

Main Street Maryland

Chestertown, Kent County

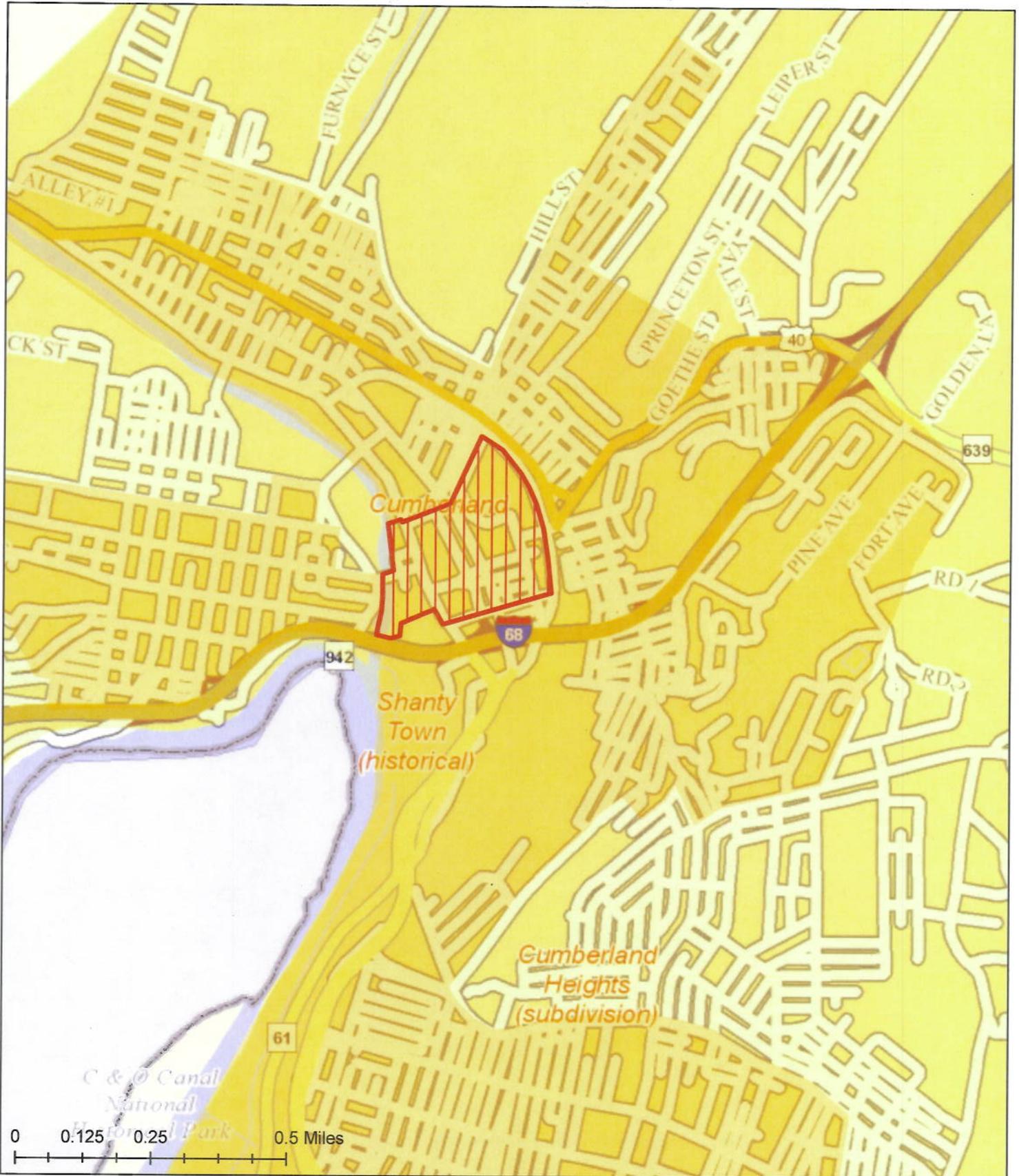


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

-  Main Street Area
-  Designated Neighborhoods
-  Community Legacy Areas
-  Priority Funding Areas

Main Street Maryland

City of Cumberland, Allegany County

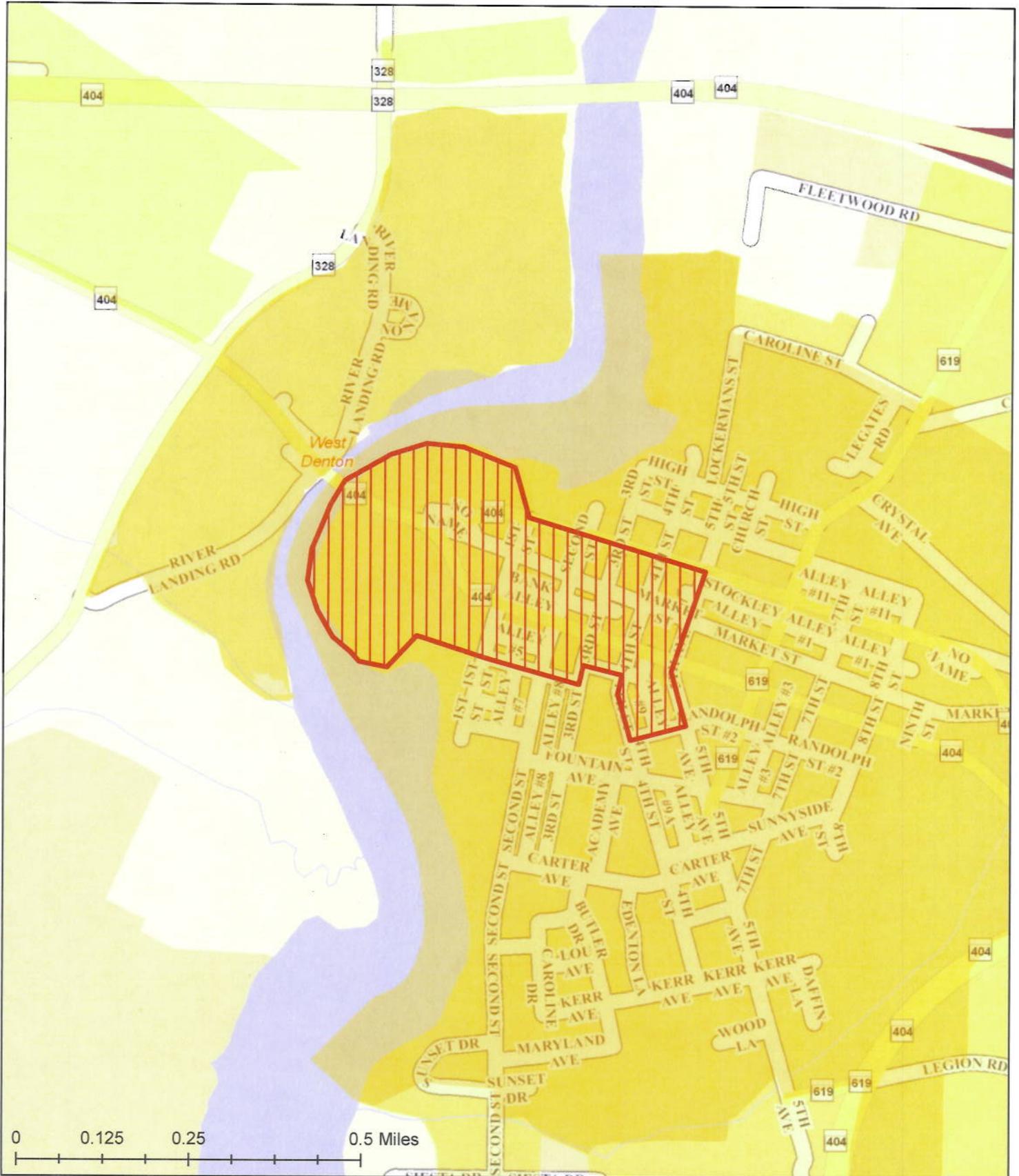


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Area
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Denton, Caroline County

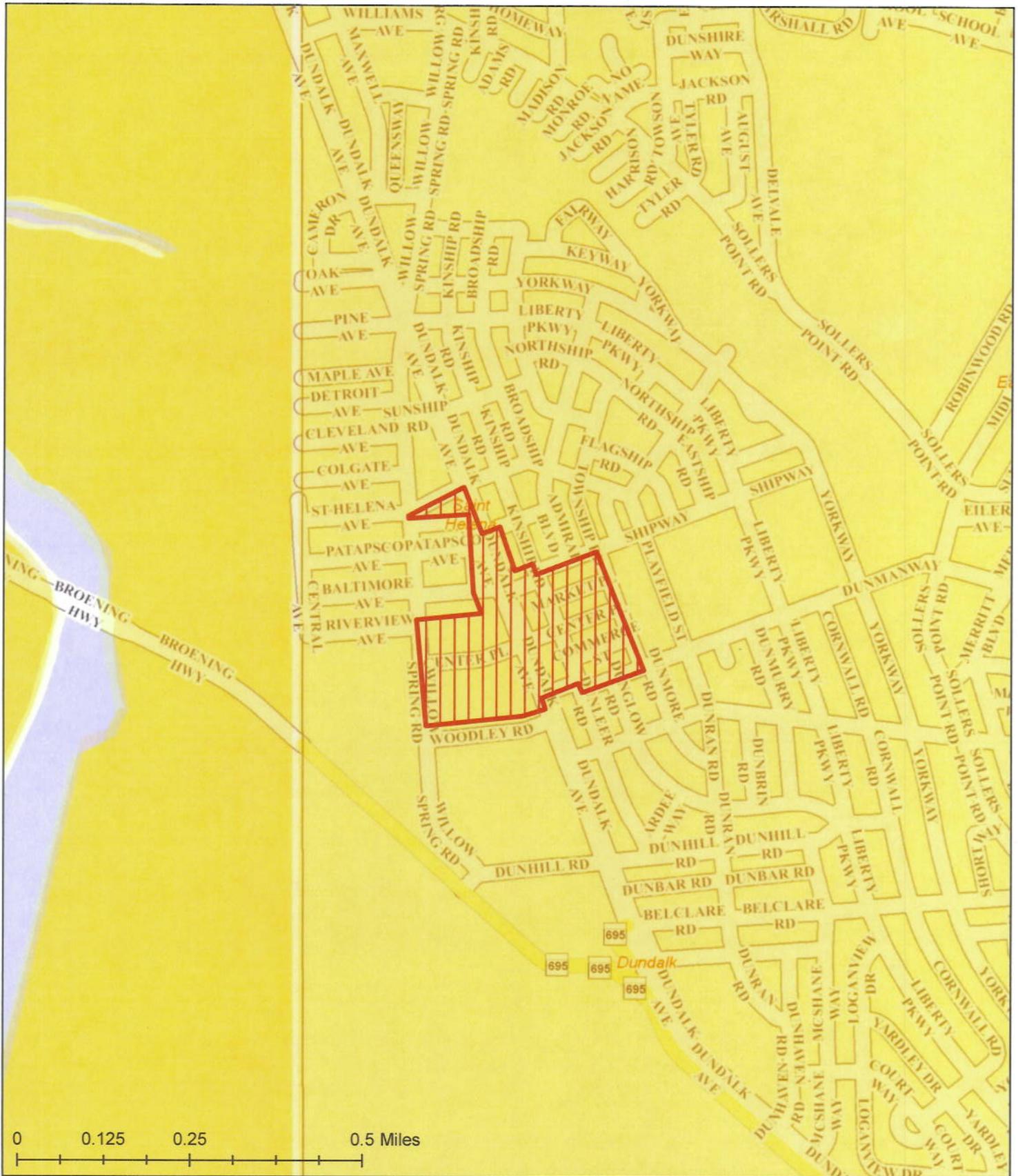


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

-  Main Street Area
-  Designated Neighborhoods
-  Community Legacy Areas
-  Priority Funding Areas

Main Street Maryland

Dundalk, Baltimore County

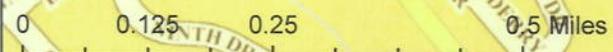
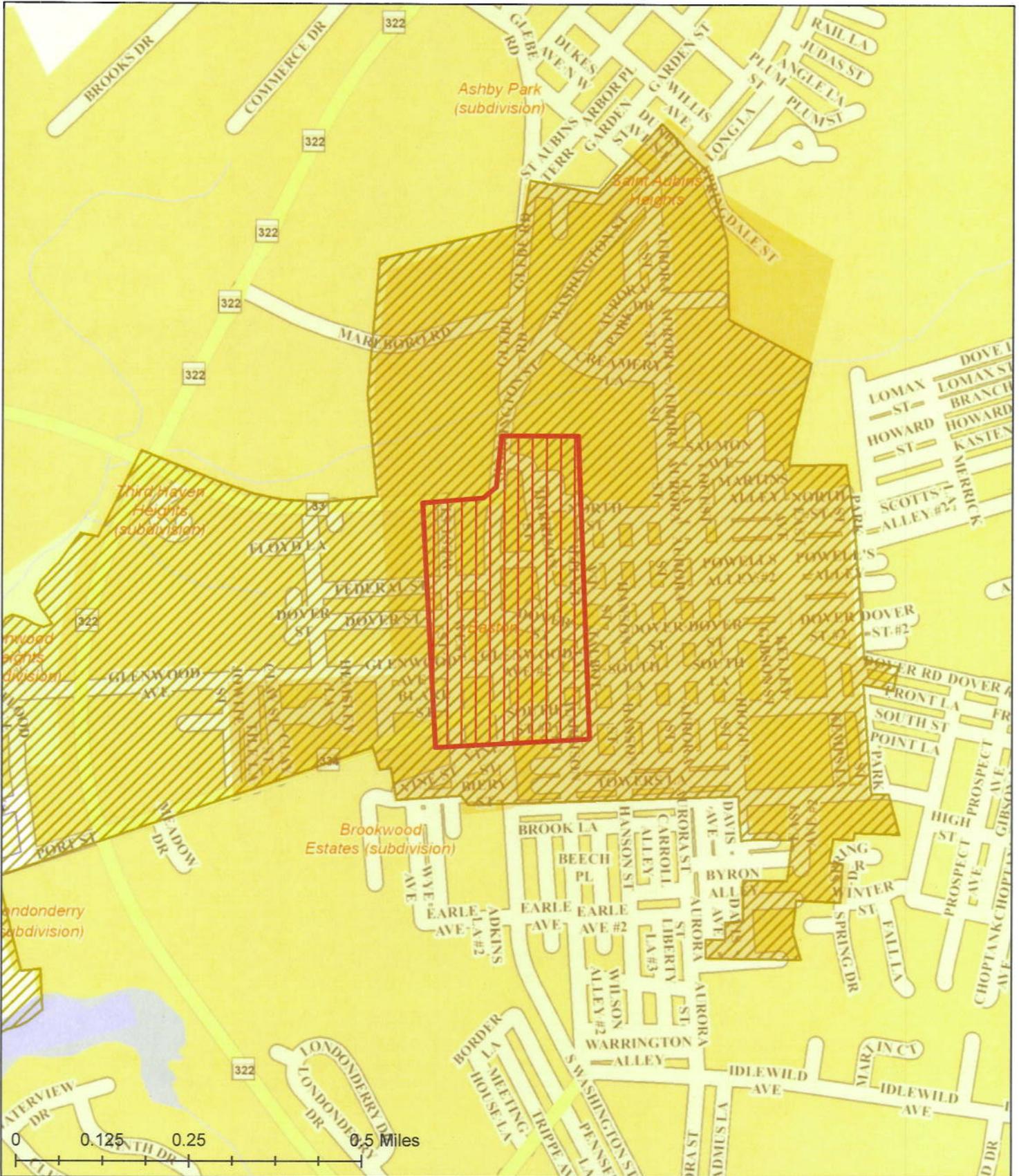


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Area
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Easton, Talbot County

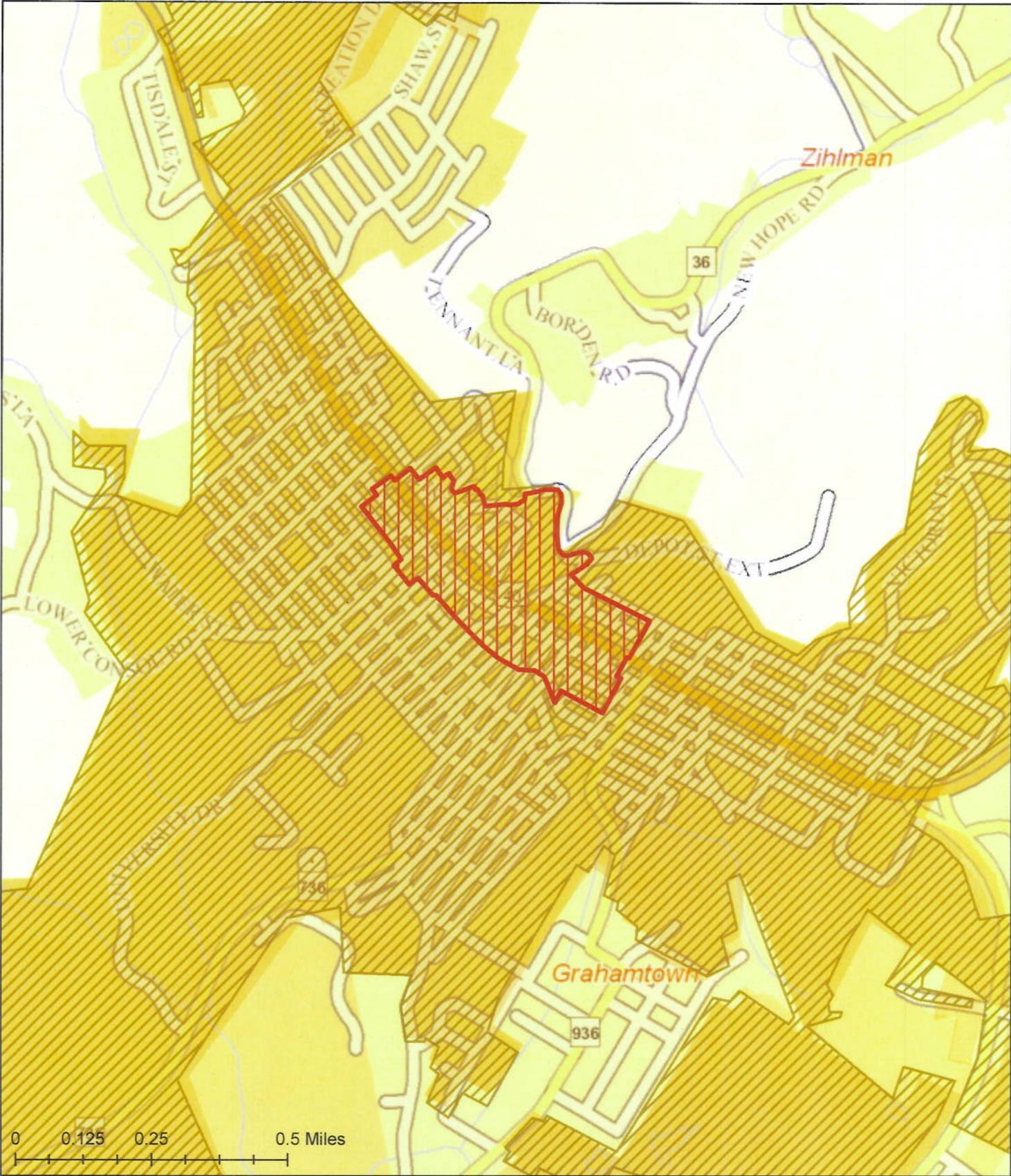


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Areas
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

City of Frostburg, Allegany County

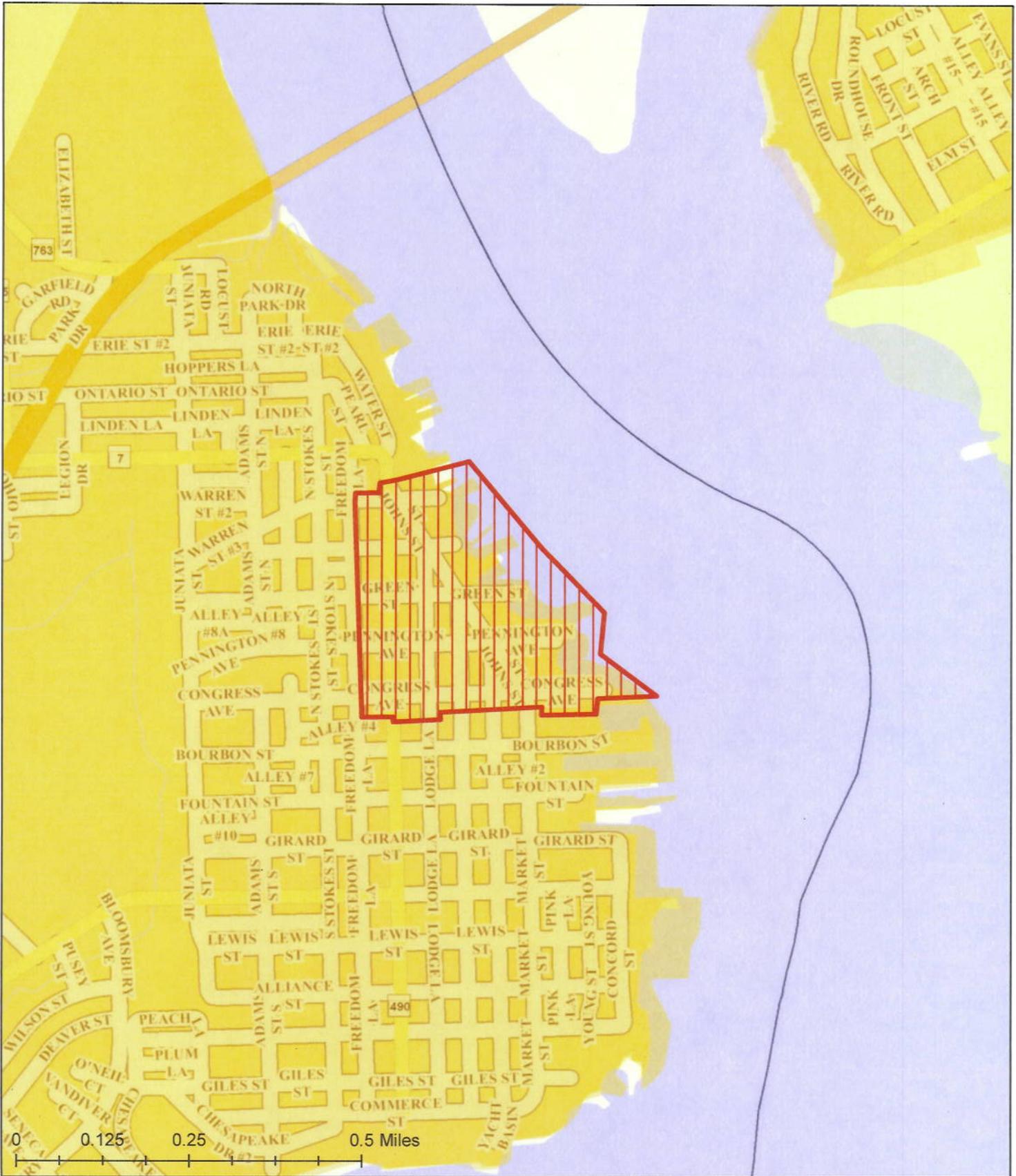


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Maryland Main Area
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Havre de Grace, Harford County



Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary



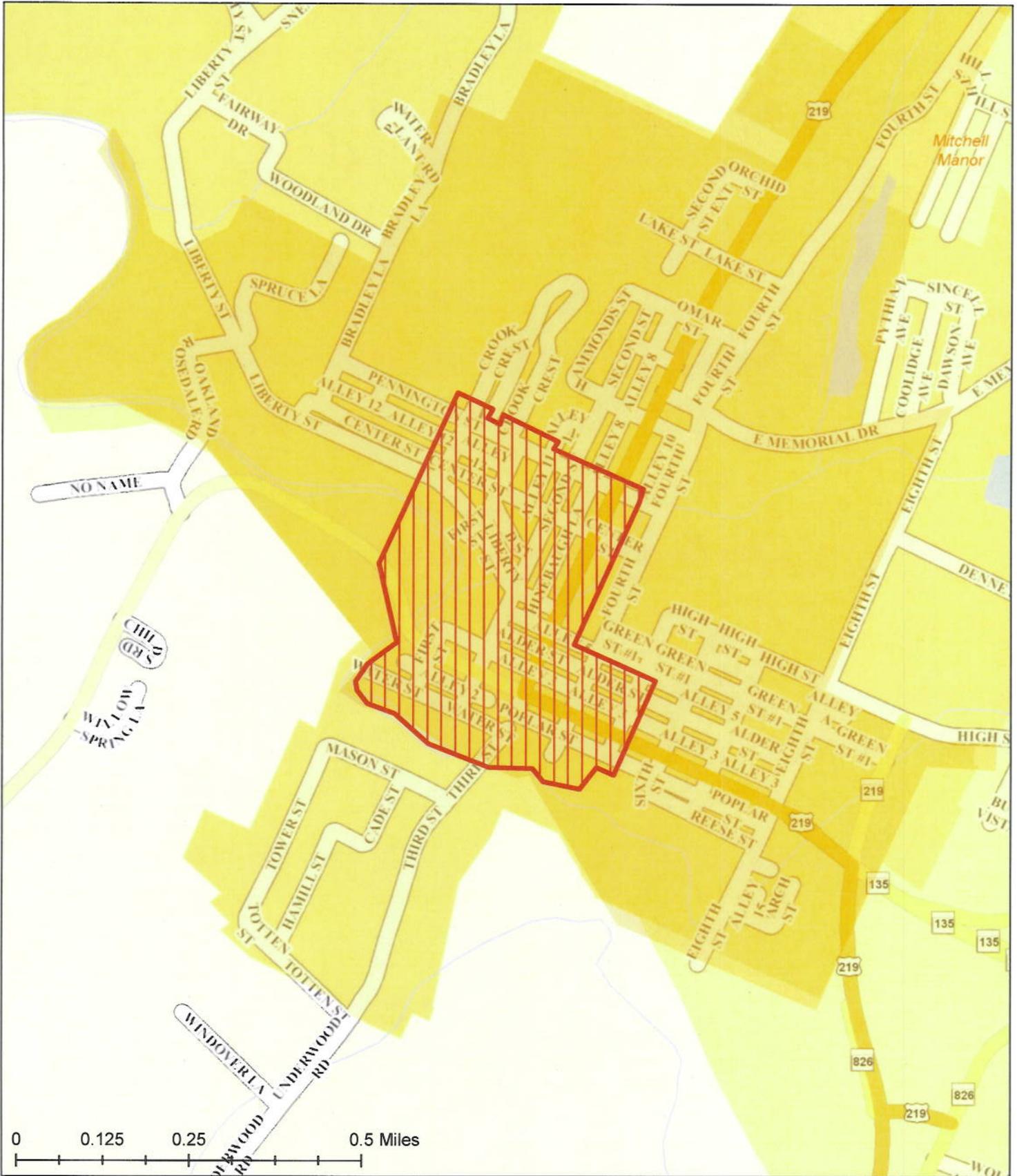
Main Street Area
Community Legacy Areas



Designated Neighborhoods
Priority Funding Areas

Main Street Maryland

Town of Oakland, Garrett County

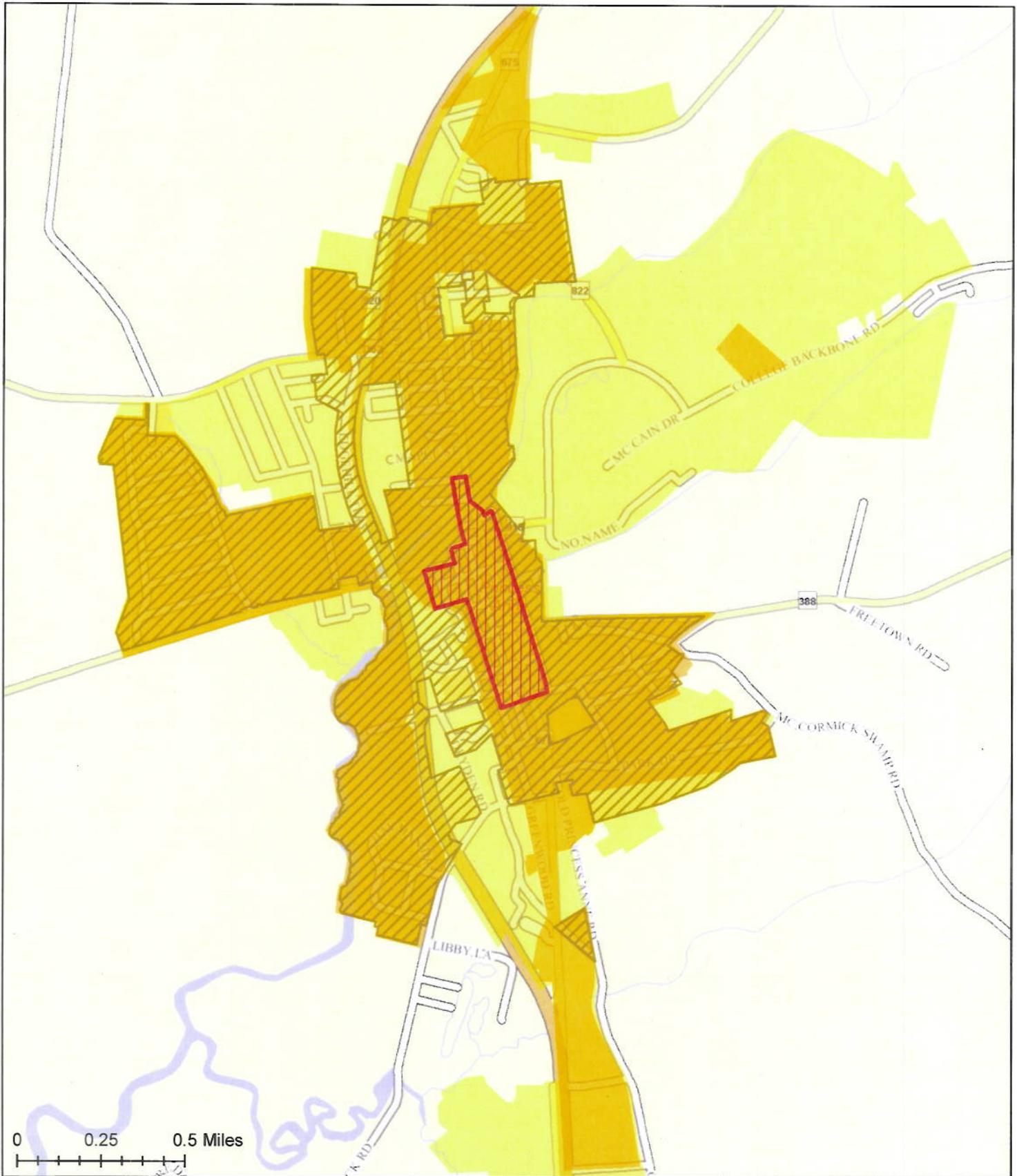


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Area
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Princess Anne, Somerset County

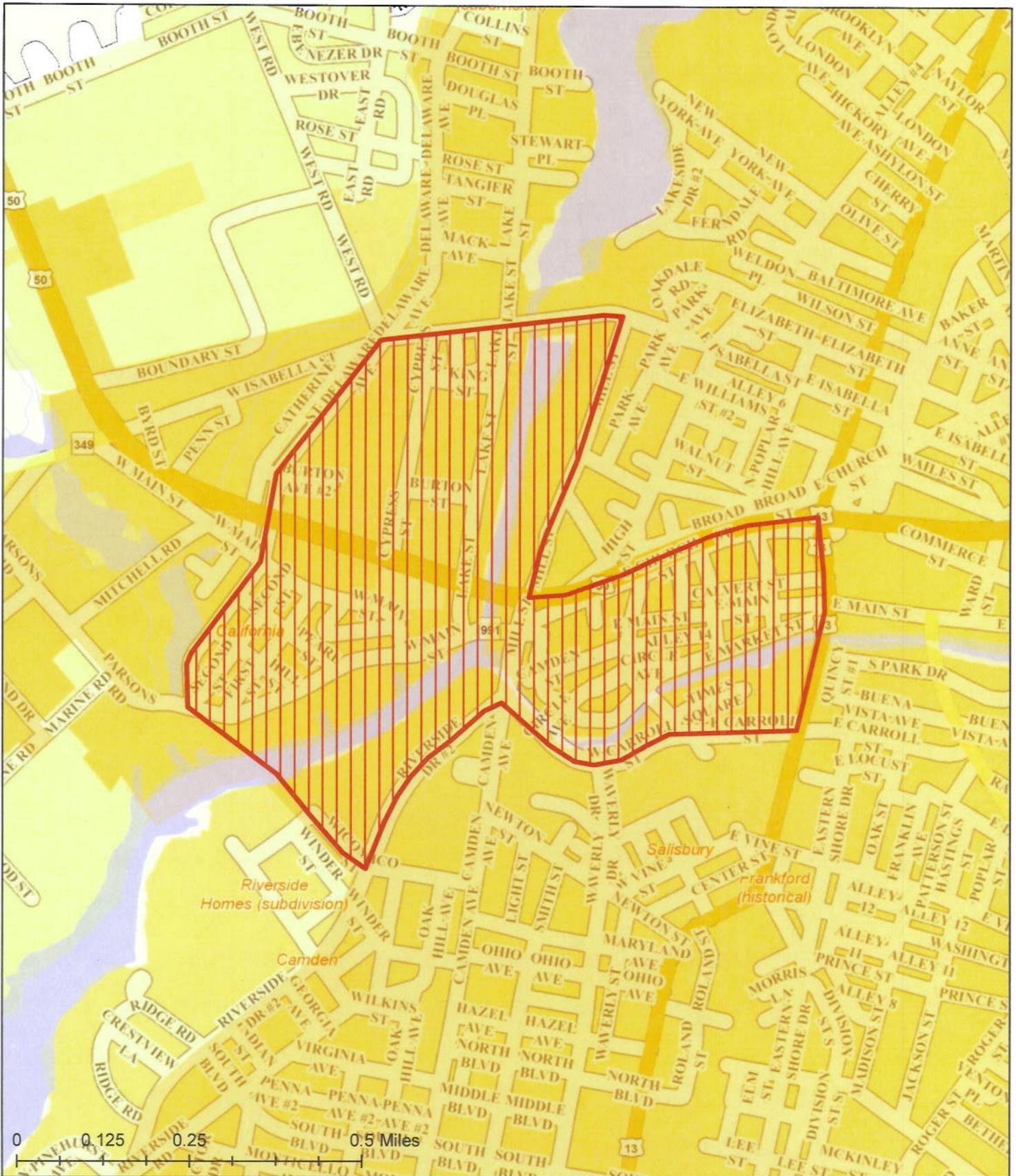


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Areas
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Salisbury, Wicomico County

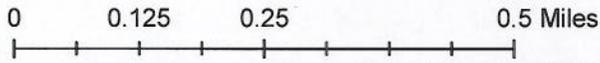


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Areas
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Takoma Park, Montgomery County

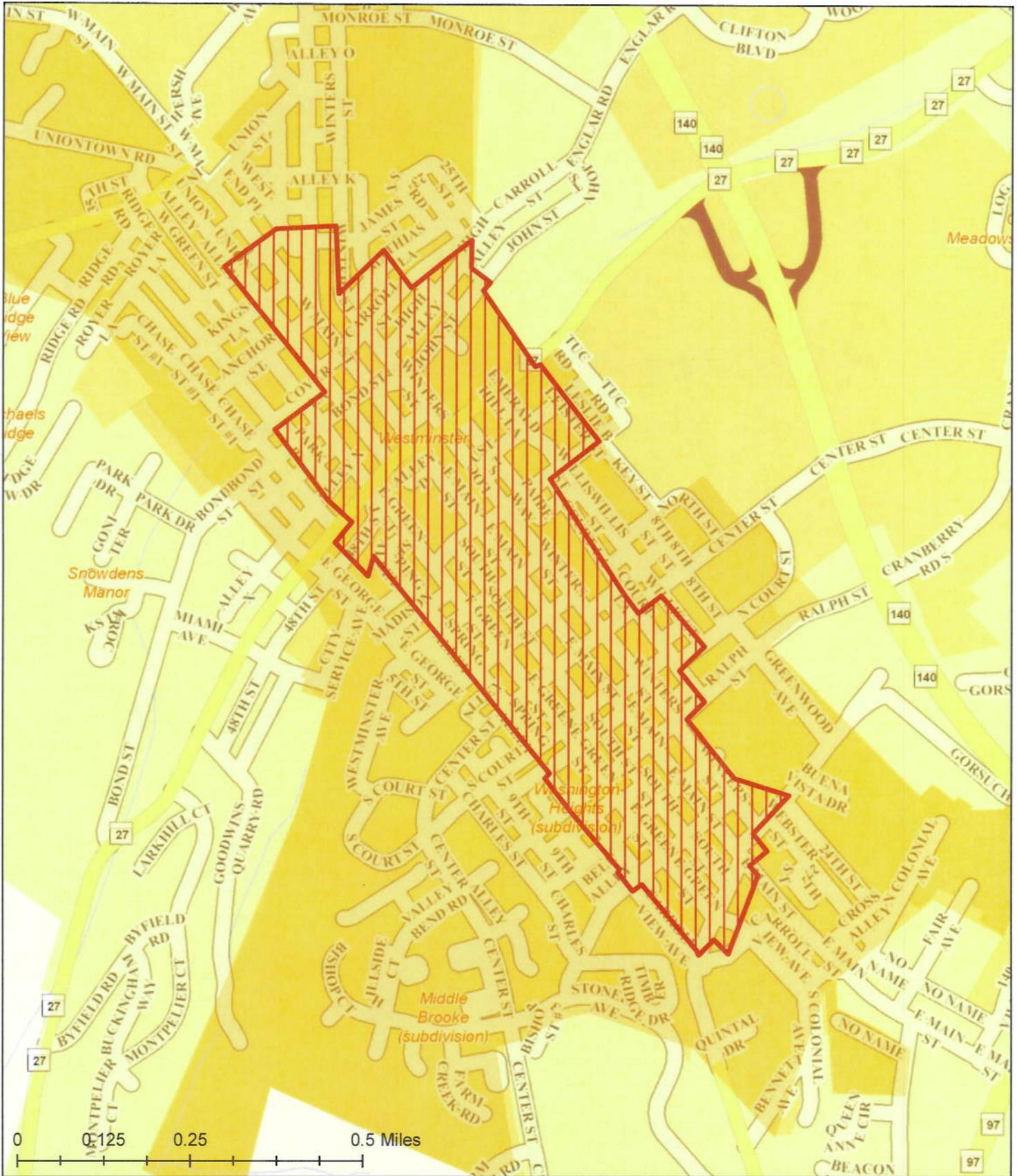


Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

- Main Street Areas
- Designated Neighborhoods
- Community Legacy Areas
- Priority Funding Areas

Main Street Maryland

Town of Westminster, Carroll County



Martin O'Malley, Governor
 Anthony G. Brown, Lt. Governor
 Raymond A. Skinner, Secretary
 Clarence J. Snuggs, Deputy Secretary

-  Main Street Area
-  Community Legacy Areas
-  Designated Neighborhoods
-  Priority Funding Areas



switch

TO BECOME ENERGY EFFICIENT

The State of Maryland, through the Department of Housing and Community Development, is offering both financial and technical assistance to homeowners, small businesses and property owners to help them make energy efficient improvements that will support local sustainability and economic growth. To learn more about how you can make the SWITCH, visit MDhousing.org.



MARTIN O'MALLEY
Governor

ANTHONY G. BROWN
Lt. Governor

RAYMOND A. SKINNER
Secretary

CLARENCE J. SNUGGS
Deputy Secretary



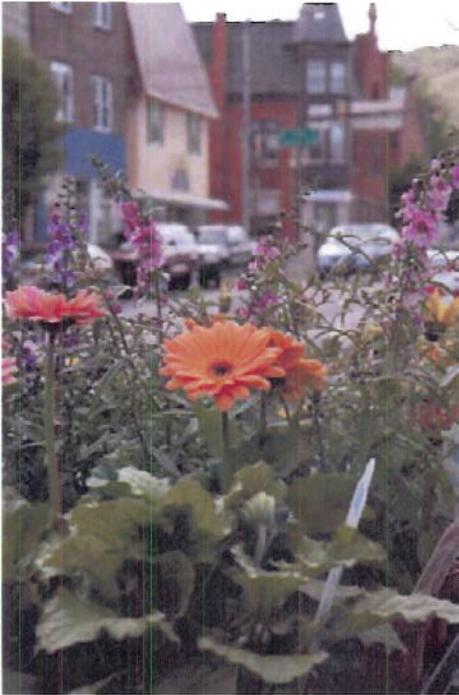
GOING GREEN DOWNTOWN

A SUSTAINABILITY GUIDE FOR MARYLAND'S MAIN STREETS



*Brought to you through a partnership of the
Maryland Department of Housing and Community Development
and the Maryland Department of Natural Resources*

CONTENTS



Sam Kittner Photographer

GOING GREEN DOWNTOWN.....	2
WHAT IT MEANS TO BE GREEN: VIBRANT COMMUNITIES AND BUSINESSES	3
BUILD IT GREEN.....	4
HISTORIC PRESERVATION IS GREEN.....	6
GREEN DOWNTOWNS: LESS IS MORE.....	8
ENHANCING DOWNTOWN WITH GREEN SPACES	12
STORMWATER: SLOW IT DOWN, SPREAD IT OUT, SOAK IT IN.....	15
SUSTAINABLE TRANSPORTATION: LINKING IT ALL TOGETHER.....	17
RALLY 'ROUND THE DOWNTOWN.....	20
READY, SET, GREEN!	24

SMART, GREEN AND GROWING

MESSAGE FROM THE GOVERNOR

Maryland's dynamic Main Street communities allow us to celebrate and build upon the State's rich history. Collectively, they define what is unique about our State, from the majestic Allegany Mountains to the gateways of the Eastern Shore. They are the village squares, the historic buildings, and the unique family destinations that provide opportunities to eat, shop and learn about the incredible legacy we have inherited as Marylanders.

Increasingly, chronic over development threatens not only the economic survival and character of these communities, but also our treasured Chesapeake Bay. Over the past 30 years, Maryland's population has increased by 30 percent while our consumption of land has increased by 100 percent — pulling vital resources and people away from traditional business districts.

Today Maryland's *Smart, Green & Growing* initiative is providing businesses, governments and residents the tools they need to get started, get involved and contribute to protecting our natural resources, revitalizing our cities and towns, and enhancing our economic well-being. Through strategies like Main Street Maryland's *Clean, Safe and Green*, citizens are able to reinvest in historic downtowns through projects and programs that use less energy and water resources, minimize waste, and help support the local economy.

By choosing to grow in a smarter, greener, more sustainable manner, we can preserve our natural resources, protect our environment, and enhance our quality of life, all while growing our economy and saving money in infrastructure and personal expenses. Working together as One Maryland, we are strengthening our vital downtowns and neighborhoods to make lasting progress for Maryland families of today and tomorrow.



Martin O'Malley



GOING GREEN DOWNTOWN

MAKING MARYLAND'S DOWNTOWNS MORE SUSTAINABLE



Sam Kittner Photographer

From Oakland to Ocean City, Maryland's citizens share the same goal of living in healthy, vibrant communities where they can live, work and prosper. As a result, communities have a major investment in the infrastructure — streetscapes, schools, water/sewer lines — of their traditional downtowns and neighborhoods. These communities are also faced with the challenges of the coming decades including an increasing population, rising energy costs, limited resources, water and air pollution, and climate change.

This guide, a collaboration between the Maryland Department of Housing and Community Development (DHCD) and the Maryland Department of Natural Resources (DNR), is designed to address those challenges, giving communities throughout Maryland an important set of principles, guidelines, and examples of how to pursue and implement sustainable practices. Sustainability emphasizes the

balance between economic, social and environmental resources needed for today with preserving those same resources for future generations. In order to maintain and even expand those resources, there needs to be a focus on best practices such as compact mixed use development, rehabilitation and reuse, and pedestrian orientated design — all major characteristics found in Maryland's historic Main Street communities.

Since 1998, DHCD's Main Street Maryland program has strived to improve the economy, appearance and image of the State's traditional business districts, utilizing the National Main Street Center's Four-Point Approach™. In addition to the Four Points, DHCD has initiated a **Clean, Safe and Green** strategy to increase sustainability in Maryland's designated Main Street communities. With a commitment to adopting green strategies that impact and benefit businesses, residents and visitors, Main Street Maryland communities provide some best practices that can be implemented in downtowns across the State. There is a strong connection between how we treat the built environment and the quality of our natural environment—this guide brings that connection into focus.



Sam Kittner Photographer

We can reshape our communities by reinvesting in older areas, reducing waste and improving energy efficiency. Making Maryland's downtowns more sustainable ensures that communities will be **Smart, Green and Growing** for generations to come.

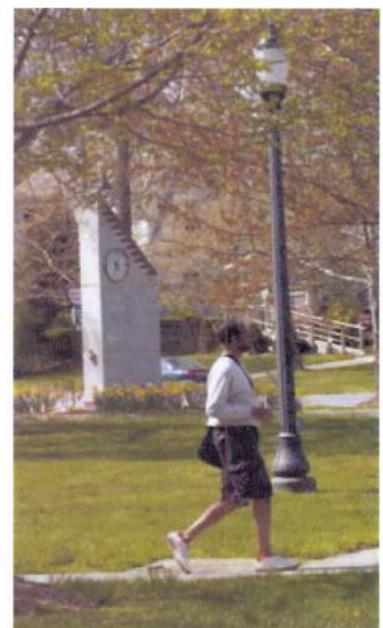
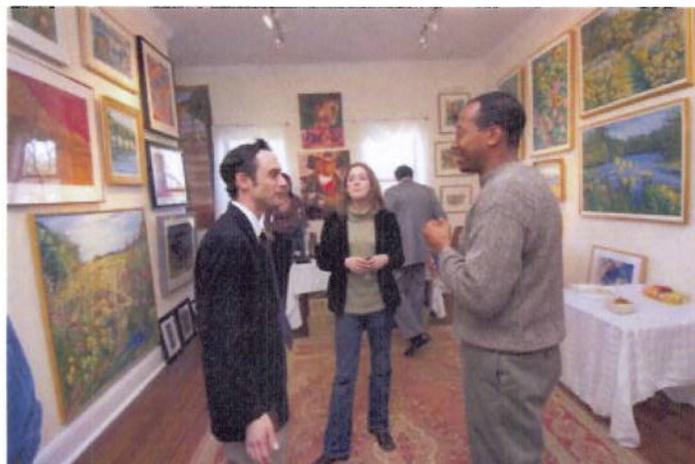
WHAT IT MEANS TO BE GREEN

Vibrant Communities and Businesses

Sustainable and “green” communities seek to conserve resources; provide open spaces and parks for recreation and cultivation; offer multiple options for transportation; use natural and cultural resources wisely to conserve for future generations and consider the social and economic needs of all residents. A “green community” strives to have a strong economy, serve residents and visitors alike, as well as minimize environmental impacts.

When thinking about ways your community can implement green or more sustainable practices the following strategies should be considered and are looked at more closely throughout this guide:

- CREATING GREEN SPACES
- BUILDING USE AND EFFICIENCY
- WATER CONSERVATION
- LAND USE AND PLANNING
- RECYCLING



Photos by Sam Kittner Photographer

BUILD IT GREEN

Green Communities in Action: Montgomery Park

Numerous green roofs are already in place in Maryland's downtowns. One prominent example is Montgomery Park, a former Montgomery Ward warehouse in Baltimore City's Washington Village Main Street that was renovated to become a mixed use property. Tenants include the Maryland Department of the Environment and other retail and office uses. The building's 30,000 square foot green roof features alpine plants, which thrive in extreme temperatures, winds, and drought, while requiring minimal soil depth.

Buildings define the character of a Main Street or traditional business district, and are also large components of the downtown's environmental impact or "carbon footprint". In the United States, buildings consume approximately 40% of all energy and emit approximately 40% of all carbon dioxide. Making buildings green or more efficient can reduce energy use and costs and minimize pollution. Sustainable building practices can preserve and enhance the community's overall appearance, especially when existing buildings are re-used and renovated with energy- and resource-saving appliances, fixtures, and materials. Green buildings can also have economic benefits, generating higher rental and sale prices, as well as higher occupancy rates.¹

Green building features extend beyond design and building materials². Buildings can encourage sustainability by including a mix of uses (for example, residential units above ground-floor retail space). The provision of affordable housing is also a green building technique, since it promotes economic sustainability for the community's residents, helping everyone live close to where they work. Locating a building in a walkable, transit-served location—such as Main Street—reduces automobile reliance and encourages social connections between residents, business owners, and visitors.

BENEFITS OF A GREEN BUILDING

- Lower costs for energy, water, and sewer service;
- Increased asset value and return on investment, especially through LEED or equivalent accreditation;
- Qualification for tax rebates and other incentives;
- Reputation as a "green" business can facilitate employee and client recruitment/retention;
- Improved productivity and reduced health care costs for employees; and
- Reduced impact on the community's air, water, and biological resources.

GREEN TOOLKIT: TOP IT OFF WITH A GREEN ROOF

Encouraging the replacement of standard roofing materials with "green" or vegetated roofs can have several long-term benefits. Vegetation retains rainwater, returning a portion to the atmosphere through evaporation and transpiration and thereby cooling rather than heating a building in warm weather, and minimizing heat loss in winter. Other benefits of green roofs include improved air quality, longevity of roofing materials, habitat for wildlife, competitive lifecycle costs, and cleaner stormwater runoff. Green roofs can also help to reduce temperatures in urban areas, which are often several degrees warmer during the summer—a phenomenon known as the "urban heat island effect."



Montgomery Park in
Baltimore City

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

US Green Building Council LEED Rating Systems
www.usgbc.org/DisplayPage.aspx?CMSPageID=222
Directory of LEED Accredited Professionals
www.gbci.org/LEED/AP/ViewAll.aspx?CMSPageID=59
The Playbook for Green Buildings and Neighborhoods
www.greenplaybook.org

“LEED” YOUR COMMUNITY TO BETTER BUILDINGS

One of the best known green building initiatives is the US Green Building Council’s (USGBC) Leadership in Energy and Environmental Design (LEED) rating systems for buildings and neighborhoods. LEED certification for buildings is determined based on scores related to water conservation, energy use, air pollution, solid waste, and indoor air quality. Accreditation confirms that a building’s owners and managers have minimized the building’s environmental impacts in these areas. In Maryland, Montgomery County, Howard County, and Baltimore City have either passed or have pending legislation requiring LEED certification for new commercial buildings that exceed a minimum square footage threshold.

LEED certification is not a requirement for a building or community to be considered sustainable or “green”. Instead, emphasizing a few key components of LEED in Main Street buildings can go a long way toward making the downtown more sustainable. In particular, communities and building owners can focus on water conservation and efficiency (particularly in landscaping), energy-efficient appliances and lighting, and careful choices regarding building materials. *(See page 8 for more details related to conserving resources.)*

GREEN TOOLKIT: CERTIFICATION FOR NEIGHBORHOODS

The LEED rating system is best known as applicable to individual buildings. However, the USGBC is also developing a rating system for entire communities and neighborhoods. The LEED for Neighborhood Development (LEED-ND) system is intended to guide the location and design of communities to promote smart growth, enhance community health, and protect the natural environment. The LEED-ND system strongly encourages:

- Sites close to existing town and city centers;
- Areas with good transit access;
- Infill sites;
- Previously developed sites; and
- Sites adjacent to existing development

Five communities in Maryland are part of the LEED-ND pilot study. These communities are Aventienc/Crown Farm in Gaithersburg, Decker Walk in Baltimore, the East Baltimore Development Initiative, Glenmont Metrocenter in Silver Spring, and Twinbrook Commons in Rockville. More information can be found at www.usgbc.org/LEED/ND/.



The Renaissance Square building in Hyattsville provides moderate-income housing in a transit-accessible location. It also incorporates several sustainable features, such as green roofs.



Green Communities in Action: Renaissance Square

Occupying the site of an abandoned office building, Renaissance Square includes affordably-priced artists’ housing, gallery space and a performance studio. As part of construction, environmental contamination from previous site uses was cleaned up, reducing the overall environmental impact of the project and turning a liability into a community asset. The project incorporates features that reduce impervious surfaces, conserve water and energy, improve indoor air quality, and reduce residents’ dependence on cars. Sustainable features include:

- A green roof that insulates the building’s living spaces and collects water for landscaping
- Indoor bicycle storage;
- High efficiency water fixtures and appliances;
- Enhanced insulation in the walls and roof reduce loss of heated/cooled air;
- Building materials with recycled content; and
- Proximity to the US 1 transit corridor.

More information can be found at www.hiphomes.org/rent

Environmental Practices for Restaurants
www.greenrestaurants.org

Federal Tax Credits for Energy Efficiency
www.energystar.gov/index.cfm?c=products.pr_tax_credits#s8

Maryland Income Tax Credit for Green Buildings
www.energy.state.md.us/incentives/business/greenbuilding/index.asp

LINKS TO
TECHNICAL
AND FUNDING
ASSISTANCE

HISTORIC PRESERVATION IS GREEN



In addition to the social and economic benefits offered by green buildings, the adaptive reuse of existing structures also helps to maintain and capitalize on the distinct historic character of Maryland's downtowns. Preservation maximizes the use of existing materials and infrastructure, reduces waste, and preserves the aesthetics of older cities and towns. Historic preservation is one of the earliest green activities! Indeed, commercial buildings constructed before 1920 are just as energy-efficient as modern buildings constructed since 2000.³ There are many ways to reuse old structures, reinvest in historic communities, and renew historic buildings to successfully blend the past with the present, creating a dynamic place to live, work, or visit.

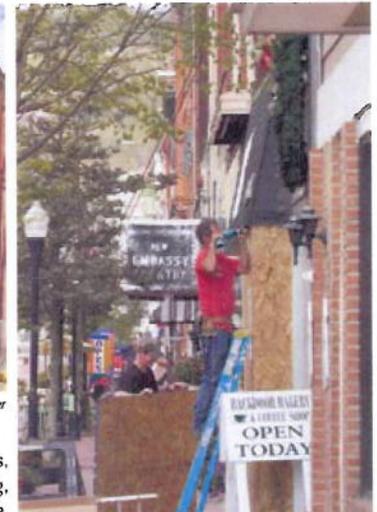
- **Reuse** existing buildings to reduce the amount of demolition and construction waste deposited in landfills, lessen the unnecessary demand for new energy and other natural resources needed to construct a new building, and conserve the energy originally expended to create the structures.
- **Reinvest** in older and historic communities. These communities tend to be centrally located, dense, walkable, and are often mass-transit accessible. Reinvestment in these communities also preserves the energy expended in creating the existing infrastructure, such as roads, water systems and sewer lines. Utilizing existing resources allows us to create sustainable communities by encouraging reinvestment in historic assets.
- **Retrofit** historic buildings to extend building life and better capture the energy savings available through newer technologies.

Local regulations and guidelines play an important role in the way that historic buildings are reused and retrofitted. Local Historic District Commissions or local governments often maintain specific design guidelines for renovations to historic properties. These guidelines can significantly influence adaptive reuse of historic buildings, and representatives from local government and/or Historic District Commissions should be involved in efforts to link historic resources with downtown sustainability. Additionally, the Maryland Building Rehabilitation Code encourages the rehabilitation and reuse of existing buildings, for more information visit mdcodes.umbc.edu/dhcd2/rehab-new.htm.



Sam Kittner Photographer

Rehabilitation of historic buildings, such as these in Cumberland and Frostburg, helps to make the downtown more sustainable.



Sam Kittner Photographer

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

National Trust for Historic Preservation: Preservation and Sustainability

www.preservationnation.org/issues/sustainability

Preservation Maryland

www.preservationmaryland.org

Traditional Building (Historic/Recycled Building Material Suppliers)

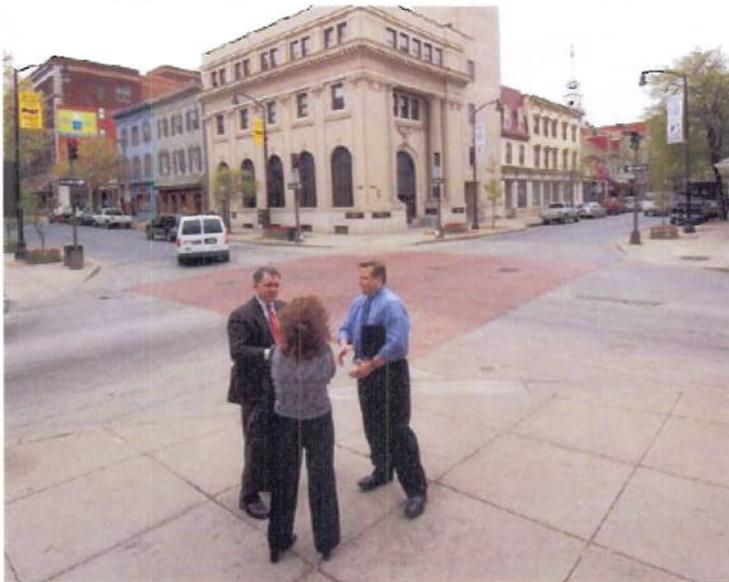
www.traditional-building.com

GREEN TOOLKIT: GREENING A HISTORIC BUILDING OR COMMUNITY

Historic properties are valuable, not only for the sense of authenticity they lend to an area, but also because their building materials are already in place. Some potential improvements to existing buildings include:

- Energy audits help property owners identify energy drains such as air leakage and inefficient mechanical systems.
- Adding insulation and weather-stripping are easy and inexpensive ways to improve a building's efficiency, while retaining important historic building materials.
- For more extensive projects consider obtaining a green building certification such as LEED.
- In some cases, it may be feasible to install a green roof.
- Plant appropriate trees to buffer winter winds and provide summer shade, but be careful not to plant too close to the building, which can cause moisture infiltration.
- Architectural research can help to identify not only the history of an area, but also the materials that were historically used. The past use and appearance of the building can be helpful in determining ways to incorporate this past into a new updated use.

On a community-wide level, conduct an analysis to evaluate viewsheds (views to accentuate and views to screen), pedestrian circulation, accessibility (ADA), and existing historic materials such as light fixtures, street furniture, paving and plantings. Historic travel patterns in towns focused on pedestrian activity. Re-configuring downtowns to favor pedestrians while minimizing the amount of land devoted to parking can also have environmental benefits without compromising economic health. (See pages 17-19 for more recommendations related to transportation).



Sam Kittner Photographer

Historic preservation and adaptive reuse have helped to spur downtown Frederick's economy.

Green Communities in Action: Integrating Green and Historic in Frederick

Established in 1745, Frederick has deep roots in both Revolutionary and Civil War history. Downtown Frederick is home to an impressive collection of historic buildings that have been part of Downtown Frederick's ongoing revitalization. Practically all of Downtown Frederick's 2,500-plus historic properties have been renovated for modern use as residences, offices, restaurants, and shops.

By reusing and retrofitting its historic buildings, Frederick not only reduces waste but also realizes an economic benefit. The City reports that about 1.4 million visitors per year come to Downtown Frederick for its historic resources and character.

Frederick's downtown revitalization extends beyond historic buildings. A series of flood control and urban design projects have enabled the City to integrate Carroll Creek as a community amenity, rather than a potential flood liability for buildings and businesses.

Maryland Historical Trust Rehabilitation Tax Credits
www.marylandhistoricaltrust.net/taxcr.html

Federal Historic Preservation Tax Incentives
www.nps.gov/history/hps/TPS/tax/index.htm

The National Trust for Historic Preservation Loan Fund
www.preservationnation.org/resources/find-funding/loans/national-trust-loan-fund

LINKS TO
TECHNICAL
AND FUNDING
ASSISTANCE

GREEN DOWNTOWNS

Less is More



Green buildings are not the only components of a sustainable community. A good community conservation plan includes ways to save energy, conserve water, and reduce the amount of solid waste generated. Downtown is a great place to start! One way for downtown businesses to be a part of a local conservation plan is through Maryland Green, a voluntary self-certification program of the State's Smart, Green, and Growing initiative. Maryland Green offers tips and resources to help businesses and other organizations set and meet their own sustainability goals. More information is available at www.green.maryland.gov.

THE '3 R'S': REDUCE, REUSE, RECYCLE

Pollution prevention and recycling can be effective tools for reducing waste, minimizing landfill use, and reducing pollution. Such initiatives can also reduce costs to the downtown, leaving more money for other initiatives. The phrase, "reduce, reuse, recycle" is more than a motto, it's an important guideline for green communities.



Reduce: Reducing or preventing pollution can lower solid waste disposal and handling costs, conserve resources, and reduce pollution.

Reuse: Reusing items helps to reduce solid waste, while keeping our personal and community budgets healthy.

Recycle: Recycling reduces water pollution and the need for landfills and incinerators, and can create jobs and promote fiscal health. Jurisdictions can also profit by reselling recycled materials. Depending on your location, a wide variety of materials used in business districts can be recycled, such as cardboard, used computer components, and other electronic waste.

GREEN TOOLKIT: PRACTICING THE THREE "R'S"

AT WORK

- Participate in your community's commercial recycling program, or help start one.
- Use office products that contain post-consumer recycled material.
- Provide reusable or biodegradable cups, plates, cutlery etc. to employees and restaurant patrons.
- Contribute edible but unsalable food to a food bank.

AT HOME

- Use non-toxic cleaning products, especially when working outside.
- Use rechargeable batteries for small appliances.
- To save paper, opt to receive e-bills, e-statements, and pay your bills online.
- Use cloth napkins and towels rather than paper towels and napkins.
- Start or participate in a community recycling program.

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

Green Vendors (recycled products):
www.thegreenoffice.com
www.freecycle.com/catoffice.html
www.recycledproducts.org
www.green-mary.com
The Freecycle Network
www.freecycle.org

RECYCLING IN YOUR COMMUNITY

According to Maryland Department of the Environment (MDE), the average Maryland citizen disposes of more than seven pounds of trash per day. A successful recycling program involves local businesses, residents, neighborhood associations, civic organizations, schools, and local government. Since commercial and institutional operations are generally the source of the most recyclable waste, a community-wide recycling effort should have both a residential and non-residential component.

FIRST STEPS

- Local government or business associations should take the lead in finding an agency or contractor to collect and haul recyclable materials to a local recycling facility on a regular schedule.
- Distribute recycling containers to businesses and residents. On Main Street, recycling containers should be placed alongside trash cans, to make it easy and convenient to recycle.
- Individual businesses with small recyclable outputs may wish to set up a cooperative recycling program with other nearby businesses, to help ensure regular pickup.

KEEPING IT GOING

- Develop promotional and educational materials to inform residents, businesses, offices, and restaurants of the importance of recycling. Some local governments can conduct waste generation audits for their local business community.
- Individuals, businesses, and business or neighborhood associations can partner with Recycle Bank, which provides monetary incentives for individual household recycling (www.recyclebank.com).
- Schools can partner with the Green School Project, which pays schools and nonprofit organizations to recycle printer cartridges, cell phones, and PDA devices (www.greenschoolproject.com).
- Local government can establish regulatory incentives to encourage recycling and waste reduction. Some examples can include:
 - "Pay-as-you-throw" solid waste pricing, in which solid waste collection fees are based on the amount thrown away to reduce the amount of recyclable material sent to the landfill (www.epa.gov/epawaste/conserve/tools/payt/index.htm).
 - Recycling and disposal fees for hard-to-dispose items such as tires and batteries.



MDE educates communities on how recycling paper, plastic and cans can reduce waste from 7 lbs. to only four items reaching our landfills.

Green Communities in Action: Commercial Recycling in Annapolis

Building on its successful residential recycling program, Annapolis has begun a commercial recycling initiative. In Annapolis' compact downtown, many buildings have limited areas for storing trash and recyclables. Recognizing these constraints, based on consultation with downtown businesses, the City encourages recycling and waste reduction by:

- Identifying space for common storage enclosures, shared by adjacent businesses, such as the corners of parking lots, and coordinating with businesses that do have adequate storage space for solid waste. This approach requires proper maintenance and sanitation.
- Requiring new owners or owners applying for renovation permits to provide an interior trash room to accommodate trash, recycling, and grease cans.
- Conducting waste audits for businesses, to show how much current waste is recyclable, and how much money can be saved (in solid waste collection fees) by diverting trash to recycling.

In addition to its commercial recycling efforts, Annapolis has also installed recycling bins in prominent places (including tourist areas) in the downtown. For more information, check out the City's website www.ci.annapolis.md.us.



Annapolis recycling bin.

Photo credit: ERM

U.S. EPA "Pay-as-you-throw":
www.epa.gov/epawaste/conserve/tools/payt/index.htm
Partnership for Bar and Restaurant Recycling
www.partnership4recycling.org
Maryland Recycles
www.mdrecycles.org

LINKS TO
TECHNICAL
AND FUNDING
ASSISTANCE

Green Communities in Action: Water Conservation in Mount Airy

Citizens for a Green Mount Airy and the Town held a Water Conservation Workshop to educate the public about effective water-saving techniques. The Mayor gave out free toilet tank banks, diverter valves, shower timers, faucet aerators and low flow showerheads. Participants were given a presentation on high-efficiency washing machines and toilets. Tips for the installation and maintenance of rain barrels were provided and 20 free barrels were distributed to town residents.

In other efforts to conserve water and maintain quality, the Town has installed new water meters and updated their leak detection systems. The community group Citizens for a Green Mount Airy also makes rain barrels and dual flush toilets available at a reduced cost. See www.greenmountairy.org.

THE WATER-CONSCIOUS DOWNTOWN

Water conservation on our Main Streets puts less strain on drinking water supplies, while also reducing wastewater discharges that pollute our streams, rivers, and the Chesapeake Bay. Conserving water can postpone or eliminate the need for making major investments in new water and sewer infrastructure. Conserving water waste also puts less of a strain on the community during droughts. Some strategies for conserving water in the business district include:

Audits: Conduct water use audits to provide information about how water is used and help identify potential conservation strategies.

Building Systems: Repair existing plumbing leaks and perform maintenance (such as corrosion control) on pipes to prevent leaking. Install water saving plumbing fixtures and water-efficient appliances, such as low-flow faucets, shower heads, and toilets.

Business Practices: Train employees to conserve water. For example, restaurants can adopt policies of serving water only when requested by a customer.

Education and Information: Encourage efficient water use and conservation through business associations, community newsletters and bulletin boards, and by individual example. A good educational program can be very effective in reducing consumer demand.

Metering: Contact your Department of Public Works to ask about updated water metering (or new metering if none exists). Installing and updating meters can reduce unmetered and/or unauthorized water use. Reporting broken pipes, open hydrants, and other significant water problems to the appropriate local government or utility can also help to minimize water loss.

Water-Efficient Landscaping: Divert water from roof and air conditioning runoff directly into planters or rain barrels for use in landscaping (see pages 15-16 for more information). Minimize outdoor watering through landscape design and species selection. Use native plants or species that are drought resistant and/or tolerant of urban conditions, and position downspouts into landscaped areas. Rain sensors can be distributed for irrigation systems, and daily watering guides can be posted on community websites. Set sprinklers to water the lawn or garden only – not the street or sidewalk and use soaker hoses or trickle irrigation systems for trees and shrubs. Sweep sidewalks instead of using a hose. Water during the coolest part of the day.

Pricing: Water pricing policies should encourage conservation. Progressive price structures, with higher prices for larger water volumes, are one option.



Sweeping sidewalks instead of hosing them down reduces runoff and conserves water.

Sam Kittner Photographer



Sam Kittner Photographer

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

MDE Water Conservation Tips for Businesses and Households
www.mde.state.md.us/Programs/WaterPrograms/Water_Conervation/index.asp
US EPA WaterSense
www.epa.gov/watersense
Low-Flow Plumbing Fixtures
www.earteasy.com/shop/water_save.htm

FIND YOUR ENERGY GROOVE: REDUCE YOUR USE

Energy-efficient buildings and practices reduce demand on the power grid and natural gas supplies, improve local air quality, save consumers money, and consume fewer natural resources. Choosing energy-efficient products—specifically those labeled as Energy Star—can save about 30% on energy bills, while reducing emissions of greenhouse gases.

GREEN TOOLKIT: HOW TO CONSERVE ENERGY

A number of strategies can help conserve energy in the downtown and throughout the community.

WHAT LOCAL GOVERNMENT AND COMMUNITY GROUPS CAN DO

- Reduce excess energy use from street lights. Use compact fluorescent or light emitting diode (LED) bulbs in existing fixtures. Where feasible, replace older lampposts or external light fixtures with more energy efficient fixtures, such as low pressure sodium (LPS) systems.
- Encourage (or require, through zoning and other ordinances) businesses to use night lighting only when necessary for safety. Encourage or require businesses and residences to use motion sensors for outdoor lighting.
- Provide information to residents and businesses about the availability of Energy Star (www.energystar.gov) and other energy-efficient appliances.
- Promote energy conservation through business associations, community newsletters and bulletin boards, and by individual example.

WHAT BUSINESSES AND RESIDENTS CAN DO

- Conserve electricity by turning off lights and unplugging appliances when not in use.
- Insulate your building, hot water heater, and pipes. Use caulking and weather stripping to plug air leaks around doors and windows
- Buy energy-efficient compact fluorescent bulbs for your most-used lights.
- Have leaky air conditioning and refrigeration systems repaired.
- Install a programmable thermostat and set it higher in the summer and lower in the winter. Each degree warmer (in the summer) or cooler (in the winter) can save as much as 1% of your annual heating and cooling costs.⁴
- Run dishwashers and clothes washers only when full and use the energy saving setting, if available.



An Energy Conservation Workshop in Mount Airy helped to educate citizens about ways to reduce energy use.

Photo credit: Citizens for a Green Mount Airy

EmPOWER Maryland Sets State Efficiency Goals

Through the EmPOWER Maryland initiative State agencies are developing conservation measures to reduce energy consumption by 15% by 2015. Those measures include seven steps:

1. Improve building operations by replacing incandescent lights with compact fluorescent lights and asking each State employee to reduce energy use.
2. Expand energy performance contracting.
3. Increase the State Agency Loan Program, which funds energy-efficient lighting, controls, and HVAC.
4. Require all new State buildings larger than 20,000 square feet to be more energy efficient.
5. Purchase ENERGY STAR® products and environmentally friendly cleaning and maintenance products to save energy and reduce the State's environmental footprint.
6. Expand the Community Energy Loan Program, which provides low-interest revolving loans to local governments and nonprofit organizations to install energy efficiency improvements.
7. Ensure accountability by incorporating energy data into StateStat, the Maryland statistics-based government management process.

US Department of Energy – Energy Saving Tips

www.energy.gov/energysavingtips.htm

Maryland Energy Administration, Tips for Offices

www.energy.state.md.us/energytipsforoffices.asp

Tax Incentives Assistance Project (TIAP)

www.energytaxincentives.org

LINKS TO
TECHNICAL
AND FUNDING
ASSISTANCE

ENHANCING DOWNTOWN WITH GREEN SPACES



While the built environment is the most prominent part of our downtowns, green space is a strong factor in making our communities more livable, inviting, and aesthetically pleasing. Parks and public open spaces bring the community together and give us a place to relax or play on a nice day. Public parks are important community assets, but they aren't the only kind of space that can help to green the downtown. In the more constrained Main Street or downtown environment, an emphasis should also be placed on smaller-scale opportunities to add greenery.

COMMUNITY GREEN SPACES

Green space can come in many forms in the downtown, ranging from small container gardens to larger community gardens and pocket parks (see page 14). Community gardens are public green spaces that offer residents the opportunity to plant their own fruits and vegetables. Pocket Parks are small parks accessible to the general public, and are generally created on small, irregular pieces of land or single vacant building lots. Some important considerations for successful green spaces include:

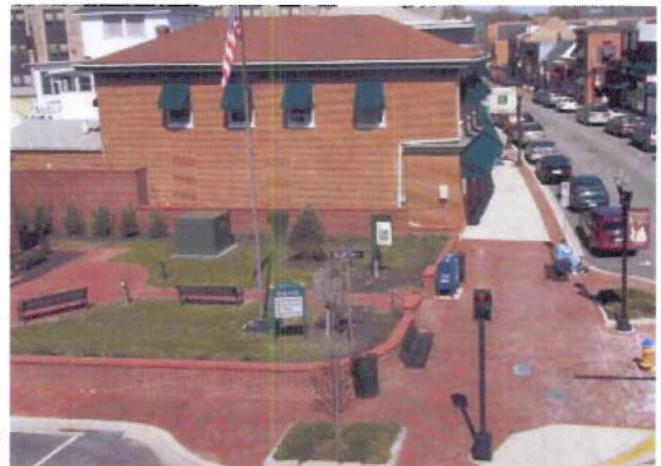
Location: Green spaces should occupy locations that will benefit from pedestrian traffic, while complementing adjacent businesses.

Costs: Major costs can include removal of existing hardscape and plantings, design costs, new hardscape and plantings, municipal services for the site, and new site amenities.

Safety: Well-designed and well-lit public open spaces can help to deter crime and increase public safety. Public open spaces should not have any hidden or permanently dark areas.

Maintenance: Once opened for public use, open space must be properly cared for, whether by local government or community volunteers. Without routine maintenance, an open space can quickly become an unused blight in the community.

Light and Shade: Having too much sun or too much shade can both make open space undesirable for use. Shade and sun should be balanced through the use of trees and building shadows.



A community green space in downtown Elkton.

Sam Kittner Photographer

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

Maryland Community Crime Prevention Institute
www.dpscs.state.md.us/aboutdpscs/pct/ccpi

University of Maryland Home and Garden Information Center
www.hgic.umd.edu

USDA Community Food Project Grant Information
www.csrees.usda.gov/fo/communityfoodprojects.cfm

TREES TO ENERGIZE THE DOWNTOWN

A tree-lined Main Street will create a pedestrian friendly and welcoming environment that can become an extension of community pride and spirit. Healthy street trees and plantings add aesthetic appeal and natural character to the downtown. They screen harsh scenery, provide privacy, and improve air and water quality. The State of Maryland is working in partnership with businesses, communities, and citizens to plant 1 million new trees by 2011 (www.trees.maryland.gov).

According to the National Arbor Day Foundation and the US Department of Agriculture, street trees can also contribute to the overall economic and social vitality of a community. To realize these benefits, the community must choose the right planting, and must commit to proper maintenance. Important maintenance considerations include:

Maintenance: Newly installed street trees are typically maintained by the landscape contractor for the first year. After that, the tree needs help from community-based volunteer groups, or individual business owners taking responsibility for mulching and watering the trees outside of their stores.

Watering: Plants receive much of their water from rainfall, but in the summer or during droughts, an external water source maybe required. Using water from roof drains collected in rain barrels can be a relatively low-cost solution, particularly in areas where public water supplies are limited. (See page 16 for more details on rain barrels).

Drainage: One of the biggest causes for decline of trees and other vegetation is “drowning” due to improper drainage. Design of drainage systems for tree pits/planters should address this problem.



Sam Kittner Photographer

Fertilizing: Fertilize after a soil test has been conducted, based on the soil analysis recommendations. Over-fertilizing can hurt the tree, degrade water quality, and waste money. Go to www.hgic.umd.edu/content/documents/hg110_005.pdf for more information.

Pruning: In business districts, pruning the lower branches from the trees instead of pruning from the top down, or “topping off” a tree, is often preferred, since this encourages growth at a higher elevation and enhances the visibility of storefronts. Careful consideration of planting location and typical tree height can avoid future conflicts with overhead utilities. Tree removal, pruning, care, and/or planting of trees within the public right-of-way require a Roadside Tree Law Permit. See www.dnr.state.md.us/download/rsregs.pdf for more information.

Pruning away the lower branches of trees promotes visibility of storefronts while also providing shade and comfort.

Starter List of Recommended Street Trees in Maryland

Common Name	(Botanical name)
Native to Maryland	
Oak—various species	(<i>Quercus</i> sp.)
American Elm	(<i>Ulmus americana</i>)
Compatible non-native	
Honey Locust	(<i>Gleditsia triacanthos</i>)
London Plane tree	(<i>Platanus acerifolia</i>)
Japanese Zelkova	(<i>Zelkova serrata</i>)
Littleleaf Linden	(<i>Tilia cordata</i>)

Oak, locust, and elm trees are native to Maryland (native American Elms were all but wiped out by Dutch Elm Disease, but disease-resistant varieties are available). Other species listed above are not native, but are relatively common, and are generally appropriate for the climates in Maryland’s downtowns. Overall, the trees listed above are hardy, require little maintenance, and are complementary to nearby native species and plant communities. All are listed on the State’s Roadside Recommended Tree List www.dnr.state.md.us/forests/download/Recommended%20Tree%20List.pdf and trees are available for purchase from the online Nursery.



Tree-Mendous Maryland Program in Baltimore County
www.baltimorecountymd.gov/Agencies/environment/education/ep_needtrees.html
 Maryland Urban Forest Committee Tree Planting Grant Application
www.dnr.state.md.us/forests/programs/urban/grantapp.pdf
 US Forest Service Urban and Community Forestry Challenge Cost Share Grant Program
www.fs.fed.us/ucf/nuclac

LINKS TO
 TECHNICAL
 AND FUNDING
 ASSISTANCE

Green Communities in Action: Frostburg and Oakland in Bloom

Frostburg First, the Foundation for Frostburg, and Frostburg's House and Garden Club are using Main Street Improvement Program funds for a beautification program on Main Street. One aspect of the beautification program is the repair and refurbishing of Frostburg's signature lampposts, which include garden baskets about midway on each post. In Oakland, garden baskets adorn parking meters and welcome visitors to downtown. Whether hung on lampposts and parking meters, or grown in containers at a store's entrance, garden baskets and other touches of green enhance the downtown and promote community pride.



GREEN TOOLKIT: POCKET PARKS

Pocket parks provide a splash of greenery, a place to sit outdoors and socialize with neighbors, and children's play areas for local families and visitors. Because they're small, these parks can fit in a busy downtown. To establish a pocket park, consider these steps, as recommended by Keep Indiana Beautiful (*see link below*):

- Pick a site that is available and can be maintained.
- Secure the community's commitment.
- Plan your park, including site layout, funding, and maintenance.
- Identify partners to provide funds, labor, and materials.
- Convene a steering committee to guide the project.
- Secure funding (short-term for construction, and long-term for maintenance)
- Hold a community kickoff event to begin work on the park.
- Implement a maintenance plan.
- Stay involved with partners and community members to ensure long-term success.

GREEN TOOLKIT: CONTAINER GARDENS

Container gardens, as well as window box planters or small garden plots in front of individual businesses and residences can add green to the downtown without major costs to the property owner or the community. For restaurants, a vegetable garden, either in a container or on the ground, can also provide an inexpensive, local source of food.

Container Gardening Associated (www.container-gardens.com) suggests the following steps to a successful garden:

- Decide how much space you want your garden to use, and where that space is.
- Decide what you want to grow (i.e., flowers or vegetables), taking into account the availability of sunlight and shade. Use locally grown plants wherever possible.
- Select containers to match your space and plant needs, and choose locally-produced baskets or containers if they are available.
- Choose a garden soil mixture that is best for your plants.
- Don't forget about making your garden look good with decorative planters and other accessories.
- Don't have a green thumb? Your local garden club can also be a great resource.



Container gardening
in Oakland.

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

Guide to Container Gardening

www.gardenguides.com/how-to/tipstechniques/containerindoor/container.asp

Starting a Community Garden

www.communitygarden.org/learn/starting-a-community-garden.php

Keep Indianapolis Beautiful (Pocket Parks)

www.kibi.org/programs/greenspace/how_to_guide_greenspace_pocket_parks.htm

STORMWATER

Slow it Down, Spread it Out, Soak it In

A sustainable community uses its water resources wisely, conserving valuable drinking water, and reducing pollution. Managing stormwater runoff is an ongoing issue in Maryland's downtowns. Stormwater contributes large amounts of pollution to local streams, rivers, and eventually the Chesapeake Bay. Fast-moving stormwater erodes stream banks, degrading natural habitats, harming fish, and threatening public water supplies.

Stormwater flows increase as natural forests and fields are replaced with impervious surfaces such as roofs, parking lots, driveways, and roads, which do not allow rainwater to filter into the ground. However, this runoff can be managed—even in urban environments—in a way that reduces pollutants and protects rivers and streams. Maryland's Stormwater Management Regulations are available online: www.mde.state.md.us/assets/document/26.17.02.%202009.pdf.

SLOW IT DOWN: STORMWATER REGULATIONS AND RETROFITS

Slowing the movement of stormwater reduces stream bank erosion and increases opportunities for on-site filtration and purification of stormwater. Maryland's newest stormwater regulations require that new construction manage stormwater through Environmental Site Design (ESD). In already-built areas, ESD stormwater retrofits can also reduce stormwater pollution. ESD is a menu of structural (physical construction) and nonstructural (landscaping, vegetation, and placement of buildings on the site) techniques to reduce the amount, speed, and pollutant content of stormwater that reaches streams.

Runoff can be slowed by using vegetation in place of impervious surfaces to slow the movement of water. "Micro-scale practices," such as green roofs, pervious pavement, and rain gardens are more compatible with downtowns than other land consumptive ESD techniques. Rain gardens—sometimes referred to as infiltration areas—are planted areas that capture stormwater runoff, allowing water to infiltrate into the soil, rather than running directly into nearby streams. New construction typically pays for stormwater management associated with the development project. The cost of stormwater retrofits—redesigning stormwater systems to fit into Main Street's existing

character—is typically undertaken by the local jurisdiction (see page 16 for funding suggestions).



Rain gardens such as this one at the Centreville Library trap runoff and allow it to infiltrate.

Green Communities in Action: Rain Gardens and Rain Barrels

Friends of Sligo Creek (FOSC) is a community group in Montgomery and Prince George's Counties that works to restore the health and vitality of Sligo Creek, a tributary of the Anacostia River. Among other efforts, they hold clean-up and clear-out events in the park, offer indoor programs for learning, and organize guided outdoor explorations.

FOSC has worked cooperatively with many communities. In Berwyn Heights, FOSC was part of a rain garden workshop that facilitated the installation of a rain barrel and two rain gardens at the Town Hall parking lot. In Takoma Park, FOSC worked with the City to install rain gardens at Forest Park in downtown. In Silver Spring, they worked with the Forest Estates Civic Association to help several homeowners build rain gardens in their yards. In return, the homeowners agreed to maintain the rain gardens and to use them to encourage their neighbors to install rain gardens and rain barrels. The FOSC rain gardens are also intended to educate the community at large about the problems of stormwater runoff and about simple solutions to the problem.



Pervious pavers can reduce impervious surface in developed areas.

US EPA "Reduce Runoff" Video
www.epa.gov/owow/nps/lid/video.html
Prince George's County Rain Garden Guide
www.princegeorgescountymd.gov/Government/AgencyIndex/DER/ESG/pdf/Garden.pdf
Natural Resources Defense Council – Information on Stormwater Utilities
www.nrdc.org/water/pollution/storm/chap4.asp

LINKS TO
TECHNICAL
AND FUNDING
ASSISTANCE

Stormwater Management Funding

- Many community organizations will provide rain barrels and assistance at low or no cost.
- A stormwater management (SWM) utility fee or district can raise funds to pay for the operations, maintenance, and capital improvements of public SWM and stream restoration projects.
- Developer impact fees can be tied to the amount of impervious cover on a site.
- State and federal grants, loans, and fees, such as Maryland Department of the Environment's Water Quality Infrastructure Program. These can cover the costs of SWM structures and reduce erosion and sedimentation from new construction.

SPREAD IT OUT: REDUCING STORMWATER VOLUMES

Stormwater management should aim to reduce the volume of runoff by evaporation, infiltration, and retention methods. Infiltration systems recharge groundwater, filter pollutants out of stormwater, and irrigate plants. Retention systems slow or eliminate the release of stormwater from a site.

WHAT LOCAL GOVERNMENT AND COMMUNITY GROUPS CAN DO

- Encourage local and State governments to identify the downtown's biggest stormwater "hot spots," and to fund and install stormwater retrofits to address these problems.
- Install plates or use stencils with the message "Don't Dump, Drains to Bay" or "Don't Dump, Drains to River" on storm drains, to discourage dumping of antifreeze, oil, or other harmful materials. Visit www.dnr.state.md.us/education/are/stencil.pdf to order a stencil kit.

WHAT BUSINESSES AND RESIDENTS CAN DO

- Install a rain barrel to harvest rainwater from downspouts. Rain barrels are simple, inexpensive systems that collect and store rainwater from roofs that would otherwise become runoff. www.dnr.state.md.us/ed/rainbarrel.html.
- Plant a rain garden on your property (businesses and residents) or in public open space (government and community groups). www.montgomerycountymd.gov/Content/DEP/Rainscapes/garden.htm.
- Keep your property litter-free: litter clogs drains and ends up as pollution in our waterways. Local government and community groups can also buy street sweeper machines or hire sweeping services.

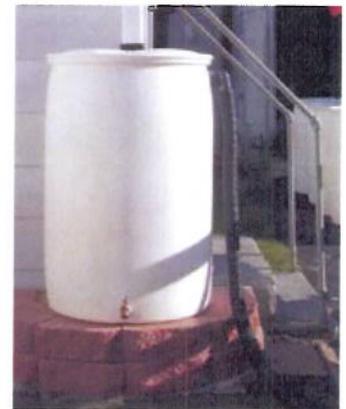


Stormwater from parking lots, roofs, and other impervious surface carries pollutants to the Chesapeake Bay and its tributaries.

SOAK IT IN: REDUCING IMPERVIOUS SURFACE

According to the US Environmental Protection Agency, water quality in streams tends to decline as watersheds approach ten percent impervious coverage.⁵ Most downtowns exceed this threshold, so it is important to find ways to reduce impervious surface. Some techniques that can be implemented include:

- Installing rain gardens, particularly along parking lots and roads, helps to collect rainwater before it becomes runoff.
- Container gardens, landscaped medians, and other elements of downtown green space (see pages 12-14) also help to collect stormwater.
- Installation of pervious, or permeable, pavement. Pervious pavement is designed to allow the infiltration of stormwater through the surface into the soil below where the water is naturally filtered and pollutants are removed. In contrast normal pavement is an impervious surface that sheds rainfall and associated surface pollutants forcing the water to run off paved surfaces directly into nearby storm drains and then into streams and lakes. <http://www.perviouspavement.org>



Rain barrels can collect and save rooftop runoff.

LINKS TO TECHNICAL AND FUNDING ASSISTANCE

Maryland Local Government Infrastructure Finance Program
www.neighborhoodrevitalization.org/Programs/LGIF/LGIF.aspx

Maryland Department of the Environment Stormwater Retrofit Funding
www.mde.state.md.us/Programs/WaterPrograms/WQIP/wqip_stormwater.asp

Maryland Department of the Environment Nonpoint Source Grants – Federal 319(h) Program
www.mde.state.md.us/Programs/WaterPrograms/319NPS/factsheet.asp