7-11: THIS MAP PRODUCED BY THE TRUST FOR PUBLIC LAND'S PARKSERVE PROGRAM SHOWS AREAS OF ANNAPOLIS WITHIN A SHORT WALK OF EXISTING PARKS AND AREAS WHERE PARKS ARE LESS ACCESSIBLE AND SHOULD BE PRIORITIZED FOR INVESTMENT.

Source: Trust for Public Land





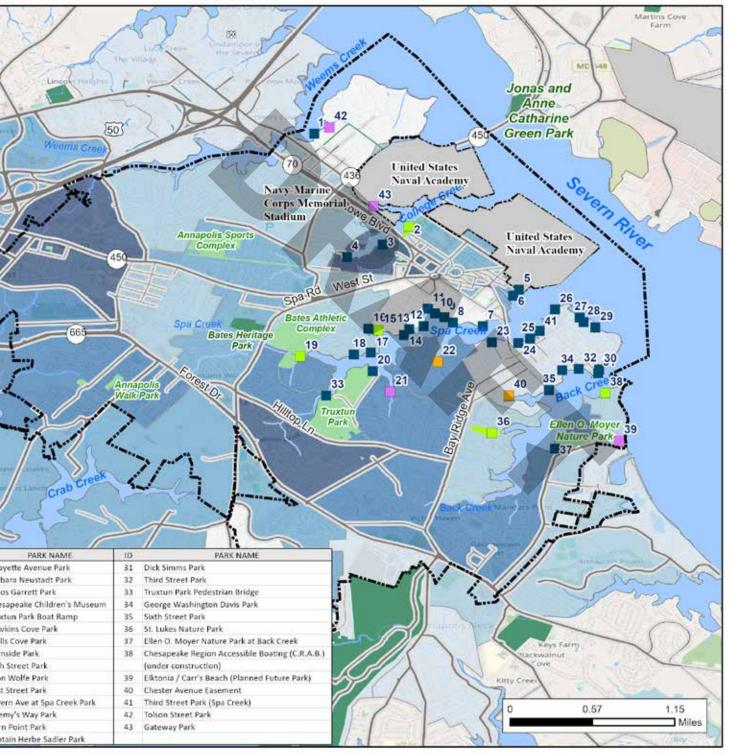
The fundamental goal for park access is for all residents to be within 1/4 mile of a Mini-Park, 1/2 mile of a Neighborhood Playground, and within 1 mile of a Community Playfield. Nearly the entire city is within one mile from the largest parks such as Truxtun Park. However, fewer are within the recommended range of the smaller Neighborhood Playgrounds and Mini-Parks. The map of park access on the previous page overlays the City's park system onto the social vulnerability map, and adds a service area in dotted line around each park based on its park type. This tells us where we find the greatest park need and can help guide more equitable park and trail investments. While the socially vulnerable Tyler Heights neighborhood has generally poor access to smaller neighborhoodscale parks, Truxtun Park, with its abundance of recreational facilities, is immediately adjacent. The Parole neighborhood is among those with the poorest access to parks and recreational facilities of all types, being constrained by nearby major roadways, and thus could benefit the most from targeted investment. By comparison, the Wardour community in West Annapolis has equally poor if not even worse access to parks, although here it may be less of a need given minimal social vulnerability.

#### **Adequate Public Facilities**

The City's Adequate Public Facilities Ordinance is a critical tool for expanding the park network but could be improved significantly to better address equity goals. In its current form, the ordinance, which is designed to ensure that the City has adequate park space to support the new population associated with a development, does not include any reference to equity and its requirements of developments do not typically lead to a noticeable improvement to the park system. An overhaul of this ordinance should be a priority with a particular focus on stretching any investment from a

FIGURE 7-12: THIS MAP OVERLAYS THE CITY'S EXISTING AND PLANNED WATERFRONT PARKS OVER SOCIAL VULNERABILITY DATA TO SHOW WHERE ACCESS IS ADEQUATE AND WHERE ACCESS GAPS EXIST.





new development to reach as many other underserved residents as possible, ensuring that barriers to access are eliminated, and that any park investment from the new development is coordinated with City priorities.

#### **Water Access**

Public water access is without question the most critical accessibility challenge facing Annapolis today. While Truxtun Park and Ellen O. Moyer Nature Park are two high quality parks that offer significant public access to the water, and the City Dock is in the process of being dramatically redesigned for public use, much of the City's waterfront is off limits to the vast majority of residents and visitors. Annapolis is strongly identified by its 22 miles of waterfront and the culture and opportunity created by this unique resource. Yet, only approximately 10% of this shoreline is publicly accessible today and at no time in the City's history has there been more concern from residents about the lack of public water access. What has changed to trigger this concern?

Historically, Annapolis did not necessarily have more public water access than it does today, but it had a less regulated waterfront. As the City expanded starting in the 1950's and 1960's and gradually shifted from a primarily working waterfront of industrial uses to one of recreation and leisure, there has been a significant growth of marinas and other types of private water access including gated communities and membership-based boat clubs. Yet, even with these private waterfront uses, many public waterfront sites still existed both formally and informally. Many of the street-end waterfront parks we appreciate today were historically just informal water access locations. Beginning as early as the 1960's, City programs began to make many of these sites more official through easements or acquisition. Yet many of these smaller and informal water access sites remain in limbo and threatened when new development occurs.

There are other potential public water access sites within the City owned and managed by other public entities including Anne Arundel County, the





FIGURE 7-13: THE TRANSFORMATION OF THE CITY DOCK AREA OVER THE LAST FIFTY YEARS FROM WORKING WATERFRONT (TOP) TO LIESURE WATERFRONT (BOTTOM) IS INDICATIVE OF BROADER CHANGES TO WATERFRONT USES ACROSS THE CITY. WHILE THESE CHANGES TRANSFORMED THE CITY DOCK INTO AN IMPORTANT CIVIC SPACE, THEY ALSO DIMINSHED PUBLIC WATER ACCESS ELSEWHERE IN THE CITY.

Source: Marion Warren (Top); Visit Annapolis & Anne Arundel County (bottom)

State of Maryland, the Housing Authority of the City of Annapolis (HACA), and the Navy, as well as private entities such as churches and homeowners associations. Many of these sites may never be developed, but they also not become more publicly accessible either without a deliberate planning process to envision their use.

Two recent efforts have helped to turn the tide on public water access. In 2021, the Maritime Task Force







FIGURE 7-14: EXISTING BARRIERS TO PUBLIC WATER ACCESS
ARE DIVERSE, NUMEROUS, AND GROWING IN ANNAPOLIS
WHICH REINFORCED THE NEED FOR A PUBLIC WATER
ACCESS PLAN. AMONG THESE BARRIERS ARE GATED
DEVELOPMENTS (TOP); PRIVATE PARKS (MIDDLE); AND
ACCELERATING ENVIRONMENTAL IMPACTS FROM CLIMATE
CHANGE INCLUDING MORE FREQUENT FLOODING (BOTTOM).

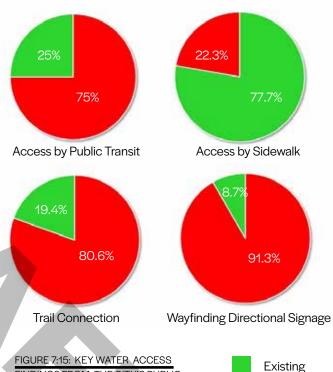


FIGURE 7:15: KEY WATER ACCESS
FINDINGS FROM THE CITY'S PUBLIC
WATER ACCESS PLAN WHICH ANALYSED
ALL OF THE CITY'S EXISTING PUBLIC
WATER ACCESS LOCATIONS.

Not Existing

Source: City of Annapolis

was created to study ways of strengthening the City's Maritime Industry which is a major economic and cultural asset to the city. The recommendations from the Task Force, summarized in the adopted "Maritime Task Force Strategy: Strengthening the Industry", included a significant focus on public water access improvements both in the Maritime districts and throughout the City. The Task Force strategy document was adopted by resolution of the Annapolis City Council as an addendum to this Comprehensive Plan. Several strategies recommended by the Task Force for expanding public water access were subsequently incorporated by City Council into the City's land development code include the creation of Water Access Incentives for property owners and



FIGURE 7-16: 5TH STREET PARK IS AN EXAMPLE OF ONE OF THE CITY'S MANY STREET-END PARKS THAT HAS CLEAR POTENTIAL FOR IMPPROVEMENT AND IS BEING CONSIDERED AS A FUTURE FERRY LANDING AND MOBILITY HUB.

a requirement of public water access for all new waterfront restaurants. But most importantly, the Task Force sparked the launching of the City's first Public Water Access Plan which kicked off in early 2022. The plan is being funded in part by the National Park Service which is looking to create a hub in Annapolis for its revamped Chesapeake Gateways program and thus has a vested interest in ensuring equitable public water access.

When complete, the Public Water Access Plan will become a guiding document for City staff, elected officials, boards and commissions, and a wide variety of community stakeholders. The plan will also become an addendum to this Comprehensive Plan. Although the Public Water Access Plan will delve into far greater detail on how to achieve more equitable public water access, the goals and recommended actions at the end of this chapter identify the immediate areas of need for public water access.

#### **Public Water Access Plan**

In 2021, as part of a Maritime Task Force, the improvement and expansion of public water access was identified as a critical need for the city. At present, only approximately 10% of the city's 22 miles of shoreline is truly publicly accessible. Following the Task Force recommendation, and with assistance from the National Park Service, the City launched, for the first time in its history, a Public Water Access Plan to identify and prioritize the concrete steps the City and its partners can take now and into the future to improve, enhance, and expand public water access within and adjacent to the City limits. To achieve this, the Public Water Access Plan was developed in conjunction with Annapolis Ahead 2040 and focused on the following five areas:

- Comprehensive inventory of all existing public water access sites;
- ldentification of opportunity sites for new or improved public water access;
- 3 Standards for equitable public access infrastructure;
- 4 Program and partnership initiatives; and
- 5 Alternative mobility initiatives on land and water.

FIGURE 7-17: (OPPOSITE PAGE) THE PUBLIC WATER ACCESS THAT CURRENTLY EXISTS IN ANNAPOLIS IS LARGELY COMPRISED OF MANY UNIQUE STREET-END PARKS THAT SHOULD BE IMPROVED WITH BETTER SIGNAGE, NEW FURNISHINGS, AND PADDLE LAUNCHES WHERE FEASIBLE. CLOCKWISE FROM TOP LEFT: AMOS GARRET PARK; ANNAPOLIS MARITIME MUSEUM; SIXTH STREET PARK; HORN POINT PARK; ACTON COVE PARK; GEORGE WASHINGTON DAVIS PARK;













#### **College Creek**

College Creek warrants particular attention as an opportunity area for expanded public water access. Land bordering the creek is almost entirely publicly owned or by nonprofit institutions, including large tracts owned by Anne Arundel County Public Schools (AACPS), Housing Authority of the City of Annapolis (HACA), St. Anne's Parish, St. John's College, State of Maryland, and the Navy. Yet, very little of this land is currently accessible to the public.

With minimal waterfront development and no marinas, College Creek has always had a distinct identity from the City's other major creeks, and has the potential to become a more accessible natural refuge for both people and wildlife. In addition to improved public water access, there are numerous opportunities for ecological restoration, habitat enhancement, stream daylighting, and other stormwater best management practices that will improve both water quality and biodiversity particularly at the creek's headwaters.

A visioning process is needed that brings together the many stakeholders along the creek, especially residents, to develop a consensus plan. The City is starting the process by rebuilding the newly renamed Robert H. Eades Park, formerly known as College Creek Park, which had been deteriorating for many years. As one of only two small properties owned by the City of Annapolis on College Creek, the hope is that this project will jumpstart a broader plan for the creek. The City is also advancing plans for a major trail connection along the waterfront called the College Creek Connector, which is profiled in Chapter 6: Transportation. The map provided here is a preliminary effort to illustrate the potential water access opportunities around College Creek through new or improved open space and trail connections.

FIGURE 7-18: THIS MAP PROVIDES A CONCEPTUAL VISION FOR THE PUBLIC WATER ACCESS AND OPEN SPACE OPPORTUNITIES THAT COULD MAKE COLLEGE CREEK A MORE INVITING NATURAL RESOURCE FOR THE CITY.





**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

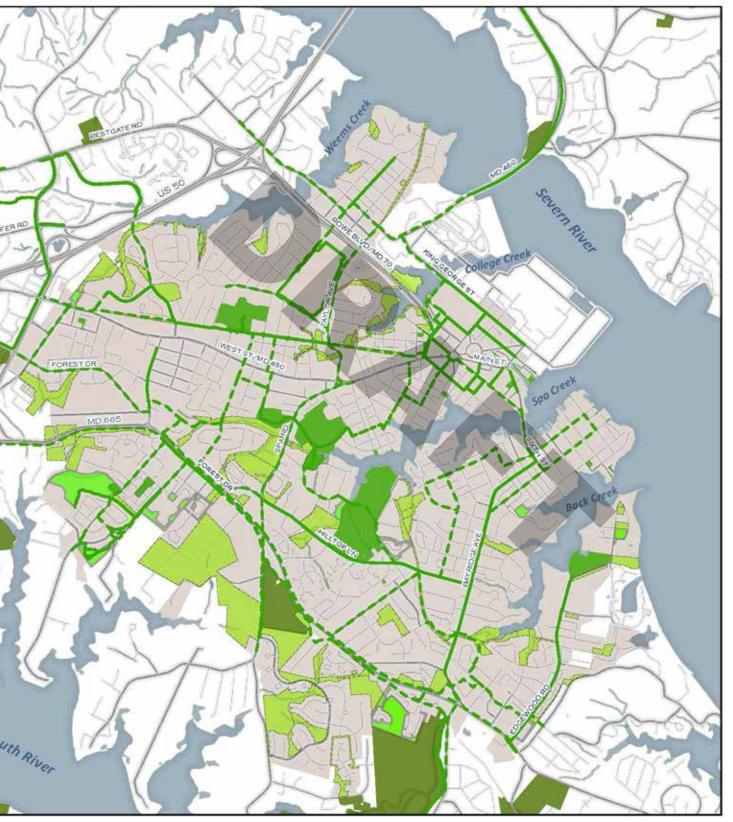
#### Conservation

Annapolis has an extensive inventory of conserved lands as natural resources but they are scattered throughout the City with numerous gaps between them. There is a great need to better link these easements together to form contiguous greenway corridors for a variety of reasons: for residents to enjoy as neighborhood greenspace; to connect and nurture wildlife habitat that can enhance biodiversity; as green infrastructure for stormwater management and water quality, carbon sequestration, heat island mitigation, and air quality benefits; and as potential trail connections. Some of these spaces are informally connected, lacking the officiality of an easement or other form of protection from future development. Even when they are established by formal easement, these conservation areas exist as a separate network from the City's park system. In concert with an expansion and improvement to the City's park facilities is a goal to merge the parks system with the network of natural resources, bikeways, and trails via a comprehensive greenways effort. The main intent of a greenways effort is to identify those lands which provide significant environmental, recreation, aesthetic, and/or health benefits, and then connect them to provide an accessible citywide resource.

Annapolis is fortunate to have a unique Conservancy Board already established that aids in the advocacy and prioritization, the easement and/or acquisition process, and the coordination of stewardship for conservation areas within the City. In 2021, the Annapolis Conservancy Board launched a signature initiative to identify and map priorities for future conservation. Over 100 different parcels of land of varying sizes were identified across the City which were then organized into a database that groups the properties by various criteria including watershed, ward, contiguous with existing parkland or conservation area, potential for trail connection, among other data. From this, a comprehensive

FIGURE 7-19: THE GREENWAY MAP ILLUSTRATES THE POTENTIAL OF BETTER CONNECTING THE CITY'S PARK SYSTEM WITH ITS CONSERVATION AREAS.





greenway map was created which identifies priorities for greenway corridors.

With Truxtun Park and the Bates Athletic Complex as major green space hubs, the aim would be for greenways to radiate throughout the city and ultimately connect to Waterworks Park which offers over 600 acres of pristine woodlands and twelve miles of trails. A key greenway corridor could parallel Forest Drive linking Quiet Waters Park to Broad Creek Park outside of the City. Another corridor could better connect the B&A Trail to the City on MD-450, along College Creek, ultimately connecting to the Poplar Trail. Weems Creek offers another priority corridor with significant potential to link the neighborhoods of West Annapolis to Parole, the Poplar Trail, the Anne Arundel Medical Center, and the South Shore Trail. And at the headwaters of Spa Creek, the existing Spa Creek Trail already links various conservation areas but needs better signage and a more accessible bridge. The greenway network was also coordinated with Anne Arundel County's efforts to create a much larger network through the County as part of its updated Green Infrastructure Plan released in 2021.

Recreation is only one aspect of the greenways. Two other strategic initiatives of this Comprehensive Plan identified in Chapter 4: Land Use, will aid in the development of the greenway network. First, the future land use plan includes a new land use designation for "Environmental Enhancement Areas" that prioritizes the environmental benefits that certain parcels provide which includes stormwater management, tree canopy preservation, habitat, biodiversity, or potentially other benefits. While many of these sites are currently undeveloped, some are paved and/ or minimally developed areas in close proximity to waterways that should be enhanced with natural features to provide improved environmental benefits. Sites designated as Environmental Enhancement Areas were coordinated with sites on the greenways inventory as well as sites within the Critical Area's Resource Conservation zones. Secondly, this plan is promoting a new framework for future small area planning oriented to the City's major creeksheds.



FIGURE 7-20: WATERWORKS PARK OFFERS OVER 600 ACRES
OF PRISTINE WOODLANDS SURROUNDING BROAD CREEK AND
TWELVE MILES OF TRAILS.

Source: City of Annapolis



FIGURE 7-21: THE SPA CREEK TRAIL CONNECTS EXISTING CONSERVATIONS AREAS AND PROVIDES A ALTERNATIVE TRANSPORTATION ROUTE. BETTER SIGNAGE AND A NEW BRIDGE WOULD DRAMATICALLY IMPROVE ITS VALUE.

Source: City of Annapolis

This is a departure from historic precedent which has focused small area planning around neighborhoods and urban corridors. The intent with this change is to better address environmental concerns side by side with development, particularly at the water's edge, acknowledging that land use decisions have significant consequences on the city's creeksheds.

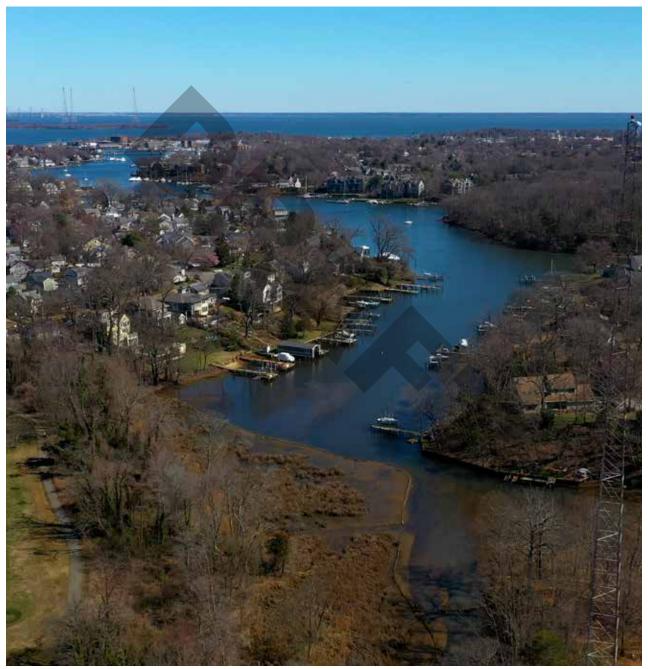


FIGURE 7-22: THE LAND AROUND THEHEADWATERS OF SPA CREEK IS AN IDEAL EXAMPLE OF A SITE WHERE CONSERVATION PROVIDES MULTIPLE BENEFITS INCLUDING RECREATIONS, WATER QUALITY, TREE CANOPY, AND BIODIVERSITY.

#### Recreation

A significant component of the Recreation and Parks Department are the programs and services offered to City residents, After-school activities, sports leagues and clinics, fitness classes, sporting events, summer camps, and a variety of enrichment programs contribute to the assortment of affordable offerings. The vast majority of these programs take place at the Pip Moyer Recreation Center at Truxtun Park and the Stanton Community Center, with warm weather offerings at other facilities and City parks. Although the department is limited by program space and staffing, the variety and frequency of programs has gradually increased in response to demand and interest. Notably, the reconstructed Truxtun Park pool and racquet courts have provided a number of new opportunities for programs. In the short-term, additional investments are prioritized at Truxtun Park including a major renovation of the skate park, renovation of the basketball courts, overhead lights at the pickleball courts, new fitness equipment, and improvements at the boat ramp area.

The Annapolis Recreation and Parks' seasonal program guide reveals the remarkable diversity of the programs offered. To provide these offerings, the City partners with many other organizations to augment the City's capacity with limited staff. One example is "Cut Different Boxing", a new youth boxing program, established in 2022 at the Pip Moyer Recreation Center in partnership with the U.S. Naval Academy, and Annapolis Police Foundation.

Currently, a major limiting factor in programs is the lack of a modern linear sports field complex. While Anne Arundel County owns several facilities in the region, the City has none aside from the Bates Athletic Complex which it manages on behalf of the County. For this reason, neither the City nor the County has had much incentive to invest in the facility. Given the demand for sports leagues, tournaments and clinics, the City's other adjacent properties which include the former Weems Whelan Field and the former WYRE site, the City should explore acquiring the Bates Athletic Complex and the potential for revenue-generating facility improvements on the site.



FIGURE 7-23: THE DIVERSITY OF RECREATIONAL PROGRAM OFFERINGS IS APPARENT IN THE CITY'S PROGRAM GUIDE ISSUED FOUR TIMES EACH YEAR.

Source: City of Annapolis

The Stanton Community Center remains a cherished and critical resource for the Old Fourth Ward community but it too is limited by its facility and staffing. An additional programming associate has been sought by the Center for many years and would enable the Center to expand its programs. With its proximity to College Creek, there is also enormous potential for additional outdoor programming as new park and trail investments along the Creek are realized.

Finally, Waterworks Park, although located outside of the City and currently not very accessible, remains a remarkable asset for the City and region that could see far more investment for outdoor programs. With its more than six hundred acres of woodlands, twelve miles of trails and fishable waters, the park is a true gem. In the coming years, the vacant historic buildings at the park which once served as the City's waterworks facility should be restored and repurposed for new revenue generating uses compatible with the park.

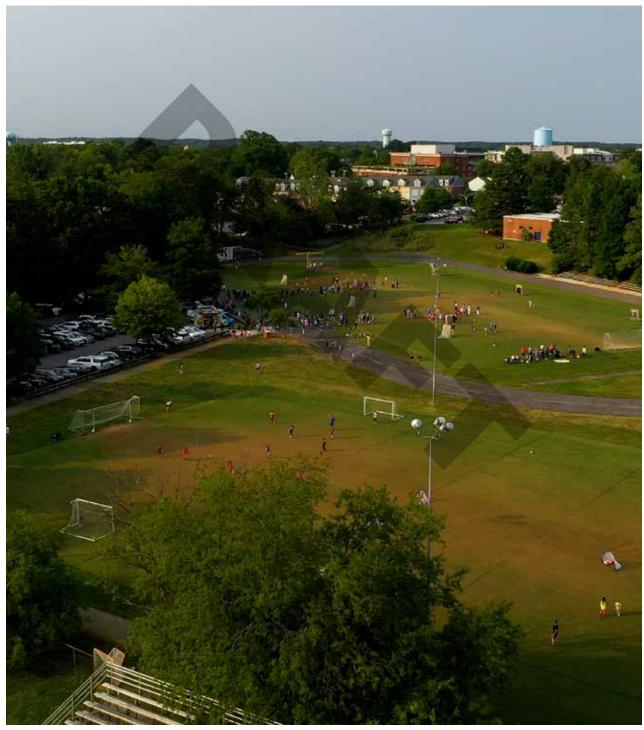


FIGURE 7-24: THE BATES ATHLETIC COMPLEX ANCHORS A GROUP OF INTENSELY USED RECREATIONAL AND CULTURAL FACILITIES THAT COULD BE BETTER COORDINATED.

#### **Park and Trail Maintenance**

As mentioned earlier in this chapter, Annapolis' parks, trails, and other open space, including conservation areas, provide substantial value to the city in a variety of forms: as recreational amenities, as community anchors, as green infrastructure, as mobility infrastructure, and in other ways. This value translates to higher property values, opportunities for economic development, higher quality of life, a more attractive community, and better health outcomes for residents. However, this return on investment generally relies on these spaces being well maintained and in good repair. The challenge of maintaining an urban park system has increased over time, both in Annapolis and in other cities of all sizes across the country. During the COVID-19 pandemic, this challenge was most evident as outdoor public spaces became critical places to social distance where the impacts of COVID were dissipated. The daily use of Annapolis' parks and trails expanded dramatically during this period, putting strains on maintenance staff. But the challenges of providing adequate maintenance were already being felt prior to COVID. Similar to most cities, Annapolis' budget for park maintenance is almost entirely funded by tax revenue through the City's General Fund. Over time, spending on parks, as a portion of the City's budget, has not kept up with changing demand, a growing inventory of park spaces, and higher public expectations for the quality of the park system. Additionally, the types of park spaces and features which comprise Annapolis' park system have changed over time which require new maintenance needs. Rather than evolving the City's internal park maintenance capacity and capabilities, the general trend has been to out-source these needs to specialized contractors which often limits how frequently a specialized maintenance service can be provided. On the ground, this might mean trees are not pruned as frequently as needed or natural stormwater management features become less effective as they get overgrown or clogged.

In the coming years, Annapolis' park system will continue to expand with numerous new or renovated parks in the City's current capital budget. The City



FIGURE 7-25: TREE PRUNING WITHIN PARKS AND ALONG

Source: Urban Forest Tree Service

Dock is the most notable of these improvements but there are over twenty other substantial park or trail projects in the City's capital improvement plan for fiscal years 2025-2029. These projects include dramatic improvements to the City's public water access network, including new parks at Elktonia/ Carr's Beach, Hawkins Cove, and Gateway Park; a variety of improvements to the heavily used Truxtun Park: and numerous trail initiatives which will add miles of additional acreage to the park system. In addition to basic park maintenance, such as mowing or trash removal, many of the future projects will include new features that will require additional specialized maintenance. There will likely be a need to add additional maintenance staff with specific expertise, such as a trails team or natural resource manager. There may also be opportunities for existing maintenance staff to develop new skills and responsibility through a professional development



FIGURE 7-26: ROUTINE MAINTENANCE OF STORMWATER

Source: Dragonfly Pond Works

program. As the City prepares for a park system in the coming years that may look nothing like the one we have today, budgeting and staffing for adequate maintenance will be critical to ensure that the significant investment in these popular spaces is maintained and leveraged for maximum benefit to the city and its residents.



IGURE 7-27: THE REMOVAL OF INVASIVE VEGETATION

· City of Columbia, MO

## OTHER COMMUNITY FACILITIES

#### **Health Facilities**

Annapolis is fortunate to have the Anne Arundel Medical Center (AAMC) and its top notch medical services located just outside of the city limits as well as the many resources provided by Anne Arundel County's Department of Health. As part of their missions, both of these institutions operate community health centers within several socially vulnerable Annapolis neighborhoods. AAMC operates a community health center on Forest Drive and another at the Morris H. Blum Senior Apartments. AAMC also provides a weekly dental clinic at the Stanton Community Center. The Department of Health operates the Parole Health Center in addition to the health services provided at its main offices at the County Government Complex just outside of the city limits.

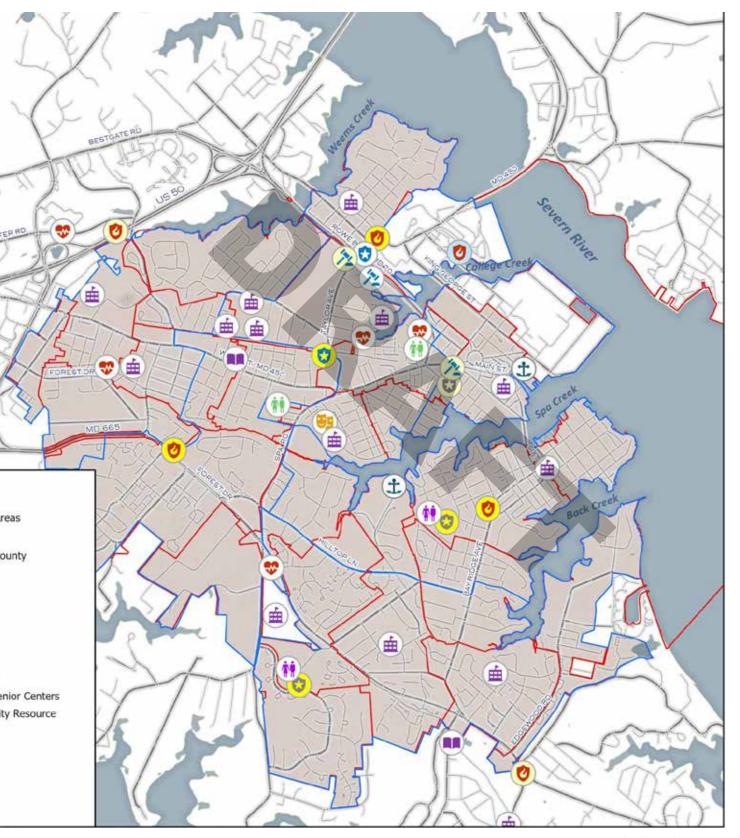
The value of having both of these institutions in close proximity to Annapolis has become acutely clear during the COVID-19 Pandemic as both have been instrumental in providing critical testing, care, and policy guidance to Annapolis residents.

FIGURE 7-28: MAP OF PUBLIC FACILITIES BY SERVICE

Source: City of Annapolis

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.





#### **Educational Facilities**

Schools are community facilities that nearly every resident interacts with in some capacity on a daily basis. Beyond educating thousands of students, they are also major employers, they manage fleets of buses, and require traffic coordination two times per day. With their playgrounds, athletic fields, and other community spaces, schools also serve a critical role as community recreational facilities and host a wide range of community events when school is not in session.

#### **Community Open Space**

While the City does not own or operate any of the public schools located within its jurisdiction, it does maintain a partnership with Anne Arundel County Public Schools (AACPS) in using their facilities for recreational and other programs. This partnership includes the Bates Athletic Complex adjacent to Bates Middle School which is used intensely for citywide recreational programs. Many other school properties are used more informally by city residents during afterschool hours.

#### **Improved Access**

Just as accessibility to parks and other recreational amenities is important to residents, so too is accessibility to schools and not just for students. Safety and accessibility within close proximity of these educational and recreational facilities adds another layer of emphasis on implementing bicycle and pedestrian infrastructure, to which Annapolis does have the authority to direct policy and investment. For example, the City's Poplar Trail currently connects several neighborhoods to local schools. As the trail is improved in the coming years with extensions both east and west to become the West East Express (see Chapter 6: Transportation for more detail about this project) the trail will connect to even more schools and communities. Along Forest Drive however, neighborhoods and schools currently have limited options for safe bike and pedestrian access. A recent Forest Drive Safety Study advanced by Anne Arundel County in partnership with the City provides numerous recommendations for improvements including the



FIGURE 7-29: PUBLIC SCHOOL FACILITIES, SUCH AS THIS
PLAYGROUND AT EASPORT ELEMENTARY, PROVIDE VALUABLE
COMMUNITY FACILITIES FOR RECREATION EVEN WHEN
SCHOOL IS NOT IN SESSION

Source: City of Annapolis



FIGURE 7-30: SAFE ROUTES TO SCHOOL PLANNING IS AN INITIATIVE TO PRIORITIZE SAFETY IMPROVEMENTS TO STREETSCAPES CLOSE TO SCHOOLS

Source: Toole Design

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

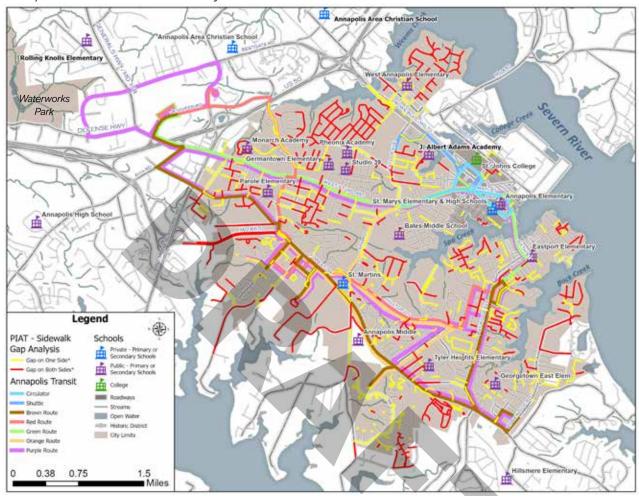


FIGURE 7-31: MAP OF THE 1/2 MILE WALK ZONE AROUND EACH PUBLIC SCHOOL WITHIN THE CITY THAT SHOULD PROVIDE SAFE PEDESTRIAN AND BIKE ACCESS.

Source: City of Annapolis

extension of the shared use path that currently ends at Hilltop Lane.

The City also has the capacity to improve public transit access to schools that serve Annapolis residents. While most public schools are currently accessible by Annapolis Transit, Annapolis High School is not despite being the largest school in the Annapolis area. Transit access to Annapolis High School would provide substantial benefits to both the school population and the broader population by reducing dependency on the school bus system and personal vehicles which would reduce traffic congestion. Transit access to the high school would also connect residents to a unique concentration of other public facilities including Anne Arundel County offices, the Arundel Olympic Swim Center, the Anne Arundel County Farmers Market, and

the MTA Park & Ride station. Figure 7-32 illustrates this cluster of services at the edge of the city.

Students get to and from school five days a week by car, on foot, by bike, or take buses, and this leads to an increase in vehicular and pedestrian traffic flow at times when school begins or lets out. To better coordinate mobility infrastructure serving schools, the map above shows the current gaps in the sidewalk network and the bus network. The City's Pedestrian Infrastructure Analysis Tool or PIAT, which was developed with the Baltimore Metropolitan Council was used to create the pedestrian network map in Chapter 6: Transportation. In the map on the facing page, it highlights the same information in the context of the schools which serve Annapolis residents.

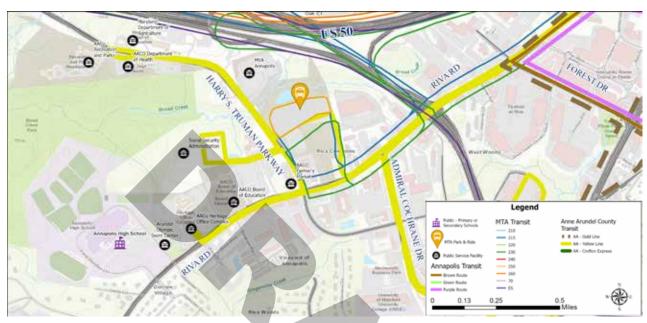


FIGURE 7-32: PUBLIC SERVICES NEAR ANNAPOLIS HIGH SCHOOL

AACPS does not send buses to students that live within a 1/2 mile radius for pre-kindergarten or kindergarten students; within a 1 mile radius for students in grades one through five; and within a 1  $\frac{1}{2}$  mile radius for students attending grades six through twelve. For students that attend these schools where a bus is not available for any particular reason, walking to and from school is often the only option.

Sidewalk improvements for areas around schools is important for minimizing risk for students that walk to and from school. Public Transit is another option that can be improved in the near future to get students to and from school more safely and efficiently and augment the bus service provided by AACPS.

#### **School Capacity**

School capacity refers to the total number of students that a school can accommodate. If a school is over-utilized, then student enrollment is greater than the school's capacity. If a school is under-utilized, the enrollment is less than total capacity. AACPS uses

state-rated capacity (SRC) to determine school's capacity. The SRC is the number of students that the State of Maryland determines that a school has the physical capacity to enroll and can be reasonably accommodated in a facility.

In recent years, four of the public schools serving Annapolis residents have been close to capacity or over-capacity. Capacity issues at both Hillsmere Elementary and Tyler Heights Elementary were solved by major capital improvement projects recently completed. At Eastport Elementary, student enrollment decreased significantly following the COVID-19 pandemic, which was a general trend across all schools. Annapolis High School is the one school serving Annapolis with capacity issues still not addressed by AACPS. It is also the largest school in the Annapolis area with a State-rated capacity of 2,083 students. In 2022, the Annapolis High School has an actual student enrollment of 2,127 and it is projected to continue rising.

As mentioned previously, the City of Annapolis has limited tools for addressing school capacity issues given that it does not own or manage the public

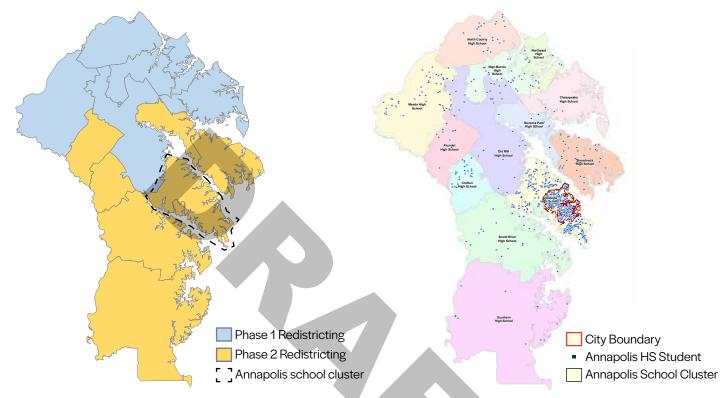


FIGURE 7-33: ANNE ARUNDEL COUNTY PUBLIC SCHOOL REDISTRICTING PHASES

Source: AACPS

schools serving its residents. The City's Adequate Public Facilities Ordinance, which was recently updated in 2019, is designed to ensure that school facilities can handle increases in population from new residential development. However, the ordinance also includes exceptions for certain types of residential development for low to moderate income households, which in some circumstances allows a student population to expand even if a school is over-capacity.

Rather than building a larger school facility, AACPS' primary strategy for addressing the over-capacity at Annapolis High School is a redistricting process which will redraw the attendance zones for schools across the county to better balance enrollments and minimize crowding at schools. This county-wide process is organized into two phases where Phase 1 addresses the northern portion of the county and Phase 2 addresses the southern portion of the county which includes the twelve schools that form the

FIGURE 7-34: THIS MAPS ILLUSTRATES THE GEOGRAPHIC RANGE OF ANNAPOLIS HIGH SCHOOL'S STUDENT POPULATION IN JULY 2023. THE SCHOOL DRAWS STUDENTS FROM ACROSS THE COUNTY PRIMARILY DUE TO ITS MAGENT PROGRAMS.

Source: AACPS

Annapolis school cluster. The Phase 1 process began in 2023 and a plan for redrawing the attendance zones for that portion of the county was approved by the AACPS Board of Education in November 2023. Implementation of the approved plan is scheduled to begin in 2024.

Planning for Phase 2 is on schedule to begin in early 2025 with the launch of a web-based tool designed to facilitate public participation in the process. Implementation is projected to occur in 2026. Until then, the City has few resources to substantively address the capacity issues at Annapolis High School but must continue to coordinate with AACPS and advocate for additional resources to serve the school population.

#### **Public Safety**

#### **Police**

The Annapolis Police Department (APD) celebrated its 150th Anniversary as a City department in 2017 and is headquartered at the Joseph S. Johnson Police Station on Taylor Avenue. The facility has undergone a \$12.8-million renovation and expansion since 2009. The renovation project doubled the size of the police station and included new facilities for the City's Office of Emergency Management (OEM) which coordinates closely with APD but operates independently. Among the facilities managed by OEM is a state of the art emergency operations center which serves as the "nerve center" for the City's response and recovery efforts before, during and after an emergency event.

Overall crime remains relatively low in Annapolis in comparison with other jurisdictions of similar size and demographics, and shows a decreasing trend. Violent crime, while also relatively low, is showing signs of an increasing trend and remains a persistent threat with the majority of incidents occurring in and around the City's public housing communities. In these communities, high concentrations of persistent poverty and social vulnerability combined with historic disinvestment and lack of quality public amenities has created conditions very susceptible to crime. To effectively address these conditions, the City must use a more diverse arsenal of social and economic strategies beyond basic policing including targeted investment, partnerships with social service providers, and Crime Prevention through Environmental Design (CPTED) methods that have proven for decades to reduce the likelihood of crime. Many of these strategies are already in motion but must continue. For example, the Eastport Choice Neighborhood Initiative profiled in Chapter 5: Housing is leveraging a wide variety of strategies to holistically revitalize the City's largest public housing community where crime is prevalent.

Beginning in 2020, APD has instituted a variety of new social programs and policies aimed at building stronger relationships with the communities it serves and breaking the cycle of repeat offenses. These





FIGURE 7-35: THE OPENING OF ONE OF THE TWO NEW SUBSTATIONS ESTABLISHED IN PUBLIC HOUSING COMMUNITIES. THE SUBSTATION SERVES AS BOTH A FIELD OFFICE FOR ANNAPOLIS POLICE AND A COMMUNITY RESOURCE CENTER FOR RESIDENTS AND STAFFED BY THE CITY'S OFFICE OF COMMUNITY SERVICES.

Souce: City of Annapolis

include a successful ReEntry Program for former offenders, a publicly accessible Homicide and Gun Violence Dashboard which tracks all data associated with violent crime over multiple years, and the ongoing NO HARM community-based violence intervention program in partnership with the Mayor's Office. In partnership with the Housing Authority of the City of Annapolis (HACA), and the City's Office of Community Services, APD established two new substations within the communities of Robinwood and Harbour House-Eastport Terrace to connect those residents to social programs and aim to reduce incidents of violence.

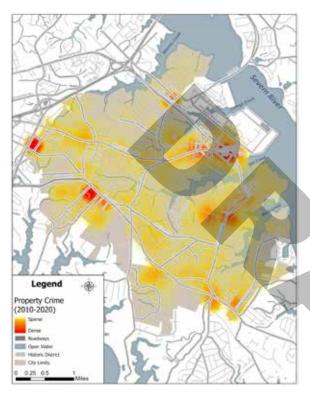


FIGURE 7-36: MAP OF PROPERTY CRIME 2010 - 2022

The Annapolis Police Department currently has a ratio of 2.4 officers per 1,000 residents. This is slightly lower than the national standard used by the International Association of Chiefs of Police (2.6 officers per 1,000 residents), and City's current Adequate Public Facilities Ordinance requires 3.2 officers per 1,000 residents. Following this standard, more than 20 additional police officers would be needed to accommodate the approximately 4,000 new residents expected by 2040.

In 2023, to address the ongoing challenge of recruiting additional Police Officers which limited the City's ability to meet its required number of officers, the City Council adopted ordinance O-9-23 which amended the Adequate Public Facilities standards for Police.

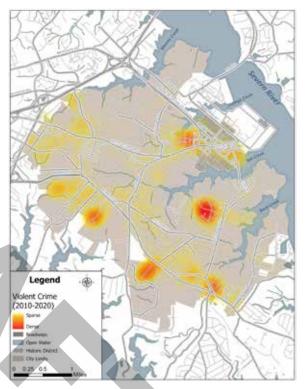


FIGURE 7-37: MAP OF VIOLENT CRIME 2010 - 2022

Source: City of Annapolis

Through the legislation, if additional police protection is needed to meet the Adequate Public Facilities requirements for a proposed development, mitigation can now be achieved through several new options. Security enhancements can be added including security cameras, the hiring of off-duty police officers, the hiring of private security, the hiring of contractual City Police officers, or other measures approved by the Chief of Police and City Manager. Social services enhancements can also be used to meet the requirements, including the hiring of a private social worker, the hiring of contractual City social workers, or other measures approved by the Chief of Police and City Manager.

#### **Meet the Office of Community Services**

One of the City's best new resources for addressing social vulnerability and the root causes of crime in Annapolis is the Office of Community Services. In 2020, the City launched the Office within the Mayor's Office to focus efforts on providing a variety of social services to community members in high need areas. While the initiative had been planned prior to the COVID-19 pandemic, impacts from the Pandemic accelerated the established of the Office. Since launching, the Office has been staffed by a professional social worker and other staff trained in community outreach who partner with other agencies, including Annapolis Police and the Housing Authority of the City of Annapolis (HACA), to deliver services. In May of 2021, the Office, in partnership with APD, opened two community resource centers, one at HACA's Harbor House community, and the other at HACA's Robinwood community. Each office is staffed and also serves as a Police substation. Although the capacity of the Office is evolving, staff are currently available to provide the assistance to residents for the following needs:

- Rental Assistance CPR Tra
- Food Assistance Health Care
- Utility Bill Assistance Montal Health
- - SubstanceAbuse
- Job Training / WorkforceConnections
- School Tutoring
- Reentry Job
- Summer CampSign-Ups
- COVID-19 Testing
- Narcan Training

#### **Annapolis Fire Department**

The Annapolis Fire Department provides fire and disaster protection, emergency medical services, as well as a variety specialized rescue services related hazardous materials, explosives, and marine operations for the City of Annapolis and adjacent parts of Anna Arundel County. The department also includes the Fire Marshal's office which reviews all proposed development for compliance with the fire code and conducts code inspections to ensure safe building practices.

The Department operates three fire stations: the Forest Drive Station (Headquarters) near Parole, the Taylor Avenue Fire Station near West Annapolis, and the Eastport Fire Station on Bay Ridge Avenue. The City has mutual aid agreements with Anne Arundel County and the Naval Academy to provide emergency response services. These reciprocal relationships ensure efficient response time and service coverage throughout the Annapolis area. The Naval Academy operates the Naval Academy Fire Station (located on the USNA Campus) and the North Severn Station (located on the north side of the Severn River). In the Annapolis area, Anne Arundel County operates a Fire Station located on Jennifer Road, and a newer fire station on Bay Ridge Road along the City's southern boundary. The Annapolis Fire Department has determined that it will have sufficient resources to serve all projected new residents, businesses, and institutions in the City.

#### Office of Emergency Management

The City's Office of Emergency Management (OEM), referenced earlier in this section, works closely with APD on public safety issues but is more focused on coordinating response to emergency events including many related to weather and public health. OEM is also heavily focused on emergency preparedness, and works on programs and policies that can better equip the City to mitigate and manage the incidence of emergency events and the recovery from them.

#### Libraries

The Anne Arundel County Public Library system consists of 16 branches serving more than 500,000 County residents. Two library branches serve the City of Annapolis: a main branch on West Street which reopened in 2020 after being completely rebuilt and renamed the Michael E. Busch Annapolis Library; and the Eastport-Annapolis Neck Library on Hillsmere Drive just south of the City boundary. The County recently opened a third Annapolis area library located at Westfield Annapolis Mall. "Discoveries: The Library at the Annapolis Mall", as the new branch is called, provides a glimpse of how the library system is working to reach more of its service population with critical services that may extend beyond traditional library offerings. The new library includes a community pantry with health supplies, and offers a variety of social programs.

The library system's increasing focus on supportive social services augments the work of the City's Office of Community Services profiled on the facing page. In fact, through a new partnership with Anne Arundel County Department of Social Services, social workers who can provide access to county and state resources for a variety of concerns are now available for appointments at five of the County's libraries including the Annapolis branch.

Although library use dropped significantly for all services during the COVID-19 Pandemic, statistics for 2022 show a dramatic rise in numbers across all key activities including circulation, visits, computer sessions, and program attendance. This positive trend is evident at all of the Annapolis area libraries which are, and will continue to be, important social anchors for the city. Although the libraries are neither owned nor managed by the City, the City has much to gain from their presence and should support and coordinate with their ongoing development and evolutions as much as possible.

FIGURE 7-38: EXTERIOR OF MICHAEL E. BUSCH ANNAPOLIS LIBRARY (TOP); INTERIOR OF MICHAEL E. BUSCH ANNAPOLIS LIBRARY (MIDDLE); COMMUNITY PANTRY AT DISCOVERIES: THE LIBRARY AT THE MALL.

Source: Anne Arundel County Public Library (top); Keith Isaacs (middle); Anne Arundel County Public Library (bottom)







# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

#### **COMMUNITY FACILITIES GOAL CF1**

MERGE ANNAPOLIS' PARKS
AND RECREATION SYSTEM
WITH ITS EVOLVING NETWORK
OF CONSERVATION AREAS
AND TRAILS TO CREATE A
COMPREHENSIVE GREENWAY
SYSTEM.

#### **PERFORMANCE MEASURE 1**

The Greenway Map is updated annually

#### **PERFORMANCE MEASURE 2**

The Annapolis Conservancy Board assists the Department of Recreation and Parks with at least one conservation project every two years.

- CF1.1 Revise the mission of the Annapolis
  Conservancy Board to include regular
  coordination with the Department of Recreation
  and Parks.
- CF1.2 Refine and publish an official park system map that includes detailed information on access to conservation areas, water access, and trail connections, in addition to updated information on active recreation facilities.
- CF1.3 Design, adopt and implement a Greenway Plan that identifies lands which provide significant environmental, recreation, aesthetic, and/ or health benefits and detailed strategies to maintain the values these lands provide. The plan should be managed jointly by the Annapolis Conservancy Board and the Department of Planning and Zoning, updated regularly, and coordinated with Anne Arundel County's Green Infrastructure Plan. (also listed in Chapter 4: Land Use under Goal LU6)
- CF1.4 Explore training opportunities for Parks maintenance staff to include habitat restoration, conservation land management, and green stormwater infrastructure maintenance. (also listed in Chapter 10: Water Resources under Goal WR3)
- **CF1.5** Prioritize the development of a dedicated parks maintenance facility at Truxtun Park, or at another feasible location.
- CF1.6 Expand Recreation & Parks staff to include a dedicated trail manager, and two naturalist/park rangers.

### EXPAND PARKS FACILITIES STRATEGICALLY, AND THE CONNECTIONS TO THEM, TO ACHIEVE EQUITABLE ACCESS FOR ALL.

#### **PERFORMANCE MEASURE 1**

All residents are within a 10-minute walk of a park space maintained by the City of Annapolis Department of Recreation and Parks.

#### **PERFORMANCE MEASURE 2**

The citywide Recreation and Parks Master Plan is updated by 2025 and regularly updated every 10 years.

- CF2.1 Update the Adequate Public Facilities
  Ordinance to meet this goal's performance
  metric of proximity to parks by clarifying
  the level of service standards, updating the
  fee-in-lieu structure to reflect current park
  development costs, and simplifying the process.
- CF2.2 Prioritize the update of the 2004 Recreation and Parks Master Plan, with future updates to occur every ten years; The master plan will not only serve to update equitable level of service standards, recreational program priorities, and opportunities for park and trail enhancements, but also opportunities for new diversified funding sources, as well as updated maintenance guidelines and efficiencies.
- CF2.3 Identify opportunities for enhancements to existing parks, such as at Annapolis Walk Community Park that will expand use to more diverse users and activities.
- CF2.4 Work with Anne Arundel County Recreation and Parks, and Anne Arundel County Public Schools, to implement enhancements to various Anne Arundel County facilities within the City, or create new facilities, that could help to address equity goals.
- **CF2.5** Include improvements to bike and pedestrian access in all new park projects or investments at existing parks.

PRIORITIZE EQUITABLE WATER ACCESS BY INVESTING IN NEW AND IMPROVED PUBLIC OPEN SPACES ALONG THE WATERFRONT, AND THE CONNECTIONS TO THEM.

#### **PERFORMANCE MEASURE 1**

The linear feet of publicly accessible waterfront is doubled by 2040 from approximately 10,000 LF to 20,000 LF.

#### **PERFORMANCE MEASURE 2**

Funding for ongoing improvements to existing water access infrastructure is a line item in the annual Capital Improvement Program.

- CF3.1 Continue to work with public and private partners to plan, design, and build the future Elktonia/Carr's Beach Park as a signature investment in the City's public waterfront. (also listed in Chapter 8: Arts & Culture under Goal AC1)
- CF3.2 Continue to work with HACA and other community partners to create a community nature park at Hawkins Cove with a living shoreline, restored stream channel, public water access, naure play area, and improved trail connectivity to Truxtun Park. (also listed in Chapter 9: Environmental Sustainability under Goal ES3)

- CF3.3 Work with public and private property owners along College Creek to create a parks and trails master plan for the area that will create new and improved water access opportunities, preserve existing open space and cultural sites, restore habitat, and improve bicycle/pedestrian connections throughout the area; Prioritize the development of the College Creek Connector trail and Capital City Gateway Park as central to this effort.
- CF3.4 Deferred maintenance to the City's existing waterfront parks is addressed through consistent funding in the annual Capital Improvement Program.
- CF3.5 Update the adequate public facilities ordinance to require public waterfront access for all new waterfront development, excluding single family parcels.
- CF3.6 Develop a clear and consistent signage program for all public water access sites, including wayfinding, regulatory, and interpretive signage, to clarify access and encourage more public use of the waterfront. As part of this, ensure that clear and consistent public water access signage is required at all future public access easements not maintained by the City.
- CF3.7 Establish an accessible system of paddle share locations at multiple public water access locations in the city. The system would provide storage for paddle craft and a means for residents and visitors to affordably access them.
- CF3.8 Update City standards to ensure that all new, replaced, or enhanced stormwater outfall facilities are designed in coordination with public water access so that recreational opportunities are not negatively impacted. (Also listed in Chapter 10: Water Resources under Goal WR3)

ENSURE THAT RECREATIONAL PROGRAM OFFERINGS ARE ACCESSIBLE TO ALL CITY RESIDENTS, PARTICULARLY UNDER-REPRESENTED POPULATIONS.

#### **PERFORMANCE MEASURE 1**

Recreational program funding per capita is competitive with other cities similar in size to Annapolis.

- CF4.1 Establish an effective system for tracking who is being served by the City's recreational programs to help target programming and ensure equity.
- CF4.2 Explore the feasibility of creating a new City park that combines the Bates Athletic Complex, the former Weems Whelan Field, and the site of the former WYRE radio station (currently home to the Chesapeake Children's Museum). As part of this, study the potential return on investment of developing a modern multi-use sports complex on the site as a revenue-generating asset for the City.
- CF4.3 Support the creation of an independent parks foundation that can help to aggregate private donations, manage fundraising campaigns, and spearhead new parks initiatives.
- CF4.4 Explore new opportunities for revenuegenerating concessions within existing parks including paddle craft rentals, food service, and other complementary uses.
- **CF4.5** Prioritize the hiring of the Recreation Associate position at the Stanton Center to allow for additional programming.
- CF4.6 Ensure that an updated citywide Recreation and Parks Master Plan includes an emphasis on clear level of service standards and equity in the development of recreational programs.

## LEVERAGE OPPORTUNITIES FOR EXPANDED RECREATIONAL USE OF WATERWORKS PARK.

#### **PERFORMANCE MEASURE 1**

Initiate a plan to restore and program the historic pump house for new uses by 2025.

#### **PERFORMANCE MEASURE 2**

Complete all approved bike and pedestrian connections to Waterworks Park by 2030.

- CF5.1 Continue to work with passionate volunteers such as those from Mid-Atlantic Off-road Enthusiasts (M.O.R.E.) and other partners to expand access to the park for users of all ages and interests.
- CF5.2 Continue to work with Anne Arundel County to create the necessary bike and pedestrian facilities to connect the park to nearby residential communities and commercial centers.
- CF5.3 Expand the trail network around the Annapolis Solar Park and explore a potential parking area at N. River Road.
- CF5.4 Explore using an RFP process to solicit developer interest in the restoration and activation of the historic pump house building.
- CF5.5 Expand program offerings at the park to reach more youth who have limited access to the types of activities that happen there such as fishing, hiking, mountain biking, and outdoor education.
- CF5.6 Continue to work with Anne Arundel County and nearby property owners to create new parking options that will help to expand park use and eliminate parking conflicts.

IMPROVE PUBLIC SAFETY
THROUGHOUT THE CITY BY
TARGETING PUBLIC AND PRIVATE
INVESTMENT TO AREAS OF
PERSISTENT POVERTY, CRIME,
AND HISTORIC DISINVESTMENT.

#### **PERFORMANCE MEASURE 1**

Improvements to the streetscapes and/or recreational spaces at each of the City's public housing communities are included in the annual Capital Improvement Program.

- CF6.1 Ensure that all new residential development follows the principles of Crime Prevention Through Environmental Design (CPTED).
- CF6.2 Prioritize public safety as a key criteria in determining and prioritizing capital improvement projects such as street, park, and trail enhancements.
- CF6.3 Update the Adequate Public Facilities
  Ordinance to better reflect public safety goals and the various means to achieve them.
- CF6.4 Coordinate community programs and leverage community resources of the Annapolis Police Department, the City's Office of Community Services, and other social service organizations to address the root causes of crime and community conflict.
- CF6.5 Work with community partners, Anne Arundel County, and the State of Maryland to advance gun violence intervention programs in communities facing persistent gun violence.
- CF6.6 Continue to fund and seek partnerships to advance community enrichment programs such as Annapolis United that help to connect youth and families to worthwhile recreation opportunities.
- CF6.7 Support and promote the Annapolis Police
  Homicide and Gun Violence Dashboard as a
  tool for coordinated neighborhood planning and
  investment.

PARTNER WITH ANNE ARUNDEL COUNTY TO EXPAND PROGRAM OPPORTUNITIES AND RESOURCES FOR ANNAPOLIS RESIDENTS AT PUBLIC SCHOOLS, LIBRARIES, AND HEALTH FACILITIES.

#### **PERFORMANCE MEASURE 1**

Each public school within the City limits will have a Safe Routes to School plan in place by 2030.

- CF7.1 Work with Anne Arundel County and AACPS to initiate and advance Safe Routes to School projects at all public schools within the City limits. Safe Routes to School is a federally funded program that helps to advance safe pedestrian and bike connections to public schools.
- CF7.2 Prioritize bikeway and sidewalk network improvements within the 1/4 mile walk radius of each public school within the City limits.
- CF7.3 Expand Annapolis Transit service in coordination with Anne Arundel County Transit to provide access to Annapolis High School and adjacent public facilities along Riva Road including the Arundel Olympic Swim Center, Anne Arundel County Offices, the Anne Arundel County Farmers Market, and the MTA Park & Ride Center.
- CF7.4 Support expanded satellite healthcare programs within underserved low income communities.
- CF7.5 Continue to support the Anne Arundel County Public Library's innovative efforts to reach more Annapolis area residents through pop-up branches, mobile programs, and new services.
- CF7.6 Ensure that a future redevelopment of the Eastport Annapolis Neck Library is closely coordinated with other area goals and better connected to adjacent destinations including Quiet Waters Park and the Hillsmere Shopping Center.

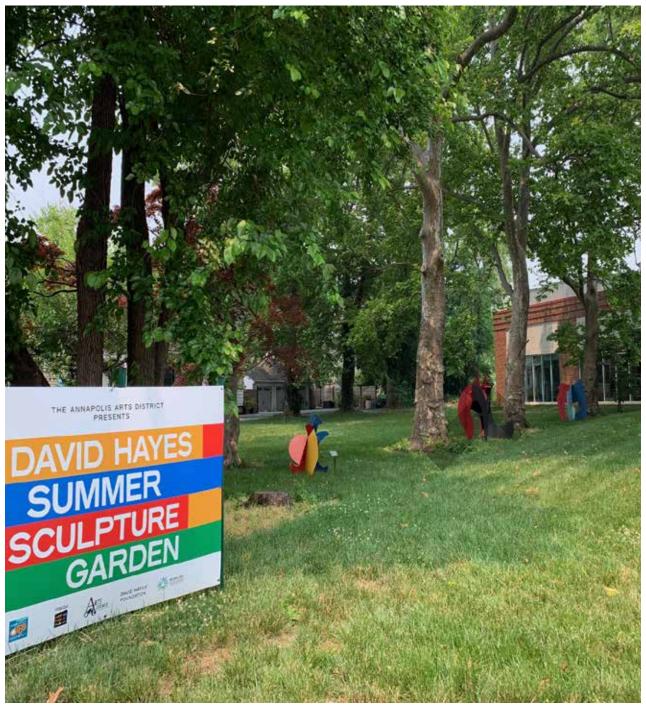


FIGURE 7-39: THE MICHAEL E. BUSCH ANNAPOLIS LIBRARY PARTNERED WITH THE ANNAPOLIS ARTS DISTRICT, AIPPC, ACAAC, AND THE DAVID HAYES FOUNDATION TO HOST A TEMPORARY SCULPTURE GARDEN IN 2023.

## 8. ARTS, CULTURE & HISTORIC PRESERVATION

## **OVERVIEW**

Annapolis has been a cultural center for close to four hundred years, and it aspires to remain so. Coined as a "Museum without Walls" by the preservation organization Historic Annapolis, and by others the "Athens of America", a significant amount of the City's cultural heritage has been sensitively preserved through the Annapolis Historic District, established in 1965, various Neighborhood Conservation Districts, Maritime Districts, and over two dozen sites recognized by the National Park Service's National Register of Historic Places. Yet this is the first time an Annapolis comprehensive plan has dedicated a chapter to arts and cultural preservation. There are several reasons for including this emphasis now. First, there is a growing recognition of the economic value that the arts, and artists, bring to Annapolis, what is frequently referred to as the cultural economy. An active arts community, and thriving creative industries have helped to make Annapolis a desirable place to live, work, and visit. In fact, it is because of Annapolis' commitment to the arts that Mayor Buckley received the 2022 National Award for Arts Leadership for cities under 100,000 persons from the U.S. Conference of Mayors and Americans for the Arts.

This plan seeks to expand on the historic and cultural narratives that define the Annapolis experience by highlighting the diverse places and stories that demand greater recognition. This extends well beyond the current Historic District.

The advancement of the arts in Annapolis also reflects the continued growth of several key institutions which anchor the arts community through programming, funding, organizing, and facilities. While several of these diverse institutions will be recognized in this chapter, the City's Art in Public Places Commission (AiPPC) holds a central place within this ecosystem and its role as the primary funder of cultural events within the City's public spaces continues to grow.

As with the rest of this Plan, this chapter has been written in the context of Annapolis' response to the COVID-19 pandemic. There are few industries which were more negatively impacted by the pandemic than the arts and cultural tourism. As with restaurants, another industry hard hit by COVID-19, some artists, cultural institutions, and arts venues were able to pivot their work and programming to mitigate risk. But this has been a very small percentage of industry members.

Without the ability to gather in public environments, much of the creative economy was devastated by the effects of COVID-19 and relied heavily on support from the federal Cares Act and the American Rescue Plan, the two primary sources of art and culture subsidies. The distribution of funding for the arts from these programs highlights the uphill battle that the arts face in being recognized as a critical component of cities and communities, despite their significant economic and social contributions. For example, of the \$1.9 trillion American Rescue Plan, only \$135 million was dedicated to the arts, approximately 0.7%. Notwithstanding this chronic funding inequity, the arts do get respect in Annapolis and their local support has only grown. In recognition of this and the important role that the arts will continue to play in the Annapolis of tomorrow, within the context of this Plan, Arts, Culture & Historic Preservation is not a luxury, but rather a critical component of the Functional City.



### **EXISTING CONDITIONS**

## Arts Community and the Creative Economy

Annapolis is fortunate to have a thriving arts community of working artists, designers, and other cultural producers, residents and visitors who desire arts and culture and see its value; businesses and city government which support arts and culture; and a diversity of institutions including non-profit and for-profit exhibition spaces, performance venues, and educational programs. Yet, there is broad consensus that the city's arts community, and by extension its creative economy, could be and should be more supported, expansive, diverse, visible, and impactful.

In recent years there has been a significant amount of data collection regionally and nationally to better understand the composition and impact of the creative economy. The Arts and Economic Prosperity 5 study, published by Americans for the Arts in 2017, estimates the following:

- \$511,399,372 spent by arts and cultural organizations in Maryland;
- \$450,172,892 spent by cultural audiences in Maryland;
- 25,248 full time equivalent arts and culture jobs created in Maryland;
- \$643,499,000 in resident household income generated from arts and culture in Maryland;
- \$41,770,000 in local government revenue generated from arts and culture in Maryland; and
- \$45,596,000 in State government revenue generated from arts and culture.

Although the data specific to Annapolis is not fully captured, one could reasonably assume that the City contributes a significant portion to the State totals given that it is a regional arts destination.

In the time since the City's 2009 comprehensive plan, Annapolis' arts community and cultural economy have grown in a variety of ways: New arts and cultural institutions have established themselves (see the subsection below focused on institutions); Longstanding cultural institutions have expanded their programming and found new audiences; New artsoriented businesses have taken root, particularly within the Arts & Entertainment District; Design offices have chosen to open or relocate to Annapolis; and the City's Art in Public Places Commission has expanded its own programming across the City.

However, the City still lacks the crucial local data to fully account for the growth in its cultural economy and to better coordinate investments. There is far more that can be done to ensure that the diversity of artists, audiences, and other participants in the creative economy reflects the full diversity of the city. Despite the city's robust arts community, access to opportunities such as arts funding, arts classes, arts equipment, studio space, venues, and marketing, is not as equitable as it could be. Similar to the recommendations for supporting local businesses in Chapter 3: Municipal Growth, a more diverse arts community will require both an understanding of current disparities and programs to address the disparity.



FIGURE 8-2: A PAINTER ON WEST STREET PARTICIPATING IN THE ANNUAL PAINT ANNAPOLIS FESTIVAL ORGANIZED BY MARYLAND FEDERATION OF ART.

Source: City of Annapolis

The City for its part can lead in this area by assessing the impact of its grants and other resources it provides to arts and culture initiatives such as major cultural events, individual project grants, and grants to arts organizations. The Art in Public Places Commission (AIPPC) is the City's major grant-giving arm for the arts. Establishing clear goals for how its grants can be equitably administered should be a high priority.

A more foundational challenge that Annapolis will face in the coming years as it looks to grow its arts community and cultural economy, is simply the cost of living in the city. With diminishing housing options, limited alternative mobility options, and few local funding opportunities, the City remains a difficult environment for working artists to sustain themselves. However, all of these current deficiencies are identified as priorities to address elsewhere in this Plan. If the City is truly intent to grow as a cultural center, it must keep the needs of its arts community in mind when making policy changes aimed at vulnerable populations as their goals need not be mutually exclusive. The City can invest its resources strategically in ways that address diversity, equity, and creativity, distribute grant funding, and organize events.

## **Honoring Hoppy Adams**



FIGURE 8-3: HOPPY ADAMS HOSTING ONE OF MANY EVENTS AT THE FORMER ELKTONIA/CARR'S BEACH.

Source: Maryland State Archives / Thomas R. Baden, Jr.

Hoppy Adams was a distinguished Radio personality, event promoter, and Executive with radio station WANN located in Annapolis for over 40 years starting in the 1950s. The station was unique in catering exclusively to the African American community and programming in gospel, soul, and rhythm and blues music. At his passing in 2005, Hoppy Adams left a legacy of breaking barriers for African Americans in radio, for his civil rights advocacy, and for his community leadership. Appropriately, this legacy is currently being honored in Annapolis in multiple signature projects. In 2022, the last remnant of the famous Elktonia/Carr's Beach music venue, where Hoppy Adams hosted many concerts by notable Black entertainers, was preserved and will become a future park. His residence in the Parole community still stands today and plans are in place to create a museum. And finally, he is currently celebrated in an exhibit at the Museum of Historic Annapolis.

#### The Arts and Entertainment District

The Annapolis Arts & Entertainment District, commonly known as the Annapolis Arts District, was created in 2008, and is perhaps the best evidence of the City's evolving cultural economy. Through its influence on the composition of the Inner West Street area, the District has helped to foster an increasing number of arts-oriented businesses, cultural institutions, resident artists, and events.

Cultural districts are defined by Americans for the Arts as "well-recognized, labeled areas of a city in which a high concentration of arts and cultural facilities and programs serve as the main anchor of attraction." In Maryland, the Arts and Entertainment District program aims to formalize and spur these cultural districts and was one of the first such programs in the country when it launched in 2001.

Annapolis' own Arts and Entertainment District was. Initially managed by the ACAAC, but is today managed as an independent non-profit organization with a fulltime Executive Director and active Board of Directors. The District is one of 29 such arts and entertainment districts that exist across the state, authorized by the Maryland Department of Commerce and managed by the Maryland State Arts Council.

"Maryland's A&E Districts support creativity, and in turn, spur economic activity in their localities. This activity supports additional businesses throughout Maryland's economy. Thus, the total influence of Maryland's A&E Districts extends beyond district borders."

Maryland Arts and Entertainment District Economic and Tax Impact Analysis (FY20)

The most recent economic impact study of Maryland's Arts and Entertainment Districts prepared by Towson University's Regional Economic Studies Institute documented that events and new businesses across



FIGURE 8-4: STREET BANNER PROMOTING THE ARTS AND ENTERTAINMENT DISTRICT

Source: City of Annapolis

all of the districts supported more than \$148.6 million in state GDP, over \$10 million in state and local tax revenues, and 1,454 jobs that paid more almost \$47 million in wages. From the same report, the contribution from Annapolis' Arts and Entertainment District amounted to \$4,063,754 in State GDP, and 46 jobs that paid \$1,302,567 in local wages.

Unfortunately, it is difficult to surmise how the economic activity of the District has changed over time or how well it is performing given that the economic modeling approach is refined each year. However, it is important to acknowledge that the economic footprint of the District is complex and far-reaching. As the report concludes: "Maryland's A&E Districts support creativity, and in turn, spur economic activity in their localities. This activity supports additional businesses throughout Maryland's economy. Thus, the total influence of Maryland's A&E Districts extends beyond district borders."



FIGURE 8-5: THE FIRST SUNDAY ARTS FESTIVAL TAKES PLACE ON THE FIRST BLOCK OF WEST STREET. ALTHOUGH THE BLOCK IS NOT INCLUDED IN THE ARTS DISTRICTAND IS ORGANIZED BY THE INNER WEST STREET ASSOCIATION, IT IS EMBLEMATIC OF THE NEXUS OF ARTS AND CULTURAL INTEREST IN THIS AREA OF THE CITY.

Source: John Lee Photography / Inner West Street Association

While the Arts and Entertainment District does not have the ability to regulate land uses, it does have other policy tools it can leverage to attract, retain, and expand art-related businesses within the District. At the core of these tools is the ability to provide various tax incentives including a property tax benefit, an income tax modification, and an exemption for the admission and amusement tax, all designed to incentivize and reward properties, businesses, and artists who actively promote the arts within the District. Additionally, the District is also able to provide marketing support to arts-related businesses, spearhead public realm improvement projects, distribute grant funding, and organize events.

The events in particular are a key form of marketing and support by the District. The monthly and seasonal events along Inner West Street have become synonymous with the Arts and Entertainment District, and one of the primary ways that visitors are drawn to the District, particularly those from outside of Annapolis. Typically organized by other organizations in partnership with the District, these events include the monthly First Sunday Arts Festival, the Chocolate Binge Festival, Annapolis Arts Week, Dinner Under the Stars, Annapolis Pride Festival, Annapolis Film Festival, Paint Annapolis, as well as numerous holiday parades throughout the year which typically begin at Park

Place and move through the District before continuing down Main Street to the City Dock. In 2021, the District helped to host Annapolis' newest parade as part of the Juneteenth Day festivities which celebrate Black history and culture, and commemorates the emancipation of enslaved African-Americans in the United States.

Despite its success, the Arts and Entertainment District remains a work in progress. The original limits for the district did not include the first block of West Street which includes several established art and entertainment spaces including Rams Head on Stage, 49 West, Annapolis Collection Gallery, Gallery 57 West, while at the same time there are numerous vacant storefronts on this block that could be activated through arts-related businesses. On the other end of the district, the current limits exclude Park Place which has hosted a temporary gallery space and outdoor performance venue. There are additional properties adjacent to the district that make sense for inclusion. Of particular note is the City-owned former Public Works facility on Spa Road which would be an ideal site for live/work artist housing or other arts-oriented use. Continuing the District along West Street, several the Germantown-Homewood neighborhood includes several properties which have the potential to house arts or cultural uses and which are bookended by the recently opened Michael E. Busch Annapolis Public Library, an important cultural space in its own right.

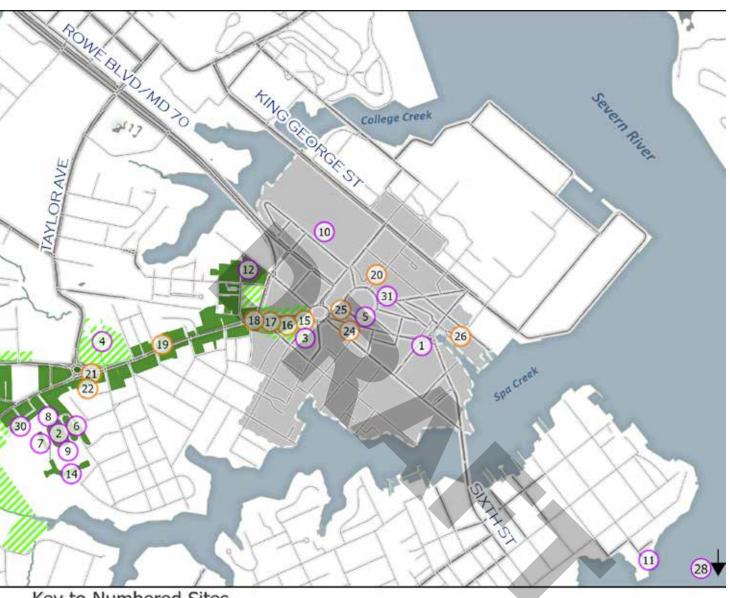
FIGURE 8-6: THIS MAP SHOWS THE ARTS AND ENTERTAINMENT DISTRICT, INCLUDING ITS

PROPOSED EXPANSION, IN THE CONTEXT OF THE CITY'S CULTURAL INSTITUTIONS AND ENTERPRISES.

ALSO IDENTIFIED IS THE ANNAPOLIS DESIGN
DISTRICT WHICH IS A NONPROFIT ASSOCIATION OF BUSINESSES IN THE CITY'S INDUSTRIAL SECTOR.

Source: City of Annapolis





### Key to Numbered Sites

- 1. Museum of Historic Annapolis
- 2. Maryland Hall
- 3. Banneker-Douglass Museum
- 4. Park Place
- 5. Maryland Federation for the Arts
- 6. Annapolis Opera
- 7. Annapolis Symphony Orchestra
- 8. Ballet Theatre of Maryland
- 9. Annapolis Chorale / Live Arts
- 10. Mitchell Art Museum (St. John's College)
- 11. Annapolis Maritime Museum Museum Campus
- 12. Stanton Community Center
- 13. Studio 39 (AACPS Performing and Visual Arts Magnet)
- 14. Wiley H. Bates Middle School (AACPS Performing and Visual Arts Magnet)

- 15. Rams Head on Stage
- 16. 49 West
- 17. Annapolis Collection Gallery
- 18. Gallery 57 West
- 19. Nancy Hammond Editions
- 20. Jo Fleming Fine Art
- 21. Kim Hovell Fine art
- 22. Circle Creations / Prism Annapolis
- 23. ArtFarm Studios
- 24. McBride Gallery
- 25. Main Street Gallery
- 26. Annapolis Marine Art Gallery
- 27. Michael E. Busch Annapolis Library
- 28. Annapolis Maritime Museum Park Campus\* (Not Shown on map)

- 29. Greater Annapolis Ballet
- 30. Compass Rose Theatre
- 31. Colonial Players Theatre
- 32. Classic Theatre of Maryland

#### **Cultural Institutions**

The cultural economy and cultural life of the city is largely fulfilled by and dependent on the existence of a robust and diverse community of cultural institutions. For a city of its size, Annapolis is fortunate to have a variety of both non-profit and for-profit institutions including performing arts companies of all sizes and disciplines, museums and galleries, arts education providers, indoor and outdoor venues, and studio spaces covering a wide range of missions, cultural genres, and audiences. These institutions form an essential cultural ecosystem that organizes events, programs, education, and other activities for both residents and visitors to Annapolis. An inventory of these institutions is provided on the map shown on the previous pages.

While these institutions operate independently from the City, there is much that the City can do to support them. This begins by creating an environment in Annapolis that supports the values needed for cultural institutions to thrive and encourages their growth. For example, the City can leverage its capacity for marketing and promotion of local arts initiatives, it can continue to sponsor programs in partnership with local institutions, it can help institutions to activate public spaces with programming, and it can lease city-owned property for cultural organizations and programs as it does for the Annapolis Maritime Museum.

Most importantly, the City must be an active participant in coordination with cultural institutions for shared programs to leverage resources and mitigate potential competition, and oversee or collaborate on the planning needed to advance new initiatives.



FIGURE 8-7: MARYLAND HALL FOR THE CREATIVE ARTS

Source: City of Annapolis



FIGURE 8-8: ANNAPOLIS MARITIME MUSEUM

Source: Preservation Maryland



FIGURE 8-9: ANNAPOLIS SYMPHONY ORCHESTRA

Source: Eye on Annapolis



FIGURE 8-11; MITCHELL ART MUSEUM AT ST. JOHN'S COLLEGE

Source: City of Annapolis



FIGURE 8-10: COLONIAL PLAYERS THEATRE

Source: Trip Advisor



FIGURE 8-12: BANNKER DOUGLASS MUSEUM

Source: Banneker Douglas Museum

## Historic and Cultural Preservation

The Museum of Historic Annapolis, an impressive new institution opened by the preservation organization Historic Annapolis in 2022, provides a fitting lens through which to understand the state of historic and cultural preservation in Annapolis. The museum's singular exhibit, *Annapolis: An American Story*, fills four floors of the historic mercantile building at the foot of Main Street and succeeds in communicating a cultural history of the City that is diverse, nuanced, and complex.

Annapolis today has more preservation projects aimed at protecting or enhancing sites of significance to historically marginalized communities that at any other time in its history.

The Annapolis Historic District remains a singular cultural asset to the city. It includes the largest concentration of colonial-era buildings in the nation, and drives the tourism economy of the city. The City will continue to maintain both a high standard of preservation and help this area to sensitively evolve with the times as it has done since the District's designation in 1965. Historic and cultural preservation work now focuses on a more comprehensive set of narratives to better tell the stories of this important place. This includes the restoration of the Maynard-Burgess House across the street from City Hall, home to two different African-American families between 1847 and 1990. The redevelopment of the City Dock is also including substantial preservation and interpretation related to the diversity of people who historically populated the downtown area and helped to build its thriving port. This includes the adaptive reuse of the Burtis House, the last remaining waterman's cottage.

Other efforts are extending preservation beyond downtown. Two specific projects stand out as examples of the cultural history of the city that many residents have long been aware of, but until recently has not had adequate visibility. The recent protection of the last remnant of Elktonia/Carr's Beach, a



FIGURE 8-13: CONCERT POSTER FROM THE HEYDAY
OF ELKTONIA/CARR'S BEACH; THE LAST REMAINING
UNDEVELOPED PORTION OF THE REMARKABLE BLACKOWNED BEACH DESTINATION WAS ACQUIRED FOR
PRESERVATION IN 2022 WITH ASSISTANCE FROM MANY
PARTNERS.

Source: Unknown

remarkable Black-owned beach destination that was open from the 1920's until the 1970's, will allow the city to create its first bayfront park and tell the story of water access during the period of segregation. On the other side of town, plans for the creation of a museum in the Parole community at the former home of the civil rights- era disc jockey C.W. "Hoppy" Adams Jr.-who was the popular host of the concerts at Elktonia/Carr's Beach-- will provide expanded view of both an important individual to the City's history but also the community he served, and the times he lived through.









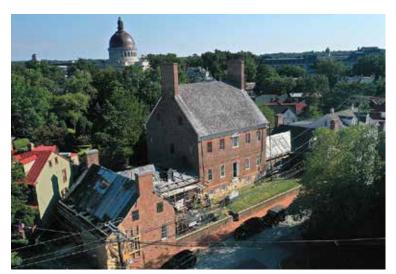


FIGURE 8-14: NOTABLY DIVERSE PRESERVATION PROJECTS IN PROGRESS INCLUDE (CLOCKWISE FROM TOP LEFT) THE MAYNARD BURGESS HOUSE; HOPPY ADAMS HOUSE; UNIVERSAL LODGE #14; JAMES BRICE HOUSE; AND THE BURTIS HOUSE

Source: (Clockwise from top left) Lewis Contractors; C.W. "Hoppy" Adams Jr. Foundation; P. Kutze; Capital Gazette; Capital Gazette

#### **Annapolis Historic District**

Since its establishment in 1965, the Annapolis Historic District has been so successful at preserving important architecture, that in the eyes of many visitors the District is nearly synonymous with Annapolis itself. The Historic District is a singular asset to the city and in many respects warrants the large share of the city's identity that it holds. Much of this success is due to Historic Annapolis, the nonprofit organization founded in the 1950's to help preserve and steward the District.

The Historic District is also a complex and dynamic urban place on the front lines of climate change. In additional to welcoming millions of visitors each year, the District is also an active and evolving residential and commercial area, the seat of State government and County government, Annapolis' central business district and economic center for the region, site of the U.S. Boat Show and dozens of other festivals each year, and home to the U.S. Naval Academy and St. John's College. All of these facets must be considered when guiding the future of the Historic District.

The following represents the major issues to address in the coming years to effectively balance all of the many aspects which define the Historic District and ensure that it remains a "Museum without Walls":

#### **City Dock Resilience and Revitalization**

The ongoing City Dock resilience and revitalization project is the largest and most consequential civic project in the City's history and will address longstanding environmental and economic issues. Guided by the City Dock Action Plan, the project must be fully implemented to be successful. The City Dock is the most intensely studied and planned area of the city and must be treated with nuance from other parts of the city. As the project and downtown evolves, it will create additional opportunities for public and private investment and these should be evaluated in regard to their ultimate public benefit to the city. For example, in the wake of the pandemic, Market Space has proven to be a successful urban plaza and formalizing this space as such should be explored.

#### **Mobility Options**

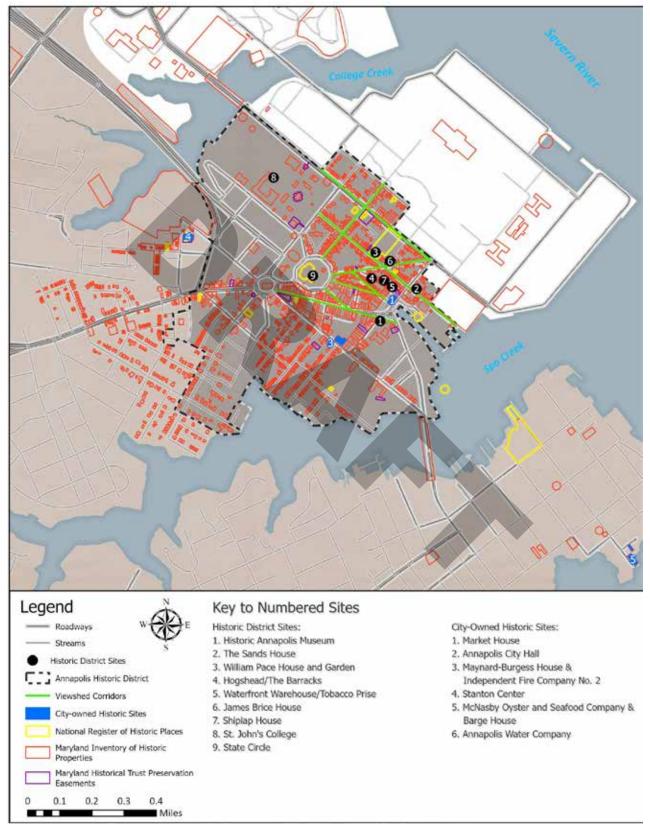
The reconstruction of the Hillman Garage has already enabled the City to explore and pilot new mobility options to offset the limited parking. When the new garage is open, the City must continue to provide the same mobility options and look for ways to improve them and integrate them including the downtown shuttle, the e-bike / e-scooter program, the Annapolis Go on-demand service, and the 10-minute trolleys. The planned electric ferry service between Eastport and City Dock must be realized and planning for future ferry service to other locations farther afield must also continue anticipating Annapolis as the hub for the proposed Chesapeake National Recreation Area.

#### Major Infrastructure

The City has made great strides in recent years to improve and redesign major infrastructure to be more visually coordinated and in sync with the Historic District. The Hillman Garage is the latest example. In the coming years the rebricking of Main Street, the undergrounding of overhead powerlines, the ongoing flood protections associated with the City Dock area should all be prioritized and funded.

#### **Housing and Neighborhood Preservation**

The Historic District is Annapolis' original mixed income and mixed use neighborhood that has long been defined by a wide range of housing options and eclectic mix of commercial spaces. Even in today's challenging housing market, the District still supports a large moderate income renter population. Ensuring that the Historic District continues to have a sufficient number of fulltime residents should be a paramount concern and will depend on not only preserving the multifamily units existing today, but creating additional units through the activation of underutilized upper floors and opportunities to subdivide existing buildings where feasible. Changes to short term rental policy as described in Chapter 5: Housing will also be needed. Ensuring that the District has a growing resident population will not only preserve the neighborhood character and aid the economy of downtown, but also help to offset housing supply issues elsewhere in the city.



#### **Preservation Focus Areas**

In the coming years, as preservation efforts expand beyond the downtown Historic District, this Plan proposes two preservations focus areas-- the Old Fourth Ward and Parole-- that include numerous important buildings and places that tell the history of Annapolis' African-American community. Many of these sites are already on the Maryland Inventory of Historic Sites including the Rosenwald School, Parole Health Center, and Hoppy Adams House in Parole, and numerous row houses in the Old Fourth Ward. The Stanton Center (formerly the Stanton School) and the Masonic Lodge are also on the National Register of Historic Places.

While there have been significant efforts already to acknowledge the importance of these areas, there is no formal designation for the neighborhoods that would help to contextualize them within broader African-American historical narratives in Anne Arundel County, and across Maryland. These relationships deserve more recognition and visibility. To address this, the Plan recommends a new State-level designation for African-American Heritage District that currently does not exist. The designation would be similar to the State's Arts District program and Main Street program which help to stimulate economic and community development opportunities by focusing attention on neighborhoods with concentrations of valuable sites. In fact, there is already a Black Arts District in Baltimore that leverages the Arts District designation to promote African-American heritage but this strategy is not as easily applicable in Annapolis given an existing Arts District already along West Street.

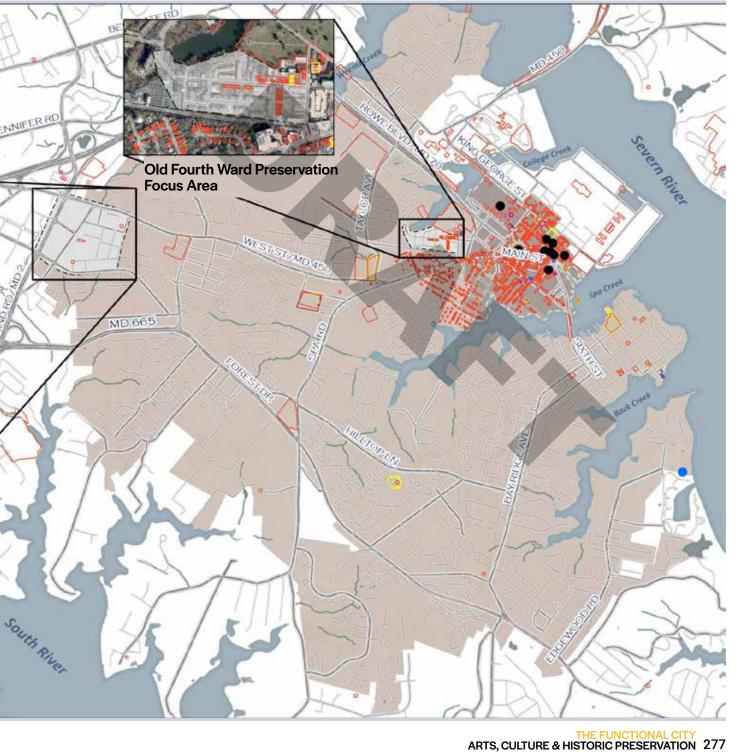
Improved recognition for these areas should not replace ongoing efforts to preserve and rehabilitate specific sites but would augment and efforts.

FIGURE 8-16: MAP OF DOCUMENTED HISTORIC SITES
CITYWIDE AND PRESERVATION FOCUS AREAS

City of Annapolis

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.





## Arts and Cultural Programming

#### **Art in Public Places Commission**

While the City of Annapolis has never employed a full time staff person dedicated to advancing the arts, for over two decades the city has strived to compensate, and has ultimately benefited immensely, through the volunteer efforts of the Art in Public Places Commission (AiPPC). The idea for the Commission came from former Mayor Ellen Moyer, while serving as a City Councilmember, and the group was established by the City Council in 2000. While its signature projects and programs have evolved and varied through the years, the general mission and thrust of the Commission has not. The Commission advances the arts in Annapolis through advocacy, marketing, funding, and coordination of public art projects throughout the city with highlights including numerous permanent murals such as the recently completed Equal Justice for All which faces the Anne Arundel Courthouse and the monumental sculpture "Shoals" mounted at Westgate Circle for several years; seasonal performing arts events such as the Summer Concert Series at City Dock and at Chambers Park; other special events such as Arts Week; the Annapolis Songwriters Festival which debuted in 2022; the selection of the City's Poet Laureate; and acts as the City's liaison for all arts initiatives led by other partner organizations such as the Annapolis Film Festival. Its vision is threefold:

- Take a leading role in support of the Arts in the city of Annapolis.
- Demonstrate the economic and cultural benefit that funding of the arts will bring to Annapolis.
- Build a base of support within the City government, the Annapolis community and other Arts organizations.

Despite the clear need for a well-funded citywide arts organization, AiPCC has been challenged to fill this role as a chronically underfunded volunteer-based



FIGURE 8-17: ONE OF THE MANY SCULPTURES BY DAVID HAYES TEMPORARILY EXHIBITED AROUND ANNAPOLIS IN 2022 JOINTLY ORGANIZED BY AIPPC. ANNAPOLIS ARTS DISTRICT, ACAAC, AND THE DAVID HAYES FOUNDATION.

Source: Alison Harbaugh / Upstart Magazine

group. It has had a tumultuous budget for most of its history, receiving less than \$10,000 in dedicated City funds in a typical year. The Commission has also faced challenges in filling its nine standing member seats, which includes one member nominated by each Alderperson, and a member at large nominated by the Mayor.

Support for the Commission took a dramatic turn in 2021, with the adoption of State legislation SB529 sponsored by Sen. Sarah Elfeth which dedicates a minimum of 3% of the hotel tax generated in the City of Annapolis to fund AiPPC. In a typical year, this now equates to a minimum of \$50,000 unrestricted funds for AiPPC to use toward any of its programs.

Even with its new dedicated funding AiPPC's capacity to take on new programs and initiatives will continue to be limited by the finite energy and passion of its volunteer commissioners. However, even with its current structure, the Commission can be more proactive in how it leverages its funding and invests



FIGURE 8-18: CREATION OF THE MURAL "EQUAL JUSTICE FOR ALL" IN PROGRESS AT CHURCH CIRCLE BY THE ARTS ORGANIZATION FUTURE HISTORY NOW.

Source: Paul W. Gillespie / Capital Gazette

in ways that provide a greater return for both artists and audiences in Annapolis. For example, the Commission could create an annual artist grant fund to help nurture local artists. As a way of activating certain places in the city, AiPPC could commission more public art that provides functional as well as cultural value such as creative seating or stormwater projects.

It is not uncommon for cities to employ one or more full time persons, or in some cases a full department, dedicated to arts initiatives and cultural programming. The case is typically made that these persons contribute to the vitality of the city, to its economic development, and to furthering its cultural identity. This logic could certainly apply to Annapolis. Indeed, for Annapolis to reach its potential as a cultural hub, to become a haven for artists and other cultural producers, and to assert the economic value of the arts, a dedicated arts administrator would be the difference maker. Such a person within the City government would not only represent a commitment to the arts but would dramatically extend the impact and reach of AiPPC. Such a person could also potentially expand the visibility of other City functions by helping to integrate arts initiatives into the culture of City government as well as the broader city.



FIGURE 8-19: ANNAPOLIS SONGWRITERS FESTIVAL DEBUTED IN 2022 WITH PERFORMANCE AT MULTIPLE INDOOR AND OUTDOOR VENUES AROUND THE CITY.

Source: Annapolis Songwriters Festival



FIGURE 8-20: WESTGATE CIRCLE WITH THE TEMPORARY PUBLIC ARTWORK 'SHOALS' BY BOBBY DONOVAN WHICH HAS SINCE BEEN REMOVED. A PERMANENT ARTWORK FOR THE SITE IS AN AIPPC PRIORITY.

Source: Trip Advisor

THE FUNCTIONAL CITY

## **GOALS, PERFORMANCE MEASURES AND** RECOMMENDED ACTIONS

### **ARTS, CULTURE & HISTORIC** PRESERVATION GOAL ACHP1

PRACTICE AN APPROACH TO HISTORIC AND CULTURAL PRESERVATION THAT IS **INCLUSIVE AND EQUITABLE AND FULLY ACKNOWLEDGES THE DIVERSITY OF CULTURES THAT** HAVE CREATED THE ANNAPOLIS OF TODAY.

#### **PERFORMANCE MEASURE 1**

#### **PERFORMANCE MEASURE 2**

#### RECOMMENDED ACTIONS

ACHP1.1

Develop a preservation action plan for all notable historic sites beyond the downtown Historic District, particularly those relevant to African-American heritage.

ACHP1.2

Work with the National Park Service to implement its Master Interpretation Plan which is taking an expansive and inclusive approach to cultural and historical interpretation.

ACHP1.3

Explore African-American cultural district designations for the Parole and Old Fourth Ward neighborhoods that would promote these areas for tourism and unlock access to additional grant funding.

ACHP1.4 Explore the potential for a National Register designation of the Parole Rosenwald School and funding opportunities for preservation.

ACHP1.5 Advance the plans for a Hoppy Adams House museum at the former home of the late radio disc jockey and civil rights leader in Parole.

ACHP1.6 Explore opportunities for the Banneker-Douglass Museum and other organizations to assist with the stewardship of African-American historic sites in the city.

ACHP1.7 Continue to work with public and private partners to plan, design, and build the future Elktonia/Carr's Beach Park as a signature investment in the City's public waterfront. (also listed in Chapter 7: Community Facilities under Goal CF3)

ACHP1.8 Budget for the City to add a new Historic Site Manager position who will better manage, curate, and program historic sites owned by the City.

ACHP1.9

Identify funding opportunities for artists, designers, and curators to develop new ways of interpreting historic sites, particularly in advance of restoration.

## ARTS, CULTURE & HISTORIC PRESERVATION GOAL ACHP2

### EXPAND THE REACH OF THE ANNAPOLIS ARTS & ENTERTAINMENT DISTRICT AND GROWTH OF THE CREATIVE ECONOMY.

#### **PERFORMANCE MEASURE**

The proposed expansion of the Arts & Entertainment District is approved.

- ACHP2.1 Support the expansion of the Annapolis Arts & Entertainment District through City Council legislative action.
- ACHP2.2 Partner with Maryland Hall and Anne Arundel County Public Schools (AACPS) to create a campus master plan to better coordinate cultural programming opportunities, improved connections to nearby areas, and site improvements for multiple outdoor uses.
- ACHP2.3 Partner with the Annapolis Art in Public Places Commission (AiPPC), the Arts & Entertainment District, and other arts stakeholders on grant applications for public art opportunities and streetscape enhancements.
- ACHP2.4 Partner with AiPPC and the Arts & Entertainment District to continue existing event programming and support additional programming.
- ACHP2.5 Expand the City's wayfinding signage program within the Arts & Entertainment District to better identify key institutions and destinations including Maryland Hall and the Stanton Center.
- ACHP2.6 Support the infill development of the remaining undeveloped portion of Park Place with artsoriented uses which complement adjacent uses and the larger Arts & Entertainment District.
- ACHP2.7 Support the expansion and preservation of artist studio space, artist housing, and/or artist live/work space.

## ARTS, CULTURE & HISTORIC PRESERVATION GOAL ACHP3

EXPAND THE CAPACITY OF THE CITY TO INITIATE AND MANAGE FORMALIZED CULTURAL PROGRAMS, PUBLIC REALM ENHANCEMENTS, AND SUPPORT FOR THE CITY'S CREATIVE ECONOMY.

#### **PERFORMANCE MEASURE 1**

A dedicated grant program for local artists is established that provides small grants to at least two local artists each year.

#### **PERFORMANCE MEASURE 2**

A full time dedicated position to arts programming is established within the City government.

#### **RECOMMENDED ACTIONS**

ACHP3.1 Partner with the ACAAC, AiPPC, Maryland Hall, the Arts & Entertainment District, and other stakeholders to initiate an Arts & Culture Master Plan for the Annapolis area which will address needs and opportunities across all art disciplines and facets of the creative economy.

ACHP3.2 Partner with AiPPC on grant funded opportunities for public art, performing arts, place-making, and event programming through staff support.

ACHP3.3 Support AiPPC's dedicated programs with staff input from the Departments of Recreation and Parks, Planning and Zoning, and the Mayor's Office, and coordinate on the creation of new programs that can help to activate public places and generate new opportunities for artists.

ACHP3.4 Establish a dedicated small grants fund for local artists of all disciplines that is administered by AiPPC and distributed annually.

ACHP3.5 Explore ways of better supporting, leveraging, coordinating, and growing the work of all arts organizations in the Annapolis area that may include: new grant programs, technical assistance by City staff, partnership programs, coordinated scheduling, and marketing.

## ARTS, CULTURE & HISTORIC PRESERVATION GOAL ACHP4

### ENHANCE THE SUSTAINABILITY OF THE HISTORIC DISTRICT THROUGH A MULTI-FACETED APPROACH TO DISTRICT-WIDE IMPROVEMENTS.

#### **PERFORMANCE MEASURE 1**

The number of full time residents in the Historic District increases each year between 2020 and 2040.

#### RECOMMENDED ACTIONS

- ACHP4.1 Implement the recommendations of the Consensus Plan of the City Dock Action Committee. (also listed in the Chapter 4: Land Use under Goal LU5)
- ACHP4.2 Work with business owners to develop updated guidelines for sidewalk seating and shading, parklets, and signage.
- ACHP4.3 Work with BGE, Historic Annapolis, State of Maryland, and other partners to develop a strategic plan for burying power lines within the Historic District, coordinated with the construction schedule of City Dock project.
- ACHP4.4 Continue to maintain stringent historic preservation requirements in downtown to protect the City's architectural and city planning heritage. (also listed in Chapter 4: Land Use, under Goal LU5)

- ACHP4.5 Enact legislation that compels property owners within the Historic District, prioritizing those on Main Street, to update sprinkler systems by 2028 (also listed in Chapter 4: Land Use, under Goal LU5)
- ACHP4.6 Explore expansion of the current historic tax credit budget, with priority offered to projects that activate upper floors with moderately-priced dwelling units. (also listed in the Chapter 4: Land Use, under Goal LU5)

ACHP4.7

Ensure that zoning standards for the Historic District are updated to address recommendations from all recent hazard mitigation plans include the Citywide Hazard Mitigation Plan (2022) and Weather It Together: Cultural Resource Hazard Mitigation Plan (2018). (also listed in Chapter 4: Land Use under Goal LU5)



## THE ADAPTIVE CITY

### 9. ENVIRONMENTAL SUSTAINABILITY

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

#### **10. WATER RESOURCES**

Overview

**Existing Conditions** 

Goals, Performance Measures, and

Recommended Actions

Bridging barriers.
Connecting communities.



## <u>9.</u> ENVIRONMENTAL SUSTAINABILITY

## **OVERVIEW**

Supporting a healthy environment for all inhabitants warrants being resilient to natural threats and sustainable into the future, especially over the time span of this Plan. Natural resources - shorelines, forested areas, creeks, etc. - are central to Annapolis' identity, attractiveness, and overall health as a coastal city. The fostering of a harmonious relationship between these natural resources and the city's communities is indicative of a resilient and sustainable place. Climate change remains the single greatest challenge to, as well as impetus behind maintaining this relationship.

An integral component of sustainability is ensuring that areas which are sensitive to the impacts of growth and development - shorelines, forests, stream corridors - are conserved into the future. Sensitive Areas as defined in the State of Maryland's Land Use Article are those streams and their buffers, floodplains, critical habitats, steep slopes, wetlands, and important agricultural and forested lands which shall be protected from the adverse effects of development.

Annapolis boasts an abundance of these places essential to local wildlife, the natural environment, and to the health of its people. In addition to those environmental resources outlined by the State of Maryland, Annapolis protects and plans to protect the places critical for expanding access to open space in vulnerable communities, areas where heat impact mitigation is necessary, and areas more prone to flooding in the future as a result of sea level rise. The value of these expanded Sensitive Areas has only more recently been realized among the City's priorities. Their relationship to each other, both

geographically and ecologically, shall be highlighted. Thus, the identification and preservation of these Sensitive Areas functions in conjunction with the overall greenways strategy described in Chapter 7, Community Facilities.

Resilience is a priority identified by the Maryland Commission on Climate Change that calls for advancing our ability to address known threats and future vulnerabilities to climate change, adaptation, and response efforts; to increase and broaden public and private partnerships; address the challenge that low-income and otherwise vulnerable communities will likely be disproportionately impacted by climate change; and assess the impacts climate change will likely have on the economy, revenues and investment decisions. As stated in Chapter 1 of this plan, a resilient community is one that takes intentional steps to enhance the capacity of its residents and institutions to respond to and influence change. A sustainable community, then, is one that meets the needs of the current population without compromising the needs of the future population. Annapolis seeks to conserve its natural resources while also minimizing its environmental footprint and hence its impact on the global climate. Whereas Annapolis aims to be resilient by adapting to threats like climate change, it can be more sustainable by reducing its contribution to climate change and ensuring the quality of life of its residents is not jeopardized. In essence, these two efforts act in tandem. If the city is more resilient, it is able to be more sustainable and if it is more sustainable, it is able to be more resilient.

Annapolis' waterways are its most cherished features. They are the lifeblood of its storied existence, of its culture, and of its desirability as a place to call home and to visit. Protecting them and caring for them is of utmost importance for the city to remain sustainable and ultimately resilient in the face of future environmental change. Locals have a personal attachment to their closest waterway, which shapes their way of life and their values. It is with this in mind that it only makes sense for future smaller area planning in Annapolis to occur in the context of these waterways based on a creekshed framework. For more information on this watershed planning recommendation, refer to Chapter 4: Land Use, and for more on the watersheds themselves, refer to Chapter 10: Water Resources.

### **Greenway Map**



FIGURE 9-1: DETAIL FROMTHE GREENWAY MAP Source: City of Annapolis

In 2021, the Annapolis Conservancy Board launched a signature initiative to identify and map priorities for future conservation. Over 100 different parcels of land of varying sizes have been identified across the City and organized into a database that groups the properties by various criteria including watershed, ward, contiguous with existing parkland or conservation area, potential for trail connection, among other data. From this, a comprehensive greenway map has been created which identifies priorities for greenway corridors. The ultimate goal is to strategically link future conservation opportunities with existing conservation easements in order to form the backbone of a network of greenway corridors that could benefit wildlife and local vegetation as well as provide a local reprieve for every community in the City.

## **EXISTING CONDITIONS**

### **Climate Vulnerability**

#### **Climate Change Trends and Predictions**

Annapolis is a city with national and historical significance and is threatened by rising sea levels and other environmental impacts as a result of climate change. On a local and global scale, the effects of climate change are already being experienced and are worsening at an accelerating rate. In conjunction with growing levels of greenhouse gases in the atmosphere, the overall temperature has been warmer in the last four decades in succession than in any other decade since 1850, or when records began being kept. Temperatures have warmed by roughly 1 C compared with temperatures from 1850-1900. Under all future emissions scenarios the temperature will continue to increase. They will exceed 2 C above temperatures during the same time period by 2100 unless emissions rapidly decline to net zero and net negative around 2050 or later. All of these trends have and will lead to dryer conditions in some places and wetter conditions accompanied by more extreme precipitation in others, particularly here in Annapolis. Climate disasters, arguably the most severe environmental threats to communities, are on the rise, and, in order for communities to remain resilient and sustainable, they must follow a course of action for events including heat waves, coastal storms, extreme precipitation, to minimize their likelihood and impact. In short, the impacts of climate change on Annapolis are through:

- Extreme temperatures
- Extreme precipitation
- Sea level rise
- Coastal storms





# Sea Level Rise, Coastal Flooding, and Erosion

The most immediate effects of climate change on Annapolis will be sea level rise and the accompanying coastal flooding that is already becoming more frequent year by year. Annapolis is located in a particular hotspot where sea level rise is occurring at a rate two to four times the global average. The city lies at the convergence of three major factors contributing to regional sea level rise: thermal expansion from warming sea, glacial melting, and land subsidence specific to the Chesapeake Bay region. The two most susceptible areas in the City to coastal flooding and thus future sea level rise are City Dock and Eastport, specifically at 6th Street and points north and east. As the map in Figure 9-3 of FEMA's 100-year floodplain for Annapolis indicates, the shores of College Creek, Spa Creek, and Back Creek are all vulnerable to coastal flooding to some degree.

Projections on sea level rise published by NOAA predict that levels could increase by anywhere from 1 foot to 3 feet by 2050 and between 2 feet and 11 feet by 2100 under the most extreme scenario, as evidenced in Figure 9-4 below. The two scenarios in the middle range that are most often referenced for planning purposes project a rise of between 1.5 to 2.5 feet by 2050 and 4 to 6.5 feet by 2100. Under the intermediate high scenario, 6.5 feet happens to be approximately the height of the greatest flood elevation experienced in Annapolis during Hurricane Isabel in 2003, which could become the baseline tide elevation by 2100. In any event, at least a foot of sea level rise can be expected over the next several decades.

To put this into context, City Dock experienced only about 3 days of at least minor nuisance flooding in the early 1960s compared with close to 60 days of nuisance flooding today.

By 2050, City Dock will likely experience flooding several days a week, though the exact number could

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

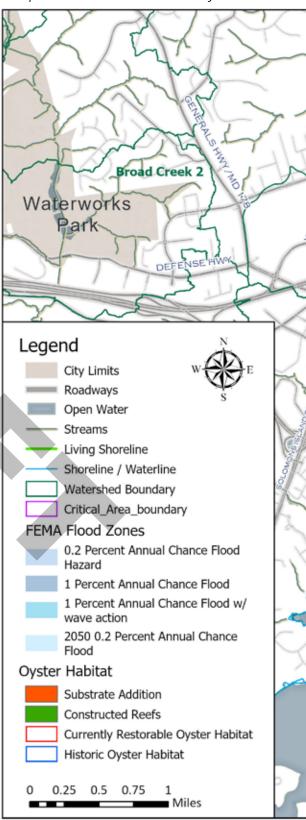
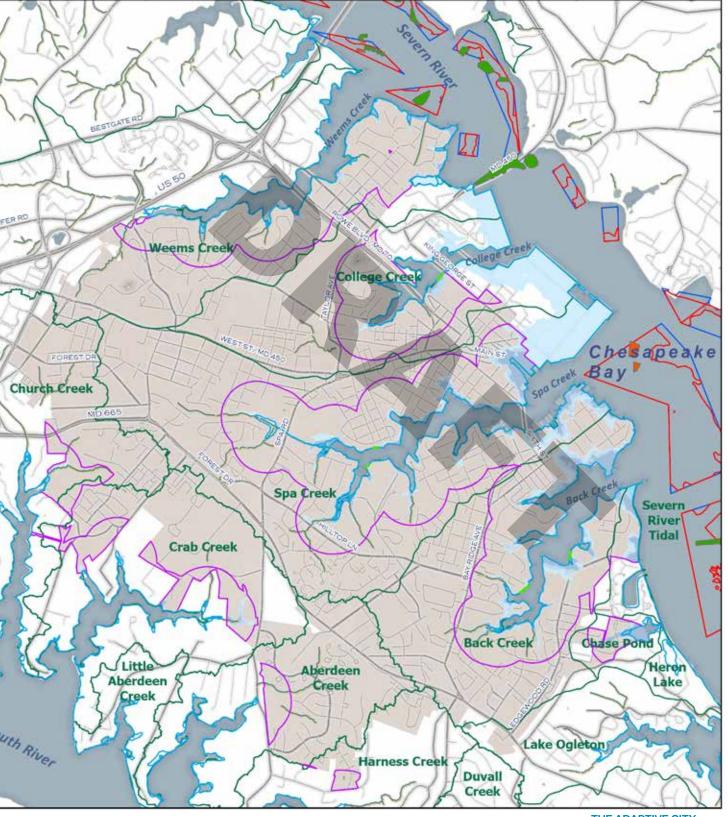


FIGURE 9-3: MAP OF CRITICAL AREA, SEA LEVEL RISE, AND COASTAL FLOODING

Source: City of Annapolis



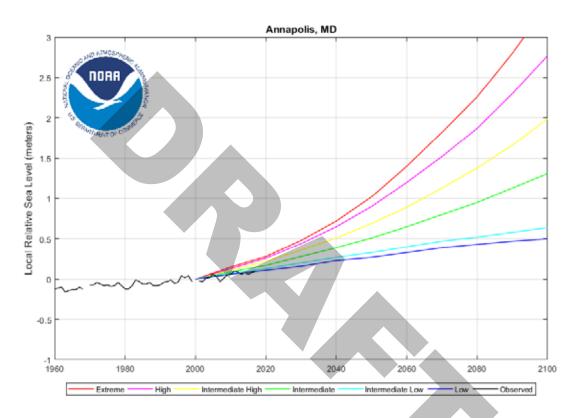


FIGURE 9-4: SEA LEVEL RISE PROJECTIONS FOR ANNAPOLIS

Source: NOAA

vary greatly. Figure 9-4 above shows how the number of tidal flooding days could be more than twice as much in a high emissions scenario than in a low emissions scenario. The threat of rising sea levels also contributes to coastal erosion in places where the shoreline is not adequately protected. This contributes to shoreline retreat and damage to nearby properties. All of this equates to tens of thousands of dollars in lost economic activity and hundreds of thousands in damage to local properties annually as of 2020 that will only increase each year.

Numerous studies have been conducted in the last 10 years both to assess the vulnerability to sea level rise and coastal flooding and to weigh solutions to mitigate their impact. As the two areas of the city most susceptible to tidal flooding, Eastport and Downtown, in particular, have received the most substantial attention in addressing the issue. Among the first studies of their kind to be conducted for Annapolis were completed in 2011 to examine the prospect of coastal flooding in both Eastport and Downtown Annapolis. Each study identified the extent of sea level rise in each area, areas susceptible to flooding, and options to alleviate the flooding. Recent projects to address the flooding Downtown have included the City Dock bulkhead replacement which was elevated and a multi-phase pump station that is currently under construction at Newman Park.



FIGURE 9-5: FLOODING AT CITY DOCK IN OCTOBER 2021

Source: Paul W. Gillespie / Capital Gazette

Every several years, in order to receive disaster funding, the Office of Emergency Management updates the city's Hazard Mitigation Plan that accounts for the impacts of sea level rise and coastal flooding in addition to all other threats the city faces. The most recent plan was updated in 2018, and an update is anticipated in 2023. Though Eastport and Downtown experience the most impactful flooding, no community is immune to the effects of the changing climate. Future efforts to plan for resilience must include participation from all communities in the city.







FIGURE 9-6: VISUALIZATIONS OF PROJECTED SEA LEVEL RISE AT THE CITY DOCK

Source: Maryland Sea Grant

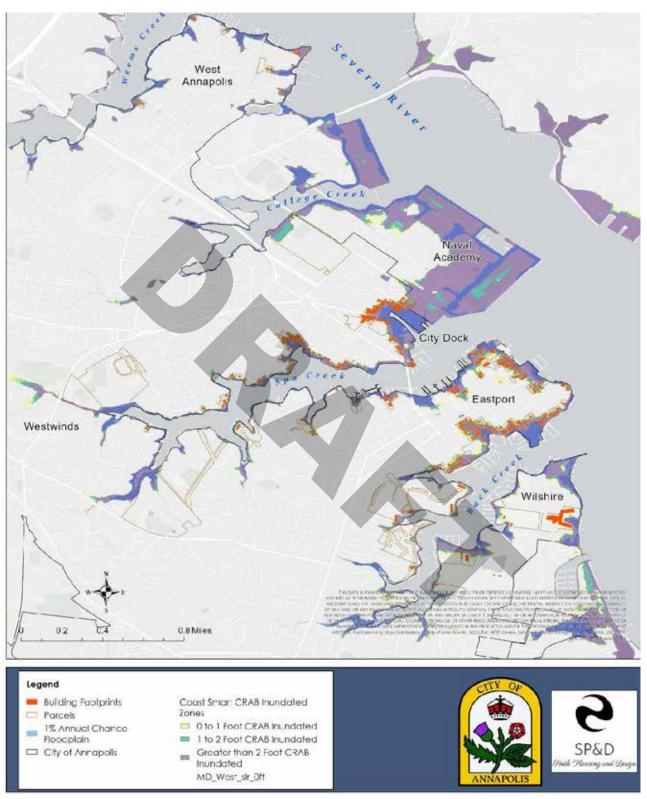


FIGURE 9-7: MAP OF CITYWIDE AT-RISK STRUCTURES BASED ON THE STATE OF MARYLAND'S COAST SMART - CLIMATE READY ACTION BOUNDARY (CRAB) MODEL WHICH SHOWS AREAS OF ANTICIPATED FLOODING AT THREE INTERVALS: 0-1FT, 1-2FT, AND GREATER THAN 2FT FLOOD INUNDATION.

Source: Smith Planning & Design



FIGURE 9-8: MAP OF EASTPORT AT-RISK STRUCTURES BASED ON THE STATE OF MARYLAND'S COAST SMART -CLIMATE READY ACTION BOUNDARY (CRAB) MODEL WHICH SHOWS AREAS OF ANTICIPATED FLOODING AT THREE INTERVALS: 0-1FT, 1-2FT, AND GREATER THAN 2FT FLOOD INUNDATION.

Source: Smith Planning & Design

#### **Recent Climate and Resilience efforts**

The City of Annapolis has been extremely active the past few years to tackle the issue of coastal flooding and resilience more broadly. The Weather it Together initiative kicked off in 2015 to build partnerships and engage the community around flooding and protecting the Annapolis Historic District. The initiative concluded with the Cultural Resources Hazard Mitigation Plan that highlighted the work accomplished through stakeholder cooperation and outlined strategies to protect flood-prone areas. In 2018, the city forged a partnership with the University of Maryland to complete a resilience financing assessment. The study, through a set of recommendations, served as a roadmap for the city to expand its financing system for the inclusion of resilience. The assessment then paved the way for the creation of the Climate Resilience Authority through State authorizing legislation who is charged with coordinating the funding to future resilience projects. Building on the partnership with the University of Maryland, resilience experts from the University and City staff came together as a working group to develop Annapolis' first Climate Resilience Action Strategy. Rather than solely focus on climate resilience the study also accounted for the social and economic aspects of resilience.

In 2022, the City's Office of Emergency Management completed a Flood Mitigation Plan funded by FEMA which included an updated in-depth analysis of flood risks and recommendations for mitigating the risk. For example, the maps on the previous pages identify atrisk structures based on the State of Maryland's Coast Smart - Climate Ready Action Boundary (CRAB) which is designed to assess vulnerability. The CRAB model is the 1% annual chance floodplain remaining inundated with an additional three feet of water added to it.

One approach to mitigating the risk of coastal flooding is to encourage nature to take a more central role. Nature-based solutions such as planting trees, establishing living shorelines, and land conservation require minimal hard infrastructure while producing multiple benefits. FEMA's National Flood Insurance

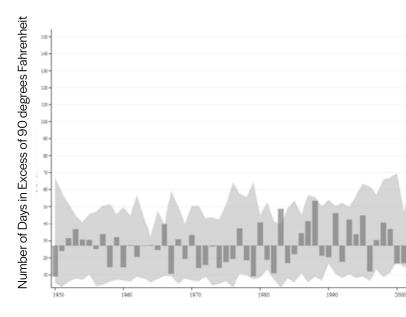


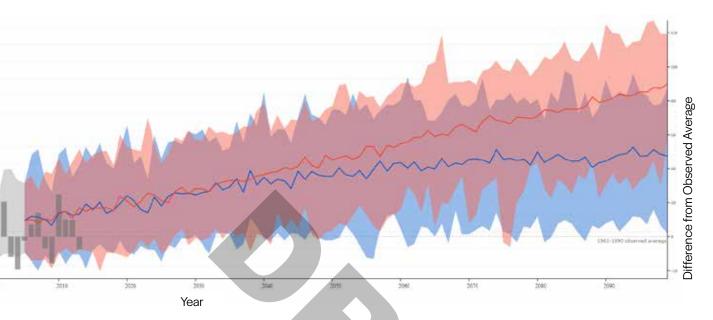
FIGURE 9-9: NUMBER OF DAYS ON AVERAGE WHERE THE TEMPERATURE EXCEEDS 90 F

Source: NOAA

Program (NFIP) provides flood insurance to property owners, renters and businesses in Annapolis provided that the City continues to implement minimum floodplain management standards. The Community Rating System (CRS) is a voluntary program within the NFIP that incentivizes additional floodplain management strategies, for instance preserving undeveloped open space in the floodplain, by offering discounts on community flood insurance premiums. The City plans to join other jurisdictions in Maryland including Baltimore City, Frederick, and Howard County in participating in the program as a means to encourage more resilient development practices.

#### Military Installation Resilience Review

In June 2023, the City, in partnership with NSA-Annapolis, Anne Arundel County, and the State of Maryland, completed the Military Installation Resilience Review (MIRR) after an 18-month planning process. Although the thrust of the plan is to ensure the long term presence of the Navy in Annapolis, the geographic focus of the plan is the greater Annapolis area and ultimately represents the first comprehensive resilience plan for the city. The planning process engaged dozens of key stakeholders across multiple jurisdictions and subject matter experts to create a plan that addresses a broad spectrum of resilience. At the heart of the plan is a detailed analysis of risk to



the most critical assets in the region with a thorough action plan to address their vulnerabilities. The critical assets addressed are the following:

- Coastal Shoreline Boundaries
- NSA-Annapolis Access Roads
- Anne Arundel County and City of Annapolis Water Treatment Facilities
- Anne Arundel County Department of Health and Luminis Health Anne Arundel Medical Center
- Cybersecurity
- Energy
- Annapolis Wastewater Conveyance and Reclamation Facility

For each asset, a variety of projects are identified to mitigate risk with detailed information on implementing the projects including tasks, project lead and key partners, and funding sources. Implementation of the recommendations will require the same cross-jurisdictional collaboration needed to complete the plan and must be coordinated on a regular basis. The City is fortunate to have helped to recently establish the Resilience Authority of Annapolis and Anne Arundel County which is an ideal partner to help lead several of the projects that impact multiple jurisdictions.

#### **Extreme Temperatures**

As the world warms, Annapolis is expected to warm with it. Compared with locations elsewhere in the country, the city is expected to receive more precipitation on average, slightly mitigating the increases in average temperature that other locations are likely to experience. Nonetheless, extreme temperatures in the form of heat waves are still expected to occur here as well. According to Figure 9-9 above, regardless of future global emissions, extreme heat is expected to increase every year from 50 days on average where the temperature exceeds 90 F as of 2020 to 70 days by 2050.

Extreme heat is among the greatest climate risks to the livelihoods of people no matter their health, but particularly among children and the elderly, and those with underlying health conditions. Exposure to heat for an extended period of time can exacerbate underlying conditions and induce a number of other health complications. The economically disadvantaged are especially vulnerable to extreme heat, often spending more time outdoors and with less access to air-conditioned spaces. Cities with large swaths of impervious cover in the form of parking lots, large building footprints and roadways experience what is called an urban heat island effect where the temperature is raised even higher than in other more vegetated areas. Making matters worse, there is often a correlation between lower income communities and instances of greater impervious cover.

# **Tree Canopy and Impervious Coverage**

The preservation and expansion of the City's tree canopy coupled with a reduction in impervious cover is one of our best tools for mitigating the impacts of rising temperature in Annapolis. Trees function to reduce heat in three critical ways: first, by simply providing shade which is a valuable asset to anyone who spends time outdoors in warm weather months, and particularly to pedestrians who may not have the benefit of an air-conditioned vehicle; secondly, by offsetting the impact of impervious coverage which is explained further below; and thirdly by capturing heat trapping greenhouses gases from the environment. In fact, trees are one of the most effective ways of reducing greenhouse gas emissions. Through the process of photosynthesis, trees absorb carbon dioxide from the air, and process it into oxygen for humans and other species to breathe, as well as into sugar that becomes a nutrient for the tree and a variety of dependent species. The embodied carbon in the tree then stays there until the tree dies and decomposes. This is among the reasons why tree canopy preservation has been a major priority in Annapolis over the last few years especially with the adoption of the Forest Conservation Act in 2016.

The act requires the owner of any property roughly an acre or larger (more than 40,000 square feet) to submit a Forest Stand Delineation and a Forest Conservation Plan when they apply for a subdivision, grading, planned development, special exception, or site design.

The City's tree canopy now stands at roughly 40 percent of the city's total land area based on estimates from a recent tree canopy assessment conducted by the University of Vermont, illustrated by the map in Figure 9-11. The assessment of the City's canopy was developed in 2020 using high-resolution imagery and LiDAR from 2011 and 2017. Change in tree canopy was mapped as points, but also to the parcel level and by land use, to examine trends in canopy change over that time period.

Between 2011 and 2017, statistically speaking, tree canopy did not change substantially. On the whole, the city did lose more trees than it gained, however, the net loss only amounts to a 4% reduction to 2,907 acres of canopy -180 acres of canopy was lost compared with 48 acres gained. Much of the loss is not attributed to new development. The largest contiguous area of canopy loss is at the proposed

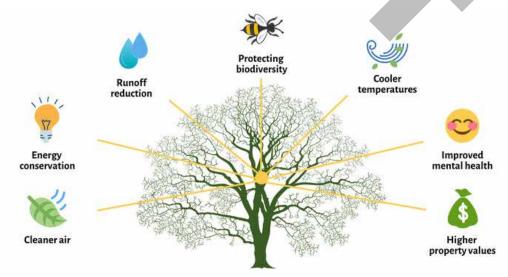
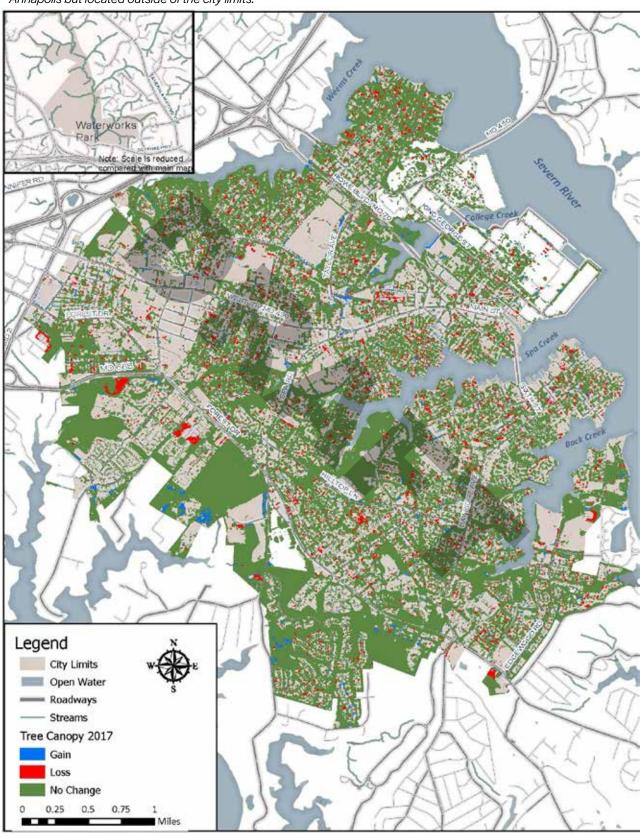


FIGURE 9-10: THE BENEFITS FROM THE CITY'S TREE CANOPY ARE SUBSTANTIAL, DIVERSE, AND FAR-REACHING, AND ADDRESS ALL THREE OF THIS PLAN'S FOUNDATIONAL THEMES: EQUITY, HEALTH, AND RESILIENCE.

Note: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.



location of the Rocky Gorge development along MD 665, where no new development has yet occurred, although clearing in anticipation of future development has already been completed, in accordance with the Forest Conservation Act. Still, this clearing only amounts to 3% of all loss. Most of the citywide loss is scattered fairly uniformly throughout the city, but predominantly within existing residential communities, where canopy was reduced by more than 3 percent on the whole. Similarly, there is no notable trend in where there have been gains in canopy, although the most significant gains have occurred on the Crystal Spring farm property, the largest existing contiguous area of tree canopy. In the coming years, the city will look to identify specific areas to expand tree canopy, not excluding developed areas for more street trees and harness the associated benefits for air and water. Expanding canopy and planting trees is an effort with the opportunity for significant community buy-in, and there are already several local organizations already engaged in this effort. A healthy tree canopy stands to improve air and water quality, moderate temperatures and reduce greenhouse gas emissions all in one.

On the other hand, where impervious surfaces cover communities, air quality is worse, stormwater carries more pollutants into local waterways, and temperatures can be as much 10 or more degrees warmer. The areas of Annapolis with the largest proportion of impervious cover to pervious cover are along the Forest Drive corridor, in the design district at Chinquapin Round Road, in West Annapolis, and in Parole, particularly along Upper West Street and along MD 2. Still, even with several highly developed neighborhoods, Annapolis is fairly balanced in terms of impervious coverage versus tree canopy. At present, there is approximately 300 more acres of impervious cover than tree canopy - 3,186 acres (42% of the city) of impervious cover compared with 2,907 acres (39% of the city) of canopy, although this relationship was reversed in 2011. That year, the City had 2,931 acres of impervious versus 3.039 acres of tree canopy. Since then, 75 of the 180 acres of canopy that have been lost overlap with areas of new impervious cover. The

map on the following page compares impervious cover from 2011 to 2020, for which there is complete data for.

Whereas changes in tree canopy seemingly have little correlation to new development, many of the largest areas of new impervious cover are directly attributed to development over the last 10 years. For instance, areas of new impervious at developments such as Bay Village Assisted Living, Village Green and Annapolis Towns at Neal Farm stand out. On the whole, while new impervious areas are not concentrated in any part of the city more than any other, certain areas with high concentrations of existing impervious were expanded, such as near Chinquapin Round Road, in Downtown, and at the Navy Marine Corps Memorial Stadium. These areas in particular could benefit the most from strategies to reduce impervious cover, such as breaking up existing paving and replanting to reclaim natural areas that were lost to development. These types of improvements will not only mitigate heat impacts but also help manage stormwater runoff and erosion, and beautify the landscape, which ultimately adds significant economic value to surrounding properties.

Environmental Enhancement areas, described in Chapter 4: Land Use, is a new land use category introduced in this plan and intended to identify places that can be protected, enhanced, and connected to other open space that often includes expanding green space and forested cover. Environmental Enhancement areas may be sites in need of retrofitting to reduce impervious cover or they may be natural forested areas that are critical for alleviating flooding, improving water quality, providing habitat, and also mitigating local climate impacts such as extreme heat. As Sensitive Areas, these sites are critical to maintain and/or improve their health to offset the local heat island effect that induces extreme heat.

Extreme heat is most prevalent in areas with high concentrations of impervious cover in the form of pavement and large building footprints. This is most

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

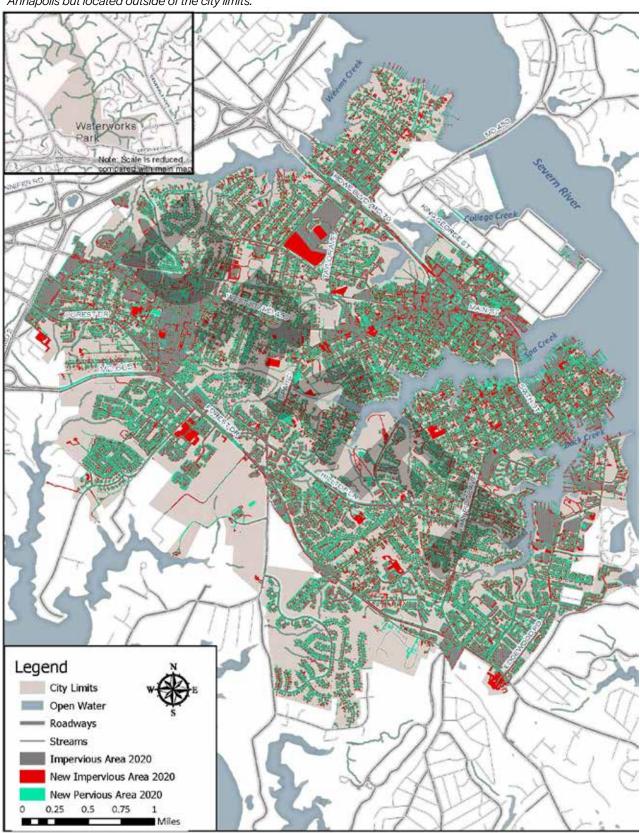




FIGURE 9-13: CRYSTAL SPRING FOREST, ANNAPOLIS' LARGEST REMAINING CONTIGUOUS FOREST WILL BE LARGELY CONSERVED THROUGH AN HISTORIC CONSERVATION AGREEMENT IN 2022. THE FOREST CONSERVATION WILL HELP TO OFFSET HEAT ISLAND IMPACTS ALONG THE FOREST DRIVE CORRDIOR.

Source: City of Annapolis

apparent in the Design District along Chinquapin Round Road and along MD-2 / Solomon's Island Road, when mapping the impacts the urban heat island effect has on ground temperature. Temperatures can run several degrees warmer compared with another location only a mile away, especially in cases of dark impervious surfaces that absorb heat. Conversely, areas with large tracts of tree canopy correlate strongly with minimal urban heat island effect and thus temperatures cooler than the local average. The contrast between these conditions is evident across the city where adjacent neighborhoods might differ dramatically in tree canopy and thus surface temperature. For example, along Forest Drive, the neighborhoods of Hunt Meadow, Heritage, and Beechwood Hill are places with dense tree canopy and one could expect cooler temperatures. Whereas

the neighborhoods of Annapolis Walk, Village Greens, Kingsport, and Bywater Homes have less canopy, and therefore hotter surface temperatures. Appreciating these variations is one way of guiding tree canopy enhancements.

A heat island map helps to illustrate the varying conditions across the city. The darkest red hues on the map represent areas of impervious cover that present the highest potential to absorb heat throughout the day and the blue hues represent areas with considerable vegetation that effectively shade the ground from the incoming daytime heat. In a few instances, lighter shades of impervious cover may appear counterintuitive to expectation when mapping heat impacts at the ground level, however, these areas still pose the same detriment to environmental quality.

Note: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

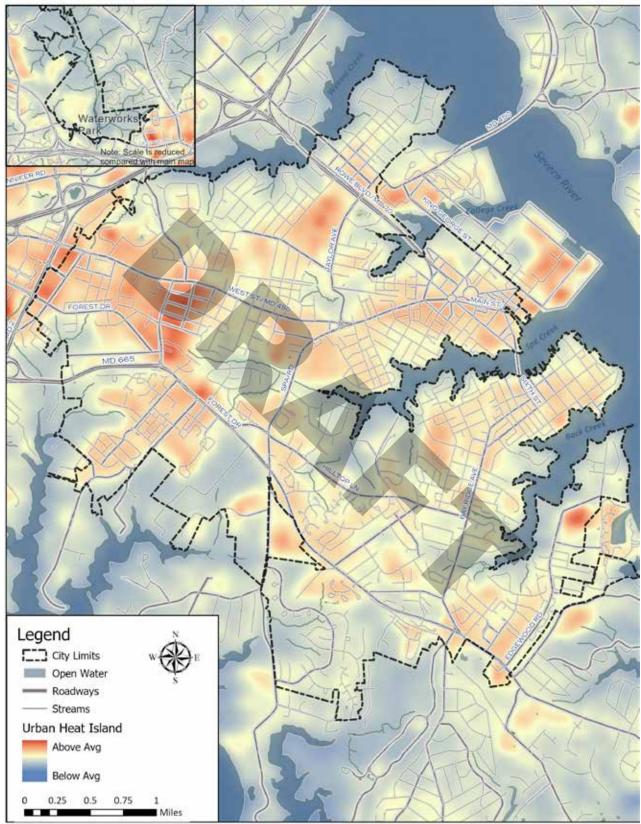


FIGURE 9-14: THIS MAP OF URBAN HEAT ISLAND EFFECT INTENSITY ILLUSTRATES THAT HEAT ISLANDS ARE CONCENTRATED ALONG MAJOR TRANSPORTATION

#### **Tree Canopy Expansion**

This Plan places significant emphasis on tree canopy expansion because it addresses so many of the Plan's broader goals ranging from stormwater management to walkable places, to biodiversity, and community health. However, planting trees in any urban environment is challenging because of constraints on available space, maintenance and stewardship, and cost. Given that the city is currently challenged to simply maintain its existing tree canopy, let along expand it, this Plan sets performance measures of canopy preservation in the short term with canopy expansion to 50% coverage by 2040. While 50% coverage from the City's current coverage of 42% may not seem substantial, it would require approximately 17,910 new trees planted based on 45 trees per acre. Another basis for aiming to reach 50% is that 44.6% canopy coverage has been found to be associated with stream health ratings of 'good' from a 2003 study of tree canopy in Montgomery County, MD (Goetz et al.). Setting a goal of reaching 50% canopy coverage represents an ambition to exceed the minimum coverage to achieve greater stream health among many other benefits.

Available data from the Annapolis' most recent tree canopy survey estimates that the city has approximately 1219 acres of available land for tree canopy expansion with more than half of this space, 678 acres or 55.5%, in the City's residential areas. As mentioned earlier in the chapter, the residential areas are also where the city is losing most of its canopy. The city's commercial, institutional, and open space area also offer space for additional canopy but residential area offer far greater potential for ongoing stewardship which is critical to the long term health of the trees. Goal ES2 in this chapter, which focuses on tree canopy, provides a variety of specific strategies for canopy expansion including changes to mitigation requirements in the Critical Area, legislation to protect heritage trees, and ways to incentive new planting.

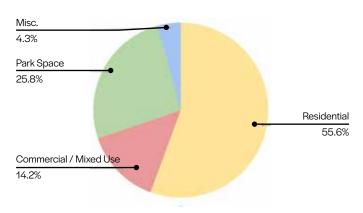


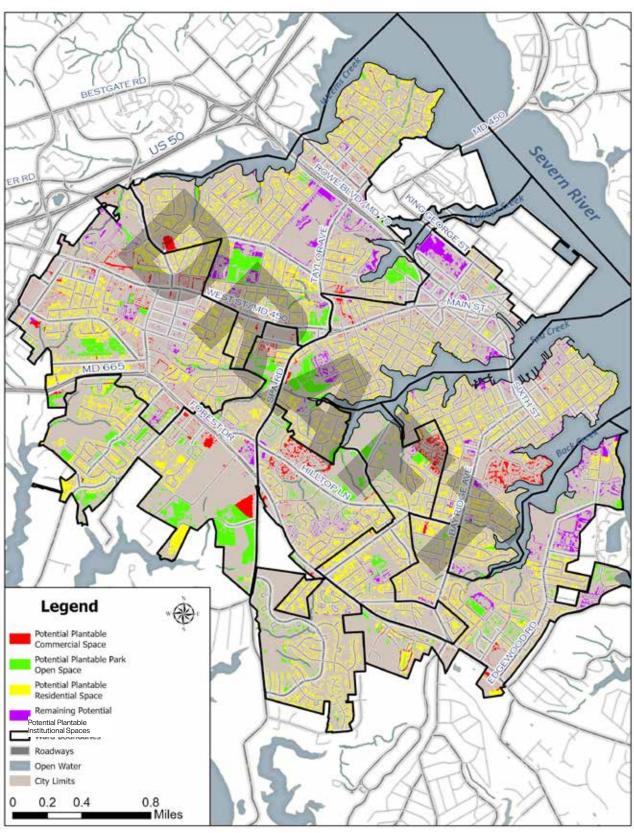
FIGURE 9-15: CHART OF POTENTIAL AREA FOR TREE CANOPY EXPANSION BY LAND USE PERCENTAGE.

Source: City of Annapolis



FIGURE 9-16: THIS TREE EQUITY MAP USES EIGHT
DIFFERENT ECONOMIC AND DEMOGRAPHIC FACTORS
TO ASSESS THE EQUITABLE DISTRIBUTION OF TREE
CANOPY IN ANNAPOLIS. AREAS THAT ARE MORE
ORANGE REPRESENT PLACES WHERE TREE CANOPY
EXPANSION IS MORE NEEDED.

Source: American Forests



# **Environmental Quality and Sensitive Areas**

# **Riparian Conditions**

The City falls within the watersheds of the Severn River and the South River. Most of Annapolis feeds into the Severn River, but areas south of Forest Drive chiefly feed into the South River. Within the Severn River watershed are the Spa Creek, Back Creek, Weems Creek and College Creek sub-watersheds. The South River watershed is then broken up into portions of the Church Creek, Crab Creek, Aberdeen Creek, Duvall Creek, and Harness Creek sub-watersheds. The riparian corridors in each of these sub-watersheds double as habitat for fish, birds and other wildlife vital to the local and regional ecosystem. These streams and their buffers are also vital in transporting nutrients and minerals to the Chesapeake Bay. The Sensitive Areas that these stream corridors consist of, including the floodplains, wetlands, and wooded slopes are important to the local ecosystem and thus their health should be maintained. Figure 9-3 depicts the boundaries of the City's subwatersheds and the Critical Area, where development is already restricted in order to protect the quality of these waterways. The map on this page illustrates locations identified as Sensitive Areas, including stream corridors.

The health of riparian corridors is critical for:

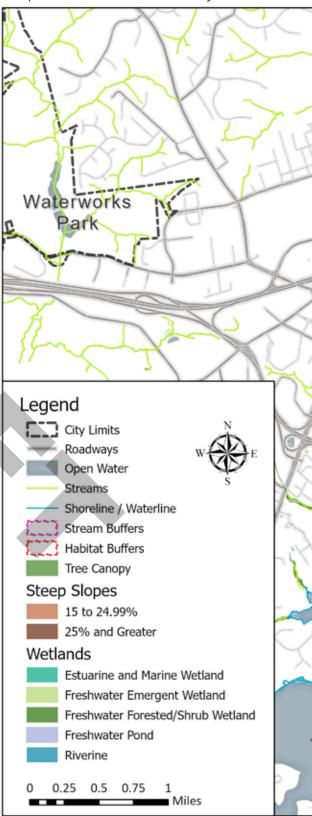
- Preserving water quality by filtering sediment before it enters rivers and streams
- Protecting against stream bank erosion
- Providing storage for flood waters both riverine and tidal
- Providing food and habitat for fish and wildlife
- Preserving open space and access to nature

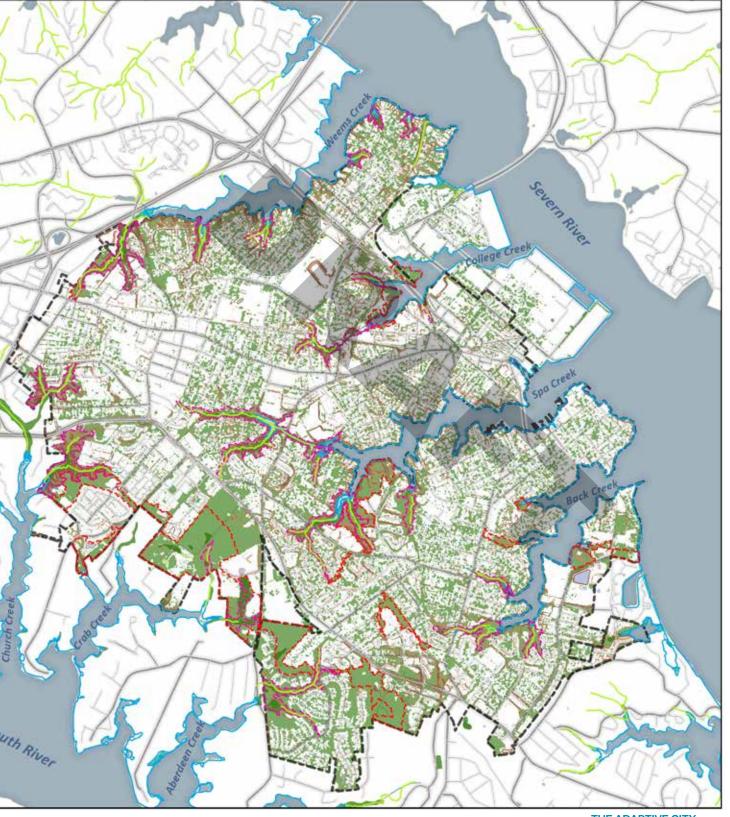
The amount of erosion occurring along the banks of each of the major watersheds and subwatersheds is indicative of the health of their respective riparian

FIGURE 9-18: MAP OF SENSITIVE AREAS

Source: City of Annapolis / MD DNR / Anne Arundel County

**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.





zones. Much of Spa, College and Back Creeks have their shorelines protected, however, there are still pockets of erosion in their upper reaches that is causing sedimentation and even land loss. On Spa Creek, this is evident at Truxtun Park and Hawkins Cove, On Back Creek near the SPCA property and at Mariners Point, on College Creek near the J. Adams Academy on Weems Creek at Harts Cove and much of the north bank (which is outside of the City).

#### **Water Quality**

Annapolis is fortunate to have an abundance of watershed-focused nonprofit organizations including the Spa Creek Conservancy, Back Creek Conservancy, Severn Riverkeeper, Severn River Association, Arundel Rivers Federation, Scenic Rivers Land Trust, the Watershed Stewards Academy, and the Oyster Recovery Partnership, which all aim to restore local waterways and protect the critical land buffers to the water. These groups have excelled at implementing a range of proven green infrastructure practices from living shorelines, to step pools, natural channel design, reconstructed wetlands, and oyster bed restoration. The City of Annapolis has collaborated with these organizations on many occasions and should continue to do so given that the City has limited capacity to oversee major restoration work or maintain the restored areas. The organizations offer the critical expertise, stewardship, funding support, and advocacy that is often needed to kick-start projects, complete them, and ensure they function as designed.

Some highlights of recent collaboration include:

- Bywater Stream and Wetland Restoration project at Kingsport
- Church Creek Headwaters Restoration -Allen Apartments Branch Project
- Street Ends Project
- Headwaters of Spa Creek Stream Restoration
- Hawkins Cove Restoration Project

Working with community groups and both public and private schools, the City has helped to set up water quality monitoring projects, based upon simple wet chemistry to determine dissolved oxygen, turbidity, pH and temperature. Over a period of time, consistent monitoring in fixed locations can provide meaningful data that will highlight trends and demonstrate changes in water quality. For more information on water quality monitoring results, refer to Chapter 10, Water Resources.

Under the City's Stormwater Management requirements, all new developments requiring site design review must implement stormwater management practices that follow the Maryland Department of the Environment's stormwater design manual. The Phase II National Pollutant Discharge Elimination System (NPDES) MS4 permit was issued in 2018 and requires municipalities including Annapolis to meet the Chesapeake Bay total maximum daily load (TMDL) for total nitrogen, total phosphorus and total suspended solids, and to treat 20 percent of impervious surfaces by 2025. According to the City's 2016 Watershed Improvement Plan, the City is credited for treating 78.7 of the 1,660 acres of impervious cover regulated by the City from best management practices (BMPs) installed since 2002. Even though there are more than 700 documented BMPs which are mapped in Figure 10-3 in Chapter 10: Water Resources, the City still has a long way to go to treat 20 percent of the total impervious cover. More information on these BMPs and projects underway to increase the amount of treatment for impervious is contained in Chapter 10: Water Resources.

A major project that is underway to address some of the stormwater treatment needs is the restoration of Hawkins Cove. The aim of the project is to create a resilient living shoreline protected from erosion, reduce the pollution entering Spa Creek and provide an open space area to support community recreation needs including public water access. Input has been gathered from the community and other stakeholders to guide the ultimate outcome of the project.



FIGURE 9-19: WATER QUALITY TESTING AT 15 SITES ON SPA CREEK AND BACK CREEK HAS BEEN CONDUCTED WEEKLY SINCE 2016 BY THE SPA CREEK CONSERVANCY, LIVEWATER FOUNDATION AND ANNE ARUNDEL COMMUNITY COLLGE. THIS MAP ILLUSTRATES THE RESULTS FROM SEPTEMBER 22, 2022 WHERE THE RED LOCATIONS ARE CONSIDERED UNHEALTHY AND THE GREEN SITES ARE CONSIDERED HEALTHY FOR SWIMMING.

Source: Spa Creek Conservancy

#### **Environmental Justice**

Located adjacent to the Annapolis' largest public housing community, the Hawkins Cove restoration is also a prime example of *Environmental Justice*, or EJ. This term has evolved since the civil rights period of the 1960's when it became evident that a disproportionate amount of harmful environmental effects from pollution were impacting lower income communities of color. Through a series of watershed events where communities began to fight for better conditions, the environmental justice movement was catalyzed. A protest event against a chemical plant in Warren County, NC, is considered the first instance of the term "Environmental Justice".

Today, Environmental Justice is a foundation for the work of the U.S. Environmental Protection Agency (EPA) which defines the term as "the fair treatment or meaningful involvement of all people regardless of race, color, national origin, or income with respect to development, implementation and enforcement of environmental laws, regulation, and policies. Fair treatment means no group of people should bear a disproportionate share of the negative environmental consequences resulting from industrial, governmental and commercial operations or policies."

In practice, Environmental Justice is used as a methodology for redistributing resources to communities that have been historically disenfranchised and reversing historic patterns of inequity and environmental racism. EJ is used by the federal government through the EPA or Centers for Disease Control (CDC) to create mapping tools such as EJ Screen, Justice 40, and the Social Vulnerability Index (which is used throughout this Plan) to highlight areas of need for increased funding to provide cleaner air, improved access to public waterways, new trees, and access to electric vehicle chargers.

While Annapolis may not show the signs of major industrial pollution that triggered Environmental Justice cases in other places, there is a clear history of environmental injustice against Black communities in the city. Today, this injustice is represented by neglected waterways in close proximity to Black communities where minimal investment has occurred until very recently. As the City works to correct this pattern of neglect, places like Hawkins Cove have become priorities for investment to both restore environmental assets and provide new amenities to nearby residents.

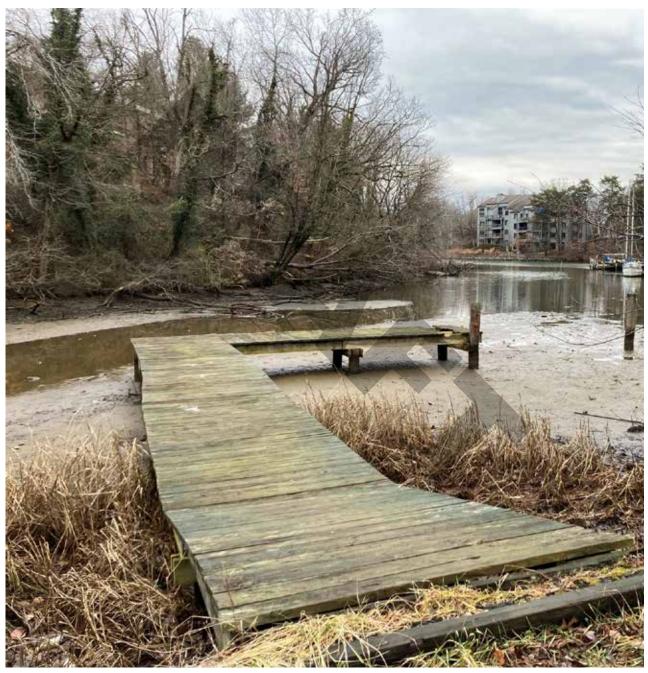


FIGURE 9-20: THE RESTORATION OF HAWKINS COVE IS A CITY PRIORITY BECAUSE IT WILL ADDRESS MUTLIPLE CITY ENVIRONMENTAL GOALS INCLUDING WATER QUALITY IMPROVEMENT, HABITAT ENHANCEMENT, WATER ACCESS, AND ENVIRONMENTAL JUSTICE

Source: City of Annapolis

#### **Habitat and Biodiversity**

Annapolis is a certified Wildlife Community under the National Wildlife Foundation's Community Wildlife Habitat Program. Locations and entities around the City including schoolyard habitats, open spaces, places of worship, and workplaces all participate in contributing to the designation. Many of the City's parks including Truxtun Park, Ellen O. Moyer Nature Park at Back Creek, and Waterworks Park are also certified. Of the habitat not included in City-owned parks, some of it is protected under conservation easements, while other areas simply have no form of formal protection. In 2016, the City was designated as a Bee City USA affiliate for promoting healthy, sustainable habitats for bees and other pollinators.

Habitat, especially coastal habitat, is threatened by climate change and environmental degradation. As water rises and warms, the habitat conditions for native species, that has long supported them, is permanently altered. Protecting these sensitive coastal habitats, that countless symbiotic flora and fauna depend on, is of utmost importance. The restorative properties of healthy habitat cannot be understated enough in fostering resilience to climate change and natural hazards in addition to their status as Sensitive Areas.

Much of this fertile habitat lies in the unbuildable sections of the city where wetlands and steep slopes are the norm. Though much of Downtown Annapolis and Eastport abut the shore of Spa Creek, the headwaters of Spa Creek in Truxtun Park and to the west of the Bates Athletic Complex form some of the most vital contiguous areas of stream buffer. Most of the City's freshwater and estuarine wetlands coexist with these two large stream buffers. Because of residential neighborhoods around the periphery of and between them, these sensitive habitat areas are for the most part disconnected from one another. However, there is a near-continuous corridor of habitat south of Forest Drive, where development is sparser and less dense.



FIGURE 9-21: THE CITY HAS A SUBSTANTIAL AMOUNT OF PROTECTED HABITAT HELD IN CONSERVATION EASEMENTS.

Source: City of Annapolis

Prioritizing habitat restoration typically begins with an understanding of existing wildlife corridors that can be enhanced in addition to understanding the range of species that rely on the habitat or once did. The greenway map described in Chapter 7, Community Facilities, illustrates what a connected network of these corridors could be. However, as the greenway map also makes clear, there are many gaps in the potential network defined by lack of tree canopy or other diverse native vegetation, and high amounts of impervious coverage. These are the locations in the City that experience the greatest impacts from extreme heat due to impervious cover as indicated in Figure 9-14 also merit consideration as Sensitive Areas in need of critical greening. These areas, if enhanced with new planting and reduction of impervious cover will help to bridge the gaps between existing areas of habitat.

#### **Air Quality**

The cleanliness of the air can be directly attributed to the quality of the environment, and if not managed can have chronic impacts on human health. A changing climate affects air quality through the production of aeroallergens like pollen and mold spores and with increases in regional ambient concentrations of ozone, fine particles, and dust. These pollutants can cause or worsen respiratory disease particularly in vulnerable populations.

The Maryland Department of the Environment (MDE) reports on air quality regionally through its Ambient Air Monitoring Program for ground-level concentrations of criteria pollutants and air toxics, as required by the EPA. In 2015, a more protective healthbased air quality standard for ozone was instituted, meaning the benchmark to meet for attainment is even higher. Despite the more stringent standard, the ozone classification assigned to Anne Arundel County actually improved from moderate to marginal between 2008 and 2015. The county is still listed as a nonattainment area but is at the lowest level of severity, as are many other jurisdictions in the region. Air quality improvement across the region is notable given air quality's tendency to depend on sources of pollution more broadly than locally.

Air quality in Annapolis is also closely tied to both tree canopy, which helps to capture greenhouse gases from the air (an analysis of which is provided earlier in this chapter) and vehicle emissions as a major source of greenhouse gases, which are addressed below in the section related to carbon reduction. Annapolis is somewhat fortunate to not have any major point sources for harmful emissions from factories, industrial farms, landfills, or energy production facilities. The U.S. Environmental Protection Agency (EPA) defines point source pollution as "any single identifiable source of pollution from which pollutants are discharged, such as a pipe, ditch, ship or factory smokestack." The two major highways near Annapolis, US-50 and I-97, aggregate harmful emissions through the large

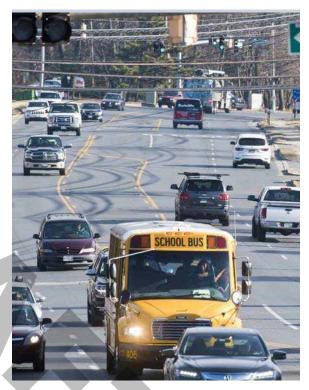


FIGURE 9-22: VEHICLE EMISSIONS FROM MAJOR ROADWAYS IN THE ANNAPOLIS AREA SUCH AS FOREST DRVE ARE THE LARGEST SOURCE OF GREENHOUSE GAS.

Source: Capital Gazette

volumes of gasoline-powered vehicles they carry, particularly freight vehicles, and are considered significant non-point sources of pollution. Regulating emissions from these sources would happen through the ongoing transition away from internal-combustion engines which is further described below. However, Annapolis is impacted by emissions from point sources in the broader region and even farther afield as prevailing winds will carry harmful emissions thousands of miles. To best address air quality improvements in Annapolis, efforts must be directed at the factors the City can control, namely tree canopy preservation and enhancement, and vehicle emissions reductions, as well as coordinate with other jurisdictions at the regional and state levels which control how other sources of pollution impacting Annapolis are regulated.

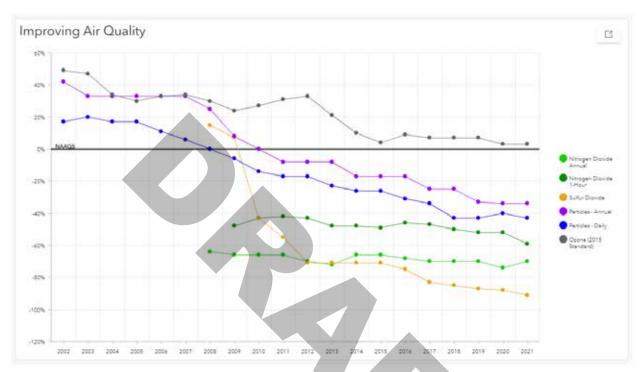


FIGURE 9-23: WHILE MARYLAND'S AIR QUALITY IS OFTEN STRONGLY INFLUENCED BY TRANSPORTED POLLUTION FROM NEIGHBORING STATES, PROGRESS HAS BEEN MADE IN REDUCING BOTH TRANSPORTED POLLUTION AND POLLUTION FROM LOCAL SOURCES.

Source: Maryland Department of the Environment

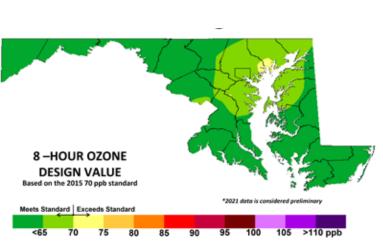


FIGURE 9-24: MOST OF MARYLAND INCLUDING ANNAPOLIS MEETS THE NATIONAL STANDARD FOR 8-HOUR OZONE DESIGN VALUE. A DESIGN VALUE IS A STATISTIC THAT DESCRIBES THE AIR QUALITY STATUS OF A GIVEN LOCATION RELATIVE TO THE LEVEL OF THE NATIONAL AMBIENT AIR QUALITY STANDARDS (NAAQS).

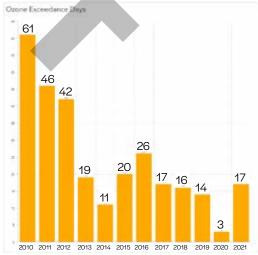


FIGURE 9-25: DAYS IN WHICH THE STATE HAS EXCEEDED NATIONAL STANDARDS FOR OZONE HAVE DECREASED DRAMATICALLY OVE THE LAST DECADE.

Source: Maryland Department of the Environment

THE ADAPTIVE CITY ENVIRONMENTAL SUSTAINABILITY 313

# **Carbon Footprint**

#### **Municipal Energy Usage**

The City has not completed an Energy Inventory of municipal facilities and operations or a Community-wide Energy Inventory since 2008, which was done in conjunction with the Sustainable Annapolis Community Action Plan. Unfortunately it is difficult to set carbon reduction goals without having current baseline data to inform the policy. However we do know the types of efforts which are required for cities to meet dramatic carbon reduction goals, many of which are highlighted below. Other factors are tied to land use and transportation which are better documented in the chapters dedicated to those topics.

However, an update to the 2008 Energy Inventory is expected to be completed in 2022, and numerous energy saving programs and tools have been implemented since the last inventory. Based on the 2008 Inventory, within city government the largest contributors to greenhouse gas emissions are the vehicle fleet (28.6%), water and sewage systems (26.6%), and city buildings (24.6%). In terms of total energy consumption, the vehicle fleet takes up an even larger share at 44.0%, while buildings and water/ sewage systems make up 25.5% and 22.8% of energy usage, respectively.

In 2020, the State updated the Greenhouse Gas Emissions Reduction Act signed into law in 2016 to increase the reduction goal from 40% of statewide emissions at 2006 levels by 2030 to 50%. This is more in alignment with the Intergovernmental Panel on Climate Change's (IPCC) finding that emissions among developed countries need to be net zero by 2045. Since the state's largest sources of emissions are from transportation and electricity generation, the plan focuses most heavily on programs and investments in these areas. In adopting the City of Annapolis' resolution to uphold the commitments



FIGURE 9-26: THIS VENN DIAGRAM ILLUSTRATES THE SHARED QUALITIES OF CITIES WHICH ACHIEVE OR ASPIRE TO ACHIEVE NET ZERO CARBON EMISSIONS.

Source: Coalition for Urban Transitions

within the United Nation Paris Climate Agreement in 2017, the City has continued to work toward reducing its emissions.

#### **Energy Sources and Renewable Energy**

Waterworks Park is now home to the nation's largest solar energy park constructed on a closed landfill at 55,000 solar panels on 80 acres of land and a production capacity of 18 megawatts. The Annapolis Solar Park, made fully operational in 2018, is supported by power purchasing agreements with the City, Anne Arundel County, and the Anne Arundel County Board of Education. The State offers many



FIGURE 9-27: ACCORDING TO THE EPA, THE ANNAPOLIS SOLAR PARK AT WATERWORKS PARK IS THE LARGEST SOLAR INSTALLATION ON A CLOSED LANDFILL IN NORTH AMERICA.

Source: Reliable Contracting

residential incentive programs for energy use and efficiency. Energy efficiency programs include grants to low and moderate income households, and loans for homeowners, to make a variety of efficiency upgrades. Subscriptions to community solar arrays, low income solar pilot grants, residential clean energy rebates, and residential wind energy grants are just some of the other programs offered.

Even with gradual reduction in reliance on fossil fuelbased energy, according to the Energy Information Administration (EIA), as a whole, Maryland still generates a slight majority of its electricity from coal and natural gas. However, coal-fired power plants are now the 3rd largest source of energy generation, a substantial reduction from a decade ago when they were still the greatest source of electricity. Nuclear power, at 38.8% of total utility-scale electricity generation, is now the largest source of energy in the state. Customers of BGE, the sole utility-scale electricity provider serving Annapolis, then get their energy from a similar breakdown of these sources.

#### **Buildings**

At the community-wide scale, buildings contribute roughly two-thirds of total emissions, with commercial at 31%, residential at 27%, and industrial at 9%. Buildings contribute a similar amount to the community's overall energy use at 65%. Commercial makes up 29% of total energy use, residential makes up 24% and industrial 12%.

As required under the City's building code, last updated in 2020 to be in accordance with state code and Maryland's High-Performance Building Program, any new construction or major modification to a commercial or mixed use building greater than 7,500 square feet, any public building, any single family dwelling over 3,250 square feet, and five or more single family dwellings in a subdivision, must meet an appropriate level rating in the LEED rating system as certified by the United States Green Building Council (USGBC). Expectedly, newer construction in the city have a smaller environmental footprint than older buildings and are more energy efficient. In 2022, the City joined the National Building Performance Standard (BPS) Coalition as a commitment to inclusively design and implement building performance standards and complementary policies and programs to drive investment in building retrofits that increase clean energy use, reduce overall energy use, and lower housing and energy costs.

Annapolis first adopted green building standards in 2008 but has made very few updates to these standards since then despite the evolving impacts of climate change, significant advances in building technology, and greater awareness of sustainable design strategies. With this Plan's substantial focus on the creation of more housing options for moderate income workforce households (see Chapter 5: Housing), there is an urgent need to ensure that the City's green building standards lead to positive outcomes for all new housing. The standards should be amended to address all new housing regardless of size; construction inspections should include at least a partial checklist related to green building requirements to ensure the intent of the standards is being met; and for larger projects, a post-occupancy review should be considered to assess the performance of the standards.

#### **Transportation**

At the municipal level, transportation is the single largest energy consumer and by a lesser margin,



FIGURE 9-28: EV CHARGER AT PIP MOYER RECREATION CENTER

Source: BGE







#### FIGURE 9-29: EV CHARGER OPTIONS

Source: BGE

emitter. The most significant culprits are the bus fleet, and police and fire vehicles, contributing over twothirds of all transportation energy use collectively. Despite improvements to the bicycle and pedestrian network and expansion in mobility options in the last decade, the most common form of mobility in the community is by personally-owned vehicle. As residents commute to work in Washington D.C., Baltimore, and other regional employment hubs, the simplest option is to go by car, which is also the least environmentally-sensitive option. Transportation through vehicle miles travelled in Annapolis, even with improvements in vehicle efficiency, contributes a large portion of the total emissions at the community-wide scale. The breakdown in modes of transportation residents use for getting to work and other trips can be found in Chapter 6, Transportation. There, a more detailed assessment of transportation modes and of the City's transit services can also be found. The City's aging transit fleet, although serving as a better option than personal vehicles, also contributes to some of the transportation-based emissions. A shift to electric buses, in addition to a conversion of the City's fleet vehicles, could drastically reduce the emissions borne from City municipal vehicles.

# **Electric Vehicle (EV) Charging**

Electric vehicles have become a more viable alternative to internal-combustion engine vehicles over the last decade as availability has increased substantially, prices have dropped, and a range of rebates are now offered to consumers on vehicles and charging equipment from Federal and State of Maryland agencies, as well as from BGE.

To support further adoption of EV technology, which emit far less greenhouse gases, accessible charging stations are needed. The City and Anne Arundel County, in partnership with BGE, has begun installing electric vehicle charging stations at key public facilities and parking garages including the Michael E. Busch Annapolis Library and the Pip Moyer Recreation Center, which was the first installation of BGE's public changing network in Central Maryland. Continued partnership with BGE will be critical to increasing access to charging stations. All City facilities must lead by example, and this is beginning with charging infrastructure at the new Public Works facility currently under construction on Hudson Street, and the design for the reconstructed Hillman Garage which boasts thirty charging stations in its current design. In addition to adding stations at public facilities, updates to off-street parking requirements in the City's code of ordinances would have a significant impact on access at commercial and residential properties.

#### Food

#### **Food Insecurity**

Generally speaking, Annapolis has sufficient access to food compared with more isolated locales. However, one of the long rooted products of inequity not only in Annapolis but in many other cities across the country, is the discrepancy in the quality of food available to communities. Depending on where you live and your economic status, access to a grocery store or other adequate food supply can vary greatly. Being within walking distance to a source of healthy food is more important in low income communities where access to a vehicle is lower. More often, it is in these areas that there is little to no access to fresh fruit, vegetables, and other healthy foods, attributed to a lack of grocery stores, farmers markets, and other healthy food providers, thus meeting the definition for a "food desert".

Causes of food inequity in neighborhoods with limited access to healthy food range from transportation challenges to the convenience of unhealthy food nearby to the perceived investment risk of locating supermarkets in lower-income areas. The recent COVID-19 pandemic exacerbated food access issues as food prices increased, stores closed or reduced hours in some cases, and many families faced economic hardship. One area of the city classified as a food desert by the USDA according to 2019 data is the Eastport neighborhood between Tyler Avenue/ Hilltop Lane and Adams Street to the west of Bay Ridge Avenue, where there is a high rate of poverty for the region, low vehicle access, and poor proximity to supermarkets. Although the area once supported a grocery store, today many residents rely on seasonal farm produce stand operating in the parking lot of the Eastport Shopping Center or convenience stores.

Even though the Murray Hill neighborhood also has relatively poor access to a supermarket, the rate of poverty is much lower and so the need is not as



FIGURE 9-30: CONVENIENCE STORE ON WEST STREET Source: City of Annapolis

significant. The map on the facing page reveals that while supermarkets may be within a 10 minute drive for many, for those without access to a vehicle, the trip is out of reach. In contrast, the Parole neighborhood has more than sufficient access to supermarkets by foot or bike with several in the Greater Parole area, although many of the streets connecting residents to these groceries are not adequately safe for pedestrians and cyclists.

# **Regional Foodshed**

Being a relatively urban area with little excess land, agriculture inside the city limits is relegated to very small-scale operations. Yet, Annapolis can still take advantage of the local agriculture economy as a primary market for nearby farms. Farmers' markets serve as a gateway to the agricultural producers in the area, offering fresh, local produce. The benefits of local agriculture and supporting local agriculture can be reflected in the economy, the health of residents, and the environment. Food that comes from local farm businesses tends to be more nutritious and produce a smaller environmental footprint as transportation costs are reduced. The support of the local farms then

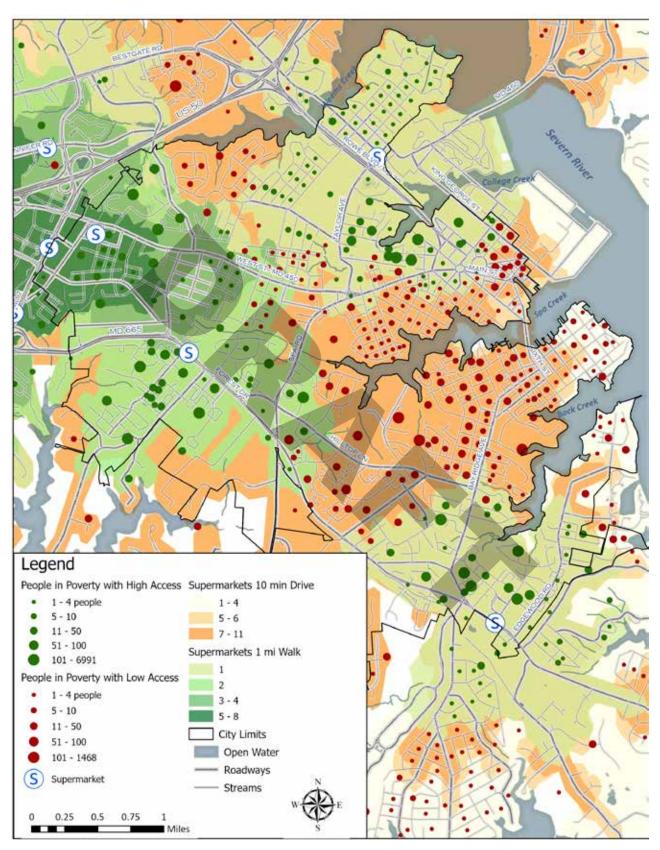


FIGURE 9-31: MAP OF FOOD ACCESS

allows those farms to sustain themselves, contribute to the economy, to the community, and in many cases preserve the unique landscape and architecture that defines a place.

Most of the local agriculture operates in Anne Arundel County, predominantly west and south of Annapolis. Anne Arundel County preserves its agricultural land to abate development pressure through a variety of policy tools including zoning for rural land uses; the allowance for various types of agritourism as a conditional use though an ordinance adopted in 2017; the allowance of "9 to 15 annual farm or agricultural heritage site special events" as a conditional uses, and the allowance of "16 to 30 annual farm or agricultural heritage site special events" and "farm or agricultural heritage site stay" by special exception, through an ordinance adopted in 2020. In addition, there are four different programs administered by the County or State: the Maryland Agricultural Land Preservation Foundation (MALPF), the Anne Arundel County Agricultural and Woodland Preservation Program, the Rural Legacy Program, and the Community Connections program.

Anne Arundel County Farmers' Market (AACFM) is the only farmers market of significant size serving the Annapolis area. Launched in 1981 by the Anne Arundel County Office of Planning and Zoning, AACFM is now a privately-managed Agricultural Service Corporation which runs the market on behalf of its members, but which continues to use the market pavilion built and owned by Anne Arundel County on Riva Road at Harry Truman Parkway. The market operates year-round on Sunday mornings, April through December on Saturday mornings, and June through December on Wednesday evenings.

The Anne Arundel Medical Center operates a smaller farmers market on Friday mornings June through October called Energize Farmers Market. In 2022, the Farragut Farmers Market was established to provide more accessible healthy food in the Ward 2 area of Annapolis. The market uses underutilized

land at the Navy Marine Corps Memorial Stadium through a partnership with the Naval Academy Athletic Association and operates on Sunday mornings June through August. These markets are a clear asset to the Annapolis community, and both markets honor numerous payment programs aimed at serving lower income customers, but there is still an unmet need for better access to healthy foods for many residents of Annapolis. Efforts should be made to broaden the reach of the farmers' markets to communities with a documented need for improved access to healthy food. This could be done through new partnerships with these existing market operators or other mission-based organizations and businesses.

# **Nutritional Trends in the City**

Arguably one of the greatest contributors to good health is nutrition. The city received recognition for its success in providing healthy food in the community. In 2015, the National League of Cities (NLC) awarded Annapolis for its work with the Let's Move! Initiative. It was awarded for displaying the U.S. Department of Agriculture's MyPlate program in 100% of city- or county-owned or operated venues that serve food, for having at least 60% of schools participate in the School Breakfast Program, and for having at least 30% of city- or county-owned or operated venues that serve food having implemented a policy for healthy and sustainable food service guidelines aligned with the Dietary Guidelines for Americans. Further, the Department of Recreation and Parks provides healthy snack and drink choices in vending machines at many City of Annapolis buildings. Further solutions to poor nutritional food access, particularly in the food desert of lower Eastport, could be in the form of community gardens and urban farming projects. Expanding access to local nutritious food in Annapolis not only improves the health of residents, it improves the quality of the environment in providing new planted areas, expanding biodiversity, reducing emissions required for obtaining food, and fostering community stewardship of natural resources.



FIGURE 9-32: ANNE ARUNDEL COUNTY FARMERS' MARKET

Source: Paul W. Gillespie / Capital Gazette



FIGURE 9-33: FARRAGUT FARMERS MARKET LOGO

Source: Farragut Farmers Market

# **Waste**

# **Waste Generation and Collection**

Waste, if not collected, becomes a major source of pollution and emissions. The Department of Public Works continues to operate curbside collection programs for recycling, yard trim, and refuse. Recyclables collected include paper, plastic, metal, and glass products. The City's curbside collection program has been successful in reducing the amount of waste going to landfills. The City currently contracts these collection services through a private contractor, which was determined to be more cost-effective than collecting the materials with City staff. Given that the City no longer operates a landfill, the collected waste and recycling is processed outside of the City.

A list of recent City accomplishments in the area of solid waste management appears below.

- The number of residential customers on each collection day was balanced to improve efficiency.
- A multi-year refuse disposable contract was negotiated in order to have some predictability from year to year.
- An Intergovernmental Agreement was executed with Prince Georges County for the processing of yard trim which creates a marketable compost. This provided the City predictability as well as a cost savings from past practices.
- The City partnered with Anne Arundel County to share in the cost of household hazardous waste disposal from City residents.
- The City enhanced the collection of metal and non-metal bulk for residential customers. Metal bulk is able to be scheduled for collection and up to 3 non-metal bulk items can be placed at the curb on each collection day.



# know where it goes.

# FIGURE 9-34: BRANDING FOR THE ANNAPOLIS RECYCLING PROGRAM

Source: City of Annapolis

- In order to increase recycling tonnage, the City provided residential customers with large 64 gallon recycling carts in addition to the smaller 32 and 18 gallon containers.
- In order to eliminate plastic bags from yard trim collection, the City provided residential customers with 64 gallon yard trim carts.
- In order to reduce contamination in the recycling stream, the City embarked on a multi-faceted campaign to better educate residential customers. First, film plastics and plastic bags were prohibited in the recycling containers. Second, recyclables were required to be loose in the recycling container. Lastly, the education on the acceptable and non-acceptable items was increased..
- An aggressive on-going enforcement program to maintain a high quality recycling stream has been established through a tag-and-leave stickering program.

- The City employs a wide range of methods to communicate with its residents including direct-mail postcards, social media posts and a comprehensive solid waste and recycling website.
- The City has created a new brand titled Rethink Recycling and has established a recycling challenge on its website. Metrics on the amount residents recycle on each collection provides for ongoing tracking of program improvements.
- Public works acquired a new phone app "TextMyGov" that works in concert with the work order management system (IWorqs) to report problems or receive notification via text message for refuse, recycling and yard trim.
- The City enhanced the enforcement of the curbside collection contract by utilizing a vehicle tracking software program (Network Fleet) that provides real-time locational data.
- The City worked with Annapolis Green to have a drop-off location for pumpkin collection at the end of the fall season.

#### **Waste Reduction Efforts**

In addition to its ongoing recycling program, the city recently initiated a food composting pilot program running from October 1, 2021 through March 30, 2022 to demonstrate the feasibility and impact of food waste collection as a municipal service. This program stemmed from a 2019 feasibility study commissioned by the City to explore the establishment of an organics resource recovery facility to be sited near Waterworks Park. As part of the program, two food waste composting options are planned including a curbside pilot program serving the Hunt Meadows community and a food waste drop-off location at Truxtun Park.

Another initiative aimed at waste reduction and broader environmental goals is the effort to discontinue the use of plastic bags. Both the city and state have explored passing legislation to ban the use and sale of plastic bags, a major source of harmful waste, in all retailers.



That's equal in weight to

800,000

pounds of those recyclable materials are contaminated with trash.



Not only do these unnecessary materials take up landfill space, but we lose the ability to manufacture new materials and save precious resources.

FIGURE 9-35: RECYCLING TRENDS

Source: City of Annapolis

#### **Behavior and Education**

Whether it's waste reduction, energy use, tree canopy enhancement, or other priorities, meeting goals for environmental sustainability will rely on a collaborative approach that must include much more than action by the City and coordination with partner agencies and community stakeholders. It will also rely significantly on changing the behavior of residents and businesses who in many respects are on the front lines of climate change. Given that the impacts of climate change on Annapolis have been dramatic and highly visible, residents are generally well aware of what's at stake. What may be less clear to residents and businesses is the impact their own actions and policies can have in stemming the effects of climate change. This is part of the rationale for the shifting to a creekshed framework with future small area planning as explained in Chapter 4, Land Use. It provides a way of better connecting communities to the creeks which are impacted by their actions.

While the City can do more in the way of programs that help to foster an environmental ethic, these programs are often more effective when they emanate from the community, ideally with the support of the City government. Fortunately, there are a number of highly effective citizen-led initiatives aimed at addressing this ethic. Anne Arundel County Watersheds Stewards Academy is one example which focuses on training an annual cohort of leaders who are trained to address stormwater management issues in their communities through a variety of green infrastructure practices. The work of this group, and its growing list of graduates who become community advocates and ambassadors, can be found throughout the Annapolis area. The work of Annapolis Green is equally important to highlight. Celebrating its 15th year of existence in 2022, the group has spearheaded numerous community initiatives and is currently leading the City's composting pilot programs. Perhaps the group's most visible work however is in promoting electric vehicles and charging in Annapolis. Its annual Electric Vehicle Showcase event has grown to become a major draw to the City Dock, attracting residents, businesses,



utility providers, and elected officials. Promoting and supporting these types of initiatives will be critical to advance the following environmental sustainability goals, metrics, and recommended actions.



FIGURE 9-36: ANNE ARUNDEL COUNTY WATERSHED STEWARDS ACADEMY COMMUNITY PLANTING EVENT

Source: Anne Arundel County Watershed Stewards Academy

# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

## ENVIRONMENTAL SUSTAINABILITY GOAL ES1

PRACTICE A COMPREHENSIVE AND EQUITABLE APPROACH TO RESILIENCE THAT IS RELEVANT TO ALL RESIDENTS.

#### **PERFORMANCE MEASURE 1**

A Resilience Plan is adopted by the City by 2025 with annual updates on implementation.

#### **PERFORMANCE MEASURE 2**

The CIP includes resilience-related projects in all Wards.

- ES1.1 For the purposes of ensuring equity in resilience investments, utilize the definition of Sensitive Area provided in this Plan that includes not only natural resource areas of significant value but also areas deficient in ecological value.

  Based on this definition, a place with both high impervious coverage and lacking in tree canopy would be deemed a Sensitive Area.
- ES1.2 Complete the City's Resilience Plan and ensure that it includes an emphasis on equitable resilience for communities with higher social vulnerability.
- ES1.3 Create a strategy for implementing "resilience hubs" within the City's most socially vulnerable communities based on the Maryland Energy Administration funding guidelines.

- ES1.4 Utilize the creekshed small area plans recommended in this Plan as a means to identify specific opportunities for neighborhood-scale resilience investments. (see Chapter 4: Land Use for more detail on the creekshed planning framework.)
- ES1.5 Work with Anne Arundel County to leverage the full capabilities of the newly created Resilience Authority to implement projects that not only protect the City from sea level rise and other climate change impacts but also improve ecological functions.
- ES1.6 Work with BGE, Anne Arundel County, NSA-Annapolis, and other partners to implement the recommendations of the Military Installation Resilience Response Study (MIRR), particularly to ensure a strategy is in place for energy resilience.
- ES1.7 Include the Naval Academy's Sea Level Rise Advisory Council (SLRAC) as a stakeholder in resiliency planning efforts. The SLRAC focuses on sea level rise and coastal flooding impacts on the operational requirements of the Naval Academy and NSA-Annapolis and advises Federal leadership on these issues.

EXPAND THE CITY'S TREE CANOPY PARTICULARLY WITHIN HEAT ISLANDS AND ALONG RIPARIAN CORRIDORS.

#### **PERFORMANCE MEASURE 1**

No net loss of tree canopy by 2028

#### **PERFORMANCE MEASURE 2**

Increase the City's tree canopy to 50% of its total land area by 2040.

#### **PERFORMANCE MEASURE 3**

Establish a consistent budget line is introduced in the City's capital budget for tree planting and proactive tree maintenance.

- ES2.1 Introduce new city policies that increase tree planting in residential areas of the city, protect heritage trees, control invasive vines, and expand mitigation planting requirements within the Critical Area.
- ES2.2 Create an Urban Forest Master Plan that includes updates to the City's Street Tree standards, new guidelines for tree preservation, and priority areas feasible for new tree planting in the public realm.
- ES2.3 Initiate a pilot planting and tree canopy management program for Minority-owned businesses based in the communities where the work is targeted.

- **ES2.4** Develop soil amendment and watering guidelines for new street trees to enhance the survival rate of new street trees.
- ES2.5 Promote and expand RePlant Annapolis, a community tree planting initiative in partnership with the Watershed Stewards Academy modeled after the RePlant Anne Arundel program.
- ES2.6 Create an online dashboard for tracking the City's tree canopy year by year to ensure the goal of 50% coverage is met by 2040.
- Es2.7 Continue to utilize fees collected through Critical Area mitigation and Forest Conservartion mitigation for new tree planting initiatives across in the City.
- **ES2.8** Establish a consistent budget line item in the Capital Improvement Program for tree planting and proactive tree maintenance.
- ES2.9 Explore opportunities to plant trees on institutional properties within the city limits such as those owned by HACA, Anne Arundel County schools and libraries, State of Maryland offices, and the Navy, for the purposes of meeting mitigation requirements and the general tree canopy goals. (also listed in Chapter 4: Land Use under goal LU6)
- **ES2.10** Support the establishment of a dedicated non-profit advocacy organization focused on tree canopy preservation, enhancement, and expansion.
- ES2.11 Use the City's forest conservation requirements to direct conservation and afforestation in ways that build larger networks of connected forests. (Also listed in Chapter 4: Land Use under goal LU6)

REINFORCE VULNERABLE SHORELINE AREAS BY ADDRESSING THE ROOT CAUSES OF SOIL EROSION AND NATURAL LANDSCAPE DEGRADATION.

#### **PERFORMANCE MEASURE 1**

A comprehensive erosion control and slope stabilization plan is commenced at Truxtun Park by 2023 and completed by 2025.

#### **PERFORMANCE MEASURE 2**

At least two living shoreline, stream restoration, or oyster bed restoration projects are implemented by the City or local partners every year.

- ES3.1 Conduct a flood resilience study for the Eastport Peninsula to identify feasible strategies for flood mitigation.
- ES3.2 Continue to work with HACA and other community partners to create a community nature park at Hawkins Cove with a living shoreline, restored stream channel, public water access, naure play area, and improved trail connectivity to Truxtun Park. (also listed in Chapter 7: Community Facilities under Goal CF3)

- ES3.3 Develop a comprehensive erosion control and slope stabilization plan for Truxtun Park's waterfront areas including priority actions.
- ES3.4 Work with local partner organizations and public agencies to augment and maintain existing living shorelines, stream restorations, wetland restorations/creations, and oyster bed restorations/creations, both within the city and along riparian areas that impact city waterways.
- ES3.5 Conduct an assessment of existing wetlands within the city which prioritizes opportunity areas for wetland restoration and expansion.
- **ES3.6** Explore the feasibility of a buyout program for flood-prone properties in Annapolis that could be converted into public waterfront open space. Such a program would expand on a pilot program developed by Anne Arundel County.
- ES3.7 Promote the use of natural shoreline solutions over gray infrastructure to create shoreline resilience to climate change impacts; as part of such efforts, expand public education to property owners of the resilience value of creating natural shorelines and retaining vegetation, particularly trees, on waterfront properties.

PROMOTE A COORDINATED APPROACH TO FOOD ACCESS THAT ENSURES ALL RESIDENTS HAVE ACCESS TO HIGH OUALITY FOODS AND LOCALLY HARVESTED FOODS.

#### **PERFORMANCE MEASURE 1**

Elimination of food deserts by 2030.

#### **PERFORMANCE MEASURE 2**

At least four (4) pop-up events focused on local and/or healthy food organized annually within the City.

- ES4.1 As part of the City's Resilience Plan, create a map of food deserts and/or healthy food access gaps to help prioritize interventions.
- ES4.2 Work with public and private partners to create new opportunities for farmers markets and other healthy food pop-up events within food deserts and other socially vulnerable communities.
- ES4.3 Work with Recreation and Parks staff, Master Gardeners program, and/or other partners to create more opportunities for community gardening education, creation, and stewardship.
- ES4.4 Work with Recreation and Parks staff and other partners to expand opportunities for recreational fishing and crabbing.
- ES4.4 Work with the Maryland Department of the Environment and Department of Natural Resources to promote current fish consumption advisories and a program of regular testing of fish from local waters. (Also listed in Chapter 10: Water Resources under Goal WR3)

# INCREASE THE CITY'S BIODIVERSITY PARTICULARLY IN AREAS THAT CURRENTLY HAVE LIMITED ECOLOGICAL VALUE.

#### **PERFORMANCE MEASURE 1**

All new and improved parks and open spaces in the City include plantings or other natural features that will increase biodiversity.

#### **PERFORMANCE MEASURE 1**

No net increase in impervious coverage.

- ES5.1 Prioritize new planting and restoration work to increase biodiversity using the Environmental Enhancement areas identified on the Future Land Use Map in this Plan.
- ES5.2 Develop management guidelines for conservation easements, and particularly in regard to parcels identified as Environmental Enhancement areas on the Future Land Use Map in this Plan.
- ES5.3 Prioritize potential conservation easements on the Greenway Map included in this Plan that are contiguous with existing conservation areas. (see Chapter 4: Land Use for detail on the Greenway Map)
- ES5.4 Promote the City's Pollinator Friendly Garden and Certified Wildlife Area programs to increase the population of pollinating insects and birds and wildlife habitat.
- ES5.5 Work with the Annapolis Environmental Commission, the Annapolis Conservancy Board, RePlant Annapolis, Save Our Trees, and other partners to create a comprehensive stewardship guide and training program for city residents aimed at preserving and expanding biodiverse areas.
- **ES5.6** Explore amendments to the City's site design standards that will increase biodiversity.

SHRINK THE CITY'S CARBON FOOTPRINT THROUGH A COMPREHENSIVE APPROACH THAT INCLUDES COORDINATED POLICIES AND INVESTMENT.

#### **PERFORMANCE MEASURE 1**

Achieve a 60% reduction in greenhouse gas emissions by 2031, and net-zero emissions by 2045\*

#### **PERFORMANCE MEASURE 2**

A city government greenhouse gas emissions inventory is completed by 2024, and a community greenhouse gas emissions inventory is completed by 2025.

#### **RECOMMENDED ACTIONS**

- ES6.1 Implement the recommendations of the City's compost study, including a curbside compost pilot project and the development of a Citymanaged composting facility.
- ES6.2 Plan for the transition of the City's fleet vehicles and transit vehicles to zero emissions vehicles with the goal of complete transition by 2030 (also listed in Chapter 6: Transportation under Goal T3)
- ES6.3 Work with partners to establish more public car-charging stations in Annapolis, particularly downtown, as well as policies to increase

- charging stations at existing multifamily and commercial developments. (also listed in Chapter 6: Transportation under goal T3)
- ES6.4 Study and propose reductions to the City's parking requirements for all land uses to incentivize the sensible development of underutilized land (as defined in the glossary of this Plan), reduce impervious coverage, improve stormwater management performance, and encourage walking, biking, and transit use, among other benefits to the City. (Also listed in Chapter 4: Land Use under Goal LU2 and Chapter 6: Transportation under Goal T3)
- ES6.5 Update the City's Green Building requirements to include new standards for energy efficiency, water efficiency, and site design for all new residential buildings regardless of size; new inspections protocols; and explore the feasibility of a post-occupancy study requirement for larger projects. (also listed in Chapter 5: Housing under Goal H4)
- **ES6.6** Develop planting guidance for maximum carbon absorption for all public and private properties.
- ES6.7 Complete inventories of greenhouse gas emissions from both city government and community level sources.
- ES6.8 Create policies to increase solar power and green roofs in all new development projects and for building retrofits.
- ES6.9 Require all new City facilities to include solar power when adequate sun exposure is available, and maximize energy efficiency measures, use of low carbon building materials, adoption of green maintenance practices, as well as conversion of maintenance equipment to electric options.

\*These values are consistent with the Climate Solutions Now Act, enacted by the Maryland Legislature in 2022.

THE ADAPTIVE CITY ENVIRONMENTAL SUSTAINABILITY 331

REDUCE THE AMOUNT OF WASTE PRODUCED IN THE CITY BY EXPANDING EXISTING PROGRAMS AND IMPLEMENTING NEW PROGRAMS.

#### **PERFORMANCE MEASURE 1**

The amount of solid waste by ton produced by the City decreases each year.

#### **PERFORMANCE MEASURE 2**

Single-use plastic bags within the City are eliminated by 2024, and all single-use plastics are phased out by 2030.

- ES7.1 Continue to explore the feasibility of a public composting facility including through a partnership with Anne Arundel County.
- ES7.2 Single-use plastic bags within the City are eliminated by 2024 and other plastics within the City's waste stream are phased out through legislation and an educational campaign each year until 2030. (also listed in Chapter 10: Water Resources under Goal WR1)
- **ES7.3** Regularly assess the performance of the City's recycling program to identify opportunities for improved performance, expansion, and educational messaging.
- **ES7.4** Continue to improve and/or expand resident awareness for how and where to properly dispose of waste materials.
- **ES7.5** Establish policies to expand recycling requirements to commercial and multi-family homes.



FIGURE 9-37: A COMMUNITY COMPOSTING PILOT PROGRAM WAS ESTABLISHED IN 2021 AT TRUXTUN PARK TO GAUGE INTEREST.

# <u>10.</u> <u>WATER</u> RESOURCES

### **OVERVIEW**

The water which made Annapolis a fitting location for settlement, and the City we know today, continues to be vital to its existence and to the people who choose to live here, work here, and recreate here. Annapolis' complex and dynamic position between the Severn and South Rivers has always meant that any impact on water inside the City's boundaries has impacts downstream and in the Chesapeake Bay. Conversely, the City is easily inundated with tidal impacts from beyond its city limits. These conditions demand that nearly everyone in Annapolis is in some way accountable for the collective stewardship of the City's water resources, whether they know it or not. Water resources in the context of the Comprehensive Plan refer to an interconnected network of water that includes the major rivers that give shape to the Annapolis Neck peninsula and the creeks that flow into them, in addition to the drinking water that flows through pipes and into homes and businesses, and in turn the water that is piped out as waste. Climate change, whose impacts on Annapolis are detailed thoroughly in Chapter 9, Environmental Sustainability, threatens to undermine that stewardship of drinking water, wastewater, and creeks and rivers alike.

Because future development will primarily occur as infill and redevelopment, the City is largely built out, as detailed in Chapter 4, Land Use. Thus the goals for water resources in this chapter encompass restoration, protection, and conservation. Rather than expanding the footprint of water and sewer infrastructure, this Chapter will examine the state of existing infrastructure, and opportunities to ensure its sustainability and resilience to future conditions and threats. The health of the City's water resources

depends on the health of those Sensitive Areas identified in Chapter 9, Environmental Sustainability. Stream corridors, habitat, and forested areas are a critical lifeline to all creeks and rivers and their respective watersheds in Annapolis.

Nearly all water which hits the surface of the Annapolis Neck peninsula, on which the City is situated, drains to the Severn and South Rivers, with Forest Drive representing an approximate dividing line between the two watersheds. The sub-watersheds of Weems Creek, College Creek, Spa Creek and Back Creek, tributaries of the Severn River, contain the majority of the City's population but face varying challenges and opportunities. Likewise, the Crab, Harness and Aberdeen Creeks, portions of which are in the City, are tributaries of the South River and pose different challenges.

In past plans for Annapolis, it has been common practice to make land use recommendations for neighborhoods, roadway corridors, and other areas of the City based on where there is opportunity for change or for improvement. A major distinction of this plan, as already mentioned in Chapter 4, Land Use, and Chapter 9, Environmental Sustainability, is to foreground the important nuances of watershed areas as the basis for future development and improvements to neighborhood quality of life to best meet the needs of residents. Therefore, the goals and recommendations found at the end of this chapter for water resources will not only guide future decisions but ultimately be integrated into watershed-based land use plans.



### **EXISTING CONDITIONS**

#### **Stormwater**

Water in the form of stormwater runoff is the greatest conduit of pollution into local waterways that feed into the Chesapeake Bay. This harmful runoff occurs when precipitation falls on impervious surfaces like roads, rooftops, sidewalks, and parking lots and picks up pollutants like fertilizer, pet waste, chemical contaminants and litter, pushing them into the nearest waterway. Managing stormwater through stormwater best management practices (BMPs) can significantly reduce the damaging effects of runoff that has increased over the years as a result of development and increased heavy precipitation from climate change. Chapter 9, Environmental Sustainability, expands on the climate change impacts from precipitation and flooding. When stormwater makes contact with soil or vegetation, it is less likely to reach streams as quickly as when it moves over impervious surfaces, or transport as many pollutants. Therefore, protection of natural areas as buffers between development and waterways becomes paramount to managing stormwater. When there are no existing natural areas available to protect, stormwater BMPs replicate the work of natural processes using specially formulated soils, strategic planting design, and drainage infrastructure to capture, filter and slow the movement of stormwater runoff.

#### **Stormwater Requirements**

Under the City's stormwater management requirements, all new developments must implement stormwater management to the maximum extent practical following the Maryland Department of the Environment (MDE) stormwater design manual which generally requires a site to be designed to

manage 125% of the stormwater it will receive. Further, following the mandates of the U.S. Clean Water Act, the Phase II National Pollutant Discharge Elimination System (NPDES) MS4 permit was issued in 2018 and requires many municipalities including Annapolis to meet the Chesapeake Bay total maximum daily load (TMDLs) for various pollutants including nitrogen, phosphorus, and suspended solids, and to mitigate the stormwater impacts of 20% of impervious surfaces by 2025. According to the City's 2017 Watershed Improvement Plan, the City is credited for treating 78.7 of the 1,660 acres of impervious cover regulated by the City from BMPs installed since 2002. To treat 20% of the untreated impervious acres means installing BMPs to treat 316 of those acres of impervious cover. Of the 741 BMPs documented as treating impervious cover, the most common types are infiltration trenches, dry wells, rain gardens, rooftop disconnections, and bioretention facilities. In 2011, the City raised the Stormwater Utility Fee, assessed as a part of the water and sewer bill, to better address the MS4 requirements. Properties with stormwater BMP's installed can qualify for a 50% discount of their utility fee, yet few properties take advantage of these incentives.

Another effective means of encouraging the installation of BMP's is the Anne Arundel County Watershed Restoration Grant Program, which funds projects to reduce pollutants flowing into local waterways through the implementation, or in some cases planning and design, of watershed restoration best management practices. Administered jointly by the County, City of Annapolis, and the Chesapeake Bay Trust, the program is funded primarily through Watershed Protection and Restoration Fee charged to all County property owners. The fee was enacted following a 2012 law adopted by the Maryland legislature "mandating that Maryland's ten largest jurisdictions assess property owners a stormwater remediation fee to provide a dedicated source of revenue for the operating, maintenance, and capital improvement expense of stormwater management programs regulated and required by the State and Federal governments". In 2022, \$327,000 was

available for projects within the City while \$1M was available for projects outside of the City in Anne Arundel County. While the funds are available to all property owners in the County, the program has been widely used by various institutional organizations including local watershed groups; community and homeowner associations; service, youth, and civic groups; and faith-based organizations which partner with property owners to execute projects.

Additionally, as a product of the Phase II MS4 permit, the City is required to inspect all privately-owned BMPs every three years to determine whether they are continuing to function as intended. If a BMP fails an inspection, it is no longer considered contributing impervious acreage credit towards the baseline or restoration requirement unless repairs are made to restore it to a functioning state. The City's contributing BMPs were last inspected between May and August of 2021 by BioHabitats, a third-party consultant based in Baltimore that specializes in stormwater management.

#### Stormwater infrastructure in the City

BioHabitats, which conducted the BMP inspections in 2021, included 755 individual BMPs in their database considered contributing toward the City's impervious acreage credit at the time that they started the inspections. The largest proportion of those BMPs are considered micro-scale practices, which include such practices as rain gardens, bio-swales, and dry wells among others that typically treat stormwater for a smaller area on the property of a residence or business. There are a total of 342 of these BMPs registered in the City's database or a little less than half of the overall number of BMPs. Another quarter of all BMPs are of the stormwater infiltration type, which includes infiltration basins and infiltration trenches. Other more common practices include nonstructural practices that may be rooftop disconnects and stormwater filtering systems like bioretention or sand filters.

### **Water Treatment Plant**



FIGURE 10-2: WATER TREATMENT PLANT

Source: City of Annapolis

Annapolis has a history of innovation in water supply infrastructure. The Annapolis Water Company was chartered in 1865 by the Maryland General Assembly after a fire at the State House in 1863, and it used Innovative concrete pipes to carry water into Annapolis. In 1912, Annapolis' water plant was one of the first to add a filtration system. The City's new 8 MGD Water Treatment Plant was completed in 2017 and built adjacent to the City's earlier drinking water facilities. This new water facility is also a leader in sustainability. The facility was the first capital project in the Annapolis area to receive LEED Silver certification and received a Maryland Green Building Award in 2019 for its bioretention facilities, water efficiency, energy efficiency, and numerous other environmental innovations. Completed at a cost of \$35 million, and funded by the City and the State of Maryland, it was at the time the largest construction project ever undertaken by the City of Annapolis.

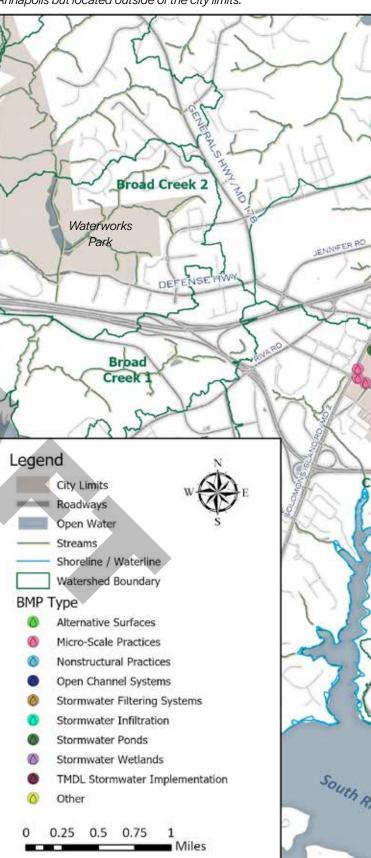
**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

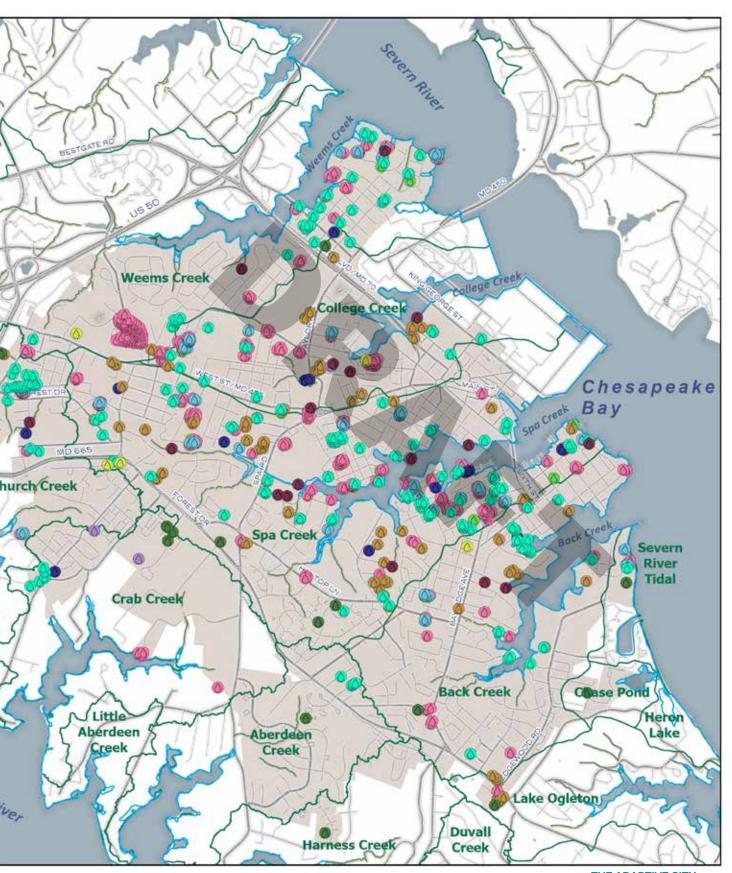
## Condition and Maintenance of Stormwater Best Management Practices (BMPs)

Of the BMP inspections that were completed in the 2021 survey, 68 of them were of BMPs not previously included in the BMP database. Altogether inspections were successfully completed for 296 of those BMPs, while another 26 were inaccessible and 73 not present. The successful inspections revealed that a great deal of installed BMPs required at a minimum some maintenance or repair to achieve their desired function. A little under half of those inspected this way were deemed functioning properly, while about a quarter of those inspected were considered to need maintenance and repairs, and another quarter not functioning as intended. The BMPs were designated as such based on whether BMPs had been removed, or whether there was failure of structures, significant erosion, evidence of clogging, or standing water. This is evidence of the amount of stormwater and debris that flows through these BMPs. Large swaths of impervious surfaces upstream accelerate the speed and volume of stormwater and debris or sediment that is pushed downstream or into larger stormwater BMPs like bioretention and stormwater ponds. Therefore, reduction in impervious surfaces, tantamount to an increase in greening through landscape planting or forestation, could alleviate the stress and subsequent maintenance needed to keep BMPs in working condition. Chapter 9, Environmental Sustainability, highlights locations with high concentrations of impervious cover and in need of greening.

FIGURE 10-3: MAP OF STORMWATER BEST
MANAGEMENT PRACTICE (BMP) FEATURES BYTYPE

Source: City of Annapolis





**Note**: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

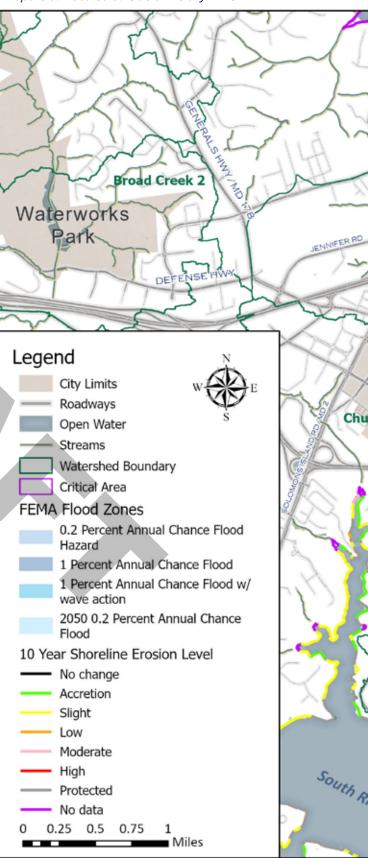
#### **Flood Management**

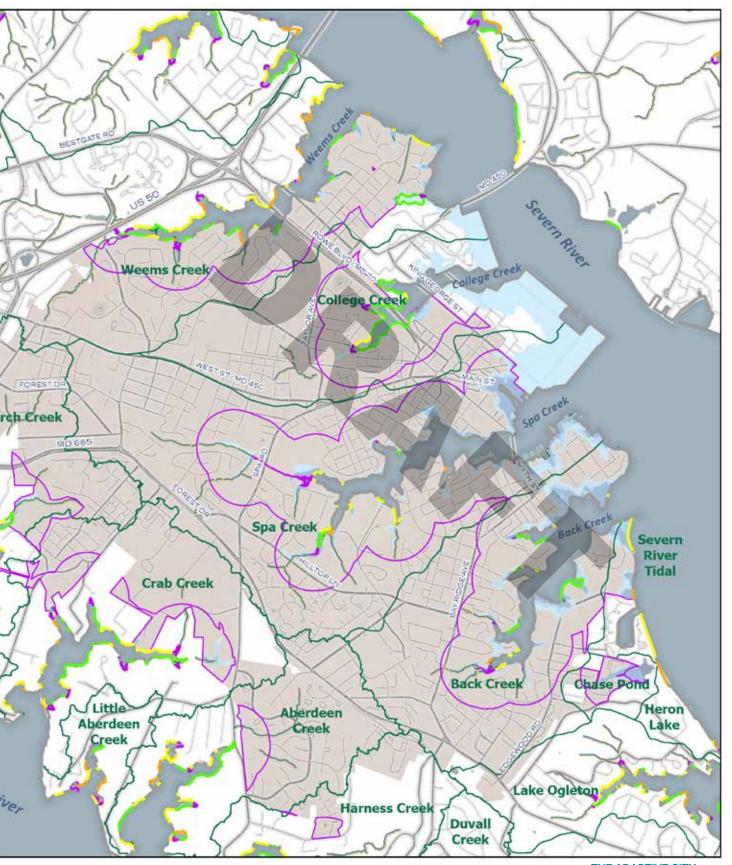
A floodplain is an integral part of a stream system. It provides storage capacity for high flows of water, helps reduce the erosive power of the stream during a flood, reduces the discharge of sediment during high flow periods and helps flood waters to move downstream. Floodplains also offer opportunities for wildlife habitat which can increase the biodiversity of a stream. Further, floodplains provide a stream with water quality benefits as well by filtering polluted stormwater through soil, rock, and vegetation before it reaches the stream.

The 100-year floodplain is that land area adjoining the stream that has a 1% or greater probability of flooding in any given year, and is thus a common reference point for land planning in the face of climate change. Chapter 9, Environmental Sustainability, details recent strategies to manage coastal flooding, particularly in the 100-year floodplain, including enforcement of floodplain management regulations through the National Flood Insurance Program (NFIP). City Dock represents Annapolis' most visible efforts to stem the rapidly accelerating impacts of flooding. Temporary pumps and backflow preventers were purchased and installed along three storm drains on Dock Street in 2019. A more permanent solution to address the chronic flooding on Compromise Street which prevents access to Downtown is currently under construction as of 2022. The project will install underground pumps and a wet well underneath Newman Street Park while also redeveloping the park and realigning a storm drain. The total cost of the project between design and construction is expected to total around \$13.5 million and will address 95% of the current flooding downtown.

FIGURE 10-4: MAP OF EROSION CONDITIONS AND FLOOD ZONES

Source: City of Annapolis





# Waterways and Riparian Corridors

#### **Water Quality**

The conditions of local waterways are a clear indicator into the successful management of the water that flows into them from upstream. What may not be easily detectable to the naked eye, subtle changes to the water can have adverse effects on vegetation and wildlife that depend on these waterways, as well as the marine and water-based economy.

The City of Annapolis is not able to restore the quality of its local waterways on its own. Thankfully, organizations like the Spa Creek Conservancy, Back Creek Conservancy, Severn Riverkeeper, Severn River Association, Arundel Rivers Federation, Scenic Rivers Land Trust, and the Watershed Stewards Academy all work to restore local waterways through monitoring, education and cleanup efforts. Successful projects completed by some of these organizations are highlighted in Chapter 9, Environmental Sustainability. The Water Quality Monitoring conducted by the Spa Creek Conservancy, Severn River Association, and Anne Arundel Community College in Back Creek, Spa Creek, and Weems Creek provide valuable insight into their conditions. Together they manage close to 30 water quality monitoring stations in the waters of Annapolis. Some of the measures they look for include conductivity, water clarity, dissolved oxygen, pH, total suspended solids, nitrogen, phosphorus, and chlorophyll.

The Severn River Association reported that in 2020 the Severn River experienced an intense algae bloom stemming from polluted stormwater runoff that carried nitrogen, phosphorus and sediment contaminants and gave the water a red-orange hue while dramatically reducing oxygen levels. The result was a decline in aquatic grasses, dissolved oxygen and water clarity. The Spa Creek Conservancy reported that of the 15 sites they maintain between Spa Creek and Back Creek, all but two of them regularly indicated healthy conditions. The two that indicated unhealthy conditions were both located at the headwaters of Spa Creek to the west of Truxtun Park. The installation of stormwater BMPs to meet the City's TMDL

requirements for total nitrogen, total phosphorus and total suspended solids has surely improved the overall quality of these waterways, however, as is evident, more could be done to restore their ecological functioning to improve water quality.

### Sea Level Rise, Coastal Flooding and Saltwater intrusion impacts

Projections on sea level rise published by NOAA predict that levels could increase by anywhere from 1 foot to 3 feet by 2050 and between 2 feet and 11 feet by 2100 under the most extreme scenario. The two scenarios in the middle range that are most often referenced for planning purposes project a rise of between 1.5 to 2.5 feet by 2050 and 4 to 6.5 feet by 2100. 6.5 feet happens to be approximately the height of the greatest flood elevation experienced in Annapolis during Hurricane Isabel in 2003. Under the intermediate high scenario, that could become the baseline tide elevation by 2100. In any event, at least a foot of sea level rise can be expected over the next several decades. Chapter 9, Environmental Sustainability, contains figures depicting the projected rates of sea level rise under each scenario through to 2100.

#### **Shoreline Erosion and Protection**

Even with sea levels that have slowly risen to about a foot above levels a century ago, much of Spa Creek, College Creek, and Back Creeks have their shorelines mostly protected from erosion. The Maryland Department of the Environment is responsible for regulation of all coastal structures, under the Coastal Zone Management Act and Maryland's Coastal Program. Portions of Downtown and the Naval Academy are protected from the Severn River by seawalls. Hardened shorelines such as these are considered to be unsustainable, but are appropriate in built out urban areas that are more exposed to the open water. Despite these protective interventions, there are still pockets of minor erosion in their upper reaches like at Truxtun Park and Hawkins Cove for



FIGURE 10-5: THE LIVING SHORELINE AT THE ANNAPOLIS MARITIME MUSEUM ON BACK CREEK PROVIDES HABITAT, FILTERS STORMWATER RUNOFF, ALLOWS FOR WATER ACCESS, AND BEAUTIFIES A PARK SPACE.

Source: City of Annapolis

Spa Creek, near the SPCA and Mariners Point for Back Creek, and at Harts Cove for Weems Creek, as shown in the map that details 10-year erosion levels. The threat of shoreline erosion will only get worse as climate change leads to stronger coastal storms and accelerated sea level rise so it is imperative to explore a variety of solutions.

Among the most common and effective "soft" solutions to prevent and even reverse shoreline erosion are living shorelines. The design of living shorelines not only protects shorelines from storm and boat wave energy, but it rebuilds the natural sandy shoreline that disappears from this wave energy and from storm surge and sea level rise. Living shorelines can also provide restored habitat for aquatic wildlife that previously inhabited shoreline areas, but that may have been eroded or hard structural solutions like bulkheads or rock revetments were put in place. As shown in the following map, living shorelines have been installed in Annapolis at multiple locations including:

#### Back Creek:

- Ellen O. Moyer Nature Park
- Annapolis Maritime Museum
- Street ends of Glendon Avenue and Springdale Avenue

#### Spa Creek:

- 1st Street Park
- Truxtun Park
- Amos Garrett Waterfront Park

#### College Creek:

St. John's College

### **Water Habitat**

#### **Oyster and Other Aquatic Habitat**

Oyster harvesting has historically been a staple of the local seafood industry and throughout the Chesapeake Bay region. While the heyday of the industry is in the past, oysters and other fish are still an important inhabitant of the Severn River and its tributaries. The degradation of the Severn combined with overfishing for decades led to the rapid decline of the oyster population as the river has been home to numerous oyster reefs up and down its length, including just offshore from Annapolis. In fact, throughout the Chesapeake Bay region oysters are currently at a historically low abundance because of disease-related mortality, habitat degradation, reduced water quality, and harvest pressure. Given the historic prevalence of oysters and oyster habitat in the Severn River in the past, the potential for a rebound in population is great and on top of that, oysters naturally filter the water so the benefit for water quality would be immense.

The Marylanders Grow Oysters (MGO) program was created in 2008 by the Maryland Department of Natural Resources (DNR) in conjunction with the Oyster Recovery Partnership, the University of Maryland Center for Environmental Science and other organizations to draw attention to oyster restoration and encourage Marylanders to repopulate rivers with oysters. The Severn River has since been identified by DNR as a restoration sanctuary for its potential to restore oyster populations. In 2021, DNR released the Anne Arundel Complex Oyster Restoration Plan where it worked with local watershed organizations to study the Severn River Sanctuary and its tributaries to understand how to maximize its restoration potential.

The Oyster Recovery Partnership is an Annapolisbased organization that manages the Operation Build a Reef, program in partnership with the Severn River Association that is working to restore oyster reefs historically located on the Severn River adjacent to Annapolis. The program has a related initiative at Eastern Bay in Queen Anne's County with the Shore Rivers organization. Since 2018, the program has



FIGURE 10-6: EVIDENCE OF SUCCESSFUL OYSTER REEF RESTORATION ON THE SEVERN RIVER

Source: Oyster Recovery Partnership

added over 100 million juvenile oysters to waterways around Annapolis that comprise the Severn River oyster sanctuary. In 2018, 45.1 million juvenile oysters were planted between the Severn River and Naval Academy Bridges in Annapolis, MD. In 2020, 16.9 million spat-on-shell (oyster larvae) found their new homes on reefs near Weems Creek. In 2021, the program deposited nearly 24 million juvenile oysters on the Traces Hollow reef on the north side of the US-50 bridge over the Severn River, and in 2022, approximately 30 million oysters were planted at Chink's Point in the Severn River.

Although current and future oyster reef restoration work near Annapolis is technically beyond the City's limits, its success benefits the City immensely in regard to habitat enhancement, water quality enhancement, storm surge dissipation, and in the longrun potentially the seafood economy.



FIGURE 10-7: DEPOSITING 30 MILLION OYSTER SPAT-ON-SHELL (OYSTER LARVAE) INTO THE SEVERN RIVER AT THE PEACH ORCHARD REEF.

### **Water Supply and Distribution**

The City provides clean, safe water service to the residents of Annapolis, and a relatively small number of residents located outside the city limits. The City serves approximately 12,850 water accounts with an estimated population of 43,000 based on the City's most recent FY'24 Water and Sewer Rate Study and recent Census data. The source of this clean water is in groundwater drawn from eight deep wells located near the City's state-of-the-art water treatment plant. Water is pumped here from three Coastal Plain aquifers – the Magothy, Upper Patapsco and Lower Patapsco aquifers.

#### **Water Supply Conditions and Threats**

The City facilities use only water from deep well aquifers as a water supply source. No Federal or State standards have been established for raw groundwater (while still in the ground). There are standards that apply to a public drinking water source, but these are applied within the water distribution system, not in the ground. However, there are regulations concerning discharge of pollutants to groundwater. The Water Resources Administration in the State of Maryland Department of the Environment (MDE) is responsible for the regulation of these discharges.

A study by the Maryland Geological Survey determined that sufficient groundwater is available between these aquifers to supply demand for water through 2040, but that future threats may shift this time period. Another joint study between the City and Anne Arundel County found that there were no immediate threats to water quality given surface exposures to each of the aquifers are well inland from any coastal threats. The primary recharge areas of the aquifers supplying these wells being located in areas with development pressures from Baltimore and Washington, D.C. means that managing recharge

is also outside of the scope of this Plan, but merits consideration. Further, since the eight wells from which the raw water supply is drawn range from 300 feet to over 1000 feet in depth and are located within Waterworks Park, no measures to protect against seepages into the aquifers are needed. The Anne Arundel County Department of Health requires that wells on the Annapolis Neck be screened and grouted at a depth of no less than 270 feet and 200 feet, respectively, into a confined aquifer. The Wellhead Protection Plan for Annapolis assessed these eight wells and determined that they have low susceptibility to contaminants.

# Condition of the Water Treatment and Distribution System

The Annapolis Water Treatment Plant (WTP) provides water to the City's water customers and is located along MD-450 just east of I-97 within Anne Arundel County limits. The WTP has a hydraulic capacity of 8.0 MGD. The WTP main filtration process building, even though it was well constructed, was over 85 years old and was at the end of its useful life prior to the construction of the new 8 MGD WTP. The new WTP was constructed adjacent to the existing facility and was completed in 2017. That new WTP facility is also a leader in sustainability. The facility was the first capital project in the Annapolis area to receive LEED Silver certification and received a Maryland Green Building Award in 2019 for its bioretention facilities, water efficiency, energy efficiency, and numerous other environmental innovations.

The existing water system facilities include four distribution pumps at the WTP, five elevated water storage tanks with overflow elevation of 173 feet, a water booster pump station, and approximately 140 miles of water mains that range in size up to 24-inch

Note: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

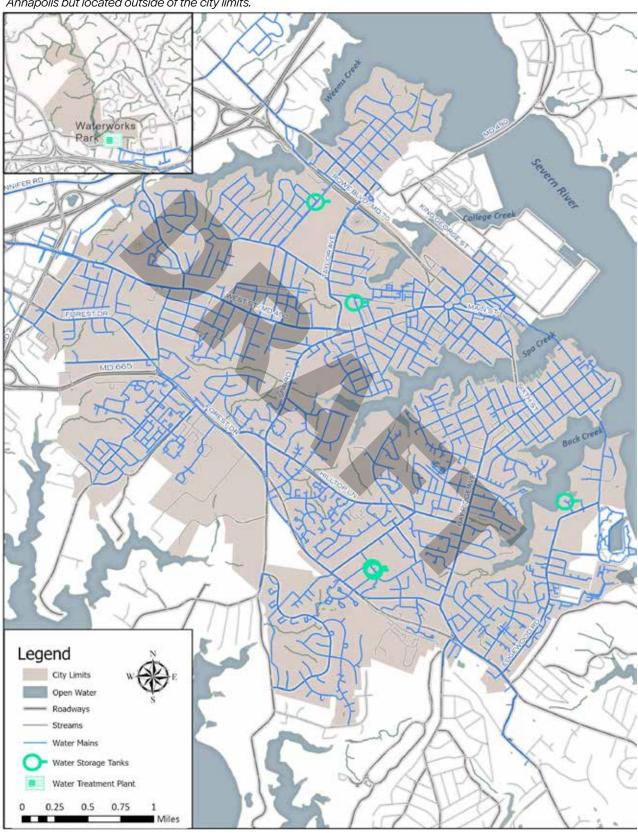


FIGURE 10-8: MAP OF THE CITY'S WATER SUPPLY ASSETS AND DISTRIBUTION NETWORK

THE ADAPTIVE CITY WATER RESOURCES 347

1.5 BILLION GALLONS OF POTABLE WATER PRODUCED PER YEAR	8 MILLION GALLONS PER DAY (MGD) WATER TREATMENT CAPACITY	137 MILES OF WATER PIPES
1 WATER TREATMENT PLANT	5 ELEVATED WATER STORAGE TANKS	2,900 WATER VALVES
8 GROUNDWATER WELLS (3 AQUIFERS)	21-MG/EACH FINISHED WATER STORAGE TANKS	1,240 FIRE HYDRANTS

FIGURE 10-9: SUMMARY CHART OF WATER SUPPLY ASSETS, NETWORK, AND CAPACITY

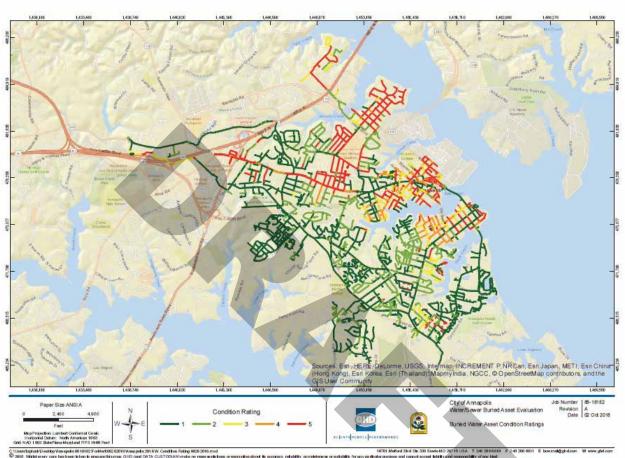
Source: City of Annapolis

in diameter. The elevated tanks include a standpipe on Jefferson Street, an elevated tank on the Naval Academy Stadium site, two elevated tanks at the intersection of Janwal Street and Barbud Lane, and an elevated tank on Edgewood Road at the site of the Ellen O. Moyer Nature Park at Back Creek. The combined total volume of the water tanks is 5.5 MG, though usable storage volume is approximately 4.2 MG. Also located at the site of the Janwal Street elevated tanks is a water booster pump station that boosts water pressure to the area to meet current City standards. The City's water distribution system serves all areas within the city limits and also extends outside the city to supply areas including parts of Parole to the west, Lindamoor and Dreams Landing north of Weems Creek, and the Chesapeake Harbor complex to the southeast of the city limits.

It should also be noted that the City has multiple water system interconnects with Anne Arundel County. These interconnects allow for shared drinking water resources to be used in the event of an emergency that significantly reduces or eliminates the water source and/or treatment capacity. Furthermore the reciprocal use of interconnect facilities during such emergencies benefits the public health and is of fiscal and operational benefit to both the City and the County

# Aging Infrastructure and Challenges to Water Distribution System

A desktop condition assessment was performed in 2018 for the City's water pipes, which determines the condition rating of water pipes based on age, material, and manufacture year, soil corrosivity, average operating pressure, and work order history. The vast majority of the City's water pipes (~95 miles) had a condition rating of 1 (excellent/new) and 2 (good). Approximately 25 miles of the City's pipes had



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FIGURE 10-10: (ABOVE)
MAP OF THE CITY'S WATER
SUPPLY DISTRIBUTION
NETWORK WITH
CONDITION RATING, 2018

Source: City of Annapolis

FIGURE 10-11: (LEFT)
SUMMARY CHART OF
WATER SUPPLY NETWORK
BY CONDITION, 2018

Source: City of Annapolis

registered a condition rating of 5 (very poor). This does not tell the whole story of the state of the City's water infrastructure, however. Though the City has done a good job in targeting replacements based on both condition (likelihood of failure) and consequence of failure (i.e. Business Risk Exposure or BRE), the majority of the water infrastructure in poor condition is located in areas that are built out the most such as the Historic District. Further, with the threat of sea level rise and saltwater intrusion along the Annapolis harbor, the stress on water infrastructure in these areas is of greater risk.

In recent years, other cities have faced challenges to the quality of drinking water, specifically regarding the presence of lead and copper. Lead that is detected in tap water usually comes from older home plumbing or lead service pipes, which are rare in Annapolis. Still, to prevent this from occurring, the City's water treatment plant has a proactive corrosion control program to minimize lead leaching from plumbing materials. Every three years, the City of Annapolis takes water samples from 30 representative homes in the City. The sampling and testing are done in accordance with the requirements of EPA's Lead and Copper Rule. The test results are used to determine if the corrosion control program is working. The test results have consistently shown that the corrosion control program keeps lead levels to a minimum. For 2023, the most recent Lead and Copper Rule sampling and testing, the 90th percentile Lead level was < 1 Parts per Billion (PPB). The EPA's "Action Level" for Lead is 15 Parts Per Billion. Monthly sampling and testing is also performed in the distribution system to determine if adjustments are required at the water treatment plant to prevent the water from being corrosive.

# Consequences of Failure in System and Business Risk Exposure (BRE)

In conjunction with the desktop condition assessment, a desktop consequence of failure assessment has been performed for the City's water pipes, which determines the consequence of failure ratings of the

water pipes based on pipe diameter, location, and proximity to attributes such as buildings, roads, historic district, etc. Thirty miles of City's water pipes have a consequence of failure (COF) rating of less than 10 (low). About one mile of City's water pipes have registered a consequence of failure rating of 20 and above (very high). A majority of the City's water pipes have medium COF ratings.

The product of the likelihood of failure (aka condition) and the consequence of failure for each water distribution asset is the Business Risk Exposure (BRE). The BRE score of an asset by itself does not indicate a need for investment into the asset; however, it helps rank assets in their relative importance to one another and therefore can be used for prioritizing capital investments and operations & maintenance (O&M) activities. The pipes in high consequence of failure areas that are not identified to be replaced, are among those that will be closely monitored.

#### **Water Demand and Water Conservation**

The City has been allocated an average daily use of 5.5 million gallons by the MDE with an average daily supply of 11.96 million gallons during the month of maximum use. The majority of the water demand (69%) is for residential use with the remaining 31% being for commercial and institutional use. As water demand has increased each year both in average daily use and maximum daily use as the population has slowly grown with new development, this demand increase has been somewhat offset by various factors including the use of water saving fixtures. As part of the Anne Arundel County Water and Sewer Master in 2022, the City completed projections to 2050 for Water Service Area Population, Households and Demand. Table 10-1 combines the data for the City of Annapolis from Tables 3-3 and 3-11 of that plan. As can be seen, the average and maximum daily demand are well below the Groundwater Well Appropriations and Water Treatment Plant capacity.

YEAR	WATER SERVICE AREA POPULATION	WATER SERVICE AREA HOUSEHOLDS	AVG. DAILY FLOW (MGD)	MAX. DAILY FLOW (MGD)	PEAK HOURLY FLOW (MGD)
2020	43,046	17,391	3.7	5.3	6.5
2025	44,284	17,727	3.8	6.5	9.0
2030	45,522	18,062	3.9	6.5	9.0
2035	46,760	18,398	4.0	6.5	9.0
2040	47,998	18,733	4.1	6.5	9.0
2045	49,236	19,069	4.1	6.5	9.0
2050	50,646	19,396	4.1	6.5	9.0

TABLE 10-1: THE CITY OF ANNAPOLIS WATER SERVICE POPULATION, HOUSEHOLDS AND DEMAND PROJECTIONS

Source: City of Annapolis

#### **Recent Water Plans and Reports**

The City contributed the Annapolis component of the Anne Arundel County Water and Sewer Master Plan in 2022, which was adopted by County Council and subsequently granted final approval by MDE as is required by State law. Additionally, the City is initiating an update to its own Ten-Year Water and Sewerage Plan which was last completed and adopted in 2019.

These plans ensure a dependable and ample water supply for all potential household uses and recommends corrections to any sanitary and water supply issues. The findings from these plans are coordinated with and incorporated into this plan. In addition, each year the City of Annapolis Department of Public Works provides a Water Quality Report to its customers which is intended to inform residents about the quality of water and provides details on water testing. Recent reports have shown the quality of Annapolis' drinking water to be of excellent quality and meeting all State and Federal standards.



FIGURE 10-12: THE CITY'S WATER STORAGE TANK AT ELLEN O. MOYER NATURE PARK IS ONE OF FIVE ELEVATED WATER STORAGE TANKS LOCATED THROUGHOUT THE CITY.

Source: Marinas.com

### **Wastewater**

#### **Wastewater Collection**

The City provides sewer service to the residents of the City, the United States Naval Academy (USNA) and a relatively small number of residents located outside the city limits. The City sewer system serves about 38,000 people through 11,200 sewer service accounts. The City owned and operated collection system consists of a network of gravity collectors and force mains, and includes 28 wastewater pumping stations. The system of 123 miles of sewer collection serves approximately 98% of the City. Flows from the USNA pass through the City collection system before reaching the Annapolis Water Reclamation Facility (WRF).

More than half or 77 miles of the City's sewer pipes have been installed between 1950 and 1990, over 30 miles of which were installed in the 1950s. A desktop condition assessment has been performed for the City's sewer pipes as part of the Evaluation Project. The desktop condition assessment model determines the condition ratings of the sewer pipes based on pipe age, pipe material, basement back-ups, and work order history.

### Status of Wastewater Treatment Infrastructure

The Annapolis Water Reclamation Facility (WRF) is a wastewater treatment plant jointly owned and supported by the City and Anne Arundel County, but is operated and maintained by the County. As a joint facility, it treats sanitary sewage collected from the City, County, and USNA. The plant's capacity is 13 MGD, of which the City (with the USNA) has been allotted 6.7 MGD. The treated effluent from the WRF is discharged to the Severn River. With the recently completed Enhanced Nutrient Removal upgrade, the facility is now able to meet the current limits of technology of

3.0 mg/L effluent total nitrogen and 0.3 mg/L total phosphorus in the discharged treated effluent. In 2021, the Annapolis WRF was awarded a National Association of Clean Water Agencies (NACWA) Peak Performance Platinum award. The facility has gone five consecutive years without a permit violation and has had perfect permit compliance in 21 out of the last 22 years.

#### **Consequences of Failure in System**

A desktop consequence of failure (COF) assessment has been performed for the City's sewer pipes as part of the Evaluation Project. The desktop consequence of failure assessment model determines the consequence of failure ratings of the sewer pipes based on pipe diameter, location, and proximity to attributes such as buildings, roads, historic district, etc.

### Challenges to Wastewater Collection System

Similarly to changes in future water demand, wastewater flows are only projected to increase at a slow and manageable rate. Again, as was mentioned earlier, the increased use of water saving fixtures has led to a reduction in the average water demand. As a result, the projection for wastewater flow of 5.76 MGD by 2035 is well within the allocated 6.7 MGD average daily flow treatment capacity at the Annapolis Water Treatment Facility.

Inflow and infiltration can be a problem for older municipal sewer systems. Inflow is stormwater that enters the wastewater collection system as a result of insufficient stormwater management on lots. Infiltration is flow from groundwater that enters the system through cracks in pipes, for example. The Annapolis Water Reclamation Facility is operating under capacity and neither inflow or infiltration have been identified as a problem.

Note: Waterworks Park is owned by the City of Annapolis but located outside of the city limits.

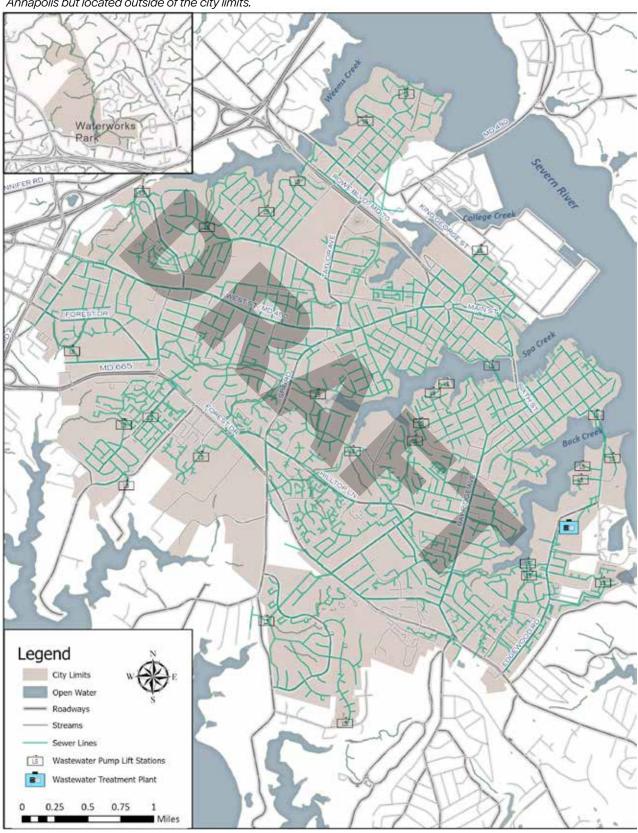


FIGURE 10-13: MAP OF THE CITY'S WASTEWATER CONVEYANCE NETWORK AND TREATMENT FACILITY

THE ADAPTIVE CITY WATER RESOURCES 353

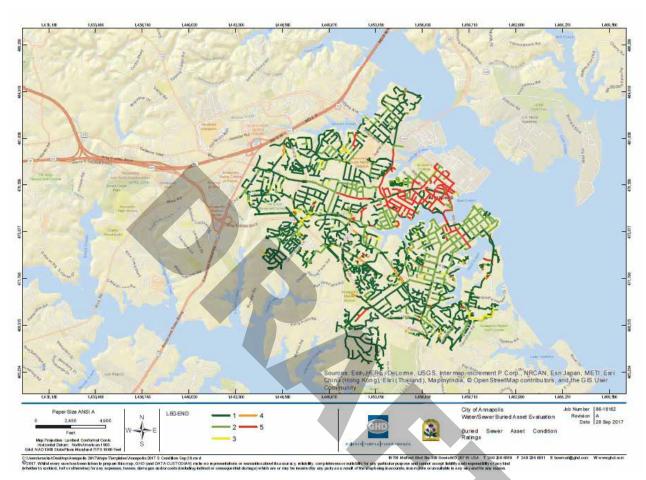


FIGURE 10-14: MAP OF THE CITY'S WATER WASTEWATER CONVEYANCE NETWORK WITH CONDITION RATING, 2018

Source: City of Annapolis

YEAR	SEWER SERVICE AREA POPULATION	SEWER SERVICE AREA HOUSEHOLDS	AVERAGE DAILY FLOW (MGD)
2020	40,246	16,541	3.93
2025	41,484	16,877	4.15
2030	42,722	17,212	4.27
2035	43,960	17,548	4.40
2040	45,198	17,833	4.52
2045	46,436	18,219	4.64
2050	47,846	18,546	4.78

TABLE 10-2: THE CITY OF ANNAPOLIS SEWER SERVICE AREA POPULATION, HOUSEHOLDS AND DEMAND PROJECTIONS

Source: City of Annapolis

#### **Recent Sewer Plan**

As with the City's water supply and distribution infrastructure, the City last completed and adopted its Ten-Year Water and Sewerage Plan in 2019. The plan, which assessed the conditions of the City's wastewater collection and treatment infrastructure, with an objective of ensuring the disposal of wastewater in a manner that will not degrade, and where possible, improve the surface and groundwater quality, was incorporated into this section.

#### **Marine Waste Management**

Maritime and recreational boating waste discharges are regulated by DNR and the U.S. Coast Guard. Collection and conveyance to the City sewer system are the responsibility of boaters and individual marina operators. In 2019, Annapolis and Anne Arundel County jointly signed an application for a No Discharge Zone (NDZ) for an area that includes the Annapolis Harbor, all waterways that feed the Chesapeake Bay that begin in Anne Arundel County (including the Severn River, Magothy River, South River, and West/ Rhode Rivers) and major creeks of those rivers. In a NDZ, boats with a hold are not permitted to discharge either treated or untreated boat sewage. By keeping human waste out of area waterways, it will help to clean up an area that runs from Gibson Island in the northern end of the County to Deale in the southern end of the County. One of the key components to an effective NDZ is the adequate capacity for mariners to offload their holds. The Annapolis City Harbormaster operates a pump-out boat that will go to boats at a slip, on a mooring or private pier. In addition, there are more than 50 pump out locations located around Annapolis and Anne Arundel County.

Additionally, numerous marinas within Annapolis have been certified through DNR's Clean Marina program which has proven to be another effective means of limiting the discharge of pollution into the City's waterways by promoting responsible pollution prevention practices. According to DNR, "Certified Clean Marinas have voluntarily adopted a significant portion of recommendations from the Maryland Clean Marina Guidebook, complied with all applicable environmental permits and regulations, and have passed a site inspection conducted by Dept. of Natural Resources staff and another Clean Marina manager." The certification lasts for three years, after which time a marina must pass another certification visit.



FIGURE 10-15: TO HELP MANAGE MARINE WASTE, THE ANNAPOLIS HARBORMASTER OPERATES A PUMP OUT BOAT THAT WORKS YEARROUND. AS OF JULY 1, 2022, ALL WATERS OF THE CITY AND ANNE ARUNDEL COUNTY ARE DESIGNATED NO DISCHARGE ZONES

Source: Capital Gazette

# GOALS, PERFORMANCE MEASURES AND RECOMMENDED ACTIONS

#### WATER RESOURCES WR1

REINFORCE AN ETHIC OF PROACTIVE WATERSHED STEWARDSHIP THROUGH ALL SECTORS OF THE CITY, INCLUDING RESIDENTS, BUSINESSES, AND INSTITUTIONS.

#### **PERFORMANCE MEASURE 1**

The number of residential and commercial properties utilizing the stormwater fee incentive policy is doubled by 2030.

#### **PERFORMANCE MEASURE 2**

Single-use plastic bags within the City are eliminated by 2024 and all single-use plastics are phased out by 2030.

- WR1.1 Require community engagement, minority subcontracting, and other possible programs to broaden community awareness of stormwater management by all City stormwater contractors
- WR1.2 Develop an economic development strategy to promote and attract more green jobs in the city, including businesses focused on stormwater management, restoration, blue technology, renewable energy, and green building.
- WR1.3 Expand the marketing and outreach around a revised incentive policy for the stormwater improvements to encourage more residential and commercial property owners to implement the improvements.
- WR1.4 Single-use plastic bags within the City are eliminated by 2024 and other plastics within the City's waste stream are phased out through legislation and an educational campaign each year until 2030. (also listed in Chapter 9: Environmental Sustainability under Goal ES7)
- WR1.5 Update the Adequate Public Facilities Ordinance to require all new on-site stormwater Management facilities at multifamily residential, commercial, and institutional projects to include interpretive signage that educates passersby on the value of the facility.
- WR1.6 Explore ways of better supporting, leveraging, and coordinating the work of watershed organizations in the Annapolis area that may include: changes to the functioning of the Waterways Cabinet; the establishment of a new organization that consolidates the efforts of multiple organizations; and a dedicated fund, among others strategies.

#### WATER RESOURCES GOAL WR2

### REDUCE THE CITY'S VOLUME OF STORMWATER RUNOFF, USING A WIDE ARRAY OF MEANS TO DO SO.

#### PERFORMANCE MEASURE

Meet the TMDL goal of a 20% reduction based on the EPA's Chesapeake Bay pollution diet.

- WR2.1 Revise the incentive policy for the Stormwater improvements to encourage more existing residential and commercial properties to implement the improvements particularly sites that currently have large impervious areas and limited or no stormwater treatment facilities.
- WR2.2 Work with local partners such as Chesapeake
  Bay Trust and Watershed Stewards Academy to
  develop a dedicated program that encourages
  Annapolis homeowners associations to
  implement green infrastructure projects to
  capture and treat more stormwater on site. Such
  a program would leverage funds already available
  through the Watershed Restoration Fund.
- WR2.3 Work with local partners such as the Chesapeake Bay Trust, the Watershed Stewards Academy, and business associations to develop a dedicated program aimed at Annapolis commercial property owners and stormwater improvements on large impervious areas. Such a program would leverage funds already available through the Watershed Restoration Fund.
- WR2.4 Utilize the Greenway Plan and assistance from the Annapolis Conservancy Board to prioritize the conservation of undeveloped areas that would have the highest benefit to reducing stormwater runoff.(see Chapter 4: Land Use for details regarding the Greenway Plan)
- WR2.5 Adopt "Green Street" design standards that include maximum tree planting, use of silva cells, micro bioretention, permeable pavers, and other integrated stormwater best management practices. (also listed in Chapter 6: Transportation under Goal T3)

#### WATER RESOURCES WR3

PRACTICE A COMPREHENSIVE APPROACH TOWARD WATERSHED RESTORATION THAT REINFORCES THE BOTH ECOLOGICAL AND CULTURAL VALUE OF ANNAPOLIS' WATERWAYS.

#### PERFORMANCE MEASURE

By 2030, all of the City's major creeks will meet water quality standards for fishing and swimming, and by 2040 all of the City's major creeks will meet the same standards after a major rain event.

- WR3.1 Prepare small area plans for each of the City's creek watershed areas that coordinate land use with environmental goals to support both the continued improvement of the City's waterways and a model for sensible infill development.

  (also listed in Chapter 4: Land Use under Goal LU1)
- WR3.2 Leverage the City's Watershed Restoration Fee to address stream and shoreline restorations that will improve both ecological function and public use.
- WR3.3 Ensure that the majority of the funds from City's stormwater fee is used for new restoration projects.

- WR3.4 Ensure that a maintenance strategy is included in the planning, design, and budgeting for all watershed restoration projects, which should include the identification of dedicated funding sources for maintenance.
- WR3.5 Conduct more regular and comprehensive water quality testing of all waterways in the city by supporting the work of the Spa Creek Conservancy through funding, collaboration, or other means.
- WR3.6 Explore training opportunities for Parks maintenance staff to include habitat restoration, conservation land management, and green stormwater infrastructure maintenance. (also listed in Chapter 7: Community Facilities under Goal CF1)
- WR3.7 Work with the Maryland Department of the Environment and Department of Natural Resources to promote current fish consumption advisories and a program of regular testing of fish from local waters. (Also listed in Chapter 9: Environmental Sustainability under Goal ES4)
- WR3.8 Update City standards to ensure that all new, replaced, or enhanced stormwater outfall facilities are designed in coordination with public water access so that recreational opportunities are not negatively impacted. (Also listed in Chapter 7: Community Facilities under Goal CF3)

#### WATER RESOURCES GOAL WR4

### PROVIDE HIGH QUALITY, SAFE **DRINKING WATER TO ALL** CUSTOMERS.

#### **PERFORMANCE MEASURE 1**

Field data gathering strategies for input into the City's water distribution system asset condition assessment model are fully implemented by 2024.

#### **PERFORMANCE MEASURE 2**

Identified water distribution system replacement projects as informed by the updated condition assessment and consequence of failure models are completed by 2035.

- WR4.1 Continue to gather water distribution system condition data to inform the projects to be completed.
- WR4.2 Ensure that the 10-year Water and Sewer Plan continues to be updated regularly.
- WR4.3 Continue to budget for and complete the water pipe replacement projects as identified in the 10-year Water and Sewer Plan and/or as informed by updated condition assessment and consequence of failure models.



#### WATER RESOURCES WR5

MANAGE THE CITY'S
WASTEWATER INFRASTRUCTURE
PROACTIVELY TO MITIGATE
INSTANCES OF FAILURE,
BACKUPS, AND OVERFLOWS.

#### **PERFORMANCE MEASURE 1**

Complete the baseline inspection of all City sewers per National Association of Sewer Service Companies (NASSCO) standards by 2032.

#### **PERFORMANCE MEASURE 2**

Identified sewer replacement or relining projects as informed by the updated condition assessment and consequence of failure models are completed within 2 years of identification.

- WR5.1 Continue sewer inspections and ramp up the pace of inspections per NASSCO standards.
- WR5.2 Ensure that the 10-year Water and Sewer Plan continues to be updated regularly.
- WR5.3 Continue to budget for and complete the wastewater collection system projects as identified in the 10-year Water and Sewer Plan and/or as informed by updated condition assessment and consequence of failure models.
- WR5.4 Explore with Anne Arundel County the feasibility of generating commercial compost using the bio-solids produced at the Annapolis Water Reclamation Facility.

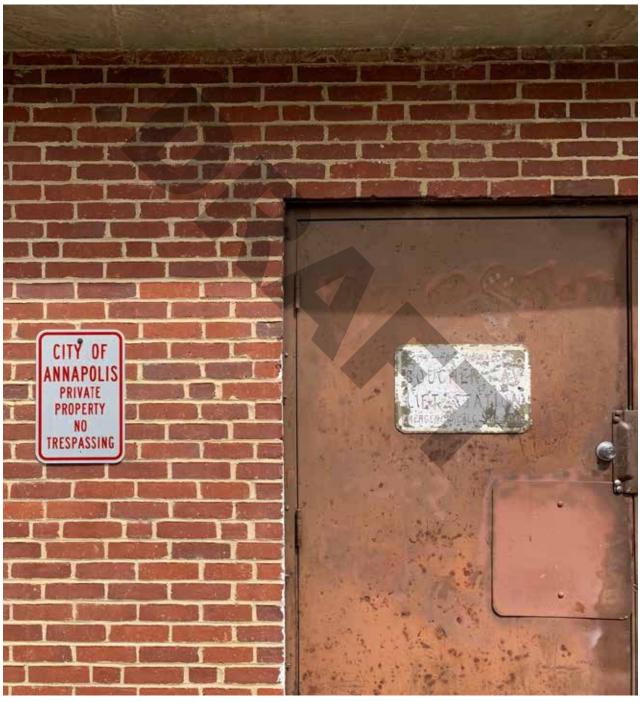


FIGURE 10-16: THE CITY'S BOUCHER AVENUE LIFT STATION LOCATED AT HAWKINS COVE IS ONE OF MANY SMALL BRICK STRUCTURES LOCATED THROUGHOUT THE CITY THAT HOUSE PUMPS FOR MOVING WASTEWATER FROM LOWER TO HIGHER ELEVATIONS.



# **IMPLEMENTATION**

#### 11. DEVELOPMENT REGULATIONS

Strategies for Implementation Priorities for Implementation

12. AREAS OF CRITICAL STATE CONCERN

11. RECOMMENDED ACTION MATRIX

Bridging barriers.
Connecting communities.



# 11. DEVELOPMENT REGULATIONS

While this Plan aims to be both aspirational and actionable, it will ultimately be judged on the latter, as plans which don't get implemented are quickly replaced. Therefore, clear paths to implementation are critical.

Much of what this Plan recommends is fundamentally about how Annapolis utilizes its land and how the City can leverage as much value and public benefit from its land as possible. To this end, it is worth revisiting a statement from the Introduction of this Plan which articulates the core intent:

Like previous plans, this plan's essential purpose is to bring about the careful development of the City and conservation of what is most exceptional about it. As a general and city-wide Plan, it does this by guiding public and private decisions that work toward achieving the vision set forth by the City and its residents over the use of land, water and other natural resources; streets and other infrastructure; parks, open spaces and other community facilities; and many other aspects of the city related to development through the year 2040.

The Plan distinguishes itself from past comprehensive plans through its three foundational themes-- equity, health, and resilience-- which assert a particular vision woven throughout this document for achieving the Plan's goals toward land use. Yet, as the highlighted statement above makes clear, what ultimately determines the implementation of this vision are the cumulative public and private decisions which together lead to change.

Each chapter of this Plan's core elements, beginning with Municipal Growth and ending with Water Resources, include specific examples of how those foundational themes of equity, health, and resilience can be realized through land use decisions. These decisions need two essential things to have any consequence: a plan of action, which is summarized in Chapter 13: Recommended Action Matrix, and actual changes to the City's development regulations which ultimately dictate what can and can't be built in Annapolis. What follows is an outline of the various strategies that will ensure that the necessary changes to the city's development regulations are enacted in the coming years and the vision of this Plan is realized.

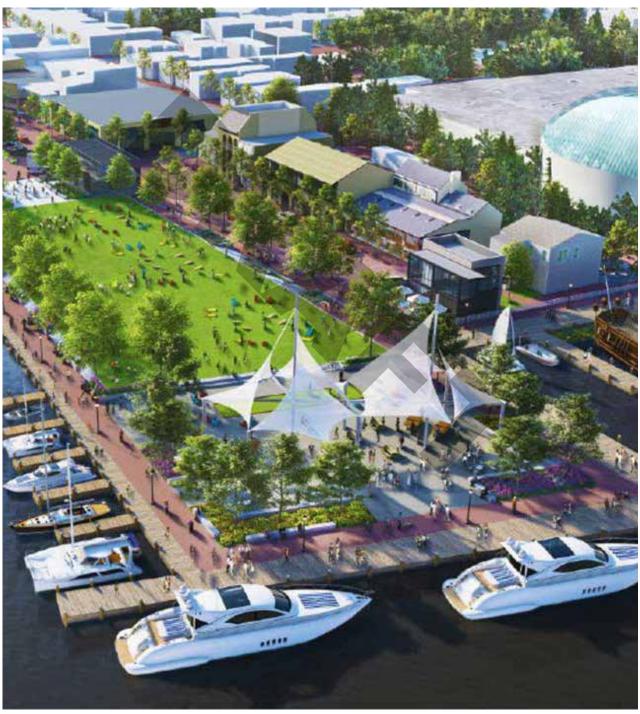


FIGURE 11-1: CONCEPT RENDERING OF THE FUTURE CITY DOCK AS PROPOSED IN THE CITY DOCK ACTION PLAN (2020). THE CITY DOCK PROJECT IS PERHAPS THE BEST RECENT EXAMPLE OF HOW LAND USE DECISIONS ARE DRIVEN BY PLANNING VISION.

## STRATEGIES FOR IMPLEMENTATION

# Role of Comprehensive Plan in Daily Decision-making

There is no exhibit that better summarizes how the various elements of this Plan come together and have bearing on the City's landscape than the Future Land Use Map. Featured in Chapter 4: Land Use, this map is reproduced on the facing page as a reminder of why we plan: to coordinate decision-making among the many individuals and institutions who collectively create the city that we see today and desire for tomorrow. The Future Land Use Map, by clarifying the preferred land use designation for every property in the city, is a critical tool for the coordinated decision-making required to implement this Plan.

Annapolis' comprehensive plan guides many decisions on a daily basis including new development, legislative policies, community programs, and investments in public infrastructure. This Plan should be an essential resource for anyone making a decision that will have any amount of consequence on the city's landscape, its economy, it environment, and its communities and residents. This includes all property owners, business owners, public institutions, government agencies at the local, county, state, and federal levels, and elected officials at all levels.

# Coordination Within and between City Departments

City of Annapolis staff across all departments will use this Plan more than anyone else because their work has everyday consequence on how the city looks and functions. The many applications of this Plan in the daily work of City staff include development plan review and platting, decisions to prioritize improvements to infrastructure and how that infrastructure should be designed, the creation of new social and economic programs, and small area plans that will provide greater detail for land use decisions at the neighborhood level. This Plan gives all City departments and offices a shared document to aid in coordination, particularly relevant and necessary to

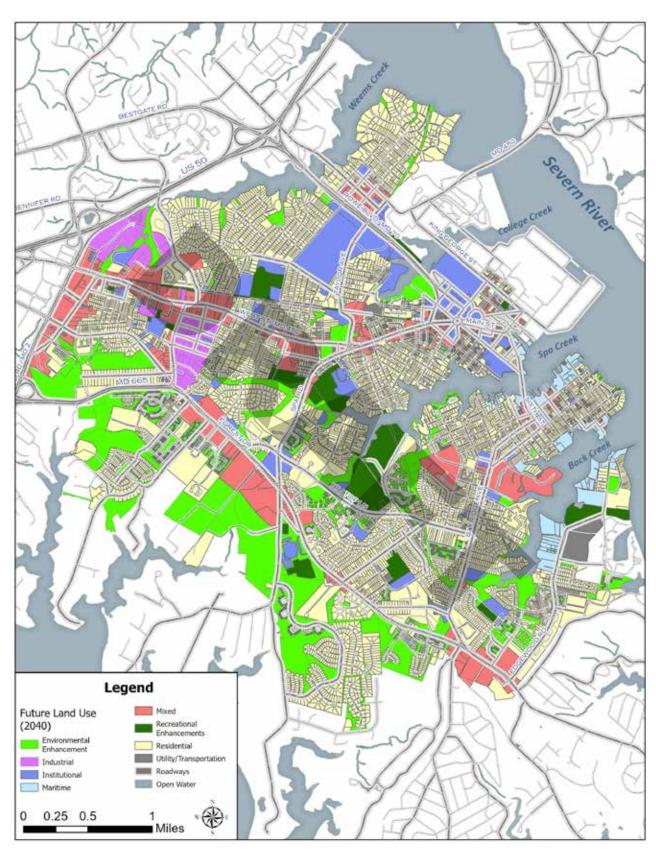
those which guide the physical planning of the city-the Departments of Planning & Zoning, Public Works, Transportation, Recreation and Parks, Police, Fire, Office of Emergency Management, and Office of the Harbor Master. Staff in all of these areas have specific mission-driven work but which overlaps with other areas of work and frequently relies on decisions by others, and thus must be closely coordinated.

#### **Coordination with Neighboring Jurisdictions**

While all municipalities have relationships with the larger jurisdictions in which they are located and neighboring jurisdictions, the number of overlapping jurisdictions in Annapolis are one of the city's defining features and a quality that makes planning in the city more complex. Annapolis is the County seat for Anne Arundel County, the State Capital for Maryland, the home of the United States Naval Academy and Naval Support Activity - Annapolis. A substantial amount of land within and around the city is owned and managed by these jurisdictions and institutions, which includes major roadways, waterways, buildings, and public spaces. To implement many of the projects in this Plan, the City will need to rely on close relationships and regular coordination with staff and elected officials representing each of these jurisdictions. This is perhaps most consequential in regard to transportation with most of the City's major arterial corridors being State roadways, and the City's transit system funded disproportionately by State and Federal grants.

#### **Capital Improvement Program**

Annapolis' annual capital budget and capital improvement program sets the priorities for investment in the city's infrastructure and public realm covering a wide variety of features including parks, roadways, natural resources, and public buildings. The capital budget is perhaps the best representation of what the City values, because it prioritizes how the City desires to allocate its resources, and therefore it should be reflective of the comprehensive plan vision.



In fact, consistency with the comprehensive plan has long been a guiding principle determining capital budget projects. As stated in the most recent capital budget book:

The City recognizes the Comprehensive Plan, Strategic Plan, and master plans are key components of the City's long-term capital planning. These plans forecast the outlook for the City and underscore the alignment between demand generators, capital improvement programs, and funding policies.

In the coming years, the City should use the themes of this Comprehensive Plan-- equity, health, and resilience-- as well as the Plan's emphasis on social vulnerability, to adopt more nuanced criteria for prioritizing capital projects that will help to implement the plan vision.

#### **Community Support**

Annapolis is fortunate to have a highly engaged population that contributes heavily in the planning of the city. Residents volunteer their time and insight to serve on Boards and Commissions, they attend community meetings to share input for ongoing projects, they provide testimony that helps to improve development projects and legislation, and they organize campaigns to help promote important issues, needs, and opportunities, among other contributions. Generally, projects, legislation, and programs proposed by City staff and elected officials are better when they have received adequate community input and/ or support. City staff regularly explore new methods of engaging with the city's population and ensuring a diverse participation, and this should continue as this Plan is implemented particularly in regard to reaching underrepresented communities.

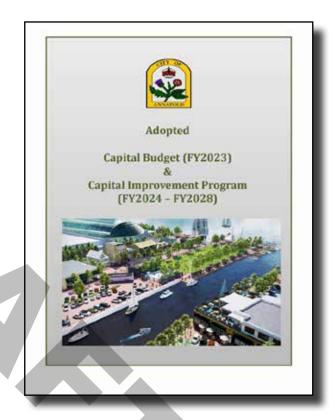


FIGURE 11-3: THE ADOPTED CAPITAL BUDGET AND CAPITAL IMPROVEMENT PROGRAM FOR FISCAL YEARS 2024-2028.

THE CAPITAL BUDGET SHOULD CONTINUE TO REFLECT THE PRIORITIES OF THE COMPREHENSIVE PLAN.

Source: City of Annapolis



FIGURE 11-4: A COMMUNITY EVENT STAGED AT THE PEOPLE'S PARK IN 2023 WAS USED TO SHARE PRELIMINARY PLANS FOR NEW TRAIL PROJECTS AND GATHER COMMUNITY INPUT.

## PRIORITIES FOR IMPLEMENTATION

## **Zoning Reform**

Zoning standards (commonly referred to as "zoning" code") are the most encompassing and impactful aspect of development regulations and generally responsible for guiding the look of city's built environment and land uses allowed. However, despite its relevance as a planning tool, zoning is not well understood by most property owners and with 31 different zoning districts, Annapolis' zoning is notoriously complex not just for a small city, but for any city. Even a cursory look at the City's zoning map on the facing page reveals a history of many piecemeal land use decisions accumulated over time which frequently do not reflect any sort of larger vision for the city. A primary goal of this Plan is to ensure that the city's zoning map better reflects this Plan's Future Land Use Map in its vision, clarity, priorties, and purpose.

A form-based code is a land development regulation that fosters predictable built results and a walkable public realm by using physical form—rather than separation of uses—as the primary basis and focus for the code and standards. Communities can apply form-based codes at different contexts and scales. Form-based codes are legally-binding regulations, not optional guides, and offer municipalities an alternative to conventional zoning for shaping development.

#### - Form Based Codes Institute

As described in Chapter 4: Land Use, the Plan's primary approach to improving the city's zoning is through the use of form-based codes which provide a more effective means of generating context

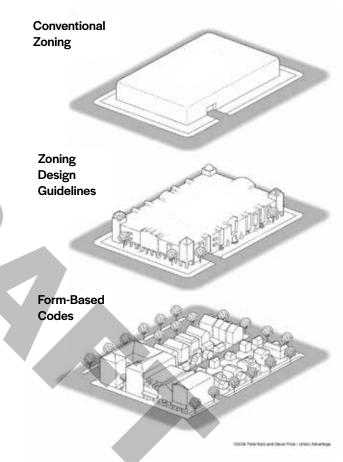


FIGURE 11-5: DIAGRAM OF ZONING STRATEGIES.
ANNAPOLIS TODAY IS PRIMARILY CONVENTIONAL
ZONING WITH SOME AREAS SUCH AS THE HISTORIC
DISTRICT AND NEIGHBORHOOD CONSERVATION
ZONES HAVING ZONING DESIGN GUIDELINES.

Source: Peter Katz and Steve Price / Urban Advantage

sensitive development. A form-based zoning code can be calibrated to carry out the vision of this Plan by requiring new development to place appropriate emphasis on building architecture and site design that encourages active streetscapes, walkable places, and leads to built environments which are more prescriptive and tailored to community needs.

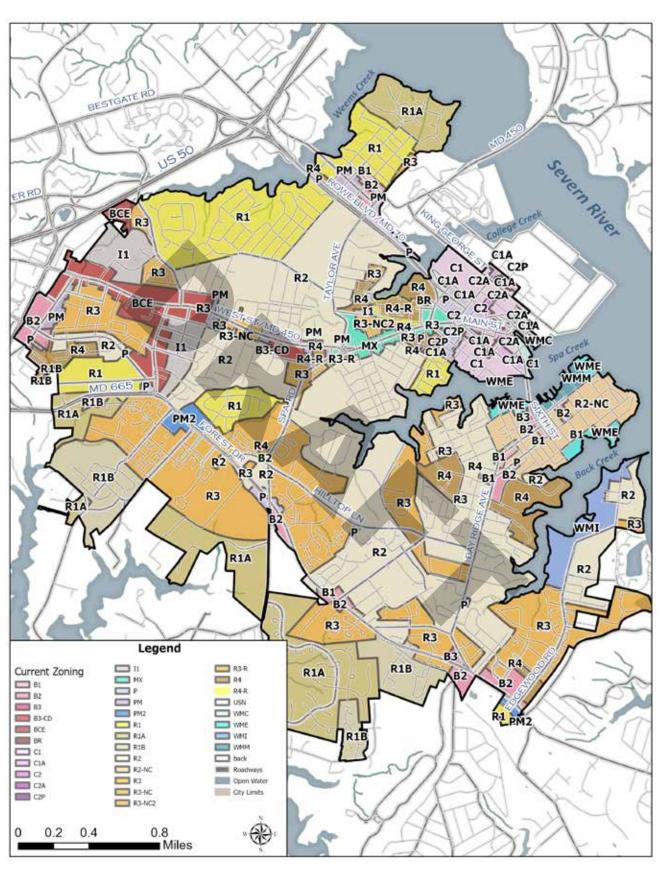


FIGURE 11-6: MAP OF EXISTING ZONING DESIGNATIONS ILLUSTRATES A HISTORY OF HYPER LOCAL LAND USE DECISIONS THAT FREQUENTLY DO NOT REFLECT A LARGER LAND USE VISION FOR THE CITY

#### **Districts**

Zoning standards, regardless of the type of zoning, are based on districts as the primary organizing unit. Districts have a uniform identity that is reflective of their desired development outcome. Annapolis' current zoning districts are predominantly driven by their land use, such as residential, commercial, professional office, industrial, etc..., with building and site standards oriented to the particular use. Alternatively, form-based code districts are defined less by their land use and more by a desired architectural form relevant to the location of the district, which may be appropriate for multiple land uses.

The West Annapolis Master Plan (2021) which is included in the Appendices to this Plan created a conceptual district framework for the commercial area of West Annapolis based on the form-based code principles. The result is a group districts, illustrated in the graphic on the facing page, that respond to local context and defining features of the area, namely the residential neighborhood, Annapolis Street, Rowe Boulevard, and the shopping center. By contrast, the existing zoning districts for the same area have minimal relationship to their context and are driven more by their prescribed land uses, namely convenience commercial, community commercial, professional office, and professional mixed office. The outcome is a puzzle of districts that is not intuitive or convey a larger vision.

#### **Design Standards**

Zoning districts rely on design standards for both building design and site design that will yield a desired outcome. Most of Annapolis' current zoning standards are very basic, and simply specify building setbacks, height, and density. Some districts go further such as the Neighborhood Conservation districts, the Conservation districts, and the MX district. Formbased code design standards will go much further in actually shaping how the building and site define the public realm and enhance the surrounding context.

#### Why Form-Based Code?

Many cities across the United States have effectively implemented form-based codes to better regulate their built environment, simplify the zoning code, and guide development to be reflective of local context and planning goals. Annapolis can expect to see the following outcomes from a form based code tailored to the city's needs:

- A more walkable city, and areas that are easily accessed on foot, by bike, or by vehicle.
- A high-quality public realm, framed by private development at a scale that is appropriate to the context of the area.
- A more predictable framework for new development (including infill and redevelopment), for developers and the city.
- Economic development opportunities with increased density allowances where feasible.
- Promoting housing choice and affordability by allowing more housing types that are designed in context with their surroundings.
- Integrated green infrastructure with building and site design.
- Context-sensitive urban design and architecture (building heights, massing, setbacks, stepbacks).
- Simplified and consolidated zoning map from the City's 31 current districts.

#### **Planned Development Standards**

Planned developments refer to larger projects which typically combine multiple uses or properties to create a more dynamic development project. The city's current planned development standards are unnecessarily complicated and should be completely reconceived in concert with the form-based code districts and design standards.



FIGURE 11-7: PROPOSED FORM-BASED ZONING DISTRICTS FOR THE WEST ANNAPOLIS COMMERCIAL AREA FROM THE WEST ANNAPOLIS MASTER PLAN (2021) WHICH IS INCLUDED IN THE APPENDICES TO THIS PLAN. THE CONCEPTUAL DISTRICTS ARE ORIENTED AROUND SIGNIFICANT FEATURES AND ASSETS SUCH THE SHOPPING CENTER, THE RESIDENTIAL AREA, AND ROWE BLVD. THIS FRAMEWORK IS THE MODEL FOR ZONING CHANGES IN OTHER PARTS OF ANNAPOLIS.

Source: City of Annapolis



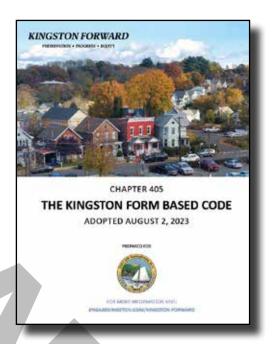
FIGURE 11-8: THE EXISTING ZONING
DISTRICTS OF THE SAME AREA AS ABOVE
ARE DRIVEN MORE BY THEIR ALLOWED
USES RATHER THAN LOCAL CONTEXT.
THE RESULT IS A PUZZLE OF DISTRICTS
THAT IS NOT INTUITIVE AND DOES NOT
CONVEY ANY TYPE OF OVERARCHING
VISION.

Source: City of Annapolis

#### **Zoning Reform Precedent**

Kingston, NY, is a small historic waterfront city in the Hudson Valley region of New York which recently adopted a new citywide zoning code ordinance that uses form-based zoning standards to achieve more predictable development outcomes. Annapolis and Kingston are very comparable in size and context with prominent historic, maritime, and natural resource elements. The two cities are also dealing with similar challenges and priorities including housing affordability, safer mobility options, equitable access to amenities, and natural resource conservation. Kingston's zoning code addresses all of these issues and provides the best recent precedent for what is needed in Annapolis to achieve many of the goals in this Plan. The key elements of Kingston's zoning code that Annapolis should emulate are the following:

- A zoning map which is simple and straightforward to understand with only twelve zoning districts compared to Annapolis' thirty-one different districts:
- Zoning districts which acknowledge the varying development patterns of the city while also allowing for incremental changes to occur in each zone:
- Zoning districts which privilege neighborhood character and appearance through the use of architectural standards:
- Building type standards which are specific to the city, acknowledging a variety of traditional building types which have defined the city and which should be prioritized.
- Street frontage standards designed to create more consistent and walkable streetscapes.
- Parking standards which are sensible and encourage a more pedestrian-oriented city.
- Street type standards designed to create complete streets: an accessible, interconnected network of streets that accommodate all ages, abilities, and modes of transportation, including walking, cycling, driving, and public transit.



Source: City of Kingston



#### T5 Main Street (T5MS)

Intent: A walkable, vibrant urban main street serving multiple neighborhoods and the City with commercial, retail, entertainment and civic uses. public transportation, and smallto-large footprint, medium-tohigh density Building Types.



#### TS Flex (TSF)

Intent: To provide an urban form that can accommodate a very diverse range of uses and Building Types, including some light industrial as well as live/work combinations, to reinforce the pattern of existing walkable neighborhoods and to encourage revitalization and investment



T5 Neighborhood (T5N)

Intent: To provide a variety of housing choices, in small-tolarge footprint, medium-to-high density Building Types, which reinforce the walkable nature of the neighborhood, support neighborhood-serving retail and service uses adjacent to this zone, and support public transportation alternatives



Intent: A walkab

urban main stree multiple neighbo with commercial entertainment ar public transports to-medium footp to-high density B

FIGURE 11-10: KINGSTON'S TEN BASIC ZONING DISTRICTS

Source: City of Kingston

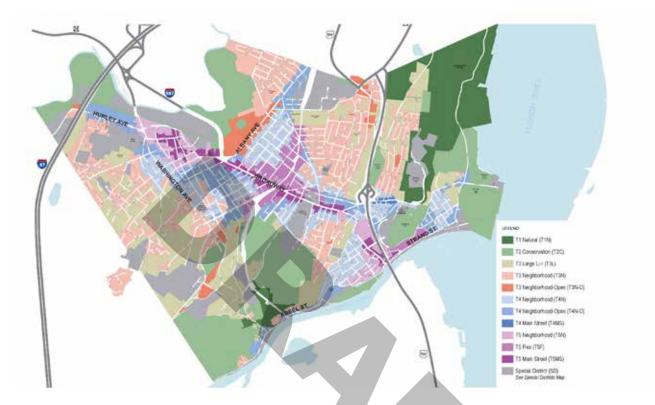


FIGURE 11-11: KINGSTON'S UPDATED ZONING CODE IS BASED ON THIS ZONING MAP INCLUDES JUST TEN BASIC ZONING DISTRICTS "FLEX" DISTRICT, AND A SPECIAL DISTRICT CATEGORY, ALL DEFINED BY NEIGHBORHOOD CONTEXT. BY COMPARISON, ANNAPOLIS HAS THIRTY-ONE ZONING DISTRICTS TODAY

Source: City of Kingston



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T4 Neighborhood & T4 Neighborhood-Open (T4N & T4N-O)

Intent: To provide a variety of housing choices, in small-tomedium footprint, medium-tohigh density Building Types, which reinforce the walkable ion, and smallnature of the neighborhood, support neighborhood-serving retail and service uses adjacent to this zone, and support public transportation alternatives. An Open Sub-Zone provides the same building form but allows for a more diverse mix of uses.

#### T3 Neighborhood



T3 Neighborhood & T3 Neighborhood-Open (T3N & T3N-O)

Intent: To protect the integrity of existing, small-to-medium lot detached homes and reinforce their role within walkable neighborhoods and to allow new neighborhoods with this component. An Open Sub-Zone provides the same building form. but allows for a more diverse mix of uses.

T3 Large Lot



T3 Large Lot (T3L)

Intent: To protect the integrity of existing, medium-large lot detached homes and reinforce their role within the City.

TZ Conservation



T2 Conservation (T2C)

Intent: To protect the integrity of existing natural land with low density detached homes as well as areas of steep slopes and natural vegetation, and reinforce their role within the



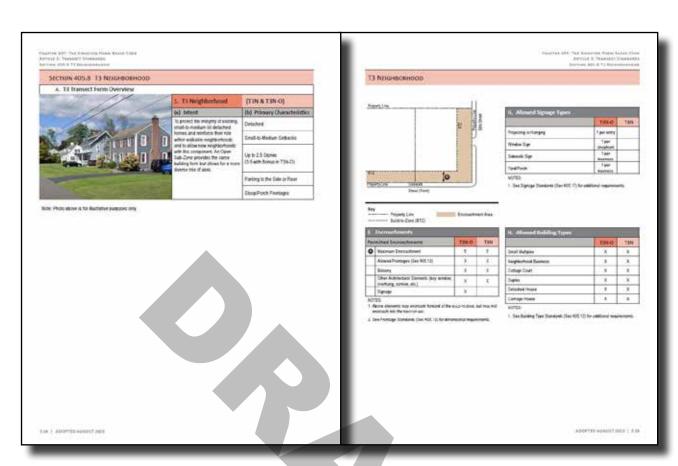
T1 Natural (T1N)

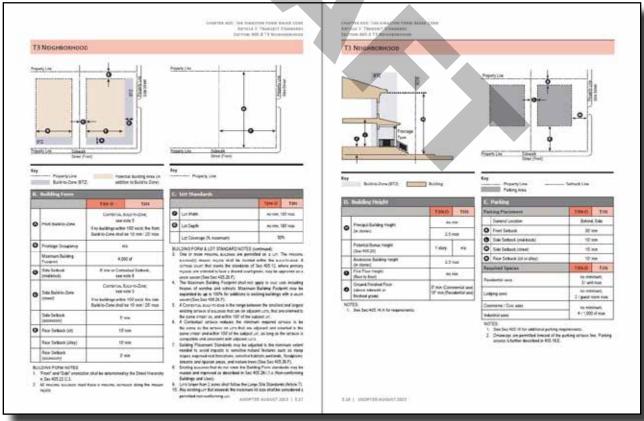
Intent: Preservation of open spaces and natural resources.



Waterfront Mixed-Use (SD-WMU)

Intent: To allow for a walkable, mixed-use destination district that celebrates the rich cultural, historic, and natural resources of the waterfront, and furthers the policies of the Kingston Local Waterfront Revitalization Program (LWRP). District standards shape mixed-use development and public spaces that support a healthy relationship between people and the environment.





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## **Streetscape Standards**

Mobility is signature focus of this Plan because it is one the best ways of addressing the Plan's foundational themes of equity, health, and resilience. Dollar for dollar, investments in mobility options that make Annapolis safer and more comfortable for all travelers, yield the highest return on the goals of this Plan. However, the City has few standards or specific transportation plans in place to support the kinds of improvements which are needed. Chapter 6: Transportation provides a substantial overview of the areas of focus that warrant additional planning and ultimately codified standards. These areas of focus are provided below:

#### **Vision Zero**

Vision Zero is a global initiative to dramatically reduce traffic crashes and fatalities, if not eliminate them completely. In 2022, Anne Arundel County adopted a Vision Zero Action Plan aimed at making changes in policy, design, and education to address traffic safety. Annapolis must follow suit and either adopt the County's plan or a modified version tailored to Annapolis.

#### **Complete Streets**

Creating walkable places is a major goal of this Plan but much of Annapolis is simply not designed for walking. Annapolis has very few guidelines or standards for streetscape design and often defers to Anne Arundel County standards when new street are constructed. With very few new streets built in Annapolis, the bigger issue is how to best retrofit the City's existing streets to improve safety and comfort with the limited right of way and other constraints. Complete Street design guidelines similar to what Baltimore created in 2021 provide a model for Annapolis. Having adopted guidelines in place would simplify the process of making important changes to the city's streets.

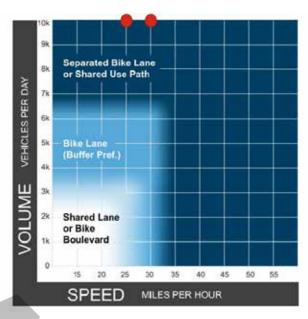


FIGURE 11-10: BIKEWAY DESIGN GUIDANCE FROM THE FEDERAL HIGHWAY ADMINISTRATION. IN RECENT YEARS, SIGNIFICANT RESEARCH HAS BEEN DONE TO FORMALIZE WHERE AND HOW TO BEST IMPLEMENT BIKE INFRASTRUCTURE.

Source: FHWA

#### **Bicycle Infrastructure Standards**

The Complete Streets guidelines would integrate with work already underway to create bikeway standards. Through funding from the Baltimore Metropolitan Council, City staff are working with a consultant to develop design standards for implementing bicycle infrastructure, particularly when ideal conditions are not possible. These standards will become an appendix to the City's 2011 Bike Master Plan.

#### **Street Trees**

Finally, healthy environments have thriving tree canopy and street trees are a critical component of this. The City has not updated its Street Tree manual in more than 25 years and it is urgently needed to help advance this Plan's tree canopy goals. Updating the Street Tree manual should be part of a more comprehensive Urban Forest Master Plan as recommended in Chapter 9: Environmental Sustainability.



FIGURE 11-15: AN ILLUSTRATION OF A COMPLETE STREET IN A NEIGHBORHOOD CONTEXT.

Source: NACTO



Shared Use Path











FIGURE 11-10: BIKE FACILITIES RANGE DRAMATICALLY IN REGARD TO HOW SEPERATED THEY ARE FROM VEHICULAR TRAFFIC AND REFLECT THE TYPES OF CYCLISTS WHO WILL FEEL SAFE ON THE FACILITY.

Source: Toole Design

#### Waterfront



FIGURE 11-17: THE FOUNDATIONAL THEMES OF THIS PLAN—EQUITY, HEALTH, AND RESILIENCE-- ALL INTERSECT ON THE CITY'S WATERFRONT WHICH MAKES THE RECOMMENDED ACTIONS FOCUSING ON THIS AREA AN IMPLEMENTATION PRIORITY.

Source: City of Annapolis

The Annapolis waterfront is a significant focus of this Plan, and numerous ongoing projects are already implementing the Plan's recommended actions, most notably the City Dock redevelopment. In every circumstance, resilience, equity, recreation, and culture are driving the projects and reshaping the city's waterfront. More specifically, equitable public water access, climate change adaptation, watershed restoration, and support for the maritime industry are the four most significant priorities in this Plan that will impact the city's waterfront in the coming years but require specific implementation strategies.

Changes to the waterfront happen in a variety of ways: through new private development or redevelopment, through public infrastructure projects, through programs that activate the waterfront in new ways, and through new management practices. How these mechanisms are leveraged allows for the priorities mentioned above to have greater impact. For example, in 2021, in an effort to better guide private development, the City Council updated the zoning regulations for the City's maritime zoning districts for the first time in 34 years based on recommendation

from a Maritime Task Force. The positive impact of the changes will be primarily seen in the preservation and evolution of the maritime industry and in the expansion of public water access. Additional strategies are provided below for each of the waterfront priorities.

#### **Equitable Public Water Access**

Equitable public water access is a major topic of Chapter 7: Communities Facilities and addressed in several other chapters. The City is also in the process of completing its first Public Water Access Plan which will be included in the Appendices to this Plan. There are a variety of ways for this priority to be implemented in the near future:

- The amended maritime zoning regulations referenced above created a new definition for public water access and several mechanisms for either requiring or incentivizing expanded public water access as part of new development.
- An additional zoning policy amendment is needed to require public water access as part of



FIGURE 11-18: NO PLACE IN ANNAPOLIS IS MORE IMPORTANT FOR CLIMATE CHANGE ADAPTATION THAN THE CITY DOCK WHERE A VARIETY OF STRATEGIES WILL BE USED TO PROTECT THE CITY MOST IMPORTANT CIVIC SPACE.

Source: AMRP

waterfront developments outside of the maritime zones. A development threshold could be defined, for example based on the size of the development or its use, that triggers a public water access requirement.

- The City's Capital Improvement Program (CIP) which guides investments in public infrastructure and is updated annually, is the single most important mechanism for implementing equitable public water access. The current CIP for fiscal year 2024 includes a dramatic expansion in funding for public water access projects that should continue for the foreseeable future. However, it will be important to create a strategy for prioritizing projects that address equitable outcomes
- Chapter 15 of the City's Code of Ordinances addresses most directly the standards for waterways and waterfront and has many sections which should be updated.
- The Adequate Public Facilities Ordinance could be amended to reference public water access as a standard for Recreational Facilities, particularly for proposed development within a half mile of the waterfront.

#### **Climate Change Adaptation**

Several recent plans have set policy goals and identified critical projects to ensure that the City is able to meet the challenges posed by climate change. These plans include the Cultural Resource Hazard Mitigation Plan (2018), the Flood Resilience Plan (2022), the Hazard Mitigation Plan Update (2023), and Military Installation Resilience Review (2023). Some of the key strategies to support the ongoing climate change adaptation include:

- Ensure that the City's floodplain development standards are regularly reviewed and updated if needed;
- As with public water access, the CIP is an important tool for prioritizing projects that will address climate change vulnerabilities;
- Many of the areas most vulnerable to rising sea levels and storm surge are public streets and parks. The City can address these vulnerabilities through improved design standards which



FIGURE 11-19: WATERSHED RESTORATION EFFORTS ALONG COLLEGE CREEK HAVE BECOME A PRIORITY BECAUSE THE AREA HAS BEEN HISTORICALLY UNDERINVESTED, AND MUCH OF THE PROPERTY ADJACENT TO THE CREEK IS PUBLICLY OWNED AND MINIMALLY DEVELOPED.

Source: City of Annapolis

acknowledge the anticipated impacts from climate change. The future Recreation & Parks Master Plan and Complete Streets Design Manual recommended by this Plan can address these standards:

- Collaboration with partner agencies and neighboring jurisdictions is critical, particularly NSA-Annapolis, Anne Arundel County, and the Resilience Authority of Annapolis and Anne Arundel County, as many of the most vulnerable assets have regional impacts;
- Accelerate the transition to renewable energy and particularly in the City's fleet vehicles and transit vehicles.

#### **Watershed Restoration**

The economy, culture, and identity of Annapolis are closely tied to water and without clean water and healthy natural resources, the city will cease to be the place it is. Watershed restoration addresses the continuing need to improve the environmental quality

of the lands which directly impact the city's waterways. Some of the key strategies for implementing improvements in this area include:

- Utilize the creekshed framework recommended by this Plan for all future small area planning to ensure that land use decisions are oriented to the waterways they will impact;
- Create standard procedures for ensuring that maintenance is properly budgeted for all naturebased stormwater management projects;
- Explore amendments to the Adequate Public Facilities Ordinance to ensure that off-site stormwater outfalls are improved as part of a proposed project;
- Amend the site design guidelines in the City's zoning regulations to require low impact design principles and stormwater best management practices;
- Expand the tree mitigation requirements for the Critical Area buffer to apply to the full extent of the Critical Area.



SERVICES THE CITY OFFERS. AS THE INDUSTRY CHANGES, THE CITY WILL NEED TO RESPOND ACCORDINGLY TO STAY COMPETITIVE.

Source: Marinas.com

#### **Maritime Industry**

The maritime zoning update in 2021 was specifically aimed at strengthening the maritime industry. In addition to creating incentives for large properties to maintain critical boatyard functions, the zoning update also created the Annapolis Maritime Industry Fund to directly support the preservation and expansion of maritime businesses in Annapolis. Other strategies to support this priority include:

- Using annual reporting requirements, continue to monitor the effectiveness of the most recent maritime zoning updates to ensure they positively impacting the maritime industry;
- Create standard procedures for how to distribute the funds that may accrue in the Annapolis Maritime Industry Fund;
- Create additional small and mid-size business development programs for maritime businesses;

- Prioritize staff resources to maritime businesses seeking to locate in the city's maritime districts;
- Make efforts to streamline permitting processes for maritime businesses particularly around temporary structures and coordination between multiple permitting agencies.

## **Adequate Public Facilities**

Annapolis' Adequate Public Facilities Ordinance (APFO) ensures that the city's infrastructure is equipped to accommodate the impact from new development and it should reflect the goals of the City's comprehensive plan.

As currently defined in the City's Code of Ordinances, all new development or redevelopment greater than ten thousand square feet in area or a residential subdivision of more than eleven lots regardless of the square footage of the development must have a Certificate of Adequate Public Facilities, meaning the City's public facilities or services across the following ten key areas have been proven to be adequate:

- Fire, Rescue, Emergency Medical, and Fire Inspection Facilities
- Police Protection
- Public Maintenance Services
- Water Facilities
- Sewer Facilities
- Recreational Facilities
- Traffic Impact
- Non-Auto Transportation Facilities
- Stormwater Management Facilities
- School Facilities

There are a few ways that the APFO can be calibrated to be consistent with the goals of this Plan. If any of the above facilities or services is not adequate to serve a proposed development, the City's Code of Ordinances stipulates ways that the development can mitigate, meaning invest in the particular facility or service so that it becomes adequate. The guidelines for this mitigation can be widely shaped to address priorities such as equity or resilience, or particular sustainable practices. For example, the APFO mitigation guidelines for Recreational Facilities currently allow

a proposed development to pay a fee to mitigate. The methodology for calculating the fee and the methodology for how it should be used could be far better defined in the APFO to achieve more equitable results.

Additionally, each facility or service has standards which must be met to prove adequacy and it is these standards which should be re-assessed regularly to ensure they are producing the desired outcomes in line with the comprehensive plan. Using Recreational Facilities again as an example, the standard for determining whether there are adequate recreational amenities near a proposed development may change over time as values change. For example, one could interpret from this Plan that access to nature and water are critically important forms of recreation in Annapolis but are not equitably distributed. The APFO standards for Recreational Facilities could address this shortcoming.

The APFO can and should change over time. In 2019, the standards for School Facilities were amended, and in 2023, the mitigation options for Police Protection were amended. The areas of the APFO that could be most influenced by the goals of this Plan are:

- Police Protection
- Recreational Facilities
- Traffic Impact
- Non-Auto Transportation Facilities
- Stormwater Management Facilities











Source (clockwise from top left): Rick Hitzell/The Baltimor Banner; City of Annapolis; Capital Gazette; City of Annapolis; City of Annapolis

# <u>12.</u> AREAS OF CRITICAL STATE CONCERN

# **OVERVIEW**

The State of Maryland has prepared and adopted a statewide plan, *A Better Maryland*, which seeks to support a thriving economy and environmental stewardship throughout Maryland. The Plan's highlight is its commitment to collaboration between the State and its local governments by providing resources and tools for implementing long term plans. To facilitate this collaboration, *A Better Maryland* advances certain "areas of critical state concern". The most prominent areas of synergy between this Comprehensive Plan and *A Better Maryland* are shown in the table on the following pages.

Successful implementation of A Better Maryland will depend on the close coordination of state agencies with local governments. To facilitate this, [the Maryland Department of] Planning has identified areas of critical state concern that local jurisdictions may consider in their comprehensive/master planning and implementation of those plans. Local jurisdictions may address these areas of concern within their local plans as they deem appropriate.

#### - Maryland Department of Planning

The State classifies several of the relevant programs as "spatially designated", meaning they are addressed to projects in areas contained within unique geographic areas, such as coastal flood

# Criteria for Areas of Critical State Concern

Criteria used by the State of Maryland's Smart Growth Sub Cabinet (SGSC) agencies to evaluate the appropriateness of areas, plans and programs to be included as areas of critical state concern take the following into consideration:

- Areas that transcend local jurisdiction boundaries;
- Connection to local jurisdiction's comprehensive/master plans;
- Implementation that requires state-local coordination or collaboration; and
- Recognized state agency collaboration associated with area designations, complementary programs, or interagency planning efforts.

risk areas, or within pre-defined boundaries. For implementation purposes, the most prominent and relevant pre-defined area for the city is the Sustainable Communities (SC) Program designation. Annapolis already participates in the SC Program and is required to review its SC boundary and a companion Action Plan every five years. With the current Action Plan set to expire in 2023, the City will need to update the plan and potentially the SC boundary in coordination with the Maryland Department of Housing and Community

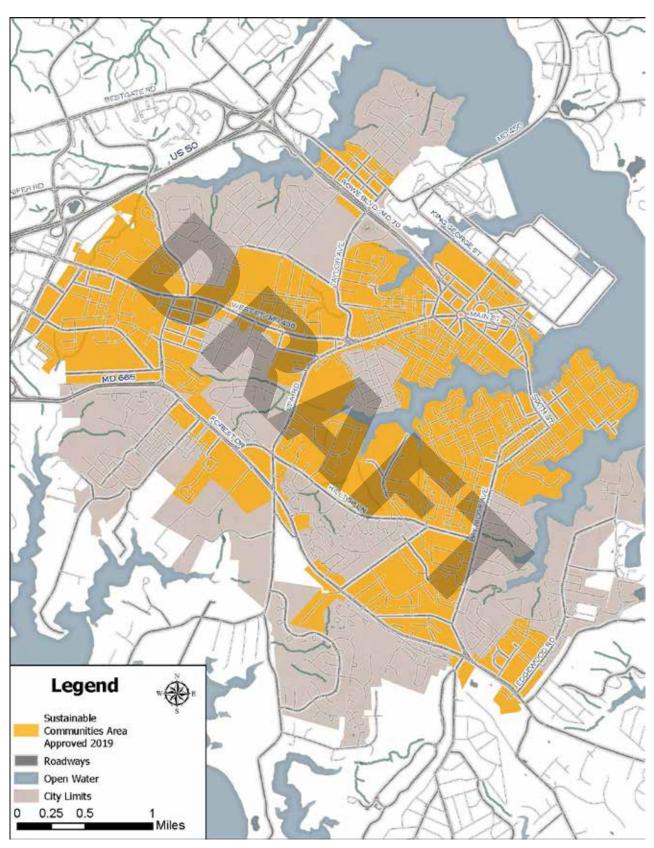


Recommendation / Policy Area	Maryland Areas of Critical State Concern					
	Spatially Designated Program	Policy Program	Plan			
Planning and adaptation for sea level rise, flood mitigation, habitat and shoreline protections	Coastal Community Flood Risk Program	Chesapeake & Coastal Service Program, Climate Leadership Academy, MD Commission on Climate Change	MD Hazard Mitigation Plan			
Updating environmental regulations in flood prone areas	Chesapeake and Atlantic Coastal Bays Critical Areas Program	Chesapeake & Coastal Service Programs				
Protecting water quality and preserving forests	Sustainable Communities Program	Chesapeake & Coastal Service Programs				
Developing neighborhood parks and playgrounds, extending trails		Program Open Space - Local				
Public Acquisition of Randle Cliffs Natural Heritage Area		Program Open Space- Statewide				
Beach Elementary School engagement with Fishing Creek		Project Green Classroom environmental education initiative				
Addressing affordable and senior housing	Community Legacy Program	Home Ownership and Affordable Housing (DHCD)				
Tourism and related business development, programming town center activities	Community Legacy Program	Office of Tourism Development assistance programs				
Promoting economic development, revitalization	Community Legacy Program		A Strategic Plan for Accelerating Economic Development			
Building bikeways and sidewalks			MD Bicycle and Pedestrian Master Plan			
Great streets program, beautifying and retrofitting MD Routes 260 and 261	Community Legacy Program		MD Transportation Plan			
Smart streets technologies, elevating State roads above flood levels		Chesapeake & Coastal Service Programs	MD Transportation Plan			

 $Note: Sustainable\ Community\ Program\ designation\ is\ a\ prerequisite\ for\ eligibility\ in\ the\ Community\ Legacy\ Program.$ 

#### FIGURE 12-2: CHART OF POLICY AREAS WITH ASSOCIATED STATE PROGRAMS

Source: City of Annapolis



Development and the Department of Planning (DHCD) to be in accordance with the program.

The map in figure 12-3 shows the current Sustainable Communities boundary which was approved by DHCD in 2019. The map excludes some areas that warrant consideration. Given Annapolis' population density, its diversity, its socially vulnerable populations, and its high concentration of public and subsidized housing per capita, this Plan recommends that the boundaries be re-drawn to encompass additional areas of city. This is important because the Sustainable Communities program defines an area's eligibility for some State funding and technical assistance programs, including the State's Community Legacy Program which can fund projects aimed at community revitalization and sustainable development. Inclusion in the Sustainable Communities boundary also allows for better coordination in city planning. It is also recommended that the City evaluate the current Sustainable Community Action Plan and as needed, update the plan with actions and strategies consistent with this updated Comprehensive Plan.

#### **Maryland Heritage Areas**

Although it carries less consequence for State funding in comparison to the Sustainable Community program, Maryland's Heritage Area program is also an important opportunity for the city to implement various recommended actions from this Plan. The program is designed to help communities preserve and promote their local culture for economic and community benefit. The City participates in the Heritage Area program through its inclusion in the Chesapeake Crossroads heritage area which is a regional designation governed by the Maryland Heritage Areas Authority (MHAA) and administered by the Maryland Historical Trust (MHT). Chesapeake Crossroads, Inc., a local non-profit organization, helps to coordinate and support funded programs and generally promote the heritage area.

Maryland is only one of three states in the nation with a state Heritage Area program and Annapolis has

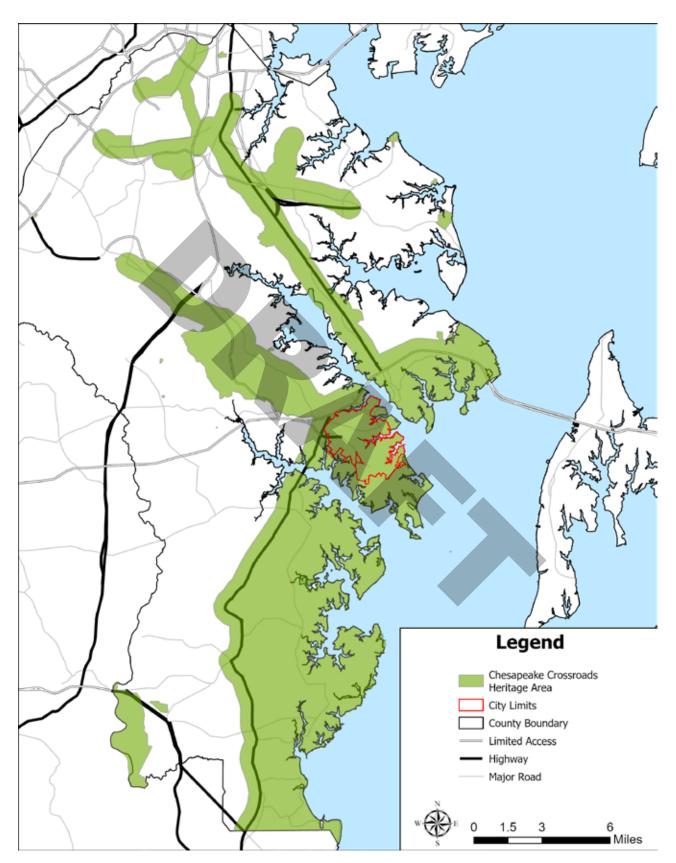


FIGURE 12-4: ANNAPOLIS' MONTHLY FIRST SUNDAY ARTS FESTIVAL HAS BEEN SUPPORTED BY THE CHESAPEAKE CROSSROADS HERITAGE AREA IN PARTNERSHIP WITH THE INNER WEST STREET ASSOCIATION AND VISIT ANNAPOLIS A& ANNE ARUNDEL COUNTY.

Source: City of Annapolis

benefitted from its location within the Chesapeake Crossroads heritage are, formerly known as the Four Rivers heritage area, and established in 2001. The Heritage Area designation is a boon for tourism and economic development, and offers direct funding to specific projects. Chesapeake Crossraods is the only entity through which Annapolis and heritage-related nonprofit organizations within the city are eligible for matching Maryland Heritage Areas Authority (MHAA) grants and low interest business loans. Since certification, Chesapeake Crossroads has brought in more than \$7.4 million in matched program and project grants, including one low interest loan to a heritage tourism business, resulting in total leverage of \$25 million for heritage organizations and projects.

With this Plan's significant focus on expanding and diversifying the historical and cultural narratives of the city, and the expansion of parks, trails, and public water access, the Heritage Area program will be a particularly important partner in helping to fund and elevate new projects and programs.



# 13. RECOMMENDED ACTION MATRIX

# **OVERVIEW**

The Recommended Action Matrix on the following pages is designed to consolidate all of the goals, performance measures, and recommended actions from Chapters 3 through 10 into straightforward charts to aid in implementation.

For each recommended action, the following pertinent information has been added:

#### **Timing**

The timing of each action is based on an assessment of its relative importance and feasibility for implementation.

Ongoing = this action is already being addressed

**Short-Term** = 1-3 years **Mid-Term** = 3-6 years **Long-Term** = 6+ years

#### Cost

Cost refers in most cases to labor costs needed to advance a policy, program, or project, or capital cost to design and build a project. Cost does not refer to fiscal impact. Cost varies widely across the recommended actions and in some cases is irrelevant to implementation. Hard costs cannot be calculated for any actions without additional information. The costs are simply relative to the other actions and provide a basis for comparison and coordination.

\$ = cost is minimal

\$\$ = cost is a factor in implementation but not prohibitive

\$\$\$ = cost is significant and will require additional planning to ensure implementation.

#### Agency

For recommended actions to be implemented there needs to be a lead agency who will be responsible for implementation. In many cases these are City of Annapolis departments in which staff will be assigned. Many of the actions cut across departments or will benefit from contributions by non-City partners.

DPZ = Department of Planning and Zoning

DPW = Department of Public Works

DRP = Department of Recreation and Parks

ADOT = Department of Transportation

FIN -= Department of Finance

APD = Annapolis Police Department

OEM = Office of Emergency Management

CM = City Manager's Office

DIT = Department of Information Technology

#### **Related Goals**

Many of the recommended actions are cross-listed with other goals and it's valuable to be aware of these relationships when coordinating implementation.

## **Prioritization strategy**

#### **Short-Term (1-3 Years)**

- New or ongoing initiatives which do not require additional funding or staff.
- Policy changes not requiring additional study.
- Studies needed to support policy changes.
- Policy changes requiring additional study (may extend beyond Short-Term)
- Projects or tasks required before other changes can

#### Mid-Term (4-6 Years)

- New initiatives or phases of ongoing initiatives which require additional funding or staff.
- Policy changes requiring additional

#### Long-Term (6+ Years)

New initiatives which require both substantial additional funding, and/ or require policy change by County, State, or Federal government.

In addition to the information on timing, cost, agency, and related goals which are specific to each recommended action, the following are general considerations which are critical to implementation success.

#### **Funding**

The majority of the recommended actions in this Plan will not require major fundraising to implement but rather the commitment and time from key City staff, elected officials, and partners. Recommended actions that do require additional funding to implement will be funded generally from one or more of these four sources: the City's General Fund (primarily tax revenue), Enterprise Funds (revenue from city services), Grants from external agencies such as the State of Maryland or Federal government, or Bonds. Generally, only physical infrastructure projects can use bond funding. All of these funding sources are part of the annual budget approved by the City Council which, in the coming years, will prioritize various recommended actions from this Plan.

#### **Monitoring**

The degree to which the recommended actions of this Plan are implemented will depend significantly on a process of monitoring by City staff to track progress and prioritize projects. Monitoring can be addressed in a variety of formats, but should ultimately be transparent and accountable to be effective. Two common practices for monitoring include annual or biannual reporting that is shared publicly with the Planning Commission and/or City Council; and online reporting where shorter interval updates are made to a website where the general public can easily follow the progress. A hybrid of the two formats could also be effective. On a practical level, whichever format is selected should be user-friendly and easy to manage to ensure the monitoring gets done. Staff from the Comprehensive Planning division of the Department of Planning & Zoning will lead this effort and develop an appropriate format for monitoring following the adoption of this Plan.

## **MUNICIPAL GROWTH**

# GOAL

## MG1

Grow in a way that assures public facilities and infrastructure, including both hard infrastructure such as roadways and city services such as police, are adequately sized and equipped to deliver exceptional service to existing residents, institutions, and businesses.

**PERFORMANCE MEASURE 1**: The levels of service of public facilities documented in this Plan are not reduced over time but instead kept the same or improved.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
MG1.1	Implement a revised Adequate Public Facilities Ordinance which updates and clarifies the requirements for all categories of public facilities.	SHORT TERM	\$	DPZ	
MG1.2	Expand parks and public open spaces and ensure any major land use proposals incorporate open spaces and trails that can help link together the City's public amenities.	SHORT TERM	\$\$	DPZ	LU6/CF2/CF3
MG1.3	Maintain disciplined plans for the allocation of water and sewer connections in keeping with State of Maryland Department of the Environment regulations and guidelines (see the Chapter 10: Water Resources).	ONGOING	\$	DPW	
MG1.4	The City will extend no facilities or services to any property without annexation.  However, on a case-by-case basis, the City may consider a pre-annexation agreement – a contract requiring the owner to annex when the City is ready to do so.	ONGOING	\$	DPZ	
MG1.5	Work with Anne Arundel County Public Schools (AACPS) to proactively plan for maintaining sufficient capacity at public schools serving Annapolis residents, particularly at Annapolis High School.	ONGOING	\$	DPZ	CF7

## **GOAL**

## MG2

Promote exceptional development within the designated growth area that addresses the city's planning goals and, in particular, contributes to affordable housing options, the creation of good paying jobs, and the fiscal strength of the city.

**PERFORMANCE MEASURE 1**: Any redevelopment plans for properties annexed into the City will be reviewed and approved by the Planning Commission and be found consistent with this Comprehensive Plan.

**PERFORMANCE MEASURE 2**: Each annexation approved by the City will be found to make a net positive fiscal impact to the City when comparing the cost of servicing the annexed property to the potential for tax revenue from the property.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
MG2.1	Apply the recommended land use plan designation and appropriate mixed use zoning to each annexation as described in Chapter 4: Land Use.	ONGOING	\$	DPZ	
MG2.2	Require that development proposals in the growth area protect and/or restore sensitive areas such as forests, stream buffers, and wetlands and where possible incorporate these resource areas into the Greenway Map discussed in this Plan. (see Chapter 4: Land Use for more detail on the Greenway Map)	ONGOING	\$	DPZ	LU6/ES2/ES3/ ES5
MG2.3	Conduct fiscal impact studies of each proposed annexation.	ONGOING	\$	DPZ	
MG2.4	Explore the potential for State legislation that authorizes the City of Annapolis and Anne Arundel County to work together to rationalize the City's boundary for the purpose of simplifying and making more efficient service delivery and land use decisions.	SHORT- TERM	\$	DPZ	

# **MUNICIPAL GROWTH**

# GOAL

## MG3

Growth in the number of households will prioritize increasing workforce and affordable housing.

**PERFORMANCE MEASURE 1**: The workforce and affordable housing performance measures included in the goals of Chapter 5: Housing will be achieved.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
MG3.1	Require a conceptual development plan and firm commitments to delivering workforce or other affordable housing as a condition of annexation.	SHORT TERM	\$	DPZ	
MG3.2	Study and adopt strategic updates to the zoning code and other city policies that can incentivize workforce housing. These updates might include policies which help to prioritize plan approvals and permits, and reduce fees for workforce housing. (also listed in Chapter 5: Housing under goal H1)	SHORT TERM	\$	DPZ	
MG3.3	Utilize zoning district changes to identify "housing priority" areas where access to transit, jobs, and amenities are already available within a 1/2 mile radius. (also listed in Chapter 5: Housing under goal H1)	SHORT TERM	\$	DPZ	
MG3.4	Remove the barriers in the City's current zoning regulations that are preventing Annapolis from meeting the Federal Fair Housing Act standards, which include expanding the areas where more "missing middle" workforce housing options are permitted. (also listed in Chapter 5: Housing under goal H1)	SHORT TERM	\$	DPZ	H1
MG3.5	Amend the policies regulating for Short Term Rentals (STR's) to prioritize local ownership and occupancy as a strategy for housing affordability and neighborhood preservation. (also listed in Chapter 4: Land Use under goal LU3, and Chapter 5: Housing under goal H2)	SHORT TERM	\$	DPZ	

#### MG4

Encourage and incentivize revitalization and redevelopment that best connects residents to retail, services, natural resources, and other amenities.

**PERFORMANCE MEASURE 1**: The percent of land area in the City zoned for mixed use increases from 8% to 20% by 2030.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
MG4.1	Update the Zoning Ordinance and zoning map to significantly expand the places where mixed-use development is permitted and/or required.	SHORT TERM	\$	DPZ	
MG4.2	Provide expanded technical assistance from City staff to business owners, property owners, and/or developers where new retail and housing opportunities will improve the quality of life for residents, particularly in areas of high social vulnerability (see Chapter 2: Demographic Trends for more detail on social vulnerability)	ÓNGOING	\$	DPZ	
MG4.3	Explore reductions in parking requirements for redevelopment in areas where direct access to transit, bike, and pedestrian networks already exist, and allow for greater flexibility in utilizing shared parking solutions.	SHORT TERM	\$	DPZ	
MG4.4	Leverage parking districts in the City's most walkable commercial areas, including the expansion of the existing downtown parking district and implementation of a new parking district for Eastport, as a way of better managing limited parking resources and mitigating conflicts.	MID TERM	\$	DPZ	

#### **LAND USE**

### GOAL

#### LU1

Simplify the zoning code so that it is easier to develop infill projects that complement the neighborhoods and creeksheds where they are located.

**PERFORMANCE MEASURE 1**: New zoning standards are adopted for a set of new mixed use place types which help to consolidate and simplify the City's zoning districts.

**PERFORMANCE MEASURE 2**: By 2030, the City has an established framework for using creeksheds to guide land use planning.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU1.1	Amend the Zoning Ordinance using form- based code standards, as recommended by this Plan, to bring its requirements into better alignment with the desire for compatibility between new and existing development.	SHORT TERM	\$\$	DPZ	
LU1.2	Prepare small area plans for each of the City's creek watershed areas that coordinate land use with environmental goals to support both the continued improvement of the City's waterways and a model for sensible infill development. (also listed Chapter 10: Water Resources under Goal WR3)	MID TERM	\$\$	DPZ	
LU1.3	Create illustrations of acceptable building design principles for all development types addressed in new zoning standards.	SHORT TERM	\$	DPZ	
LU1.4	Specifically promote infill development and redevelopment in the Upper West Street and Forest Drive corridors to facilitate the creation of walkable communities where new housing options and neighborhood commercial uses coexist with, and enhance, the existing communities. (also listed in Chapter 5: Housing under goal H1)	ONGOING	\$	DPZ	

#### LU2 Promote the improvement and re-investment in vacant or underutilized parcels.

**PERFORMANCE MEASURE 1**: By 2040, the aggregate assessed value of property designated as vacant or underutilized will have increased at a rate at least twice that of the City's overall assessable base

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU2.1	Implement a policy of assertively promoting and incentivizing the repurposing and redevelopment of existing buildings and sites within the City, particularly those with high impervious coverage and no stormwater facilities. This includes removing unnecessary obstacles and delays in the plan review and approval process and overall streamlining of redevelopment applications.	SHORT TERM	\$	DPZ	
LU2.2	Assemble a suite of tax and other incentives to bring about the redevelopment of vacant and underutilized properties especially those projects with designs that create more walkable environments and deliver public benefits within the neighborhoods where they are located.	MID TERM	SS	DPZ/FIN	
LU2.3	Utilize the redevelopment priority framework provided in this chapter to map and clarify those properties which should be prioritized for improvement and re-investment.	SHORT TERM	\$	DPZ	
LU2.4	Study and propose reductions to the City's parking requirements for all land uses to incentivize the sensible development of underutilized land, reduce impervious coverage, improve stormwater management performance, and encourage walking, biking, and transit use, among other benefits to the City.	SHORT TERM	\$	DPZ	T3 / ES6

#### **LAND USE**

## **GOAL**

LU3

Identify zoning language adjustments to the residential districts that will help to bring about more housing options for workforce and middle-income residents.

**PERFORMANCE MEASURE 1**: The number of housing units per acre will increase commensurate with the quality of their community design and provided public services and facilities are available.

**PERFORMANCE MEASURE 2**: The share of total housing units in Annapolis in housing types with two, three and four units will grow from 6% to 15% by 2030 and to 30% by 2040.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU3.1	Explore incremental adjustments to the city's residential zones to allow for more diversity of housing types such as townhomes and duplexes that are compatible with existing neighborhoods, using architectural standards if needed to ensure compatibility. (also listed in Chapter 5: Housing under Goal H4)	SHORT TERM	\$	DPZ	H4
LU3.2	Explore using zoning incentives and/or regulations to spur the construction of housing types that offer more home ownership opportunities for workforce households. Workforce households, as defined by the State of Maryland, are those which have an aggregate annual income between 60% - 120% of the Area Median Income for home ownership opportunities. (also listed in Chapter 5: Housing under Goal H1)	SHORT TERM	\$	DPZ	H1
LU3.3	Explore using zoning incentives and/or regulations to prioritize long-term rental options for workforce households over short-term rental options. Workhouse households, as defined by the State of Maryland, are those which have an aggregate annual income between 50% - 100% of the Area Median Income for rental opportunities. (also listed in Chapter 5: Housing under Goal H1)	SHORT TERM	\$	DPZ	H1

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU3.4	Amend the allowed uses and regulations in the residential zones of the Historic District to encourage more multifamily housing options responsive to current housing needs and the preservation of neighborhood character.	MID TERM	\$	DPZ	
LU3.5	Amend the policies regulating for Short Term Rentals (STR's) to prioritize local ownership and occupancy as a strategy for housing affordability and neighborhood preservation.	SHORT TERM	\$	DPZ	MG3 / H2

#### LU4

Support and sustain the expansion of businesses and private sector employment, and the revitalization of the tourism sector (including restaurants, retail, and lodging) which was adversely impacted by the COVID-19 pandemic.

**PERFORMANCE MEASURE 1**: Between 2020 and 2040, the number of jobs within the City's light industrial sector will increase.

**PERFORMANCE MEASURE 2**: By 2025 the restaurant and tourism sector will have surpassed its economic productivity levels recorded at the beginning of 2019, before the shut-downs related to the COVID-19 pandemic.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU4.1	Maintain the City's zoning for light industrial use and explore the interest among major industrial landholders for preparing a master plan to promote the expansion of existing firms and the modernization of the industrial district.	MID TERM	\$	DPZ	
LU4.2	Focus the City's economic development efforts on business retention, intensification and expansion within areas zoned for mixed use, light industrial use, and in areas zoned for maritime businesses.	ONGOING	\$	DPZ	
LU4.3	Coordinate with the maritime sector to facilitate its modernization and response to evolving economic conditions in the maritime and tourism industries.	ONGOING	\$	DPZ	
LU4.4	Consider economic development incentives to support the return of businesses into street level storefronts and restaurants.	SHORT TERM	\$	DPZ	



FIGURE 13-2: LIGHT INDUSTRIAL BUSINESSES SUCH AS THIS WHICH ARE ALSO PART OF THE CITY'S MARITIME SECTOR ARE AN ECONOMIC DEVELOPMENT FOCUS IN THIS PLAN

#### **LAND USE**

# GOAL

#### LU5

Protect and secure the historic resource values of downtown Annapolis while promoting both its economic vitality and its role as the central civic gathering place for the City's residents.

**PERFORMANCE MEASURE 1**: The estimated number of downtown visitors (and hotel occupancy rates) remain at or exceed levels set prior to COVID-19 pandemic through 2040.

**PERFORMANCE MEASURE 2**: The square footage of leased commercial floor area remains at or exceeds levels set prior to COVID-19 pandemic through 2040.

**PERFORMANCE MEASURE 3**: Between 2020 and 2040, the population of full time residents within the Historic District will increase.

**PERFORMANCE MEASURE 4**: The number of apartments above retail in the Historic District will increase each year through 2040.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU5.1	Build the infrastructure needed to protect downtown from both routine nuisance flooding and the flooding associated with sea level rise and storm surge, and facilitate the enhancement of the most at-risk buildings.	SHORT TERM	\$	DPZ	ACHP4
LU5.2	Implement the consensus plan of the City Dock Action Committee. (also listed in Chapter 8: Arts, Culture & Historic Preservation under Goal ACHP4)	SHORT TERM	\$\$\$	DPW	ACHP4
LU5.3	Continue to maintain stringent historic preservation requirements in downtown to protect the City's architectural and city planning heritage.	ONGOING	\$	DPZ	ACHP4
LU5.4	Ensure that zoning standards for the Historic District are updated to address recommendations from all recent hazard mitigation plans including the Citywide Hazard Mitigation Plan (2022) and Weather It Together: Cultural Resource Hazard Mitigation Plan (2018). (also listed in Chapter 8: Arts, Culture & Historic Preservation under Goal ACHP4)	ONGOING	\$	DPZ	ACHP4



ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU5.5	Enact legislation that compels property owners within the Historic District, prioritizing those on Main Street, to update sprinkler systems by 2028. (also listed in Chapter 8: Arts, Culture & Historic Preservation under Goal ACHP4)	SHORT TERM	\$	DPZ	ACHP4
LU5.6	Explore expansion of the current historic tax credit budget, with priority offered to projects that activate upper floors with moderately-priced dwelling units.	SHORT TERM	\$\$	DPZ/FIN	ACHP4
LU5.7	Explore the potential to create a Business Improvement District for the Downtown and Inner West Street areas to augment funding for public realm enhancements, security, and maintenance.	MID TERM	\$	DPZ	

### **LAND USE**

## GOAL

#### LU6

Link the city together with a network formed by the city's remaining natural areas, improved open spaces, parks, and institutional uses.

**PERFORMANCE MEASURE 1**: The Greenway Map is updated annually.

**PERFORMANCE MEASURE 2**: Establish at least one contiguous greenway within each of the City's creek watersheds by 2030.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU6.1	Design, adopt and implement a Greenway Plan that identifies lands which provide significant environmental, recreation, aesthetic, and/or health benefits and details strategies to maintain the values these lands provide; The plan should be managed jointly by the Annapolis Conservancy Board and the Department of Planning and Zoning, updated annually, and coordinated with Anne Arundel County's Green Infrastructure Plan. (also listed Chapter 7: Community Facilities under Goal CF1)	SHORT TERM	\$	DPZ	CF1
LU6.2	In the review and approval of infill and redevelopment projects, align parkland dedications and required open space set-asides to promote the interconnection of open spaces across parcels.	ONGOING	\$	DPZ	
LU6.3	Require that public access easements be established within areas set aside for future open space or planted for required forest conservation.	SHORT TERM	\$	DPZ	
LU6.4	Recognizing the innumerable benefits of street tree planting including reducing the heat island effect, air quality improvement, carbon sequestration, wildlife habitat, and traffic calming, design certain streets to be part of the Greenway Plan and elevate the importance of street tree planting and coordinated landscaping along properties with street frontage.	SHORT TERM	\$\$	DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
LU6.5	Use the City's forest conservation requirements to direct conservation and afforestation in ways that build larger networks of connected forests. (Also listed in Chapter 9: Environmental Sustainability under goal ES2)	SHORT- TERM	\$	DPZ	ES2
LU6.6	Explore opportunities to plant trees on institutional properties within the city limits such as those owned by HACA, Anne Arundel County schools and libraries, State of Maryland offices, and the Navy, for the purposes of meeting mitigation requirements and the general tree canopy goals. (also listed in Chapter 9: Environmental Sustainability under Goal ES2)	SHORT TERM	\$	DPZ	ES2
LU6.7	Amend the zoning ordinance and map to create and apply Environmental Enhancement areas guided by the Future Land Use Map of this Plan. Environmental Enhancement areas are property parcels that either already offer ecological benefits or should be improved to do so, but are not appropriate to serve as active parkland.	SHORT TERM	\$	DPZ	
LU6.8	Enact an agreement with the County that establishes the City's right to direct and use its share of Program Open Space funds for the protection and enhancement of lands within its jurisdiction. Such an agreement should detail the specific uses of the funds.	SHORT TERM	\$	DPZ	
LU6.9	Improve coordination between City departments and City Boards/Commissions tasked with environmental protection, including the Annapolis Conservancy Board, to ensure properties being reviewed for development or permitting are considered in a fuller context, taking into account the property's opportunities for conservation and easements within the property as well as connections to surrounding open space, conservation and trail systems.	SHORT TERM	\$	DPZ ANNAP ACT	OLIS AHEAD TION MATRIX 407

### **HOUSING**

# GOAL

Produce a supply of affordable rental and ownership housing in order to meet current and projected needs.

**PERFORMANCE MEASURE 1**: The percent of total renter households that are "severely cost burdened" is reduced to 10% by 2040.

**PERFORMANCE MEASURE 2**: The percent of total home-owner households that are "severely cost burdened" by 2040 is reduced to 6.5%.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
H1.1	Coordinate with Anne Arundel County and the State of Maryland to encourage the development of affordable and moderately priced rental and owner-occupied housing within the greater Annapolis area.	SHORT TERM	\$	DPZ	
H1.2	Specifically promote infill development and redevelopment in the Upper West Street and Forest Drive corridors to facilitate the creation of walkable communities where new housing options and neighborhood commercial uses coexist with, and enhance, the existing communities.	SHORT TERM	\$	DPZ	LU1
H1.3	Use the City's authority to annex and permit development to promote housing development in the City's 82.6-acre Growth Area, which is defined as the area outside of the City boundary which meets the guidelines for the State's Priority Funding Areas and is therefore deemed sensible for annexation.	MID TERM	\$	DPZ	MG2/MG3
H1.4	Reevaluate the Moderately Priced Dwelling Unit (MPDU) program and consider how it could be more effective including opportunities to expand the requirement for MPDUs within planned developments and extending the length of time before the units expire.	SHORT TERM	\$	DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
H1.5	Remove the barriers in the City's current zoning regulations that are preventing Annapolis from meeting the Federal Fair Housing Act standards, which include expanding the areas where more "missing middle" workforce housing options are permitted. (also listed in Chapter 3: Municipal Growth under Goal MG3)	SHORT- TERM	\$	DPZ	MG3
H1.6	Explore using zoning incentives and/or regulations to spur the construction of housing types that offer more home ownership opportunities for workforce households. Workforce households, as defined by the State of Maryland, are those which have an aggregate annual income between 60% - 120% of the Area Median Income for home ownership opportunities. (also listed in Chapter 4: Land Use under Goal LU3)	SHORT TERM	\$	DPZ	LU3
H1.7	Explore using zoning incentives and/or regulations to prioritize long-term rental options for workforce households over short-term rental options. Workhouse households, as defined by the State of Maryland, are those which have an aggregate annual income between 50% -100% of the Area Median Income for rental opportunities. (also listed in Chapter 4: Land Use under Goal LU3)	SHORT TERM	\$	DPZ	LU3
H1.8	Utilize zoning district changes to identify "housing priority" areas where access to transit, jobs, and amenities are already available within a 1/2 mile radius.	SHORT TERM	\$	DPZ	MG3

### **HOUSING**

# GOAL

#### **H2** Preserve the supply of quality housing for low and moderate income households.

**PERFORMANCE MEASURE 1**: Achieve no net loss in the supply of housing meeting the needs of low and moderate income households.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
H2.1	Formalize a policy of no net loss in quality affordable units to be managed by the Community and Economic Development division of the City's Department of Planning & Zoning.	SHORT TERM	\$	DPZ	
H2.2	Mitigate displacement of low- and moderate-income households by facilitating strategies aimed at reducing the costs of maintenance and property taxes.	SHORT TERM	\$	DPZ	
H2.3	Maintain and regularly update an inventory of naturally- occurring affordable housing (NOAH) in the greater Annapolis area and develop triggers and criteria for preservation actions.	SHORT TERM	\$	DPZ	
H2.4	Give greater preference at the highest level of City staff, in time and resources, to working closely with residents in low and moderate income neighborhoods who may not be formally organized to advance their interests, especially where owner occupied housing is generally affordable.	ONGOING	\$	DPZ	
H2.5	Amend the policies regulating for Short Term Rentals (STRs) to prioritize local ownership and occupancy as a strategy for housing affordability and neighborhood preservation.	SHORT TERM	\$	DPZ	MG3/LU3
H2.6	Create legislation that helps to preserve the city's existing stock of small scale apartment buildings – including duplexes, triplexes, fourplexes, and other configurations– and limits their consolidation into single family dwellings.	SHORT TERM	\$	DPZ	

H3 Plan for changing housing needs over time in relation to both the production of new housing and preservation of existing units.

**PERFORMANCE MEASURE 1**: Annual reporting on the status of housing affordability in the city coupled with expert recommendations to the Mayor and City Council for improvement.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
H3.1	Formalize a system of regular monitoring and reporting on the production and preservation of affordable housing units.	SHORT TERM	\$	DPZ	
H3.2	On an ongoing basis, postulate and test zoning changes related to density and unit types and select and adopt zoning amendments that reduce regulatory barriers to the production of affordable housing units.	SHORT TERM	\$	DPZ	
НЗ.З	Formalize a policy of regular coordinated reporting with Anne Arundel County on the production and preservation of affordable housing units in the greater Annapolis area.	SHORT TERM	\$	DPZ	
H3.4	Leverage the insight and support of the Affordable Housing and Community Equity Development Commission to develop and review strategies for the production of new housing and the preservation of existing units.	ONGOING	\$	DPZ	

### **HOUSING**

### GOAL

H4 Increase the supply, variety, and quality of housing types throughout the city to meet the needs of a diverse population in regard to income, age, household size, disability, and other factors.

**PERFORMANCE MEASURE 1**: The percentage of housing units in housing types with two, three and four units will grow from 6% to 15% of the total by 2030, and to 25% by 2040.

**PERFORMANCE MEASURE 2:** The number of accessory dwelling units will increase by 500 units by 2040.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
H4.1	Explore incremental adjustments to the city's residential zones to allow for more diversity of housing types such as townhomes, duplexes, and triplexes, that are compatible with existing neighborhoods, using architectural standards if needed to ensure compatibility. (also listed in Chapter 4: Land Use under Goal LU3)	SHORT	\$	DPZ	LU3
H4.2	Update the City's Green Building requirements to include new standards for energy efficiency, water efficiency, and site design for all new residential buildings regardless of size; new inspections protocols; and explore the feasibility of a post-occupancy study requirement for larger projects. (also listed in Chapter 9: Environmental Sustainability under Goal ES6)	SHORT	\$	DPZ	ES6
H4.3	Create legislation that incentivizes and removes barriers to building accessory dwelling units.	SHORT TERM	\$	DPZ	
H4.4	Foster new opportunities for mixed income and mixed-use communities including through the redevelopment of the Eastport Terrace and Harbor House communities, and potentially other properties currently owned and managed by the Housing Authority of the City of Annapolis (HACA).	SHORT TERM	\$	DPZ	



FIGURE 13-2: THIS HOUSE IN EASTPORT COULD BE MISTAKEN FOR A SINGLE FAMILY HOME BUT IN FACT CONTAINS THREE APARTMENTS AND IS IN KEEPING WITH THE NEIGHBORHOOD CHARACTER.

## GOAL

Shift the mix of mobility investments towards public transit, micro-mobility / ridesharing, active transportation, and support for telework options to double the usage of these modes by 2040.

**PERFORMANCE MEASURE 1**: Capital investments in transportation for public transit, walking, biking, and Mobility-as-a-Service (MaaS) will increase from 7% to 15% of General Fund expenditures by Fiscal Year 2025 and 25% by 2030

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T1.1	Complete the Bike network improvements identified in the 2011 Bike Master Plan and this Plan, and regularly track progress on all proposed improvements.	ONGOING	\$	DPZ	
T1.2	Ensure that all approved bike facility recommendations are budgeted and implemented with CIP roadway improvements.	SHORT TERM	\$	DPZ	
T1.3	Prioritize the design and construction of the West East Express (WEE) bike corridor as the spine of the City's bike network.	ONGOING	\$	DPZ	
T1.4	Continue to support and expand micro-mobility options particularly to improve mobility into and through the downtown area, including micro-transit, bikeshare, paddleshare, ridesharing services, carshare, ferries, and an integrated Annapolis Mobility App integrated with Annapolis Transit and Anne Arundel County Transit.	ONGOING	\$	DPZ/ ADOT	
T1.5	Implement a no-fare pilot program for public transit to encourage more ridership and test its feasibility.	SHORT TERM		ADOT	
T1.6	Reimagine Annapolis Transit including its route network, frequency, and vehicle fleet, to provide improved service and expand ridership.	SHORT TERM		ADOT	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T1.7	Implement a micro-transit pilot program to expand ridership and test the feasibility of on-demand service.	SHORT TERM	\$	ADOT	
T1.8	Coordinate and connect Annapolis Transit to regional transit options including park-and-ride stations, Anne Arundel County's planned multi-modal transit center, and MTA's express route stops.	SHORT TERM	\$	ADOT	
T1.9	Work with MTA and private commuter bus services to establish rush hour stops along Forest Drive and explore the feasibility of a dedicated intermodal transit hub in the Bay Ridge/Hillsmere area.	SHORT TERM	\$	ADOT	
T1.10	Implement the planned electric ferry pilot program connecting Eastport to downtown Annapolis and work with regional partners to envision Annapolis as a hub for ferry connections to other destinations.	MID TERM	\$	DPW/ DPZ	

# GOAL

Build a policy environment in Annapolis that is mode-neutral, equitable, oriented to safety, and prioritizes connectivity of the city's streets, sidewalks, and trails.

**PERFORMANCE MEASURE 1**: Crash rate is lower than rate of population and employment increase by 2030; Reduce serious injuries from car crashes to 3.0 per million Vehicle Miles Travelled (VMT) by 2040.

**PERFORMANCE MEASURE 2**: Allow no new full-movement driveways on major arterials (and reduce the total number of existing driveway cuts).

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T2.1	Adopt a Complete Street policy and design manual to guide every public and private development project through planning, design, and maintenance.	MID TERM	\$	DPZ/ DPW	
T2.2	Adopt standards for implementing bicycle facility infrastructure that improve safety for cyclists and are tailored to Annapolis.	SHORT TERM	\$	DPZ/ DPW	
T2.3	Revise the Traffic Impact Analysis requirements to incorporate safety assessments and to be fully multimodal, including Quality/Level of Service (Q/LOS) assessments for bike, pedestrian, and transit modes.	SHORT TERM	\$	DPZ	
T2.4	Adopt a Vision Zero policy, which is an initiative aimed at eliminating all traffic fatalities and severe injuries, that includes at minimum coordinated guidance on engineering, education, enforcement, and emergency medical services, and is aligned with Anne Arundel County's Vision Zero policy.	SHORT TERM	\$	DPZ	
T2.5	Prioritize bike and pedestrian facility improvements to the City's major thoroughfares, where the highest number of traffic fatalities and injuries currently happen, as means of improving safety, minimizing conflicts between modes of travel, and lessening congestion.	ONGOING		DPZ/ DPW	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T2.6	Prioritize improved bike and pedestrian connections to schools, particularly along Cedar Park Road, Forest Drive, and Spa Road.	ONGOING	\$\$	DPW/ DPZ	
T2.7	As part of future small area planning, address all physical barriers to mobility in the City and identify targeted actions for improving connections between neighborhoods particularly along the Forest Drive corridor.	MID TERM	\$	DPZ	
T2.8	Prioritize the hiring of a fulltime transportation engineer for the City's Department of Public Works who will help to accelerate improvements to the City's street network.	SHORT TERM	\$\$	DPW	

# GOAL

Transportation will take a leadership role in creating a greener and healthier Annapolis to sustain the economic, environmental, and social quality of the City.

**PERFORMANCE MEASURE 1**: Triple the mileage of walking and biking facilities from 2020 to 2040.

**PERFORMANCE MEASURE 2**: Increase bike and walk mode share to 15% by 2040.

**PERFORMANCE MEASURE 3**: Expand the number of publicly accessible EV charging stations tenfold by 2025.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T3.1	Adopt "Green Street" design standards that include maximum tree planting, use of silva cells, micro bioretention, permeable pavers, and other integrated stormwater best management practices.	SHORT TERM	\$\$	DPZ	LU6/ES2/WR2
T3.2	Plan for the transition of the City's fleet vehicles and transit vehicles to zero emissions vehicles with the goal of complete transition by 2030	SHORT TERM	\$\$	ADOT/ DPW	ES6
T3.3	Work with BGE and other partners to establish more public car-charging stations in Annapolis, particularly downtown, as well as incentives to establish charging stations at existing multifamily and commercial developments.	ONGOING	\$\$	DPZ	ES6
T3.4	Revise the City's parking standards to require carcharging parking spaces for new or redeveloped residential and commercial properties that require major site plan review.	SHORT TERM	\$	DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T3.5	Require existing parking lots to include one EV charging unit for every 50 parking spaces.	SHORT TERM	\$	DPZ	
T3.6	Study and propose reductions to the City's parking requirements for all land uses to incentivize the sensible development of underutilized land, reduce impervious coverage, improve stormwater management performance, and encourage walking, biking, and transit use, among other benefits to the City. (Also listed in Chapter 4: Land Use under Goal LU2, and Chapter 9: Environmental Sustainability under Goal ES6)	SHORT TERM	\$	DPZ	
T3.7	Become a Silver-level bike-friendly and Bronze-level walk-friendly community, designated by the League of American Bicyclists and Walk Friendly Communities, respectively.	SHORT TERM	\$	DPZ	

## GOAL

**T4** Expand partnerships with key public and private stakeholders to improve mobility, safety, and connectivity for residents and visitors alike.

**PERFORMANCE MEASURE 1**: At least one transportation related capital project in conjunction with Anne Arundel County, and one project with SHA, each year through 2040.

**PERFORMANCE MEASURE 2**: By 2028, the B&A Trail will be connected to downtown Annapolis through current project partnerships with MDOT/SHA, Anne Arundel County, St. John's College, HACA, and St. Anne's Parish.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T4.1	Continue to meet quarterly with Anne Arundel County Transportation staff to coordinate and accelerate improvements to Forest Drive which address safety and mobility options, particularly for pedestrians and bicyclists, and at all signalized intersections along the Forest Drive corridor.	ONGOING	\$	DPZ	
T4.2	Work with MDOT/SHA, NSA-Annapolis, and Anne Arundel County to implement the planned MD 450 Bicycle Retrofit project which will provide a safe bike connection from the B&A Trail into Annapolis.	SHORT TERM	\$	DPZ/ DPW	
T4.3	Continue to work with Anne Arundel County and MDOT/ SHA to advance and prioritize the redesign of the Chinquapin Round Road intersection at Forest Drive / MD-665 (Aris T. Allen Boulevard).	SHORT TERM	\$	DPZ/ DPW	
T4.4	Work with MDOT/SHA, Anne Arundel County, civic business associations, and private stakeholders to improve wayfinding signage throughout the city; new signage should utilize the City's approved wayfinding standards to the best degree possible.	MID TERM	\$\$	DPZ/ DPW	
T4.5	Work with partnering agencies including Anne Arundel County, EMS, Fire, and Police to develop advanced routing for bus and emergency response vehicles on Forest Drive.	SHORT TERM	\$	DPW/ OEM	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
T4.6	Partner with MDOT/SHA, Anne Arundel County, NSA-Annapolis, and the Resilience Authority on the design and implementation of an Intelligent Traffic System (ITS) for traffic signals on all evacuation routes as recommended in the MIRR Study.	SHORT TERM	\$\$\$	DPZ/ DPW/ OEM	
T4.7	Partner with St. John's College, St. Anne's Parish and HACA to design and implement the planned College Creek Connector trail between King George Street and Calvert Street.	SHORT TERM	\$\$\$	DPZ/ DPW	
T4.8	Partner with MDOT/SHA, Anne Arundel County, HACA, and private property owners to create the West East Express (WEE), a dedicated bike corridor that extends the Poplar Trail east and west along the former WB&A railroad corridor.	SHORT TERM	\$\$	DPZ/ DPW	
T4.9	Continue to collaborate with Bicycle Advocates for Annapolis and Anne Arundel County (Bike AAA), Mid-Atlantic Off-Road Enthusiasts (M.O.R.E.), Pedal Power Kids, and other biking advocates to plan and implement improved access to the City's bike network, as well as programs for riders of varying skill levels.	ONGOING	\$	DPZ	
T4.10	Work with MDOT/SHA to improve State-owned roadways in the City for multi-modal travel, particularly MD 450 (West Street), MD 435 (Taylor Avenue), and MD 436 (Ridgely Avenue)	ONGOING	\$	DPZ/ DPW	
T4.11	Work with the Naval Academy Athletic Association (NAAA) to explore the feasibility of a transit hub at the Navy-Marine Corps Memorial Stadium where tour buses could park and visitors could be shuttled into downtown via micro-transit options.	MD TERM	\$	DPZ/ ADOT	
T4.12	Continue to work with the MDOT/SHA, Anne Arundel County, and the Baltimore Regional Transportation Board to accelerate the improvement of regional transit options that will better connect Annapolis to the Washington DC and Baltimore areas.	MD TERM	\$	DPZ/ ADOT	
T4.13	As part of the Bay Crossing Study and future design phases of the Bay Bridge expansion, continue to work with the Maryland Transportation Authority, Anne Arundel County, Queen Anne's County, Bike AAA, Visit Annapolis & Anne Arundel County, and other partners to advocate for multimodal options including a dedicated bicycle and pedestrian trail, dedicated transit lanes and space for future rail service, and coordinated facilities for ferry service.	ONGOING	\$	DPZ / DPW / ADOT	

### **COMMUNITY FACILITIES**

# GOAL

CF1

Merge Annapolis' parks and recreation system with its evolving network of conservation areas and trails to create a comprehensive greenway system.

**PERFORMANCE MEASURE 1**: The Greenway Map is updated annually.

**PERFORMANCE MEASURE 2**: The Annapolis Conservancy Board assists the Department of Recreation and Parks with at least one conservation project every two years.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF1.1	Revise the mission of the Annapolis Conservancy Board to include regular coordination with the Department of Recreation and Parks.	SHORT TERM	\$	DPZ	
CF1.2	Refine and publish an official park system map that includes detailed information on access to conservation areas, water access, and trail connections, in addition to updated information on active recreation facilities.	SHORT TERM	\$\$	DRP/ DPZ	
CF1.3	Design, adopt and implement a Greenway Plan that identifies lands which provide significant environmental, recreation, aesthetic, and/or health benefits and detailed strategies to maintain the values these lands provide. The plan should be managed jointly by the Annapolis Conservancy Board and the Department of Planning and Zoning, updated regularly, and coordinated with Anne Arundel County's Green Infrastructure Plan. (also listed in Chapter 4: Land Use under Goal LU6)	SHORT TERM	\$\$	DPZ/ DRP	LU6
CF1.4	Explore training opportunities for Parks maintenance staff to include habitat restoration, conservation land management, and green stormwater infrastructure maintenance. (also listed in Chapter 10: Water Resources under Goal WR3)	SHORT TERM	\$\$	DRP	WR3
CF1.5	Prioritize the development of a dedicated parks maintenance facility at Truxtun Park, or at another feasible location.	SHORT TERM	\$\$	DRP	
CF1.6	Expand Recreation & Parks staff to include a dedicated trail manager, and two naturalist/park rangers.	SHORT TERM	\$\$	DRP	

# **CF2** Expand parks facilities strategically, and the connections to them, to achieve equitable access for all.

**PERFORMANCE MEASURE 1**: All residents are within a 10-minute walk of a park space maintained by the City of Annapolis Department of Recreation and Parks.

**PERFORMANCE MEASURE 2**: The citywide Recreation and Parks Master Plan is updated by 2025 and regularly updated every 10 years.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF2.1	Update the Adequate Public Facilities Ordinance to meet this goal's performance metric of proximity to parks by clarifying the level of service standards, updating the fee-in-lieu structure to reflect current park development costs, and simplifying the process.	ONGOING	\$	DPZ	
CF2.2	Prioritize the update of the 2004 Recreation and Parks Master Plan, with future updates to occur every ten years; The master plan will not only serve to update equitable level of service standards, recreational program priorities, and opportunities for park and trail enhancements, but also opportunities for new diversified funding sources, as well as updated maintenance guidelines and efficiencies.	SHORT TERM	\$	DRP DPZ	
CF2.3	Identify opportunities for enhancements to existing parks, such as at Annapolis Walk Community Park that will expand use to more diverse users and activities.	ONGOING	\$\$	DPZ DRP	
CF2.4	Work with Anne Arundel County Recreation and Parks, and Anne Arundel County Public Schools, to implement enhancements to various Anne Arundel County facilities within the City, or create new facilities, that could help to address equity goals.	ONGOING	\$	DRP	
CF2.5	Include improvements to bike and pedestrian access in all new park projects or investments at existing parks.	ONGOING	\$\$	DRP DPW	

### **COMMUNITY FACILITIES**

# GOAL

**CF3** Prioritize equitable water access by investing in new and improved public open spaces along the waterfront, and the connections to them.

**PERFORMANCE MEASURE 1**: The linear feet of publicly accessible waterfront is doubled by 2040 from approximately 10,000 LF to 20,000 LF.

**PERFORMANCE MEASURE 2**: Funding for ongoing improvements to existing water access infrastructure is a line item in the annual Capital Improvement Program.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF3.1	Continue to work with public and private partners to plan, design, and build the future Elktonia/Carr's Beach Park as a signature investment in the City's public waterfront. (also listed in Chapter 8: Arts, Culture & Historic Preservation under Goal ACHP1)	ONGOING	\$	DPZ	ACHP1
CF3.2	Continue to work with HACA and other community partners to create a community nature park at Hawkins Cove with a living shoreline, restored stream channel, public water access, naure play area, and improved trail connectivity to Truxtun Park. (also listed in Chapter 9: Environmental Sustainability under Goal ES3)	SHORT TERM	\$	DRP/ DPZ	ES3
CF3.3	Work with public and private property owners along College Creek to create a parks and trails master plan for the area that will create new and improved water access opportunities, preserve existing open space and cultural sites, restore habitat, and improve bicycle/pedestrian connections throughout the area; Prioritize the development of the College Creek Connector trail and Capital City Gateway Park as central to this effort.	SHORT TERM	\$\$	DPZ/ DRP	
CF3.4	Deferred maintenance to the City's existing waterfront parks is addressed through consistent funding in the annual Capital Improvement Program.	ONGOING	\$\$\$	DPW DRP	WR3

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF3.5	Update the adequate public facilities ordinance to require public waterfront access for all new waterfront development, excluding single family parcels.	ONGOING	\$	DPZ	
CF3.6	Develop a clear and consistent signage program for all public water access sites, including wayfinding, regulatory, and interpretive signage, to clarify access and encourage more public use of the waterfront. As part of this, ensure that clear and consistent public water access signage is required at all future public access easements not maintained by the City.	SHORT TERM	\$\$	DRP DPZ	
CF3.7	Establish an accessible system of paddle share locations at multiple public water access locations in the city. The system would provide storage for paddle craft and a means for residents and visitors to affordably access them.	SHORT TERM	\$\$	DPZ/ DRP	
CF3.8	Update City standards to ensure that all new, replaced, or enhanced stormwater outfall facilities are designed in coordination with public water access so that recreational opportunities are not negatively impacted.	SHORT TERM	\$	DPW	WR3

### **COMMUNITY FACILITIES**

# GOAL

**CF4** Ensure that recreational program offerings are accessible to all City residents, particularly under-represented populations.

**PERFORMANCE MEASURE 1**: Recreational program funding per capita is competitive with other cities similar in size to Annapolis.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF4.1	Establish an effective system for tracking who is being served by the City's recreational programs to help target programming and ensure equity.	ONGOING	\$	DRP	
CF4.2	Explore the feasibility of creating a new City park that combines the Bates Athletic Complex, the former Weems Whelan Field, and the site of the former WYRE radio station (currently home to the Chesapeake Children's Museum). As part of this, study the potential return on investment of developing a modern multi-use sports complex on the site as a revenue-generating asset for the City.	MID TERM	\$	DPZ DRP	
CF4.3	Support the creation of an independent parks foundation that can help to aggregate private donations, manage fundraising campaigns, and spearhead new parks initiatives.	ONGOING	\$	DPZ DRP	
CF4.4	Explore new opportunities for revenue-generating concessions within existing parks including paddle craft rentals, food service, and other complementary uses.	ONGOING	\$	DRP	
CF4.5	Prioritize the hiring of the Recreation Associate position at the Stanton Center to allow for additional programming.	SHORT TERM	\$\$	DRP	
CF4.6	Ensure that an updated citywide Recreation and Parks Master Plan includes an emphasis on clear level of service standards and equity in the development of recreational programs.	SHORT TERM	\$	DRP DPZ	



#### **CF5** Leverage opportunities for expanded recreational use of Waterworks Park.

**PERFORMANCE MEASURE 1**: Initiate a plan to restore and program the historic pump house for new uses by 2025.

**PERFORMANCE MEASURE 2**: Complete all approved bike and pedestrian connections to Waterworks Park by 2030.

RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
Continue to work with passionate volunteers such as those from Mid-Atlantic Off-road Enthusiasts (M.O.R.E.) and other partners to expand access to the park for users of all ages and interests.	ONGOING	\$	DPZ DRP	
Continue to work with Anne Arundel County to create the necessary bike and pedestrian facilities to connect the park to nearby residential communities and commercial centers.	ONGOING	\$	DPZ	
Expand the trail network around the Annapolis Solar Park and explore a potential parking area at N. River Road.	SHORT	\$\$	DRP	
Explore using an RFP process to solicit developer interest in the restoration and activation of the historic pump house building.	ONGOING	\$	DPZ DPW DRP	
Expand program offerings at the park to reach more youth who have limited access to the types of activities that happen there such as fishing, hiking, mountain biking, and outdoor education.	SHORT TERM	\$\$	DRP	
Continue to work with Anne Arundel County and nearby property owners to create new parking options that will help to expand park use and eliminate parking conflicts.	ONGOING	\$	DPZ	194-444-44-44-4-4-4-4-4-4-4-4-4-4-4-4-4-
	Continue to work with passionate volunteers such as those from Mid-Atlantic Off-road Enthusiasts (M.O.R.E.) and other partners to expand access to the park for users of all ages and interests.  Continue to work with Anne Arundel County to create the necessary bike and pedestrian facilities to connect the park to nearby residential communities and commercial centers.  Expand the trail network around the Annapolis Solar Park and explore a potential parking area at N. River Road.  Explore using an RFP process to solicit developer interest in the restoration and activation of the historic pump house building.  Expand program offerings at the park to reach more youth who have limited access to the types of activities that happen there such as fishing, hiking, mountain biking, and outdoor education.  Continue to work with Anne Arundel County and nearby property owners to create new parking options that will help to expand park use and eliminate parking	Continue to work with passionate volunteers such as those from Mid-Atlantic Off-road Enthusiasts (M.O.R.E.) and other partners to expand access to the park for users of all ages and interests.  Continue to work with Anne Arundel County to create the necessary bike and pedestrian facilities to connect the park to nearby residential communities and commercial centers.  Expand the trail network around the Annapolis Solar Park and explore a potential parking area at N. River Road.  Explore using an RFP process to solicit developer interest in the restoration and activation of the historic pump house building.  Expand program offerings at the park to reach more youth who have limited access to the types of activities that happen there such as fishing, hiking, mountain biking, and outdoor education.  Continue to work with Anne Arundel County and nearby property owners to create new parking options that will help to expand park use and eliminate parking	Continue to work with passionate volunteers such as those from Mid-Atlantic Off-road Enthusiasts (M.O.R.E.) and other partners to expand access to the park for users of all ages and interests.  Continue to work with Anne Arundel County to create the necessary bike and pedestrian facilities to connect the park to nearby residential communities and commercial centers.  Expand the trail network around the Annapolis Solar Park and explore a potential parking area at N. River Road.  Explore using an RFP process to solicit developer interest in the restoration and activation of the historic pump house building.  Expand program offerings at the park to reach more youth who have limited access to the types of activities that happen there such as fishing, hiking, mountain biking, and outdoor education.  Continue to work with Anne Arundel County and nearby property owners to create new parking options that will help to expand park use and eliminate parking  ONGOING \$	Continue to work with passionate volunteers such as those from Mid-Atlantic Off-road Enthusiasts (M.O.R.E.) and other partners to expand access to the park for users of all ages and interests.  Continue to work with Anne Arundel County to create the necessary bike and pedestrian facilities to connect the park to nearby residential communities and commercial centers.  Expand the trail network around the Annapolis Solar Park and explore a potential parking area at N. River Road.  Explore using an RFP process to solicit developer interest in the restoration and activation of the historic pump house building.  Expand program offerings at the park to reach more youth who have limited access to the types of activities that happen there such as fishing, hiking, mountain biking, and outdoor education.  Continue to work with Anne Arundel County and nearby property owners to create new parking options that will help to expand park use and eliminate parking

### **COMMUNITY FACILITIES**

# GOAL

CF6

Improve public safety throughout the city by targeting public and private investment to areas of persistent poverty, crime, and historic disinvestment.

**PERFORMANCE MEASURE 1**: Improvements to the streetscapes and/or recreational spaces at each of the City's public housing communities are included in the annual Capital Improvement Program.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF6.1	Ensure that all new residential development follows the principles of Crime Prevention Through Environmental Design (CPTED).	ONGOING	\$	DPZ	
CF6.2	Prioritize public safety as a key criteria in determining and prioritizing capital improvement projects such as street, park, and trail enhancements.	SHORT TERM	\$	DPW DPZ	
CF6.3	Update the Adequate Public Facilities Ordinance to better reflect public safety goals and the various means to achieve them.	ONGOING	\$	DPZ	
CF6.4	Coordinate community programs and leverage community resources of the Annapolis Police Department, the City's Office of Community Services, and other social service organizations to address the root causes of crime and community conflict.	ONGOING	\$	APD CM	
CF6.5	Work with community partners, Anne Arundel County, and the State of Maryland to advance gun violence intervention programs in communities facing persistent gun violence.	ONGOING	\$\$	APD CM	
CF6.6	Continue to fund and seek partnerships to advance community enrichment programs such as Annapolis United that help to connect youth and families to worthwhile recreation opportunities.	ONGOING	\$\$	DRP APD	
CF6.7	Support and promote the Annapolis Police Homicide and Gun Violence Dashboard as a tool for coordinated neighborhood planning and investment.	ONGOING	\$	APD DIT	

# **CF7** Partner with Anne Arundel County to expand program opportunities and resources for Annapolis residents at public schools, libraries, and health facilities.

**PERFORMANCE MEASURE 1**: Each public school within the City limits will have a Safe Routes to School plan in place by 2030.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
CF7.1	Work with Anne Arundel County and AACPS to Initiate and advance Safe Routes to School projects at all public schools within the City limits. Safe Routes to School is a federally funded program that helps to advance safe pedestrian and bike connections to public schools.	ONGOING	\$\$	DPZ	
CF7.2	Prioritize bikeway and sidewalk network improvements within the ¼ mile walk radius of each public school within the City limits.	SHORT TERM	\$\$	DPW DPZ	
CF7.3	Expand Annapolis Transit service in coordination with Anne Arundel County Transit to provide access to Annapolis High School and adjacent public facilities along Riva Road including the Arundel Olympic Swim Center, Anne Arundel County Offices, the Anne Arundel County Farmers Market, and the MTA Park & Ride Center.	SHORT TERM	\$\$	ADOT	
CF7.4	Support expanded satellite healthcare programs within underserved low income communities.	SHORT TERM	\$	OEM	
CF7.5	Continue to support the Anne Arundel County Public Library's innovative efforts to reach more Annapolis area residents through pop-up branches, mobile programs, and new services.	ONGOING	\$	DPZ DRP	
CF7.6	Ensure that a future redevelopment of the Eastport Annapolis Neck Library is closely coordinated with other area goals and better connected to adjacent destinations including Quiet Waters Park and the Hillsmere Shopping Center.	MID- TERM	\$	DPZ	

## **ARTS, CULTURE & HISTORIC PRESERVATION**

### **GOAL**

### ACHP1

Practice an approach to historic and cultural preservation that is inclusive and equitable and fully acknowledges the diversity of cultures that have created the Annapolis of today.

**PERFORMANCE MEASURE 1**: Add at least two (2) historic sites outside of the downtown Historic District to the City of Annapolis Local Landmark program and at least one (1) application for National Register status every five years.

**PERFORMANCE MEASURE 2**: Submit at least one grant application to the State of Maryland's African-American Heritage Preservation Program every two years.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ACHP1.1	Develop a preservation action plan for all notable historic sites beyond the downtown Historic District, particularly those relevant to African-American heritage.	SHORT TERM	\$\$	DPZ	
ACHP1.2	Work with the National Park Service to implement its Master Interpretation Plan which is taking an expansive and inclusive approach to cultural and historical interpretation.	SHORT TERM	\$	DPZ	
ACHP1.3	Explore African-American cultural district designations for the Parole and Old Fourth Ward neighborhoods that would promote these areas for tourism and unlock access to additional grant funding.	ONGOING	\$	DPZ	
ACHP1.4	Explore the potential for a National Register designation of the Parole Rosenwald School and funding opportunities for preservation.	SHORT TERM	\$	DPZ	
ACHP1.5	Advance the plans for a Hoppy Adams House museum at the former home of the late radio disc jockey and civil rights leader in Parole.	SHORT TERM	\$\$\$	DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ACTION#	RECOMMENDED ACTION	Tilvillad	0031	AGENCI	RELATED GOALS
ACHP1.6	Explore opportunities for the Banneker-Douglass Museum and other organizations to assist with the stewardship of African-American historic sites in the city.	ONGOING	\$	DPZ	
ACHP1.7	Continue to work with public and private partners to plan, design, and build the future Elktonia/Carr's Beach Park as a signature investment in the City's public waterfront. (also listed in Chapter 7: Community Facilities under Goal CF3)	SHORT TERM	\$\$\$	CM DRP DPZ DPW	CF3
ACHP1.8	Budget for the City to add a new Historic Site Manager position who will better manage, curate, and program historic sites owned by the City.	SHORT TERM	\$\$	DPZ/ DRP	
ACHP1.9	Identify funding opportunities for artists, designers, and curators to develop new ways of interpreting historic sites, particularly in advance of restoration.	ONGOING	\$	DPZ	

# **ARTS, CULTURE & HISTORIC PRESERVATION**

### **GOAL**

#### ACHP2

Expand the reach of the Annapolis Arts & Entertainment District and growth of the creative economy.

**PERFORMANCE MEASURE 1**: The proposed expansion of the Arts & Entertainment District is approved.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ACHP2.1	Support the expansion of the Annapolis Arts & Entertainment District through City Council legislative action.	ONGOING	\$	CM DPZ	
ACHP2.2	Partner with Maryland Hall and Anne Arundel County Public Schools (AACPS) to create a campus master plan to better coordinate cultural programming opportunities, improved connections to nearby areas, and site improvements for multiple outdoor uses.	MID TERM	\$\$	DPZ	
ACHP2.3	Partner with the Annapolis Art in Public Places Commission (AiPPC), the Arts & Entertainment District, and other arts stakeholders on grant applications for public art opportunities and streetscape enhancements.	ONGOING	\$	DPZ	
ACHP2.4	Partner with AiPPC and the Arts & Entertainment District to continue existing event programming and support additional programming.	ONGOING	\$	DRP	
ACHP2.5	Expand the City's wayfinding signage program within the Arts & Entertainment District to better identify key institutions and destinations including Maryland Hall and the Stanton Center.	SHORT TERM	\$\$	DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ACHP2.6	Support the infill development of the remaining undeveloped portion of Park Place with arts-oriented uses which complement adjacent uses and the larger Arts & Entertainment District.	MID TERM	\$	CM DPZ	
ACHP2.7	Support the expansion and preservation of artist studio space, artist housing, and/or artist live/work space.	ONGOING	\$	DPZ	

## **ARTS, CULTURE & HISTORIC PRESERVATION**

### **GOAL**

#### **ACHP3**

Expand the capacity of the City to initiate and manage formalized cultural programs, public realm enhancements, and support for the city's creative economy.

**PERFORMANCE MEASURE 1**: A dedicated grant program for local artists is established that provides small grants to at least two local artists each year.

**PERFORMANCE MEASURE 2**: A full time dedicated position to arts programming is established within the City government.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ACHP3.1	Partner with the ACAAC, AiPPC, Maryland Hall, the Arts & Entertainment District, and other stakeholders to initiate an Arts & Culture Master Plan for the Annapolis area which will address needs and opportunities across all art disciplines and facets of the creative economy.	ONGOING	\$\$	DPZ	
ACHP3.2	Partner with AiPPC on grant funded opportunities for public art, performing arts, place-making, and event programming through staff support.	SHORT TERM	\$	DPZ	
ACHP3.3	Support AiPPC's dedicated programs with staff input from the Departments of Recreation and Parks, Planning and Zoning, and the Mayor's Office, and coordinate on the creation of new programs that can help to activate public places and generate new opportunities for artists.	ONGOING	\$	DPZ DRP	
ACHP3.4	Establish a dedicated small grants fund for local artists of all disciplines that is administered by AiPPC and distributed annually.	SHORT TERM	\$	DPZ	
ACHP3.5	Explore ways of better supporting, leveraging, coordinating, and growing the work of all arts organizations in the Annapolis area that may include: new grant programs, technical assistance by City staff, partnership programs, coordinated scheduling, and marketing.	SHORT TERM	\$	DPZ	

#### ACHP4

Enhance the sustainability of the Historic District through a multi-faceted approach to district-wide improvements.

**PERFORMANCE MEASURE 1**: The number of full time residents in the Historic District increases each year between 2020 and 2040.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ACHP4.1	Implement the recommendations of the Consensus Plan of the City Dock Action Committee.	ONGOING	\$\$\$	DPW DPZ	LU5
ACHP4.2	Work with business owners to develop updated guidelines for sidewalk seating and shading, parklets, and signage.	ONGOING	\$	DPZ	
ACHP4.3	Work with BGE, Historic Annapolis, State of Maryland, and other partners to develop a strategic plan for burying power lines within the Historic District, coordinated with the construction schedule of City Dock project.	ONGOING	\$\$\$	DPW	
ACHP4.4	Continue to maintain stringent historic preservation requirements in downtown to protect the City's architectural and city planning heritage.	ONGOING	\$	DPZ	LU5
ACHP4.5	Enact legislation that compels property owners within the Historic District, prioritizing those on Main Street, to update sprinkler systems by 2028	SHORT TERM	\$	DPZ	LU5
ACHP4.6	Explore expansion of the current historic tax credit budget, with priority offered to projects that activate upper floors with moderately-priced dwelling units.	SHORT TERM	\$\$\$	DPZ FIN	LU5
ACHP4.7	Ensure that zoning standards for the Historic District are updated to address recommendations from all recent hazard mitigation plans include the Citywide Hazard Mitigation Plan (2022) and Weather It Together: Cultural Resource Hazard Mitigation Plan (2018).	SHORT TERM	\$	DPZ	LU5

# GOAL

#### ES1

Practice a comprehensive and equitable approach to resilience that is relevant to all residents.

**PERFORMANCE MEASURE 1**: A Resilience Plan is adopted by the City by 2025 with annual updates on implementation.

**PERFORMANCE MEASURE 2**: The CIP includes resilience-related projects in all Wards.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES1.1	For the purposes of ensuring equity in resilience investments, utilize the definition of Sensitive Area provided in this Plan that includes not only natural resource areas of significant value but also areas deficient in ecological value. Based on this definition, a place with both high impervious coverage and lacking in tree canopy would be deemed a Sensitive Area.	ONGOING	\$	DPZ	
ES1.2	Complete the City's Resilience Plan and ensure that it includes an emphasis on equitable resilience for communities with higher social vulnerability.	SHORT TERM	\$\$	СМ	
ES1.3	Create a strategy for implementing "resilience hubs" within the City's most socially vulnerable communities based on the Maryland Energy Administration funding guidelines.	SHORT TERM	\$\$\$	DPZ CM	
ES1.4	Utilize the creekshed small area plans recommended in this Plan as a means to identify specific opportunities for neighborhood-scale resilience investments. (see Chapter 4: Land Use for more detail on the creekshed planning framework.)	MID TERM	\$	DPZ	LU1

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES1.5	Work with Anne Arundel County to leverage the full capabilities of the newly created Resilience Authority to implement projects that not only protect the City from sea level rise and other climate change impacts but also improve ecological functions.	ONGOING	\$	CM OEM DPW	
ES1.6	Work with BGE, Anne Arundel County, NSA- Annapolis, and other partners to implement the recommendations of the Military Installation Resilience Response Study (MIRR), particularly to ensure a strategy is in place for energy resilience.	ONGOING	\$	CM DPW OEM DPZ	
ES1.7	Include the Naval Academy's Sea Level Rise Advisory Council (SLRAC) as a stakeholder in resiliency planning efforts. The SLRAC focuses on sea level rise and coastal flooding impacts on the operational requirements of the Naval Academy and NS-Annapolis and advises Federal leadership on these issues.	ONGOING	\$	CM DPW OEM DPZ	

# GOAL

ES2

Expand the City's tree canopy particularly within heat islands and along riparian corridors.

**PERFORMANCE MEASURE 1**: No net loss of tree canopy by 2028.

**PERFORMANCE MEASURE 2**: Increase the City's tree canopy to 50% of its total land area by 2040.

**PERFORMANCE MEASURE 3**: Establish a consistent budget line is introduced in the City's capital budget for tree planting and proactive tree maintenance.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES2.1	Introduce new city policies that increase tree planting in residential areas of the city, protect heritage trees, control invasive vines, and expand mitigation planting requirements within the Critical Area.	SHORT TERM	\$	DPZ	
ES2.2	Create an Urban Forest Master Plan that includes updates to the City's Street Tree standards, new guidelines for tree preservation, and priority areas feasible for new tree planting in the public realm.	SHORT TERM	\$\$	DPZ/ DRP	LU6 T3
ES2.3	Initiate a pilot planting and tree canopy management program for Minority-owned businesses based in the communities where the work is targeted.	ONGOING	\$	CM DPZ	
ES2.4	Develop soil amendment and watering guidelines for new street trees to enhance the survival rate of new street trees.	SHORT TERM	\$\$	DPZ	
ES2.5	Promote and expand RePlant Annapolis, a community tree planting initiative in partnership with the Watershed Stewards Academy modeled after the RePlant Anne Arundel program.	ONGOING	\$\$	CM DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	соѕт	AGENCY	RELATED GOALS
ES2.6	Create an online dashboard for tracking the City's tree canopy year by year to ensure the goal of 50% coverage is met by 2040.	SHORT TERM	\$	DPZ DIT	
ES2.7	Continue to utilize fees collected through Critical Area mitigation and Forest Conservartion mitigation for new tree planting initiatives across in the City.	ONGOING	\$	DPZ	
ES2.8	Establish a consistent budget line item in the Capital Improvement Program for tree planting and proactive tree maintenance.	ONGOING	\$\$	DPZ	
ES2.9	Explore opportunities to plant trees on institutional properties within the city limits such as those owned by HACA, Anne Arundel County schools and libraries, State of Maryland offices, and the Navy, for the purposes of meeting mitigation requirements and the general tree canopy goals. (also listed in Chapter 4: Land Use under goal LU6)	ONGOING	\$	DPZ	LU6
ES2.10	Support the establishment of a dedicated non-profit advocacy organization focused on tree canopy preservation, enhancement, and expansion.	ONGOING	\$	CM DPZ	
ES2.11	Use the City's forest conservation requirements to direct conservation and afforestation in ways that build larger networks of connected forests. (Also listed in Chapter 4: Land Use under goal LU6)	ONGOING	\$	DPZ	LU6

# GOAL

Reinforce vulnerable shoreline areas by addressing the root causes of soil erosion and natural landscape degradation.

**PERFORMANCE MEASURE 1**: A comprehensive erosion control and slope stabilization plan is commenced at Truxtun Park by 2023 and completed by 2025.

**PERFORMANCE MEASURE 2**: At least two living shoreline, stream restoration, or oyster bed restoration projects are implemented by the City or local partners every year.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES3.1	Conduct a flood resilience study for the Eastport Peninsula to identify feasible strategies for flood mitigation.	ONGOING	\$\$	DPZ	
ES3.2	Continue to work with HACA and other community partners to create a community nature park at Hawkins Cove with a living shoreline, restored stream channel, public water access, naure play area, and improved trail connectivity to Truxtun Park. (also listed in Chapter 7: Community Facilities under Goal CF3)	SHORT TERM	\$\$	DPW DPZ DRP	CF3
ES3.3	Develop a comprehensive erosion control and slope stabilization plan for Truxtun Park's waterfront areas including priority actions.	SHORT TERM	\$\$\$	DPZ/ DRP	
ES3.4	Work with local partner organizations and public agencies to augment and maintain existing living shorelines, stream restorations, wetland restorations/creations, and oyster bed restorations/creations, both within the city and along riparian areas that impact city waterways.	ONGOING	\$	CM DPW	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES3.5	Conduct an assessment of existing wetlands within the City which prioritizes opportunity areas for wetland restoration and expansion.	MID TERM	\$\$	DPW	
ES3.6	Explore the feasibility of a buyout program for flood- prone properties in Annapolis that could be converted into public waterfront open space. Such a program would expand on a pilot program developed by Anne Arundel County.	SHORT TERM	\$	DRP/ DPZ	
ES3.7	Promote the use of natural shoreline solutions over gray infrastructure to create shoreline resilience to climate change impacts; as part of such efforts, expand public education to property owners of the resilience value of creating natural shorelines and retaining vegetation, particularly trees, on waterfront properties.	ONGOING	\$	DPW	

## GOAL

ES4

Promote a coordinated approach to food access that ensures all residents have access to high quality and locally harvested foods.

**PERFORMANCE MEASURE 1**: Elimination of food deserts by 2030.

**PERFORMANCE MEASURE 2**: At least four (4) pop-up events focused on local and/or healthy food organized annually within the City.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES4.1	As part of the City's Resilience Plan, create a map of food deserts and/or healthy food access gaps to help prioritize interventions.	ONGOING	\$	DPZ	
ES4.2	Work with public and private partners to create new opportunities for farmers markets and other healthy food pop-up events within food deserts and other socially vulnerable communities.	SHORT TERM	\$	CM DPZ DRP	
ES4.3	Work with Recreation and Parks staff, Master Gardeners program, and/or other partners to create more opportunities for community gardening education, creation, and stewardship.	ONGOING	\$	DRP	
ES4.4	Work with Recreation and Parks staff and other partners to expand opportunities for recreational fishing and crabbing.	ONGOING		DRP	
ES4.5	Work with the Maryland Department of the Environment and Department of Natural Resources to promote current fish consumption advisories and a program of regular testing of fish from local waters.	SHORT TERM	\$	DRP	WR3

#### ES5

Increase the City's biodiversity particularly in areas that currently have limited ecological value.

**PERFORMANCE MEASURE 1**: All new and improved parks and open spaces in the City include plantings or other natural features that will increase biodiversity.

**PERFORMANCE MEASURE 2**: No net increase in impervious coverage.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES5.1	Prioritize new planting and restoration work to increase biodiversity using the Environmental Enhancement areas identified on the Future Land Use Map in this Plan.	ONGOING	\$	DPZ	LU6
ES5.2	Develop management guidelines for conservation easements, and particularly in regard to parcels identified as Environmental Enhancement areas on the Future Land Use Map in this Plan.	SHORT TERM	\$	DPZ	
ES5.3	Prioritize potential conservation easements on the Greenway Map included in this Plan that are contiguous with existing conservation areas. (see Chapter 4: Land Use for detail on the Greenway Map)	ONGOING	\$	DPZ/ DRP	
ES5.4	Promote the City's Pollinator Friendly Garden and Certified Wildlife Area programs to increase the population of pollinating insects and birds and wildlife habitat.	ONGOING	\$	СМ	
ES5.5	Work with the Annapolis Environmental Commission, the Annapolis Conservancy Board, RePlant Annapolis, Save Our Trees, and other partners to create a comprehensive stewardship guide and training program for city residents aimed at preserving and expanding biodiverse areas.	SHORT TERM	\$	CM DRP DPZ	
ES5.6	Explore amendments to the City's site design standards that will increase biodiversity.	SHORT TERM		DPZ	

# GOAL

#### ES6

Shrink the City's carbon footprint through a comprehensive approach that includes coordinated policies and investment.

**PERFORMANCE MEASURE 1**: Achieve a 60% reduction in greenhouse gas emissions by 2031, and net-zero emissions by 2045, which is consistent with the State of Maryland's Climate Solutions Now Act, enacted in 2022.

**PERFORMANCE MEASURE 2**: A city government greenhouse gas emissions inventory is completed by 2024, and a community greenhouse gas emissions inventory is completed by 2025.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES6.1	Implement the recommendations of the City's compost study, including a curbside compost pilot project and the development of a City-managed composting facility.	ONGOING	\$	CM DPW	
ES6.2	Plan for the transition of the City's fleet vehicles and transit vehicles to zero emissions vehicles with the goal of complete transition by 2030 (also listed in Chapter 6: Transportation under Goal T3)	ONGOING	\$\$\$	ADOT DPW	Т3
ES6.3	Work with partners to establish more public carcharging stations in Annapolis, particularly downtown, as well as policies to increase charging stations at existing multifamily and commercial developments.  (also listed in Chapter 6: Transportation under goal T3)	ONGOING	\$	CM DPW ADOT	Т3
ES6.4	Study and propose reductions to the City's parking requirements for all land uses to incentivize the sensible development of underutilized land (as defined in the glossary of this Plan), reduce impervious coverage, improve stormwater management performance, and encourage walking, biking, and transit use, among other benefits to the City. (Also listed in Chapter 4: Land Use under Goal LU2 and Chapter 6: Transportation under Goal T3)	SHORT TERM	\$	DPZ	Т3

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES6.5	Update the City's Green Building requirements to include new standards for energy efficiency, water efficiency, and site design for all new residential buildings regardless of size; new inspections protocols; and explore the feasibility of a post-occupancy study requirement for larger projects. (also listed in Chapter 5: Housing under Goal H4)	MID TERM	\$\$	DPZ	H4
ES6.6	Develop planting guidance for maximum carbon absorption for all public and private properties.	SHORT TERM	\$\$	DPZ	
ES6.7	Complete inventories of greenhouse gas emissions from both city government and community level sources.	SHORT TERM	\$\$	СМ	
ES6.8	Create policies to increase solar power and green roofs in all new development projects and for building retrofits.	SHORT TERM	\$\$	DPZ	
ES6.9	Require all new City facilities to include solar power when adequate sun exposure is available, and maximize energy efficiency measures, use of low carbon building materials, adoption of green maintenance practices, as well as conversion of maintenance equipment to electric options.	SHORT TERM	\$	CM DPW	

## GOAL

ES7

Reduce the amount of waste produced in the city by an expansion of existing programs and the implementation of new programs.

**PERFORMANCE MEASURE 1**: The amount of solid waste by ton produced by the City decreases each year.

**PERFORMANCE MEASURE 2**: Single-use plastic bags within the City are eliminated by 2024.and all single-use plastics are phased out by 2030.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
ES7.1	Continue to explore the feasibility of a public composting facility including through a partnership with Anne Arundel County.	ONGOING	\$	CM DPW	
ES7.2	Single-use plastic bags within the City are eliminated by 2024 and other plastics within the City's waste stream are phased out through legislation and an educational campaign each year until 2030. (also listed in Chapter 10: Water Resources under Goal WR1)	SHORT TERM	\$\$	CM DPW	WR1
ES7.3	Regularly assess the performance of the City's recycling program to identify opportunities for improved performance, expansion, and educational messaging.	ONGOING	\$	DPW	
ES7.4	Continue to improve and/or expand resident awareness for how and where to properly dispose of waste materials.	ONGOING	\$	DPW	
ES7.5	Establish policies to expand recycling requirements to commercial and multi-family homes.	SHORT TERM	\$	DPW	



FIGURE 13-2: IN 2023 ANNE ARUNDEL COUNTY ADOPTED LEGISLATION TO BAN SINGLE
USE PLASTIC BAGS, WHICH FREQUENTLY END UP IN WATERWAYS. ALTHOUGH THE
LEGISLATION DOES NOT APPLY TO ANNAPOLIS, A RECOMMENDED ACTION OF THIS PLAN
IS TO ELIMINATE THE LISE OF SLICH BAGS WITHIN ANNAPOLIS.

### **WATER RESOURCES**

## GOAL

#### WR1

Reinforce an ethic of proactive watershed stewardship through all sectors of the city, including residents, businesses, and institutions.

**PERFORMANCE MEASURE 1**: The number of residential and commercial properties utilizing the stormwater fee incentive policy is doubled by 2030.

**PERFORMANCE MEASURE 2**: Single-use plastic bags within the City are eliminated by 2024 and all single-use plastics are phased out by 2030.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
WR1.1	Require community engagement, minority subcontracting, and other possible programs to broaden community awareness of stormwater management by all City stormwater contractors	SHORT TERM	\$	DPZ DPW	
WR1.2	Develop an economic development strategy to promote and attract more green jobs in the city, including businesses focused on stormwater management, restoration, blue technology, renewable energy, and green building.	SHORT TERM	\$	DPZ	
WR1.3	Expand the marketing and outreach around a revised incentive policy for the stormwater improvements to encourage more residential and commercial property owners to implement the improvements.	SHORT TERM	\$	CM DPW	
WR1.4	Single-use plastic bags within the City are eliminated by 2024 and other plastics within the City's waste stream are phased out through legislation and an educational campaign each year until 2030. (also listed in Chapter 9: Environmental Sustainability under Goal ES7)	MID TERM	\$\$	СМ	ES7
WR1.5	Update the Adequate Public Facilities Ordinance to require all new on-site stormwater Management facilities at multifamily residential, commercial, and institutional projects to include interpretive signage that educates passersby on the value of the facility.	SHORT TERM	\$	DPZ	
WR1.6	Explore ways of better supporting, leveraging, and coordinating the work of watershed organizations in the Annapolis area that may include: changes to the functioning of the Waterways Cabinet; the establishment of a new organization that consolidates the efforts of multiple organizations; and a dedicated fund, among others strategies.	SHORT TERM	\$	СМ	

#### WR2 Reduce the City's volume of stormwater runoff, using a wide array of means to do so.

**PERFORMANCE MEASURE 1**: Meet the TMDL goal of a 20% reduction based on the EPA's Chesapeake Bay pollution diet.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
WR2.1	Revise the incentive policy for the Stormwater improvements to encourage more existing residential and commercial properties to implement the improvements particularly sites that currently have large impervious areas and limited or no stormwater treatment facilities.	SHORT TERM	\$	CM DPW	
WR2.2	Work with local partners such as Chesapeake Bay Trust and Watershed Stewards Academy to develop a dedicated program that encourages Annapolis homeowners associations to implement green infrastructure projects to capture and treat more stormwater on site. Such a program would leverage funds already available through the Watershed Restoration Fund.	SHORT TERM	\$\$	CM DPW	
WR2.3	Work with local partners such as the Chesapeake Bay Trust, the Watershed Stewards Academy, and business associations to develop a dedicated program aimed at Annapolis commercial property owners and stormwater improvements on large impervious areas. Such a program would leverage funds already available through the Watershed Restoration Fund.	SHORT TERM	\$\$	CM DPW	
WR2.4	Utilize the Greenway Plan and assistance from the Annapolis Conservancy Board to prioritize the conservation of undeveloped areas that would have the highest benefit to reducing stormwater runoff.(see Chapter 4: Land Use for details regarding the Greenway Plan)	SHORT TERM	\$	DPZ	
WR2.5	Adopt "Green Street" design standards that include maximum tree planting, use of silva cells, micro bioretention, permeable pavers, and other integrated stormwater best management practices.	SHORT TERM	\$\$	DPZ DPW	Т3

### **WATER RESOURCES**

## GOAL

#### WR3

Practice a comprehensive approach toward watershed restoration that reinforces the both ecological and cultural value of Annapolis' waterways.

**PERFORMANCE MEASURE 1**: By 2030, all of the City's major creeks will meet water quality standards for fishing and swimming, and by 2040 all of the City's major creeks will meet the same standards after a major rain event.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
WR3.1	Prepare small area plans for each of the City's creek watershed areas that coordinate land use with environmental goals to support both the continued improvement of the City's waterways and a model for sensible infill development.	MID TERM	\$\$	DPZ	LU1
WR3.2	Leverage the City's Watershed Restoration Fee to address stream and shoreline restorations that will improve both ecological function and public use.	SHORT TERM	\$	DPW DPZ	
WR3.3	Ensure that the majority of the funds from City's stormwater fee is used for new restoration projects.	SHORT TERM	\$	DPW	
WR3.4	Ensure that a maintenance strategy is included in the planning, design, and budgeting for all watershed restoration projects, which should include the identification of dedicated funding sources for maintenance.	ONGOING	\$	DPW	
WR3.5	Conduct more regular and comprehensive water quality testing of all waterways in the city by supporting the work of the Spa Creek Conservancy through funding, collaboration, or other means.	SHORT TERM	\$\$	DPW DPZ	

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
WR3.6	Explore training opportunities for Parks maintenance staff to include habitat restoration, conservation land management, and green stormwater infrastructure maintenance. (Also listed in Chapter 7: Community Facilities under Goal CF1)	ONGOING	\$	DRP	CF1
WR3.7	Work with the Maryland Department of the Environment and Department of Natural Resources to promote current fish consumption advisories and a program of regular testing of fish from local waters.	SHORT TERM	\$	DRP DPZ	ES4
WR3.8	Update City standards to ensure that all new, replaced, or enhanced stormwater outfall facilities are designed in coordination with public water access so that recreational opportunities are not negatively impacted. (Also listed in Chapter 7: Community Facilities under Goal CF3)	ONGOING	\$	DPW DRP DPZ	CF3

### **WATER RESOURCES**



#### WR4 Provide high quality, safe drinking water to all customers.

**PERFORMANCE MEASURE 1**: Field data gathering strategies for input into the City's water distribution system asset condition assessment model are fully implemented by 2024.

**PERFORMANCE MEASURE 2**: Identified water distribution system replacement projects as informed by the updated condition assessment and consequence of failure models are completed by 2035.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
WR4.1	Continue to gather water distribution system condition data to inform the projects to be completed.	ONGOING	\$	DPW	
WR4.2	Ensure that the 10-year Water and Sewer Plan continues to be updated regularly.	SHORT TERM	\$	DPW	
WR4.3	Continue to budget for and complete the water pipe replacement projects as identified in the 10-year Water and Sewer Plan and/or as informed by updated condition assessment and consequence of failure models.	ONGOING	\$\$	DPW	

#### WR5

Manage the City's wastewater infrastructure proactively to mitigate instances of failure, backups, and overflows.

**PERFORMANCE MEASURE 1**: Complete the baseline inspection of all City sewers per National Association of Sewer Service Companies (NASSCO) standards by 2032.

**PERFORMANCE MEASURE 2**: Identified sewer replacement or relining projects as informed by the updated condition assessment and consequence of failure models are completed within 2 years of identification.

ACTION#	RECOMMENDED ACTION	TIMING	COST	AGENCY	RELATED GOALS
WR5.1	Continue sewer inspections and ramp up the pace of inspections per NASSCO standards.	ONGOING	\$	DPW	
WR5.2	Ensure that the 10-year Water and Sewer Plan continues to be updated regularly.	SHORT TERM	\$	DPW	
WR5.3	Continue to budget for and complete the wastewater collection system projects as identified in the 10-year Water and Sewer Plan and/or as informed by updated condition assessment and consequence of failure models.	ONGOING	\$\$	DPW	
WR5.4	Explore with Anne Arundel County the feasibility of generating commercial compost using the bio-solids produced at the Annapolis Water Reclamation Facility.	MID TERM	\$\$	DPW	



### **APPENDIX**

**APPENDIX A** 

**COMMENT LOG** 

UNDER SEPERATE COVER

APPENDIX B: DEMOGRAPHIC AND MARKET

**ANALYSIS** 

APPENDIX C. FISCAL IMPACT STUDY

APPENDIX D: FOREST DRIVE EASTPORT

SECTOR STUDY TASK FORCE REPORT

APPENDIX E: HOUSING AFFORDABILITY TASK FORCE REPORT

APPENDIX F: MARITIME TASK FORCE STRATEGY

APPENDIX G. WEST ANNAPOLIS MASTER PLAN

APPENDIX H: OUTDOOR DINING PILOT STUDY

APPENDIX I: MILITARY INSTALLATION RESILIENCE

**RESPONSE STUDY** 

APPENDIX J: BLUE TECHNOLOGY

**BUSINES STUDY AND STRATEGY** 

APPENDIX K: 2020 ANALYSIS OF IMPEDIMENTS

TO FAIR HOUSING CHOICE IN THE

**BALTIMORE REGION** 

Bridging barriers.
Connecting communities.







