

HISP | URSP SUDIO 2021

School of Architecture, Planning, and Preservation University of Maryland College Park, MD

In collaboration with URSP 708 Planning Studio

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Executive Summary

Through the Partnership for Action Learning in Sustainability (PALS), the University of Maryland's Fall 2021 Historic Preservation Studio and Urban Planning Studio partnered with Montgomery County's Planning and Preservation Departments to assist in the implementation of Montgomery County's draft plan called Thrive Montgomery 2050 by updating the Fairland and Briggs Chaney Master Plan. The client (Montgomery County) wished to understand the historical context of the Master Plan area and how heritage values would change over the future and be influenced by climate change. The reports developed by the planning and preservation studios were developed through the lens of three different scenarios: status quo, reformist, and revolutionary. The plan here, developed by the preservation students, was informed through a comprehensive dive into the local history of the area, the people who live there today, and the environmental context. . The Master Plan boundary is located in the northeastern section of Montgomery County and contains a diverse population of about 36,800 residents and 14,000 housing units of varying types. The master plan area is home to the largest concentration of African Americans in Montgomery County and is one of the most diverse regions of the county. The community's primary areas of economic activity include the Briggs Chaney Marketplace and the Auto Park. Our research methodology divided our exploration into three phases. In the first phase, our research focused on the historical context of the study area. This research presents a general history of the area and identifies key historic resources and the environmental context within the master plan boundary. In the second phase, we explored historic preservation and environmental policy and presented an analysis of community stakeholders and public engagement strategy. In the final phase, scenario planning was used to propose potential outcomes and solutions to changes and planned developments in the master plan area in three themes: historic preservation, climate change, and heritage-led development.

During the 18th century, large plantations in Montgomery County relied heavily on tobacco as the primary crop and enslaved labor. During the 19th century, Montgomery County diversified its crop production to wheat and dairy farming, built multiple infrastructure projects that lead to the cultural and economic connection to Washington D.C., and simultaneously saw an increase in the freed African American population and a small African American farming community. Both the single family and multi family housing types are reflective of American architectural styles that were popular at the time of construction. The parks and green spaces reflect the importance of environmental conservation that has been essential to Montgomery County since the mid-20th century. The infrastructure improvements in the area do not create ideal spaces for social interaction. To understand the entire landscape, the class did a social media analysis and discovered that the community valued the Autopark, highways, and the green spaces. The class also provided possible scenario plans that emphasized the community's values by focusing on accessibility to highways, readapting the autopark, highlighting varied community identities, preserving recreaction areas, and sustainability.

Chapter 1

Introduction

This report was created in the Fall 2021 by the University of Maryland Historic Preservation Program (HISP) studio class for the Montgomery County Planning Department. A second report for Montgomery County Planning was created by the University of Maryland Urban Studies and Planning (URSP) Fall 2021 studio class. Both reports were supported by the Partnership for Action Learning in Sustainability (PALS) at the University of Maryland, College Park.

The URSP studio class has created a report focused on urban planning scenarios. The HISP studio class' report is centered around historic preservation planning scenarios. Broadly defined, the field of historic preservation is concerned with the identification, protection, and conservation of culturally and historically significant structures and sites. Preservation policy, then, is concerned with the laws, regulations, and rules which encompass and guide the field of historic preservation and preservation practitioners.

As a field, historic preservation has often been criticized for it's over-emphasis on protecting physical resources, rather than highlighting the stories of people who utilize these resources. With this (extremely valid) criticism in mind, this studio project explicitly looked for ways in which the preservation of existing historic resources might aid community interests, to bridge the gap between people, history, and the environment. In order to achieve this goal, research focused on how historic preservation could serve the needs of the community as a tool to promote sustainability, offer economic benefits to residents, and celebrate the history of the area.

Report Methodology

The purpose of this report was to develop three planning scenarios for the Fairland and Briggs Chaney Master Plan area, located near Burtonsville in Montgomery County, Maryland. The Master Plan boundary is located in the northeastern section of Montgomery County within its Upcounty Planning Area, and includes about 93,000 acres or over 75% of the county's total land area. Historically, the Fairland and Briggs Chaney area consisted of rural farmland, but is now a largely suburban area with some rural components. The area underwent development in the years following World War II, with the vast majority of development occurring after 1980. The Fairland and Briggs Chaney area is home to a diverse population of about 36,800 residents and 14,000 housing units of varying types. Demographically, the area is about 60% African American (the largest concentration of African Americans in Montgomery County), 15% Asian, and 10% Hispanic or Latino. The community's primary areas of economic activity include the Briggs Chaney MarketPlace and the Auto Park.

In order to better understand the landscape and use of space, the Fairland and Briggs Chaney Master Plan area was divided into four quadrants or sectors (figure 12): single family housing, multi family housing, parks and greenspace, and the commercial sector. The single family housing quadrant is located south of the ICC/Maryland 200, with a smaller portion located north of ICC/Maryland 200, west of Route 29/Columbia Pike, south of Briggs Chaney Road. Multifamily housing units in the Fairland and Briggs Chaney Master Plan area are located in an area to the south of Greencastle Road and to the north of Route 200. The area is bounded on the west by Route 29/Columbia Pike and on the east by Greencastle Road and the Prince George's County westernmost boundary. Parks including Edgewood Neighborhood Park and Fairland Recreational Park are located north of the Inter-county Connector/Maryland 200 and east of Route 29/Columbia Pike. Finally, the commercial sector is located directly north of the ICC/Maryland 200 along Route 29/Columbia Pike. To understand the Master Plan area in a more holistic way, these four sectors should be considered first separately, and then as important parts of the whole region that are interconnected and exist together to form both the character and cultural aspects of Fairland and Briggs Chaney.

Research was divided into three phases. Phase one focused on the historical and environmental context of the study area and the resulting chapters present a general history of the area and description of the natural landscape while also identifying key historic resources within the Master Plan boundary. Phase two discusses existing historic preservation and environmental policy and

¹ Montgomery County Planning, "Fairland and Briggs Chaney Master Plan," https://montgomeryplanning.org/planning/communities/upcounty/fairland/fairland-master-plan-1997/fairland-briggs-chaney-mp/.

² Ibid.

includes an analysis of community stakeholders, local social media pages, and a corresponding public engagement strategy. Phase three contains a trend analysis of three major themes relevant to historic preservation and the Master Plan area: climate change, the benefits of historic preservation to the economically disadvantaged, and heritage-led development. The final chapter in this report utilizes scenario planning to propose visions, objectives, and strategies for the Fairland and Briggs Chaney Master Plan area in 2031. The three scenarios discuss five common themes, identified through previous research and the phase three trend analysis, including: cultural resources, historic preservation criteria, conservation, community identity and collaboration, and preservation practice.

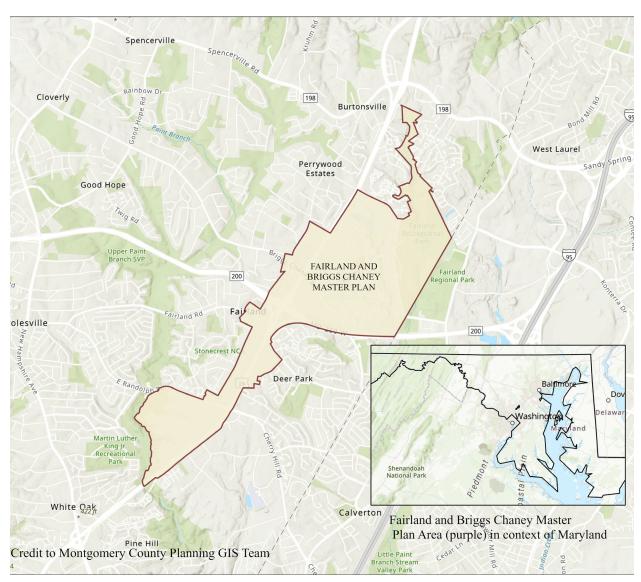


Figure 1: Map of Fairland and Brigs Chaney Master Plan area in context of Maryland. Source: Winnie. Cargill

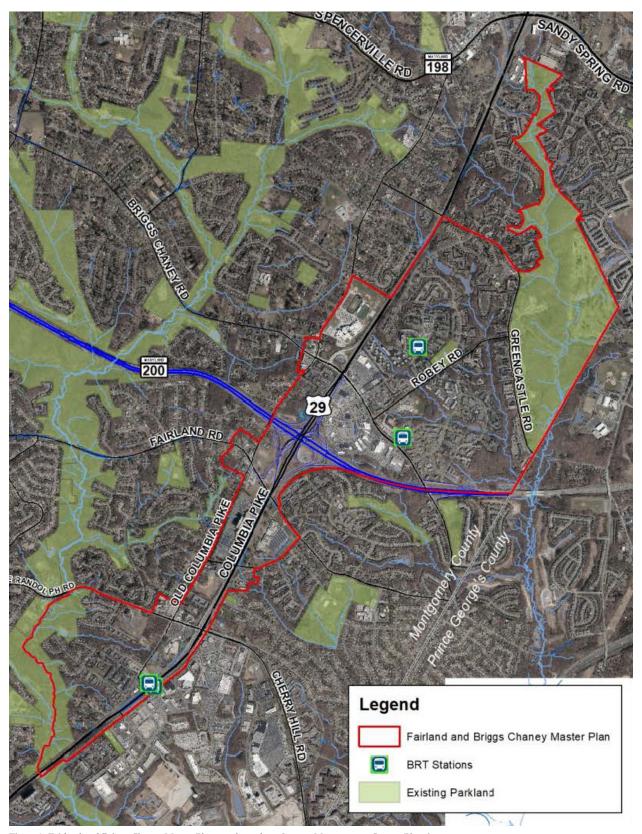


Figure 2: Fairland and Briggs Chaney Master Plan area boundary Source: Montgomery County Planning

Historic Context

State and Regional Historical Context

To fully understand the history of the Fairland and Briggs Chaney Master Plan area, it is imperative to first examine the history of the state and region in order to place the Master Plan Area within a broader historical context. This section presents a historical timeline of the state and region, beginning with the Native American population in Maryland from 11,000 BC to the present day. Following the first subsection, the timeline is broken down into major time periods, including: early European colonization to 1808; the antebellum period; Reconstruction through the Progressive Era; World War II through the 1960s; Montgomery County's postmodern growth from 1970 to 1990; 1990-2010; and 2010 to the present day. Each subsection explores several major themes, including the agricultural economy of the region, major infrastructure projects, the local populace, and the development of the area in the Twentieth century. This section also contains specific information about the Fairland and Briggs Chaney Master Plan area, however there is a separate section titled "Local Historical Context for Fairland and Briggs Chaney" that goes into greater depth.

Native Americans in Maryland (11000 BC - Present)

Paleoindian Period (approximately 11000 BC - 95)

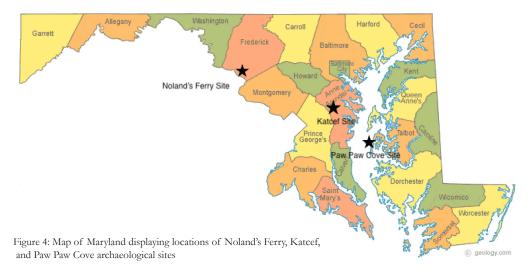
Historical Context for Fairland and Briggs Chaney" that goes into greater depth. The first people to occupy the land that is now Maryland arrived between 13,000 and 10,000 years ago during the Paleoindian Perios, which occurred at the end of the Pleistocene.³ The Paleoindian period began at the end of the last ice age and was a time of extreme climate change and mass extinctions. The Clovis culture is believed to be one of the earliest Paleoindian culture in North America, if not the earliest. The Clovis peoples were hunter and gatherers who lived in small bands and traveled to different areas in Maryland, depending on the resources available.⁴ Clovisculture is characterized archaeologically by the presence of narrow, fluted projectile points(see



Figure 3: Fluted points from Paw Paw Cove Site, R-L: Jasper, chert, jasper, orthoquartzite
Source: The Chesapeake Watershed Archaeological Research

Source: The Chesapeake Watershed Archaeological Research Foundation, photo by Darrin Lowery

figure 3). These points were discovered at three archaeological sites in Maryland: the Nolands Ferry Site in Frederick County, the Katcef Site in Anne Arundel County, and the Paw Paw Cove Site in Talbot County.⁵ All three sites span multiple occupation periods, suggesting that groups revisited and occupied them over long periods of time. For example, occupation of the Paw Paw Cove site spans from 11,500 BC (Paleoindian Period) to 1500 AD (Late Woodland Period).⁶ These three archaeological sites are listed on the National Register of Historic Places (see figure 4).



³ Zachary Singer. "Maryland Paleoindian Sites on the National Register of HIstoric Places: A Newly Reported 13,000 Year Old Fluted Point from the Katcef Site." Our History, Our Heritage. The Maryland Historical Trust, May 13 2020. https://mdhistoricaltrust.wordpress.com/2020/05/13/the-katcef-site/

⁴ Maryland Archaeological Conservation Laboratory. "Maryland's Prehistory." Diagnostic Artifacts in Maryland. Jefferson Patterson State Museum of Archaeology, 2012. https://apps.jefpat.maryland.gov/diagnostic/PrehistoricCeramics/prehistoryinMD.html

^{6 &}quot;Paw Paw Cove Site." Maryland's National Register Properties. Maryland Historical Trust, 2009. https://mht.maryland.gov/nr/NRDetail.aspx?N-RID=1578

Archaic Period (approximately 9500 BC – 1250 BC)

The Archaic Period is comprised of the Early (9500 BC-7000 BC), Middle (7000 BC-3750 BC), and Late (3750 BC-1250 BC) Archaic Periods. During the Early Archaic, the population increased, small bands became more local and less mobile, and trade networks were created. People began hunting and gathering in a wider range of environments and new types of projectile points were invented.⁷ During the Middle Archaic, temperatures rose resulting in a climate that varied by season. People settled around inland swamps and established short-term camps in upland areas. Groups became more sedentary and territory size decreased as the population continued to grow. Many new tool types were created, indicating that an even wider range of environments were being exploited for resources.8 A more sedentary lifestyle continued in the Late Archaic Period, which resulted in a greater diversity of socio-ethnic groups and smaller territories, with groups settling around estuaries, swamps, and freshwater sources. New technologies continued to be invented. Within Montgomery County and the Fairland and Briggs Chaney Master Plan area, a number of sites date to the Archaic Period: the Fairland Branch Site (18MO609) spanned from the Middle Archaic to Late Woodland Period and was the site of short term camps; the Anderson Branch Site (18MO595) dates from the Early Archaic to the Late Woodland Periods, and is also made up of camps; and the Little Paint Branch Site (18MO570) was a small camp dating to the Late Archaic or Early Woodland Period. 10

Woodland Period (approximately 1250 BC – 1600 AD)

By 1,000 BC in Maryland, there were more than 8,000 Native Americans in around 40 different tribes.9 The Early Woodland Period (1250 BC-50 AD) in Maryland was characterized by the first appearance of pottery and of underground storage pits, indicating increased sedentism, which continued into the Middle Woodland (50 AD-950 AD). 11 During this period, groups continued the pattern of seasonal movement, establishing larger multi-band base camps in the winter, and smaller family-sized camps in the summer. More ceramic types were created. 12 During the Late Woodland (950 AD-1600 AD), larger villages were developed, with some including multiple houses, and others partially contained within palisades. This suggests that conflict and warfare were common during the Late Woodland. Cultivation also became common during this period, with the cultivation of crops like corn, squash, and beans becoming widespread. 13 The bow and arrow was invented, and artifacts such as beads, clay tobacco pipes, and bone tools are commonly found at Late Woodland archaeological sites. 14 This period ended with the contact of non-Indians. Montgomery County archaeological sites that include occupations dating to the Woodland Period include the Fairland Branch Site (18MO609); the Anderson Branch Site (18MO595); and the Little Paint Branch Site (18MO570). The Hughes Site (18MO1) included a Late Woodland Period village and burials, and the Mason Island II Site (18MO13) was another Late Woodland village site.

⁷ Maryland Archaeological Conservation Laboratory, 2012.

⁸ Ibid.

⁹ Ibid

¹⁰ John Bedell and Charles LeeDecker. "Archaeological Survey of the Intercounty Connector Project Montgomery and Prince George's Counties, Maryland, Addendum: Archaeological Report No. 333." The Louis Berger Group, Inc. 2005, p. i.

¹¹ "Indigenous Peoples of the Chesapeake." Chesapeake Bay Program, accessed September 6 2021. https://www.chesapeakebay.net/discover/history/archaeology_and_native_americans

¹² Maryland Archaeological Conservation Laboratory, 2012.

¹³ Ibid.

¹⁴ Ibid.

Post Contact Period (1608 – Present)

Captain John Smith and the English colonists arrived in what is now Virginia in 1607, and Smith led an exploration along the Potomac River and Chesapeake Bay in 1608. During these explorations, Smith missed several rivers on the Eastern Shore, and tribes occupying those areas were not represented on his map of the region. ¹⁵ At this time, major tribes located in what is now Maryland included the Tockwogh, Ozinies, Kuskarawoak (now Nanticoke), Wighcomocos (now Pocomoke), Accohanock, Pawtuxtent, Moyaons (now Piscataway), and Susquehannough (now Susquehannock). Most tribes spoke an Algonquian dialect (except the Susquehannough, who spoke Iroquoian). ¹⁶ The three major chiefdoms in the Chesapeake during this time were the Powhatan, the Piscataway, and the Nanticoke, with most tribes living in the region belonging to one of these three chiefdoms. ¹⁷

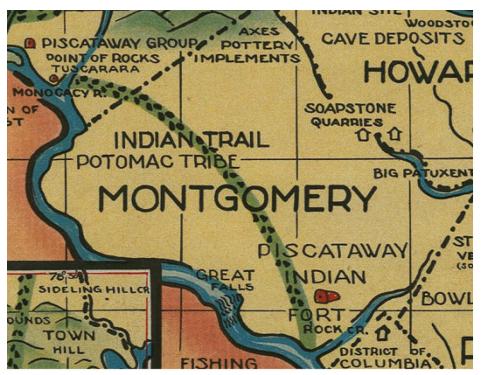


Figure 5: Inset of Montgomery County from Thelma Groth's map, "Indian Tribes of the State of Maryland," 1935. Source: University of Maryland, Special Collections Library.

According to an interpretation of Smith's map, the tribes located in what is now Montgomery County included the Potomac (or Patowomeck, part of the Powhatan Confederacy) and Piscataway tribes (see figure 5). St. Mary's City was established as Maryland's first European settlement and capital in 1634. Thereafter, Native American tribes in Maryland experienced rapid changes over the next 300 years due to warfare (between other tribes and English colonists), loss of land, displacement, disease, assimilation, poverty, and racism. ¹⁹

¹⁵ Chris Cerino, Sari Bennett, and Pat Robeson. "Native Americans and Natural Resources." Sultana Education Foundation, accessed September 6 2021. https://sultanaeducation.org/download/john_smith_curriculum_unit/Native_Americans_and_Natural_Resources.pdf
¹⁶ Ibid.

 ¹⁷ Gabrielle Tayac, Edwin Schupman, and Genevieve Simermeyer. "We Have a Story to Tell: Native Peoples of the Chesapeake Region." National Museum of the American Indian. Smithsonian Institution, 2006. https://americanindian.si.edu/sites/1/files/pdf/education/chesapeake.pdf
 ¹⁸ Thelma Groth. "The Indian Tribes of the State of Maryland" Digital Map, Call No. MD012, 1935. University of Maryland, Special Collections. https://digital.lib.umd.edu/mdmap/1935/the-indian-tribes-of-the

¹⁹ Tayac, Schupman, and Simermeyer, 2006.

Today, there are at least eight known tribes or groups of Native Americans that are native to the state of Maryland. Currently, the state of Maryland formally recognizes three tribes: the Piscataway Indian Nation, the Piscataway Conoy Tribe, and the Accohannock Indian Tribe. The Maryland Commission on Indian Affairs (est. 1976) serves eight indigenous tribes: the Accohannock Indian Tribe, the Assateague Peoples Tribe, the Nause-Waiwash Band of Indians, the Piscataway Conoy Tribe, the Piscataway Indian Nation, the Pocomoke Indian Nation, and the Youghiogheny River Band of Shawnee Indians.²⁰ Currently, there are no federally recognized tribes within the state of Maryland.

Early European Colonization (1808)

King Charles I granted what was considered access to the lands deemed "Maryland" by the English government to George Calvert, the first Lord Baltimore, in 1632.²¹ In 1634, the first area occupied by European colonists was re-named St. Mary's City, in St. Mary's County in the southern portion of the royal charter. There was an initial land agreement between early European colonialists and the Indigenous tribe that they encountered called the Yaocomico that lived in the area comprising St. Mary's County. However, this relationship would deteriorate in the following years and certainly did not characterize relationships between Europeans and Indigenous groups in the rest of what was termed "Maryland".

Throughout the seventeenth century, the Calverts and other wealthy European landowners would strive to recreate an aristocratic society in Maryland that was fueled by a lower class and an ever increasing enslaved African population reliant on cash crops such as tobacco and other mercantile operations.²² Though advertised as a place of religious freedom, early European Marylanders living in the southern counties would soon break out into several periods of conflict divided by Protestants and Catholics.²³ By the 1690s the Protestant majority overtook the minority Catholic elite and moved the then capital from Saint Mary's City to Annapolis which remains to this day.

Following the settlement in St. Mary's City, Europeans began colonizing adjacent and northern counties such as Charles, Prince George's, Calvert and others. However, later termed Montgomery County, this area would experience European development until the late seventeenth century to the degree of other counties and early eighteenth century. Henry Fleet explored this area prior to the arrival of the Ark and the Dove in the 1620s and began European interactions with local indigenous tribes such as the Patawomeke.²⁴ In 1695, the land that would later become Montgomery County was recognized as Prince George's County and also included parts of Frederick County and Washington D.C. The area was divided in 1748 and the western portion including the land that would later become Montgomery County was re-designated Frederick County.

Montgomery County was recognized as its own county in 1777. Once in Montgomery County,

²⁰ "Native Peoples of Maryland." American Indian Tribes Today. National Park Service, accessed September 6 2021. https://www.nps.gov/cajo/learn/historyculture/american-indian-tribes-today.htm

²¹ Archives of Maryland: Biographical Series. "George Calvert". MSA SC 3520-2167. https://msa.maryland.gov/msa/speccol/sc3500/sc3520/002100/002167/html/msa02167.html

²² James Gibb and Julia King. 1991, "Gender, Activity Areas, and Homelots in the 17th-Century Chesapeake Region". Historical Archaeology. Vol. 25 (4): 111-112.

²³ Julia A. King. Archaeology, Narrative, and the Politics of the Past: The View From Southern Maryland. Vol. 1st ed. Knoxville: Univ Tennessee Press, 2012: 56-57.

²⁴ Archives of Maryland: Biographical Series. "Henry Fleet". MSA SC 3520-2831: https://msa.maryland.gov/megafile/msa/speccol/sc3500/sc3520/002801/html/2831bio.html

Georgetown would later become a part of D.C. in 1791. The first courthouse constructed in a town formerly called Williamsburg changed to Rockville in 1803.²⁵ Various rural towns began to form during this time, one of which was called Brookville in the latter half of the eighteenth century.²⁶ Now a National Historic District, Brookville was founded by Quakers and has recorded connections to the Underground Railroad.

While the total state population fluctuated from 1790-1810, the number of enslaved persons increased by over 1,000 individuals (see figure 6) in Montgomery county. During this period in Montgomery County, large scale plantations became the backbone of the economy, and relied almost completely on enslaved labor. The gradual transition to a mixed grain agricultural output in some plantation operations from tobacco in the late nineteenth century would initiate the small decrease in enslaved persons. However, the culture of slavery and the racist ideologies that supported its existence remained despite economic pressures that lead to small-scale emancipations. The preservation of this time period by local and state agencies have recently taken preliminary steps to highlight early African American history in Montgomery County in public facing sites such as the Josiah Henson Museum & Park - Montgomery Parks.

Around 1805, a young Josiah Henson was trafficked from his birthplace in Charles County by Issac Riley to his plantation in Bethesda, Maryland.²⁷ Reverend Henson would later escape from Riley's plantation with his family, join and assist the Underground Railroad, create a free black settlement called Dawn in Canada among other amazing achievements. Henson is an example of just one of thousands of enslaved black persons that impacted the cultural landscape of Montgomery County.

The relationships and power dynamics created between the first European colonialists, indigenous groups, and enslaved Africans during the early colonial period leading up to the early nineteenth century continues to impact the cultural landscape of Montgomery County today. The power of land ownership that upper-class European colonists desired in turn influenced the makeup of early townships and agricultural environments. This land was made profitable through early indentured servitude later to be completely replaced by a system reliant on trafficked Africans and their enslaved descendants. The racial beliefs constructed during this time would later impact beliefs of many white Montgomery County citizens regarding the Civil War and later reconstruction history, which will be expanded upon in later sections.

²⁵ "MONTGOMERY County, Maryland," Montgomery County, Maryland - Historical Chronology, accessed September 7, 2021, https://msa.maryland.gov/msa/mdmanual/36loc/mo/chron/html/mochron.html.

²⁶ Brookeville Historic District. Inventory. Listed: October 11th, 1979. No.: M:23-65. Brookville Montgomery County.

²⁷ Scott Strictland, Julia King, Rebecca Webster. 2017. "In Search of Josiah Henson's Birthplace: Archaeological Investigations at La Grange Near Port Tobacco, Maryland". St. Mary's College of Maryland.

Total Population, Free and Enslaved Black Persons in Montegomery County: 1790-1860

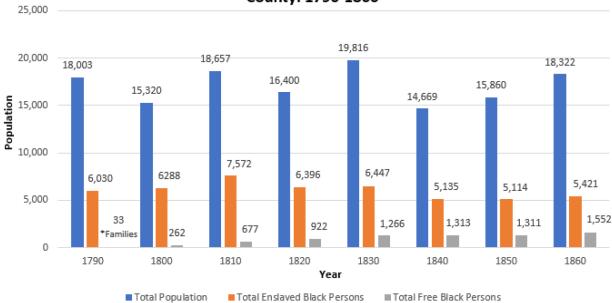


Figure 6: Total Population, Free and Enslaved Black Persons in Montgomery County: 1790-1860 Data sourced from: Legacy of Slavery in Maryland website

Antebellum Period (1808- Civil War)

Agriculture and Economy

The early nineteenth century in Montgomery Country was predominantly rural in character, with most of the landscape dominated by small farming communities. Like much of Maryland, tobacco was the dominant crop in the eighteenth century, with small tobacco operations operating near waterways. However, Montgomery County began to shift towards crop diversification, emphasizing wheat and dairy farming in the nineteenth century. This shift can be attributed in part due to depletion of soil from years of intensive tobacco farming, and to new farming practices introduced by Maryland Quaker communities.²⁸ In the 1800s, farming communities in the county often boasted a post office or a general store, which served as community gathering spaces.²⁹

Like the rest of Maryland, the antebellum economy in Montgomery County was heavily reliant on enslaved labor. Thirty percent of the population of Montgomery County was Black in the decades prior to the Civil War.³⁰ Although there were small free Black communities around the state, including in nearby Sandy Spring and Brooksville, the vast majority of Montgomery County's Black population was enslaved in the antebellum period. In contrast to larger plantations in the deep south,

²⁸ Montgomery County Government and Montgomery County Historical Society. Montgomery County, Maryland Our History and Government. Rockville, Maryland: Montgomery County Government Office of Public Information, 1999.

²⁹ Kelly, Clare Lise. PLACES from the PAST: The Tradition of Gardez Bien in Montgomery County, Maryland. Riverdale, MD: Maryland National Capital Park & Planning Commission, 2001.

³⁰ "Black Marylanders: African American Population by County, Status & Gender." Legacy of Slavery in Maryland . Maryland State Archives , n.d. http://slavery.msa.maryland.gov/html/research/census1850.html.

or even in Maryland's southern and eastern shore tidewater counties, Montgomery County farmers tended to have smaller farms, and fewer enslaved laborers. Although roughly one-third of Maryland property owners were enslavers, the majority reported owning less than ten enslaved persons.

Black Marylanders

Leading up to the Civil War, Montgomery County's free Black population grew modestly. Small abolitionist sentiments by Quakers and other Marylanders contributed to the formation of free Black communities in the area. Quaker communities like Sandy Spring, Maryland have been cited as important stops on the underground railroad, as escaped enslaved persons made their way towards freedom.³¹ However, many Maryland enslavers opted to participate in the interstate slave trade, selling enslaved persons to plantations in the deep south.³²

During the Civil War, the loyalty of Maryland residents was divided. Across the state, many larger plantation owners harbored confederate sympathies, despite Maryland's status in the Union. Many residents, including free Black persons and runaway enslaved persons, fought for the Union. Maryland did not formerly abolish slavery until 1864, one year after the Emancipation Proclamation.

Infrastructural Developments

Montgomery County was transformed in the nineteenth century by a series of large infrastructure projects. The 1828-1850 construction of the Chesapeake and Ohio (C&O) Canal connected Washington and Cumberland via a 185-mile barge system, which transported fertilizer, farm products, and coal to Washington, D.C. The introduction of the steam engine allowed for agricultural products from across Maryland to be shipped quickly to cities. Maryland also focused on more large-scale roadways, including the creation of several turnpikes. In 1810, the Maryland legislators approved funding for a road which cut directly through Fairland, stretching from Westminster, Maryland to Washington D.C.

The Fairland Area

Maps from the Fairland area from the 1860s (see figure 7) indicate that it was a small farming community, complete with a store operated by the Marlow family and a saw and grist mill located in the larger study area. Like most of Montgomery County, there were many enslavers in the Fairland area. Several Fairland residents, including the Soper, Fawcett, and Brown families, are listed in the 1850s Slave Statistics as owning between one and five enslaved persons.³³ Winnie Prother and her four children were enslaved by Nancy H. Brown on a property inside the Fairland and Briggs Chaney Master Plan area.³⁴ Malinda Jackson and her family were enslaved by Zachariah Downs, although they were freed shortly before the Civil War.

There is evidence for the presence of some free Black residents in the Fairland area prior to the Civil War. Census records from the 1860 allude to a small population of free Black residents. Susanna Watts was a 50-year-old Black woman who was listed as the head of a household in the 1860 census. Several free Black farm laborers are listed as living on the property of white residents. Three

³¹ Cohen, Anthony. The Underground Railroad in Montgomery County. Rockville, MD: Montgomery County Historical Society, 1995.

³² A Guide to Slavery in Maryland. College Park, MD: Maryland State Archives and the University of Maryland, 2007.

³³ The National Archive in Washington DC; Washington, DC; NARA Microform Publication: M432; Title: Seventh Census Of The United States, 1850; Record Group: Records of the Bureau of the Census; Record Group Number: 29

³⁴ Maryland State Archives; Washington, DC; 1867 Slave Statistics for Montgomery County

members of the Anderson family are listed as free Black occupants on the farm of Alfred Marlow³⁵ (in the study plan area), in addition to two enslaved occupants.

One particularly well-known free Black homesteader in the area was Sarah Lee (alternatively spelled Lea). She was manumitted by enslaver Evan Shaw in 1857, and granted 137 acres. Sara Lee was the most prosperous Black woman in Montgomery County at the time. The 1861 Martinet's Map of Montgomery County indicates that Lea lived slightly west of the Fairland and Briggs Chaney Master Plan area, on the border of Prince George's County. Her family cemetery and farmstead are located in Calverton-Galway Park, ³⁶ outside of the Master Plan area but included in the larger Study Area (see figure 8).

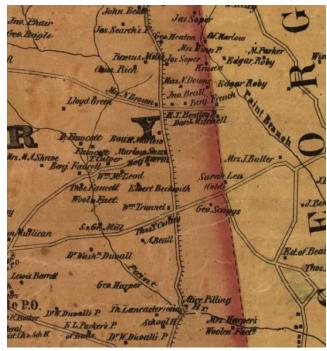


Figure 7: Insert of "Martenet and Bond's Map of Montgomery County, Maryland" (1861-1865) Source: Library of Congress

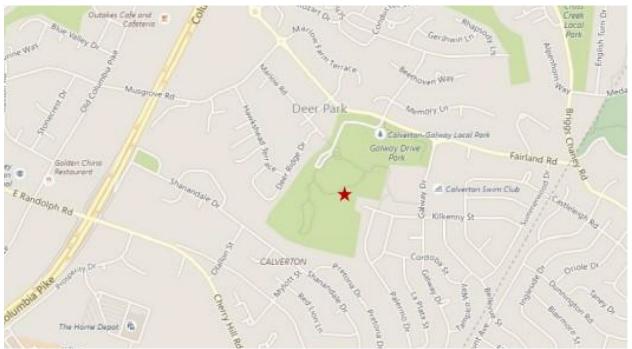


Figure 8: Location of Sara Lee's Family Cemetery Source: Scope of Work for the Fairland and Briggs Chaney Master Plan

³⁵ Year: 1860; Census Place: District 5, Montgomery, Maryland; Page: 1

³⁶ Vivian Eicke, Montgomery County Cemetery Inventory Revistired: Lee Family Cemetery at Calverton-Galway Local Park. Silver Spring, MD: MNCPPC, 2018.

Reconstruction through the Progressive Era (1865-1941)

Major Infrastructure and the Economy

In the late nineteenth century, streetcar and railroad lines emanated from Washington, D.C. which led to the rise of new communities of middle-class white-collar workers. It was also during this time, ca. 1870, when the commercial use of the Chesapeake and Ohio Canal reached its apex.³⁷ Frequent flooding and the establishment of the Metropolitan Branch of the Baltimore and Ohio (B&O) Railroad in Montgomery County led to the canal's decline and the eventual cessation of shipping on the canal in 1924.³⁸

The establishment of the nation's capital in Washington was the beginning of metropolitan influences in Montgomery County; the 1873 opening of the Metropolitan Branch of the B&O Railroad exponentially increased those influences. Locations of train stops became areas for the establishment of manufacturing companies, trade, the construction of summertime resorts, and suburban communities. The expansion of the railroad revitalized the area's declining farm economy by providing an efficient delivery of lime fertilizer and quick shipments to markets of perishable farm produce, which was especially beneficial for dairy farmers. By 1915, large, specialized dairy farms, primarily located within three miles of the railroad, became the county's largest form of agriculture. Post-World War II roadway improvements sped up the transport of milk into the District of Columbia, which led to increased numbers of dairy farms throughout the county.

B&O Railroad developers aided in Montgomery County's population rise in the late-nineteenth early-twentieth centuries by promoting the county as an idyllic retreat far from the disease epidemics, polluted drinking water, and shortage of affordable housing in the District.⁴⁰ As a result, communities were platted along the railway line, including Takoma Park, Garrett Park, and Kensington, among others.

Beginning in the late 1890s, Montgomery County began to see the early development of streetcar suburbs, which included six major streetcar lines. These suburbs, however, were not in close proximity to the Fairland area. The availability of mass-produced automobiles from 1920 through the 1930s substantially increased vehicle ownership in the county; by the end of the 1930s, one in every five county residents owned a car. As a result, developers began to create communities farther from established railroad and streetcar lines. Infrastructure projects focused on roadways, including the creation of US Route 29 in 1934. The original roadway ran from current 29, north on 650 from White Oak to Ashton, and then northeast along 108 to the old Columbia Pike, eventually meeting US Route 40 in Ellicott City. Route 29 was rerouted ca. 1966 to follow Columbia Pike, becoming Old Columbia Pike, and is a major north-south transportation facility in the eastern portion of Montgomery County. As a result of improved infrastructure and the rise of automobile ownership, Montgomery County's population skyrocketed during the 1920s and 1930s, increasing

³⁷ Claire Lise Kelly, PLACES from the PAST, 1.

³⁸ Kelly, PLACES from the PAST, 19.

³⁹ Ibid., 34.

⁴⁰ Ibid., 39.

⁴¹ Ibid., 44

^{42 &}quot;US 29 Columbia Pike, Colesville Rd.", MD Roads: Maryland Highways of the Automobile Era, http://www.mdroads.com/routes/us029.html

in size from almost 35,000 residents to just under 84,000.⁴³ A majority of the development in the immediate decade before World War II occurred near the District line and primarily consisted of single-family housing.

Throughout the rest of the county, predominantly near the District Border, the shift toward suburbanization was much more rapid, as residents relied upon jobs the federal government provided. Despite the creation of the B&O Railroad and its path through Montgomery County, along with industrial developments during the Reconstruction and Progressive Eras, the Fairland area remained a strong agricultural community and retained much of its rural character. In the years following the Civil War, Fairland had a population of approximately 50 residents and contained a school, Episcopal Church, and a store. 44 Post-World War II development, particularly along the Columbia Pike, would ultimately increase development in Fairland, ultimately shifting its economy away from agriculture. 45

The Mining Industry

Gravel and sand are common aggregates used in the creation of concrete and are utilized for road building. Therefore, as Maryland began to expand its paved roadway systems and as the use of concrete in construction became more common at the end of the nineteenth century and the early twentieth century, Maryland's gravel mining industry began to thrive, especially in the eastern part of the state. In 1910, the total tonnage of extracted sand and gravel from Maryland was 860,000 tonnes and by 1930, the total amount of sand and gravel produced was 2.3 million tonnes. ⁴⁶ During this time, sand and gravel mining was localized, especially in Northern Prince George's County.

The Contee Sand and Gravel Company, located in the northwestern part of Prince George's County, was incorporated in 1905 and began to expand its landholdings in the 1930s. Various lease agreements demonstrate a movement of the company's operations to new gravel and sand pits located to the west of their original pits, located on the west side of Muirkirk Station and to the south of Contee Road. The company continued to expand its operations westward into the 1950s. The company did provide some housing for their workers, and additional housing found indicates that Contee's mining operations had expanded westward into Montgomery County. The company continued their operations until the late 1970s when they filed for bankruptcy and were eventually replaced by the Laurel Sand and Gravel Company. A map depicting gravel pits and mines in the study area is shown below (see figure 9); note how the mines in Montgomery County are concentrated around the Prince George's County border. There is little information regarding mining operations in eastern Montgomery County, as most operations were located in the western portion of Prince George's County.

Many small quarries and pits for mining sand, gravel, and building stone were opened in Montgomery County for local use; while the Maryland Mining Industries' total value exceeded 60

⁴³ Kelly, PLACES from the PAST, 46.

⁴⁴ Caroline Hall and Tim Tamburrio, Maryland Inventory of Historic Properties Form, "Odorian Robey Property," MNCPPC, 1996.

⁴⁵ Montgomery County Planning Department, The Maryland-National Capital Park and Planning Commission, Scope of Work for the Fairland and Briggs Chaney Master Plan, April 2021, https://montgomeryplanningboard.org/wp-content/uploads/2021/03/FBCMP_scope_of_work_final-4-1-21.pdf. 3.

⁴⁶ "Contee Sand and Gravel Property Addendum", MIHP #PG:60-18, 1998.

⁴⁷ Ibid

⁴⁸ "Contee Sand and Gravel Property Addendum", MIHP #PG:60-18, 1998.

⁴⁹ Ibid.

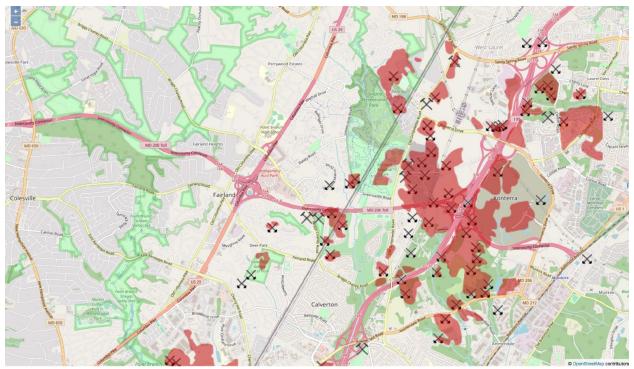


Figure 9: USGS Map of Historic Mines and Gravel Pits in Montgomery and Prince George's Counties.

million in the 1960s, the profits from Montgomery and Howard Counties comprised a small fraction of that amount.⁵⁰ Although various types of mining operations have existed in the county since the Reconstruction Era, sand and gravel mining has been quarried intermittently for local use since 1955.⁵¹

African Americans in Montgomery County

In 1870, African Americans comprised 36 percent of the county's population. ⁵² African American landowners usually acquired property through the purchase of land from white landowners or were given land by plantation owners. Free African Americans developed agricultural homestead settlements throughout the state of Maryland—over 40 of these communities were in Montgomery County. ⁵³ Regarding education, African American property owners paid, in the form of taxes, to support schools that their children were not even allowed to attend prior to 1872. In 1872, the Maryland State Legislature ruled that at least one school in each election district must be open for African American children. While this legislation was a step forward, segregated schools would continue to exist in the county through the middle of the next century. The population of African Americans in the county decreased substantially during the Great Depression. African American farmers in the county were hit hardest by sinking agricultural prices during the 1930s—along with most farmers in the region—and left the county as a result. By 1940, the African American population decreased from 17 percent to three percent. ⁵⁴

⁵⁰ E.T. Cleaves, "Mineral resources of Montgomery and Howard Counties," in The geology of Howard and Montgomery Counties: Maryland Geological Survey, 1964, 262.

⁵¹ Ibid.

⁵² Kelly, PLACES from the PAST, 22.

⁵³ Ibid

⁵⁴ Montgomery County Government and Montgomery County Historical Society, Montgomery County, Maryland Our History and Government, 13.

The Fairland Area

After the Civil War, Fairland had a small African American farming community, including homesteads belonging to formerly enslaved persons, notably Sarah Lee and Malinda Jackson. While Sarah Lee was manumitted and owned land prior to the Civil War, Malinda Jackson did not become a landowner until the war had ended. Other Black farmers, such as Benjamin Adams and family, are listed as living in the area immediately after the Civil War.⁵⁵

The Jackson Homestead (see figure 10) was the residence of an African American family in the county from 1844-1915. The property is located within the bounds of a tract called "Prospect of Peace," purchased by Zachariah Downs in 1783. Malinda Jackson was listed as one of the ten enslaved persons that Downs owned. In 1869, Malinda purchased her slave quarters and 8.75 acres of the Prospect of Peace tract from Ann, the daughter of Zachariah (see figure 11: note the property belonging to "Mrs. Jackson"). The small home and several acres of land were sufficient for Malinda to raise crops and livestock to support her family. From the time of Malinda's death sometime between 1870 and 1879, the property was occupied by different descendants of Malinda Jackson. A fire circa 1915 irreparably damaged the house on the Homestead, prompting Malinda's daughter, Mary, to sell the unoccupied property in 1916.⁵⁶

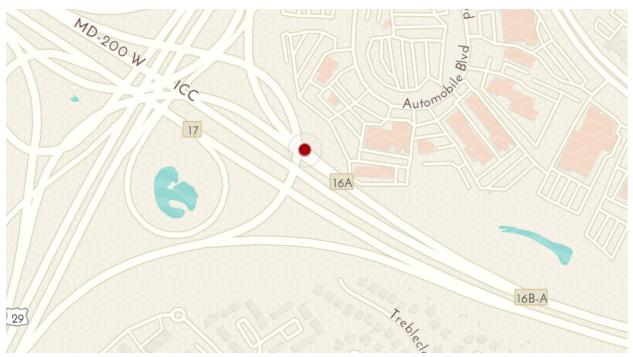


Figure 10: Maryland Department of Transportation--MDOT State Highway Administration. "Maryland Archaeology--Jackson Site." Red dot indicates the previous location of the Jackson Homestead before the ICC.

Racially restrictive land covenants, which forbade the sale of land to African Americans, did exist in some areas of Fairland, including two farmland plats created in 1937 and 1943 by William Briggs. However, most plats in Fairland were established in the years after the U.S. Supreme Court's 1948 ruling in Shelley v. Kraemer declared the practice of racial covenants unconstitutional.⁵⁷

⁵⁵ Year: 1870; Census Place: District 5, Montgomery, Maryland; Roll: M593_591; Page: 394A

⁵⁶ Sarah Rivers Cofield, "18MO609 Jackson Homestead c. 1800-1915," Jefferson Patterson Park & Museum: State Museum of Archaeology, https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/Site%20Summaries/18MO609-JacksonHomestead-SiteSummary.htm

⁵⁷ Montgomery County Planning Department, Scope of Work, 4.



Figure 11: Inset of Montgomery County from 1879 G.M. Hopkins' Map "Atlas of fifteen miles around Washington, including the county of Montgomery, Maryland. Source: Library of Congress

Montgomery County from WWII-1960

War on the Homefront (1940s)

After the bombing of Pearl Harbor on December 7, 1941, Montgomery County residents braced themselves for integration into the war. Many residents enlisted in the military, and the Montgomery County Board of Education helped to expedite the enlistment process by introducing accelerated summer education programs which enabled high school students to graduate faster.⁵⁸ As the war progressed, food shortages, rationing, and victory gardens became a part of daily life. After the end of the war, the county's population substantially increased from both the returning veterans from the war, but also from the influx of individuals across the United States migrating to Maryland to find employment in the federal sector.⁵⁹ The population doubled from 83,912 in 1940 to 164,401 by the 1950s.⁶⁰ During this time frame, Montgomery County also became the first county in Maryland to adopt a home-rule charter in 1948 (this would later be revised in 1968 to an County Executive and City Council charter).⁶¹ As the population began to grow, so did the need for improved and extended roadway infrastructure, sewage/water systems, new housing, and employment opportunities.

⁵⁸ On the Homefront in Montgomery County, during WW2 (Paths #22 & #23), Youtube (YouTube, 2017), https://www.youtube.com/watch?v=DG-ZoTo8i?ok&r=1095s

⁵⁹ Montgomery County Government and Montgomery County Historical Society. Montgomery County, Maryland Our History and Government. ⁶⁰ "Population Estimates since 1900," Montgomery County Planning Department, accessed September 7, 2021, http://www.montgomeryplanning. org/research/data_library/estimates_population.shtm.

⁶¹ "Montgomery County, Maryland Historical Chronology", Maryland Manual-Online: A Guide to Maryland & Its' Government (Maryland State Archives, December 15, 2020), https://msa.maryland.gov/msa/mdmanual/36loc/mo/chron/html/mochron.html.

The 1950s are considered a boom period for Montgomery County as they underwent physical, social, and economic changes. Roadways like Veirs Mills Road expanded to create easier accesses between suburban, urban, and rural places while sewer and water systems were upgraded and expanded by the Washington Suburban Sanitary Commission through small low-interest loans. Most importantly, new housing was being constructed as there had been a national housing shortage due to WWII calling a halt on construction. Although primarily single-family housing, Montgomery County built 46,083 new homes by 1950 and added 89,292 by 1960. Montgomery County's planning for this new growth was heavily supported by their requirement that subdivision applicants set aside portions of undeveloped land for public infrastructure.

Segregation and the Civil Rights Era (1950s-1960s)

For the returning Black veterans from the war and residents themselves, the new development in the County was not meant to benefit them. For example, with the housing boom, Black residents were denied home improvement loans, racial restrictive covenants prevented the sales and tenancy of homes, and Federal Housing Administration prohibited construction with government-backed loans in predominantly Black areas.⁶⁵ On the social side, restaurants, grocery stores, hospitals, park and recreation centers were either segregated or denied Black residents from using these services.

Per the United States Supreme Court's ruling in *Brown v. Board of Education* (1954), Montgomery County public schools began the process of desegregation, and schools were fully desegregated by 1958. Despite desegregation efforts, achievement gaps between minority and white students were evident in the later years and Montgomery County attempted to develop a choice-system that enabled students to select their preferred high school in 1998. Paint Branch, Springbrook, and Blake High School became the Northwest Consortium. Instead, what occurred was segregated school consortiums based on socioeconomic class where a majority of minority low-income students were segregated into Northeast and Downtown consortiums.

Encouraged by the new changes in policy on a national level, activists within Montgomery County fought to make a difference in the local community. In July 1960, students from Howard University (also known as the Non-Violent Action Group) protested at the Glen Echo Amusement Park until the park would change their segregation policy.⁶⁹ Eventually the park allowed all fair -goers, regardless of skin color, to enter the park on March 14, 1961.

In response to the Glen Echo event, the Montgomery County Council formed the Commission on Interracial Problems (later named the Commission on Human Relations) to maintain communication between business owners, and residents regarding the segregation and integration of

⁶² Bob Bachman and Sarah Hedlund, "How Montgomery County Grew in the 1950s," Montgomery History (Montgomery History, 2018), https://sites.google.com/view/suburbanization/how-montgomery-county-grew?authuser=0.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Ibid.

⁶⁶ Maryland Historical Chronology. Ibid.

⁶⁷ Dan Reed, "Montgomery's Experiment with School Choice Really Isn't," Greater Greater Washington, June 27, 2013, https://ggwash.org/view/31602/montgomerys-experiment-with-school-choice-really-isnt.

⁶⁸ Dan Reed, "De facto segregation threatens Montgomery public schools" Great Greater Washington, June 26, 2013, https://ggwash.org/view/31601/de-facto-segregation-threatens-montgomery-public-schools.

^{69 &}quot;A Summer of Change: The Civil Rights Story of Glen Echo Park," National Parks Service (U.S. Department of the Interior, August 3, 2021), https://www.nps.gov/glec/learn/historyculture/summer-of-change.htm.

facilities. They also conducted research and surveys relating to discrimination and attempted to pass a public accommodations law which was rejected because of concern that it would be a coercive policy and the belief that integration should be voluntary. Evidently, in 1962 the Council banned religious and racial discrimination in public accommodations which made it the first county to do so but it came with a caveat that businesses that primarily sold alcohol would not be subjected to the law. This exemption would not be repealed in 1967, when the Council passed legislation to ban discrimination in the sale and leasing of housing. Throughout the Civil Rights era in Montgomery County, the council dealt with the passage and denial of important civil rights both with internal opposition and county residents. By the 1970s, the Council was able to solidify their support for civil rights. While segregation itself had ended legally, the social impacts remained for many years.

Montgomery County's Postmodern Growth (1970-1990)

In 1970 Montgomery County's population had reached 522,809 residents, more than triple the population recorded in the 1950 Census.⁷² Though population growth slowed in the 1970s, the county continued to densify. A new "County Executive-Council" government structure, amendments to land use laws, and the expansion of the DC Metrorail into Montgomery County helped incentivize the development of residential subdivisions and commercial centers along the county's primary thoroughfares.

Land Use

Open interpretation of the land use laws established in the 1964 General Plan allowed property owners to seek higher-density residential zoning towards the end of the 1960s. As a result, by the 1970s, approximately 150 acres of multi-family and townhouse zoning were approved in the Briggs Chaney Road area.⁷³ Throughout the 1960s significant private growth occurred, but in 1970, the rate of development outpaced the capacity of public infrastructure to handle the new demand. The Maryland State Department of Health and Mental Hygiene imposed a moratorium on all new sewer construction, essentially halting the construction of new development until public utilities could be improved. In 1974 the county established 'Rural and Rural Cluster' zones to further protect rural areas and farmlands, and concentrate development along primary corridors.⁷⁴ By the end of the 1970s, the county was anticipating the end of the State's "1970 Sewer Moratorium" and sought to develop a new Master Plan.

1981 Master Plan

Initiated in 1978 and approved in 1981, the "Eastern Montgomery County Planning Area: Cloverly, White Oak, Four Corners, Fairland" plan established the need for affordable housing, preservation of agricultural land, and environmental protection.⁷⁵ In advance of the Master Plan's approval, a

⁷⁰ David Brack, "Twenty Years of Civil Rights Progress," Montgomery County Maryland Government, June 29, 2010, pp. 1-4. https://www.montgomerycountymd.gov/humanrights/resources/files/civil_right_progress.pdf;

⁷¹ Brack, Ibid.

72 Montgomery County Planning Department, Population by County Region (1950, 2000), by

⁷² Montgomery County Planning Department, Population by County Region (1950-2000), https://montgomeryplanning.org/research//data_library/population/po1.shtm

⁷³ Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.7

⁷⁴ Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.135.

⁷⁵ Ibid., 7.

separate "Master Plan for Historic Preservation" was adopted in 1979. This established a historic preservation ordinance and preservation commission that established further land use and historic preservation guidelines. The preservation Master Plan was expanded in 1980 to protect farmland (Agriculture and Rural Open Space Preservation Program) and expanded in 1989 to protect significant archaeological sites.⁷⁶

The 1981 Master Plan allowed transfer of development rights from rural areas to denser areas, and encouraged the development of more diverse housing types and densities within Fairland. By 1985, private development and population growth in Eastern Montgomery County had outpaced the county's ability to maintain infrastructure and public services. To ensure the pace of private development did not outpace public infrastructure and civic development, the County Council passed legislation to manage growth. The Annual Growth Policy of 1987 was an annual review to ensure the approval of new development and subdivisions did not "outpace the provision of a transportation network, schools, and other public facilities."

Transportation and Access

The 1976 expansion of the DC Metrorail into Montgomery County further incentivized development and led to substantial population and commercial growth throughout the 1980s. Historically, a majority of the county's residents commuted to Washington, DC and the Red Line expansion served as a direct route. However, the subsequent growth of commercial and office developments within the county between 1980 and 1990 increased the county's resident workforce by approximately 43%. County roads and interchanges were expanded to accommodate increased automobile traffic, and along the Route 29 corridor in the Fairland and Briggs Chaney Master Plan area, retail center and auto mall growth reached its apex in the 1980s.

By 1990, Montgomery County's population had reached 757,027, and its non-white population had increased from 5.5% (1970) to 23.3% (1990). The 1964 and 1981 Montgomery County Master Plans anticipated the growth of the 1970s and 1980s, and sought to establish guidelines for land use and environmental protection leading into the 1990s.

Montgomery County 1990-2010

Montgomery County expanded in 1997 with the Takoma Park Unification. Previously divided between Prince George's County and Montgomery County, Takoma Park unified on July 1, 1997. The boundary change was the culmination of 18 years of advocacy from residents who desired to have their community undivided by a county line. This addition to Montgomery County included 1,900 properties, 6,000 people, and two square miles.⁸⁰ The 1990s and 2000s were also a time of development for Montgomery County. The planning for the revitalization of downtown Silver Spring began in the 1980s, but took off in the 1990s and 2000s. The 2000 Silver Spring Sector Plan

⁷⁶ Kelly, Clare Lise. PLACES from the PAST.

Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.8

⁷⁸ Montgomery County Government and Montgomery County Historical Society, Montgomery County, Maryland Our History and Government, p.19
⁷⁹ Montgomery County Planning Department, Population by Race & Ethnicity (1970-2000), http://www.montgomeryplanning.org/research/data_li-brary/nopulation/no8b shtm

⁸⁰ Montgomery County Government and Montgomery County Historical Society, Montgomery County, Maryland Our History and Government, p.20

created the outline for the revitalization of the downtown core, focusing on transforming it into a mixed-uses, walkable place. This project attracted significant public and private investments, resulting in the restoration of the Silver Theater and residential and commercial developments.⁸¹

The Fairland and Briggs Chaney area experienced its own development, but by the 1990s and 2000s the majority of commercial building space was complete. By 1991, the housing stock had more than doubled in ten years from 5,000 units to 13,000 units. Employment had nearly tripled from 5,700 to 15,800 jobs, due to the influx of jobs from new development occurring in the area. During this time a large gap between public facilities and development began to form, causing a worsening of transportation conditions and an infrastructure imbalance. These conditions and others created the 1997 Fairland Master Plan. Its focus was on neighborhoods, the transportation network, public facilities, and the environment. Some of the goals of this plan were to develop safe and attractive transportation improvements, low-density land uses to protect the Patuxent watershed, and additional community facilities.

Montgomery County 2010- Present

Montgomery County's population grew by 9.3% from 2010 to 2020. In recent years, Montgomery County has been a primarily Democratic area with 60.74% of voters registered as Democrat and only 15.87% registered as Republicans. A 2012 article from the Washington Post, reported that Montgomery County was one of the nation's top ten most affluent counties in the country. Today, the median household income of Montgomery County is 54.09% higher than the US median income.

The Fairland and Briggs Chaney suburb is relatively less affluent than surrounding neighborhoods in the county. The neighborhood has 36,873 residents in 13,661 households.⁸⁷ The region has typical strip mall retailers and a high concentration of automobile dealerships. The average household income for the area is \$102,052 compared to \$144,723 for Montgomery County (note: presents averages, not medians like the previous paragraph).⁸⁸ 54% of those living in the area live in owner-occupied housing and 46% live in renter-occupied housing. Most individuals in the region (72%) rely on personal cars for transportation and commuting, and only 13% rely on public transit.⁸⁹

The area is about 60% African American, 15% Asian, and 10% Hispanic or Latino (according to the US Census, for Fairland CDP). The region is made up of 67% individuals speaking a language other than English and 28% of individuals speaking English less than very well, both higher rates than all of Montgomery County (with 67% and 14% respectively). Of the individuals who live in

⁸¹ Khalid Afzal. "The History of Land Use and Planning in Montgomery County." "The history of land use and planning in Montgomery County | MontgomeryPlanning.org, March 5, 2021. https://montgomeryplanning.org/blog-design/2021/03/the-history-of-land-use-and-planning-in-montgomery-county/.

⁸² Montgomery County Planning Department, Scope of Work, 4.

⁸³ Montgomery County Department of Park and Planning, The Fairland Master Plan, 3.

⁸⁴ Montgomery County Department of Park and Planning, 8.

⁸⁵ Montgomery County Planning Department, Scope of Work, 4.

⁸⁶ Carol Morello and Ted Mellnik, "Seven of nation's 10 most affluent counties are in Washington region," The Washington Post, September 20, 2012.

⁸⁷ Montgomery County Planning, "Fairland," Montgomery Planning, https://montgomeryplanning.org/planning/communities/upcounty/fairland/.

⁸⁸ Ibid.

⁸⁹ Ibid.

⁹⁰ U.S. Census Bureau (2019). QuickFacts: Fairland CDP, Maryland; United States; Montgomery County, Maryland. Retrieved from https://www.census.gov/quickfacts/fact/table/fairlandcdpmaryland,US,montgomerycountymaryland/PST045219

the area, 44% are High school graduates (32% in Montgomery County) and 49% have a Bachelor Degree or higher (59% in Montgomery County).⁹¹

In the last decade there have been many changes to the region in transportation. In 2014, the Intercounty Connector (ICC) controlled-access highway (MD 200), Maryland's first all-electronic toll-road opened. And, in 2020, Montgomery County's first bus-rapid transit service (BRT) became operational between downtown Silver Spring and Briggs Chaney.⁹²

The area has two community centers: Marilyn J Praisner Community Recreation Center and the East County Community Center, both of which are operated by Montgomery County. In and in the immediate vicinity of the study area, there are over 30 christian churches (representing Catholic, Seventh-day adventist, Baptist, African Methodist Episcopal Church (AME), Lutheran, Pentecostal, Indian Orthodox, Methodist, non-denominational); the Islamic Society of the Washington Area (ISWA), the Chùa Tù An Buddhist Temple, and the Guru Nanak Foundation of America (a Gurudwara of Sikhism). Religious services and churches operate in at least five different languages in the study area including: Arabic, Chinese, English, Portuguese, and Spanish.⁹³

Local Historical Context for Fairland and Briggs Chaney

Fairland is located on property that was known as "Deer Park" when patented to Archibald Edmonston in 1720. Originally part of Prince George's County, Deer Park comprised 682 acres of land between Little Paint Branch and Paint Branch, spanning from Briggs Chaney Road south to Randolph Road. Archibald Edmonston died in 1734 and his will bequeathed previously mentioned properties to his children and grandchildren. Edmonston also owned another large tract of land, known as "Bear Garden." The earliest reference to a dwelling located on that property is in the documentation of the passing down of the land tracts within the family in 1805. The entire estate was auctioned off by the Edmonston family in 1850 and purchased by Dr. Washington Duvall, who owned many tracts of land throughout Montgomery County.

Duvall was active in county politics and a prominent leader within the Democratic Party of Montgomery County during the mid-nineteenth century. He was director of the C&O Canal for a short period of time and member of the county's school committee. In 1858, he was elected to the House of Delegates and became the State Senator of Montgomery County two years later, holding that position throughout the Civil War until 1865. He also represented the county at the State constitutional convention. Duvall owned various tracts of land in Montgomery County and there is no evidence to show that he ever lived in Edmonston's farmhouse.

⁹¹ Ibid

⁹² Montgomery County Planning Department, Scope of Work.

⁹³ List of churches and languages compiled during brief google search, the list is in no way complete.

⁹⁴ Caroline Hall and Tim Tamburrino, "Odorian Roby Property," Maryland Inventory of Historic Properties Form (Baltimore, MD: P.A.C. Spero & Company, October 1996), Section 8.

⁹⁵ Maryland U.S. Calendar of Wills, Source Book: 21, Source Page 159, Annapolis, Maryland.

⁹⁶ Donald M. Leavitt, "Julius Marlow House," Maryland Historical Trust Inventory Form for State Historic Sites Survey (Dickerson, MD: Sugarloaf Regional Trails, 1976), Section 8.

⁹⁷ Hall and Tamburrino, "Odorian Roby Property," Section 8.

⁹⁸ Ibid.

In 1865, Duvall sold the land to Julius Marlow, who eventually became a successful farmer and a lender of mortgage money to those in the community. Marlow was a vestryman in the Episcopal Church and gave a small piece of his own property next to Fairland to be used for St. Mark's Episcopal Church. Marlow's heirs sold the land in 1925 for subdivision. Today, Route 29 cuts through Marlow's old fields and currently, corporate headquarters occupy the land along with the original farmhouse, which was built c. 1800 by Thomas Edmonston (located at 2525 Musgrove Road). The Julius Marlow House is listed as a "Master Plan Site" in the 1997 Fairland Master Plan, but sits right outside the current boundary for the Fairland and Briggs Chaney Master Plan area.

The Marlow Family owned much of the land that makes up the Fairland area today. Members of the Marlow Family formerly owned the 45 acres that were sold to Edgar Roby by Benjamin Marlow in 1899 where the Edgar Roby houses was constructed, a 50 acre parcel of land where Harold Marlow built his 1910 house, and an 18 acre parcel of land sold to Wilson Johnson that became the Lacy Shaw House. More information on these still existing properties can be found in the Single Family Housing Section.

St. Mark's Episcopal Church was located at 12621 Old Columbia Pike. The church and cemetery were constructed in 1876, on land given by Julius Marlow for the purpose of building a church. ¹⁰¹ The Gothic Revival frame building was one of three chapels of Grace Protestant Church. This original church burned down in 1987, after a new church was constructed behind the old church in 1980. ¹⁰² The St. Mark's congregation is a continuation of the old Paint (Branch) Chapel that was located nearby. ¹⁰³ Episcopal church meetings in the area date back to 1712, and a Paint Chapel was created but closed in 1748. In 1774, a new Paint Chapel was opened and established as a separate congregation in 1811. ¹⁰⁴ As the population grew, a new church was needed to accommodate the amount of parishioners, and the solution to this was the construction of St. Mark's Episcopal Church in 1876. St. Mark's is listed in the Maryland Inventory of Historic Properties (Survey No. M:34-9) but was evaluated as ineligible for National Register listing because the original church no longer exists, though the cemetery remains. ¹⁰⁵

According to Maryland land records, in 1783, Zachariah Downs and John Hawley purchased 310 acres of land that were originally part of Deer Park and Bear Garden, which were both tracts of land once owned by Archibald Edmonston. Zachariah Downs' tract of land, situated near the Prince George's County border, became known as "Prospect of Peace." Downs owned ten enslaved people at the time he wrote his will in 1825, including five adults and five children. One of those enslaved, Rachel Jackson, was willed to Downs' daughter Ann in 1831, along with 100 acres of land. It is presumed that Malinda, Rachel's daughter, remained with her mother since they are both listed in the 1850 slave schedule for the 5th Berry's District. In 1869, Malinda Jackson purchased 8.75 acres of land from her former owner, Ann Downs, who was the daughter of Zachariah Downs. 106 The

⁹⁹ Ibid.

¹⁰⁰ Ibid.

¹⁰¹ Land Records of Montgomery County, MD. EBP Liber 20 Folio 262 (5/1/1877).

¹⁰² Donald M. Leavitt, "St. Mark's/Old Paint Chapel," Maryland Historical Trust Inventory Form for State Historic Sites Survey (Dickerson, MD: Sugarloaf Regional Trails, 1976), Section 8.

¹⁰³ Donald M. Leavitt, "St. Mark's/Old Paint Chapel," Section 8.

¹⁰⁴ Ibid.

¹⁰⁵ Ibid.

¹⁰⁶ Sarah Rivers Cofield, "18MO609 Jackson Homestead c. 1800-1915," Jefferson Patterson Park & Museum: State Museum of Archaeology, https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/Site%20Summaries/18MO609-JacksonHomestead-SiteSummary.htm

property was passed down through generations of the Jackson family, until the house was destroyed by a fire c. 1915. The Jackson Homestead was first identified during a Phase I survey conducted in 2004, which was initiated by plans for the construction of the Inter-county Connector (ICC), which was projected to span from I-270 in Montgomery County and US Route 1 in Prince George's County. In 2008, Phase II and III excavations were conducted before the ICC was constructed, which effectively destroyed the archaeological site.

Single Family Housing

Single family houses in the Fairland and Briggs Chaney Master Plan area are located south of ICC/Maryland 200, with a smaller portion located north of ICC/Maryland 200, west of Columbia Pike, south of Briggs Chaney Road (see figure 12).

Multiple historic resources are located within the single family housing area of the Fairland and Briggs Chaney Master Plan, including:

St. Mark's Episcopal Church (discussed above) is no longer standing, but is listed on the MIHP and the original church cemetery still exists (Survey No. M:34-9). Fairland Schoolhouse (also called the Estelle Reimer House, and not to be

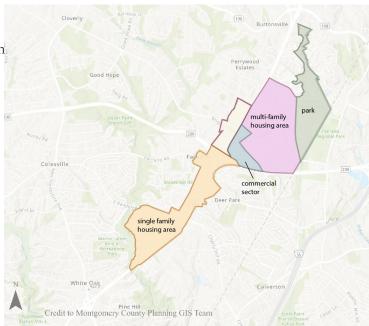


Figure 12: Inset from Fairland and Briggs Chaney Master Plan boundary, displaying the location of single family housing in the area Credit: Devon Murtha

confused with Fairland School) is located at 2510 Fairland Road. The schoolhouse was constructed in 1895 as a one-room schoolhouse with a gable front and was used as a school until it closed in 1920.¹⁰⁷

Fairland Schoolhouse is representative of rural one-room schoolhouses during the 19th century. It is listed on the Maryland Inventory of Historic Properties (Survey No. M:34-6), but is ineligible for National Register listing due to the fact that its integrity has been impaired by its conversion into a residential home. Fairland Schoolhouse was listed as a site "recommended by the HPC for removal from the Locational Atlas and Index of Historic Sites" in the 1997 Fairland Master Plan.

Fairland School is located at 13313 Old Columbia Pike. The one-story school building has 23 classrooms, and was constructed in 1947, but further research has indicated that the original part of the building was built in 1934. Fairland School is listed on the Maryland Inventory of Historic Places (Survey No. M:34-28) but is ineligible for National Register listing because it has not retained

¹⁰⁷ William Bushong, "Fairland School/Estelle Reimer House," Maryland Inventory of Historic Properties Form (Silver Spring, MD: Maryland-National Capital Parks and Planning Commission, 1994), Section 7.

¹⁰⁸ Liz Buxton, "Fairland School," Maryland Historical Trust Determination of Eligibility Form (2003).

integrity (at least four major additions and alterations have been made since it was constructed). The Conley House/Green Ridge located at 12500 Old Columbia Pike is a two-story Classical Revival house built in 1910. 109 The property also includes two stables, built in 1920, that may be considered historic. 110 The original house on the Conley site burned down before the 1910 house was built, and the land has been the continuous home of the Conley family since the early nineteenth century. 111 The Conley House/Green Ridge is listed on the Maryland Inventory of Historic Properties (Survey No. M:34-10) and is listed as a "Master Plan Site" on the 1997 Fairland Master Plan. It is eligible for National Register listing under Criterion C, as a representative example of an early twentieth century Classical Revival house. 112

The Elbert Beckwith House located at 13150 Old Columbia Pike, was built in 1865. Before its alteration in the 1980s, the Beckwith House was a representative example of the front gable Gothic Revival homes typical of Montgomery County farmers in the nineteenth century. The 1980s alterations resulted in a loss of integrity, and as such, the property is ineligible for National Register listing. The Beckwith House is listed on the Maryland Inventory of Historic Properties (Survey No. M:34-7) and was listed as a site "recommended by the HPC for removal from the Locational Atlas and Index of Historic Sites" in the 1997 Fairland Master Plan.

The Edgar Roby (or the Petree) Property is located at 13420 Old Columbia Pike. The house is a 1 ½ story, 3-bay bungalow, constructed in 1920. It is listed on the Maryland Inventory of Historic Properties (Survey No. M:34-15) and is an example of the bungalow style, which was the dominant style of middle and working class housing from 1900-1920. The Edgar Roby Property was originally part of the Marlow family farmland, and 45 acres were purchased in 1899 by Edgar Roby from Benjamin Marlow. Roby was a building contractor and cabinet maker for the federal government. Two other outbuildings on the property were also constructed in 1920. Roby sold part of the land in 1953 to Robert Vanderlip. Since then, the Roby property has been reduced to just one acre. It is ineligible for National Register designation because the construction of an addition damaged the structure's integrity. The Edgar Roby property is currently for sale for \$399,900.

The Lacy Shaw House is located at 13308 Old Columbia Pike and is a 1 story, 3-bay bungalow-style house, constructed in 1924. The property was originally part of land farmed by the Marlow family. These agricultural lands began to be subdivided in 1900 when Howard Marlow sold a 7.28 hectare (18 acre) parcel to Wilson Johnson. The 2 acre parcel was purchased by Lacy Shaw in 1924 and constructed at that time. Lacy Shaw's husband, served as a Montgomery County Commissionerduring the time he resided at the property. The property was sold in 1927 to Jesse

¹⁰⁹ Michael F. Dwyer, "Conley House," Maryland Inventory of Historic Properties Form (Silver Spring, MD: Maryland-National Capital Parks and Planning Commission, 1975), Section 7.

¹¹⁰ P.A.C. Spero & Company, "Conley House/Green Ridge," Maryland Historical Trust Addendum Sheet: Intercounty Connector Project, (Baltimore, MD: P.A.C. Spero & Company, December 1996).

¹¹¹ Michael F. Dwyer, "Conley House," Section 8.

¹¹² P.A.C. Spero & Company, "Conley House/Green Ridge."

¹¹³ William Bushong, "Beckwith House," Maryland Inventory of Historic Properties Form, (Silver Spring, MD: Maryland-National Capital Parks and Planning Commission, 1994).

¹¹⁴ Caroline Hall, "Edgar Roby Property," Maryland Inventory of Historic Properties Form (Baltimore, MD: P.A.C. Spero & Company, 1996).

¹¹⁵ Ibid.

¹¹⁶ Ibid.

¹¹⁷ Ibid.

¹¹⁸ Ibid.

Dustin, who subsequently sold the house to Youie L. and Grace Utz in 1933.¹¹⁹ When Grace Utz passed away in 1999, the ownership of the property was transferred to the county. The house is still standing today, but the front facade appears as if the home has been renovated to serve as two units. The Lacy Shaw house is eligible for listing on the National Register of Historic Places under Criterion C, as a representative example of the American Bungalow style.

The Ben Petree Property is located at 13490 Old Columbia Pike. The house was constructed circa 1920 and is a 2 story cottage with bungalow features. The Petree house is part of the 45-acres land originally owned by the Marlow family (see Edgar Roby House). The property was purchased by Edgar Roby in 1927 from his mother Harriert Roby, who was married to Benjamin T. Marlow. 121

The Hollen House is located at 13701 Old Columbia Pike and is a 1 story, 3-bay front-gable cottage that was constructed circa 1930.¹²² The Hollen House was named after the occupants at the time of the referenced report. The Hollen's potentially purchased the house in 1984, but the former owners, Glenn and Mary Bailey purchased the property from C.L. Roby in 1975.¹²³ This section of land was deeded from Harriet Roby and Benjamin T. Marlow in 1928.¹²⁴

The Edwards House is located 13705 Old Columbia Pike, Silver Spring. Montgomery County, Maryland. It was constructed circa 1930 and is a 1 story, 3-bay cross-gable cottage. ¹²⁵ Given its location and that it neighbors the Hollen House, the property was probably a part of the Marlow family land holdings in the 1920s.

Commercial Sector

Non-Extant Buildings

Although historically a quiet farming community, early maps indicate that the Fairland and Briggs Chaney Master Plan area was once home to a store owned by the Marlow family. The 1870 Census refers to Benjamin Marlow as both a farmer and store keeper, ¹²⁶ and Martenet's 1860s map shows a store along Old Columbia Pike, alongside the Marlow property. In Maryland during the 1800s, it was extremely common for farming communities to have a general store, which was both a commercial center and community gathering space. ¹²⁷ Extant examples of this include the Seneca General Store, which exemplifies the common two-story front gable building. The second story was often used as a meeting hall or an apartment. ¹²⁸

¹¹⁹ Ibid.

¹²⁰ P.A.C. Spero & Company, "Ben Petree Property," Maryland Historical Trust Abridged Inventory Form: Intercounty Connector Project (Baltimore, MD: P.A.C. Spero & Company, October 1996).

¹²¹ Montgomery County, MD, Deed Book 516, pg 0155; Montgomery County, MD, Deed Book 428, pg 0170.

¹²² P.A.C. Spero & Company, "The Hollen House," Maryland Historical Trust Abridged Inventory Form: Intercounty Connector Project (Baltimore, MD: P.A.C. Spero & Company, October 1996).

¹²³ Montgomery County, MD, Deed Book 4729, pg 0444; Montgomery County, MD, Deed Book 462, pg 0043.

¹²⁴ Montgomery County, MD, Deed Book 462, pg 0043.

¹²⁵ P.A.C. Spero & Company, "The Edwards House," Maryland Historical Trust Abridged Inventory Form: Intercounty Connector Project (Baltimore, MD: P.A.C. Spero & Company, October 1996).

¹²⁶ Year: 1870; Census Place: District 5, Montgomery, Maryland; Roll: M593_591; Page: 394B

¹²⁷ Kelly, Clare Lise. PLACES from the PAST: The Tradition of Gardez Bien in Montgomery County, Maryland. Riverdale, MD: Maryland National Capital Park & Planning Commission, 2001.
¹²⁸ Ibid.

Extant Buildings

There are two main commercial centers within the Fairland and Briggs Chaney Master Plan area. The first commercial center is a cluster of automobilerelated businesses, referred to as the Montgomery Auto Park. Roughly a dozen businesses are located on the aptly named Automobile Drive, and range from repair services to car dealerships. This parcel of land was farmland until the late 1960s, when it began to take its current shape as a commercial cul-de-sac. These buildings date from the 1968 to the early 2000s, with the oldest being The Koons Silver Spring buildings. The Koons Ford dealerships are an extremely well-known family business in the Maryland and Virginia area, founded in 1964 by Virginia car tycoon John Koons. 129

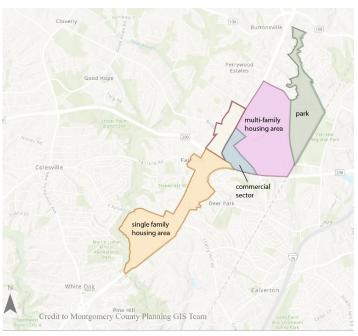


Figure 13: Inset from Fairland and Briggs Chaney Master Plan boundary, displaying the location of the commercial sector. Credit: Devon Murtha.

Car dealerships represent an extremely specific building type (see figure 14), a commercial style which emphasizes bright light, high ceilings, and a level of flashiness meant to impress upon consumers the value of the product. Central to these designs are "showrooms," in which consumers may look at cars inside the building. In this way, car dealerships are a unique building type, one constructed to balance the needs of both their automobiles and human inhabitants. However, car dealerships may be becoming obsolete as car sales move online and newer car companies decline to participate in the third-party dealership sales model.¹³⁰

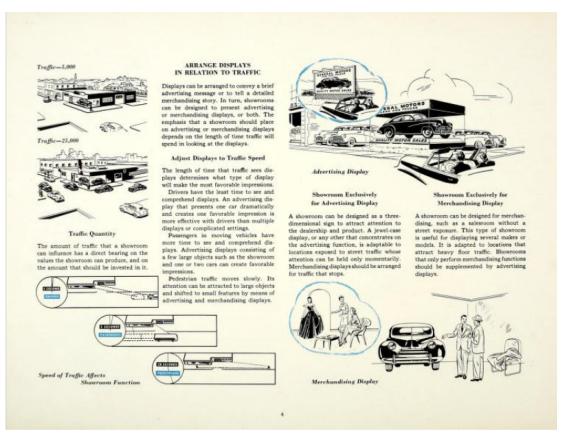
The second major commercial district is a strip mall called the Briggs Chaney MarketPlace at the intersection of Briggs Chaney Road and Columbia Pike. Originally known as the Briggs Chaney Plaza, it had been a part of the Silver Spring Country Tract. The property was later sold to the Briggs Chaney Association Ltd. on October 30, 1981. Two years later, the Briggs Chaney Plaza shopping center was created. The shopping center has experienced some controversy in the later years. In 1994, the center's owners were served a cease-and-desist letter by the Saban Company after falsely promising the public a meet-and-greet with the Power Rangers. The Saban Company who owned the trademark to the Power Rangers reported that there was no such meet-and-greet that was expected to happen. The event was presumably canceled. In April 2004, the center was acquired by the Saul Centers Inc. who renovated the center as well as changed the name to the Briggs Chaney Marketplace. Today, the center houses a diverse set of businesses, including Caribbean restaurant

¹²⁹ J.Y. Smith "Car Tycoon John W. Koons Sr. Dies at 59." The Washington Post, March 14, 1978. https://www.washingtonpost.com/archive/local/1978/03/14/car-tycoon-john-w-koons-sr-dies-at-59/0fb55308-7523-4f4e-aef3-76efbff4178d

Nora Naughton, "Everything Must Go! The American Car Dealership Is for Sale.," The Wall Street Journal, September 11, 2021, accessed December 3, 2021, https://www.wsj.com/articles/everything-must-go-the-american-car-dealership-is-for-sale-11631332812.
 Mdlandrec.net Plat #13878.

¹³² Edited by Chuck Conconi. "Mighty Morphin Power Lawyers". Washingtonian. October, 1994. https://advance-lexis-com.proxy-um.researchport. umd.edu/api/document?collection=news&id=urn:contentItem:3SJ4-DX00-0009-V3S6-00000-00&context=1516831.

^{133 &}quot;Saul Centers Acquires Shopping Centers". PR Newswire. April 23, 2004 Friday. https://advance-lexis-com.proxy-um.researchport.umd.edu/api/document?collection=news&id=urn:contentItem:4C7B-5G10-010D-R05W-00000-00&context=1516831.



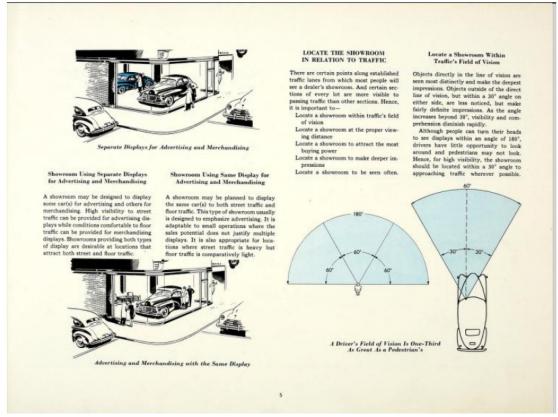


Figure 14: Design guidelines for "Planning Automobile Dealer Properties." Published by General motors in 1948.

Island Quizine, Karen's Seafood, and That Was Easy Barber Shop. There are also several chain stores, and a walk-in clinic.

The Verizon Building, situated on 13101 Columbia Pike, was originally conceived of as The Fairland Data Center (FDC), and was built by the Chesapeake and Potomac (C&P) Telephone Company. The two-story steel-frame commercial FDC building was designed by renowned local architect Leon Chatelain in the International Style between 1965 and 1975. The Verizon Center was determined eligible for nomination on the Maryland Register of Historic Properties due to the building's significance for its historic association with the C&P phone company. Founded in 1883, the C&P phone company was one of the earliest and most innovative telephone companies in the Washington D.C. region, bringing large-scale phone service to the area. The C&P Phone Company has a long history of overtly racist hiring practices. In 1943, the company officially dropped it's "heretofore iron-bound restrictive policy against hiring colored persons in white collar jobs," and hired 15 Black women for their Baltimore office, who were not allowed to use the same restrooms as white staff. Into the 1950s, the company refused to hire Black telephone operators.

Multi-family Housing Area

Fairland has been touted as a community that is well-positioned to be a family-oriented residential area as well as being commuter-friendly due to its proximity to main thoroughfares and proximity to workcenters. The area offers a variety of housing, from single family homes to multifamily housing units.

Multifamily housing units in the Fairland and Briggs Chaney Master Plan area are located in an area to the south of Greencastle Road and to the north of Route 200. The area is bounded on the west by Route 29 and on the east by Greencastle Road and the Prince George's

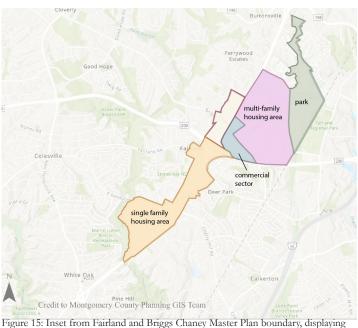


Figure 15: Inset from Farrland and Briggs Chaney Master Plan boundary, displaying the location of the multi-family housing area. Credit: Devon Murtha.

County westernmost boundary. A majority of the multifamily housing units in this area were constructed in the 1980s and 1990s, with the exception of three. These apartment units offer a mix of studio, one-, two-, and three-bedroom units for rent and other amenities common to apartment complexes.

 ^{134 &}quot;Telephone Company Hires Girl Clerks in Baltimore Offices." Afro-American (1893-1988), Jan 23, 1943, https://www.proquest.com/histori-cal-newspapers/telephone-company-hires-girl-clerks-baltimore/docview/531422086/se-2?accountid=14696 (accessed September 12, 2021).
 135 "Colored Operators Not Wanted, Says Telephone Co." Afro-American (1893-1988), Aug 15, 1953, https://www.proquest.com/historical-newspapers/colored-operators-not-wanted-says-telephone-co/docview/531813514/se-2?accountid=14696 (accessed September 12, 2021).
 136 "Artery Development Announces Two New Residential Communities; Sites in Northern Virginia and Suburban Maryland Draw Market Attention," PR Newswire. June 23, 2000. https://advance-lexis-com.proxy-um.researchport.umd.edu/api/document?collection=news&id=urn:contentItem:-40JS-YTF0-00KH-71H0-00000-00&context=1516831.

Modern Context

According to Apartments.com, a one bedroom apartment in the neighborhood costs around \$1,241 per month to about \$1,550 per month (for available apartments on 9/10) and a two bedroom apartment rents for about \$1,400 per month to \$1,750 per month. This is below the average for one-bedroom apartments in Silver Spring, MD which are about \$1,672 and on-par with the national average of \$1,510.\frac{137}{37} According to Zillow, there are about 40 homes for sale in the immediate vicinity of the study area ranging in price from \$175,000 for .5 acre of undeveloped land to \$1.7 million for a 7 bedroom 10,000 square foot home on 1.04 acres of land. Almost all of the homes are between \$230,000 to \$600,000. The current homes for sale are mostly townhouses with a few single-family homes.

Single family homes in Fairland are located south of ICC/Maryland 200, and a smaller portion are located north of ICC/Maryland 200, west of Columbia Pike, below Briggs Chaney Road. As of 9/12, for the homes south of ICC/Maryland 200, prices range from \$399,900 (for the Edgar Roby Property, listed on MIHP, a 4 bed, 1 bath home built in 1920) to \$770,000 (for a 5 bed, 3 bath home built in 2005). The median listing price for a single family home in Fairland is \$597,450, which is more expensive than the median listing price of a single family home in Silver Spring generally (\$489,900 in August 2021). Of the single family homes located above ICC/Maryland 200, prices are much more expensive -- \$1,399,900 for a 10 bed, 9.5 bath home, and \$1,669,500 for a 7 bed, 7.5 bath home.

Parks and Greenspace

The Fairland area of Eastern Montgomery County is the geological transition zone between the Piedmont and Coastal Plain regions. The Piedmont is categorized by its undulating hills, steep streams, and gorges, while the Coastal Plain is typically more level with sandier soil types. In addition to this unique geological overlap, the Fairland and Briggs Chaney Master Plan area covers two watersheds; the Paint Branch and Little Paint Branch. Historically, this landscape supported a diverse variety of plant and wildlife species but contemporary agriculture and mining activities began to significantly alter the natural landscape.

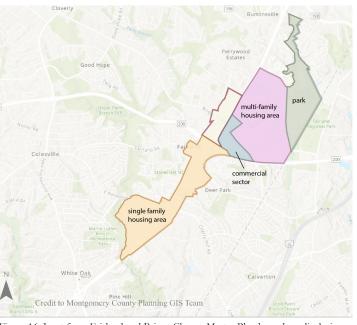


Figure 16: Inset from Fairland and Briggs Chaney Master Plan boundary, displaying the location of park

¹³⁷ "What Is the Average Rent in Silver Spring?," RENTCafé, accessed December 3, 2021, https://www.rentcafe.com/average-rent-market-trends/us/md/silver-spring/.

¹³⁸ Real Estate & Homes for Sale, Fairland, Maryland. https://www.realtor.com/realestateandhomes-search/Fairland_MD/type-single-family-home

¹³⁹ Silver Spring, MD Real Estate Market, August 2021. https://www.realtor.com/realestateandhomes-search/Silver-Spring_MD/overview

¹⁴⁰ Real Estate & Homes for Sale, Fairland, Maryland. https://www.realtor.com/realestateandhomes-search/Fairland_MD/type-single-family-home

The Maryland-National Capital Park and Planning Commission (M-NCPPC) was established in 1927 to govern long-term planning, park acquisition, and development within Montgomery and Prince George's Counties. The historically rural and farmstead landscape of Eastern Montgomery County had undergone few geographic changes since European settlement, but by the 1960's the area was slowly being rezoned for higher density residential and commercial development. In an effort to protect the natural resources and watersheds in the Fairland area, the state and county began to implement master plans and environmental acts to ensure development did not disturb the natural wildlife, plant life, and watersheds.

During this era, the M-NCPPC began to seek approval and acquire the lands that would eventually become Fairland Recreational Park and Edgewood Neighborhood Park. Concurrently, one of the first major conservation plans for the area was the "1968 Fairland-Beltsville Plan". This plan proposed that the Patuxent River (north of Fairland) and its wooded banks act as a buffer between the quickly urbanizing Washington, DC and Baltimore metropolitan regions. A 900 acre conservation district was established around the Rocky Gorge Reservoir as a means to protect water quality and provide erosion control.¹⁴¹ This catalyzed subsequent planning and environmental protections that included:

- "Rural and Rural Cluster Zones" (1974) Montgomery County Council established protections for rural lands and farmlands in an effort to concentrate development along primary corridors.¹⁴²
- "Eastern Montgomery County Master Plan" (1981) The county planned to preserve vegetation, watersheds, and overall water quality, by maintaining sprawl. Controls were set for phased land clearing, stormwater management, and sediment/erosion control.¹⁴³
- "Patuxent River Policy Plan" (1984) Maintained water quality by protecting and restoring the transition area(s) between streams and (new) development.
- "Maryland Planning Act" (1992) Identified stream buffers, identified threatened/ endangered habitats, and established a 100-year flood plain.¹⁴⁴
- "Forest Conservation Law" (1992) County legislation that protected forest and woodlands from future development.
- "Designation of Upper Paint Branch Watershed as Special Protection Area" (1995) -Protected as one of the only streams in the nation that sustains long-term reproduction of trout.¹⁴⁵
- "Montgomery County Master Plan" (1997) Fairland became part of an Environmental Restoration Area and Fairland Regional Park became an Environmental Preservation Area. Proposals sought to limit impervious surfaces and acquire further properties for conservation. The National Environmental Protection Act and Federal Clean Water Act provided further protections for watersheds and parklands.¹⁴⁶

¹⁴¹ Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.135

¹⁴² Ibid.

¹⁴³ Ibid., 134.

¹⁴⁴ Ibid., 132.

¹⁴⁵ Ibid., 136.

¹⁴⁶ Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.129.

Fairland Recreational Park.

Before the land was developed into parks it was agricultural and former mined-out land. According to a historic map, in 1865 the original land owners of the property were Edgar Roby, Jas Soper, Gen Heaton, James Athen, Mrs. Hines P, and M. Mariom. ¹⁴⁷ Fourteen years later the land owners were Alf.d Marlow, Alf.d Parker, Jas Soper, and Edgar Roby. ¹⁴⁸ As the Soper family acquired more of the land in the eastern part of Montgomery County, the area became known as "Soper's Seat". By the late 1940's the southern portion of what is now Fairland Recreational Park began its transition from agricultural land to mining land. Based on land deeds and USGS historic mining records, the

parceled farmland of the Soper family was transferred to the Gudelsky family and Contee Sandand Gravel Inc.¹⁴⁹ These transactions reveal that the Gudelsky's held management positions within Contee. 150 The Maryland Historic Trust nomination form for the 'Contee Sand and Gravel Property' further describes the westward expansion of the sand and gravel operation between the 1940s and 1950s, into what is now Fairland Park. 151 The extraction of sand and gravel from this location supported the growth of the county by supplying sand and gravel for construction, but it severely altered the topographic landscape and left the land nearly treeless. In the late 1950s operations had ceased and the M-NCPPC began its multi-decade effort to acquire the land for conservation and park use. The latest land transfer between Contee and M-NCPPC occurred in 1988.¹⁵²

The land is now owned by M-NCPPC and protectedunder local law. Bordered by Fairland to the westand Little Paint Branch to the east, the

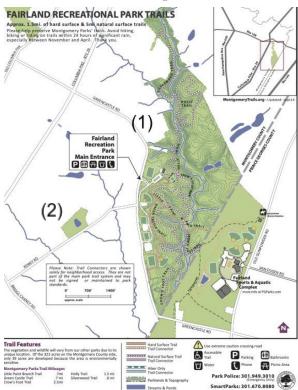


Figure 17: Map of Fairland Recreational Park Trails (1) and Edgewood Neighborhood Park (2). Source: Montgomery Parks

322-acre park is uniquely located in both Montgomery and Prince George's Counties. Fairland Recreational Park (see figure 15) offers a variety of activities and includes four lighted softball fields, a playground, and a storm water management demonstration project area. The park is not only an open space, multi-use park, but also a large "pristine forested area with miles of paved hiking trails and open surfaces for mountain bikes and equestrians." It is also an important environmental and cultural resource as it is the habitat for various birds and animals, wetlands which support

¹⁴⁷ Martenet, Simon J, Martenet & Bond, and Schmidt & Trowe. Martenet and Bond's map of Montgomery County, Maryland. [Baltimore: Simon J. Martenet, 1865] Map. Retrieved from the Library of Congress, <www.loc.gov/item/2002620533/>.

¹⁴⁸ Hopkins, Griffith Morgan, Jr. Atlas of fifteen miles around Washington, including the county of Montgomery, Maryland. Philadelphia: G.M. Hopkins, 1879, 1879. Map. https://www.loc.gov/item/87675339/.

^{149 &}quot;Prospect- and mine-related features on USGS topographic maps", USGS, https://mrdata.usgs.gov/usmin/.

¹⁵⁰ MDLandRec.net, Liber 2135, Folio 581 and Liber 1958, Folio 285

¹⁵¹ "Contee Sand and Gravel Property Addendum", MIHP #PG:60-18, 1998.

¹⁵² MDLandRec.net, Liber 8335, Folio 529.

¹⁵³ "Fairland Regional Park: MNCPPC, MD." Fairland Regional Park | MNCPPC, MD. Accessed September 14, 2021. https://www.mncppc.org/3245/Fairland-Regional-Park.

¹⁵⁴ Smith, Ronald H. "Deal Isn't Worth Loss of Parkland." The Washington Post (1974-), Jul 31, 2003. https://www.proquest.com/historical-newspapers/deal-isnt-worth-loss-parkland/docview/2267563649/se-2?accountid=14696.

endangered species, and has archaeological sites more than 2500 years old. 155

Acquisition Timeline

The agricultural lands that are now Fairland Regional Park and Edgewood Neighborhood Park were acquired by the M-NCPPC over the course of several decades:

- 1930 Congress enacted the Capper-Cramton Act, which provided federal funding for land acquisition and protection on either side of the Potomac River. Later amendments provided funding for stream valley acquisition and protection.¹⁵⁶
- 1959 The first significant step in acquiring parklands was the approval of M-NCPPC's \$6.6 million budget, half of which was allocated to purchase parkland in Montgomery and Prince George's Counties. The M-NCPPC secured an additional \$150,000 of federal funding for parks specifically located along stream valleys. In this same year it was officially announced that playgrounds would be added to multiple communities in the county, including Fairland.¹⁵⁷
- 1969 M-NCPPC sought approval to purchase an additional 273 acres of parkland in Montgomery County, and 168 acres in Prince George's County (Fairland Park).¹⁵⁸
- 1973 Planners approve additional parkland acquisitions, east of the Montgomery-Prince George's border. (Malin Property)
- 1975 M-NCPPC acquires former mine site and starts conversion to recreational fields (completed 1985)¹⁵⁹
- 1979 114 acres of Fairland Recreational Park had already been purchased by Montgomery County, with an additional 150 acres proposed (owned by Boykin Resources, LLC). 160
- 1979 State 'open-space funds' support an additional purchase of 55 acres, on the east side of Fairland Park (Prince George's County). 161
- 1985- M-NCPPC acquires Edgewood Neighborhood Park.
- 1988 Significant land transfer from Contee to M-NCPPC.¹⁶³
- 1996-present M-NCPPC continues to acquire land adjacent to Fairland Recreational Park via land purchases and Forest Conservation Easements.

Edgewood Neighborhood Park

Edgewood Neighborhood park (see figure 15) is much smaller in size compared to Fairland Recreational, being only 9.6 acres. As of 1899, the parcel of land was owned by the William Soper family and Julia Marlow (widow of William Soper). Several transfers occurred in the early 1900s but William Henry Soper reacquired ownership between 1941 and 1980. In 1980 the land was

¹⁵⁵ Ibid.

 $^{^{156}\} Surina\ Singh, ``Protecting\ Capper-Cramton\ Parks",\ NCPC,\ 2018.\ https://www.ncpc.gov/news/item/45/.$

¹⁵⁷ JW Anderson, Staff Reporter. "Park Agency Budget Passed: Prince George's County Montgomery County." The Washington Post and Times Herald (1954-1959), Apr 28, 1959.

¹⁵⁸ "Around the Beltway: Potomac Landmark Virginia: A Computer for Purity SAR Elects a President Maryland: Parkland Fund Asked." The Washington Post, Times Herald (1959-1973), Feb 27, 1969.

¹⁵⁹ "Learn About Stormwater Management at Fairland Park." MD Environment, September 1998. https://mde.state.md.us/programs/ResearchCenter/ReportsandPublications/Documents/www.mde.state.md.us/assets/document/general/mdesep.pdf.

¹⁶⁰ Sharon Conway Washington Post, Staff Writer. "Approval of Park Purchase Sought in Prince George's." The Washington Post (1974-), Feb 01, 1979.

¹⁶¹ Paul Hodge Washington Post, Staff Writer. "Prince George's Gets Federal Aid for Park." The Washington Post (1974-), Jul 19, 1979.

¹⁶² Edgewood Neighborhood Park, M-NCPPC, https://www.montgomeryparks.org/parks-and-trails/edgewood-neighborhood-park/

¹⁶³ MDLandRec.net, Liber 8335, Folio 529.

¹⁶⁴ MDLandRec.net, Liber TD12, Folio 129.

¹⁶⁵ MDLandRec.net, Liber 825, Folio 203.

transferred to one William Wheeler, who then transferred the land to Shell Oil Company in 1984.¹⁶⁶ Shell's ownership was brief and the land was transferred to M-NCPPC in 1985.¹⁶⁷

Edgewood Neighborhood Park is categorized by its central pond, young-growth tree canopy, paved walking trail, picnic shelter, and playground. The park's pond is connected to the Little Paint Branch Watershed but based on historic aerials dating to 1957, the pond formed as a drainage basin for adjacent agricultural operations. While the pond does support trout and bird species, it is off-limits to swimming and fishing because it currently serves the stormwater network. It still provides a lovely green-space to the surrounding neighborhood and provides a place for people to gather at the picnic shelter and has a playground for children.¹⁶⁸

Conservation and Natural Resources

Since the transition from primary agricultural land to suburban development, there has been a desire to conserve greenspace and parkland in the area. With the development of both commercial and residential spaces, stormwater runoff has become a concern for the area. Not only is there an investment in conservation efforts and stormwater management but also an involvement in educating the public about best management practices. This can be seen in the Stormwater management demonstration area at Fairland Regional Park.¹⁶⁹ The land for this program was a reclaimed sand and gravel mine purchased in 1975. By 1985 the first phase of the project, the baseball field complex, was completed. Then in 1987 the development of the stormwater management demonstration area began.¹⁷⁰ The demonstration area consists of examples of stormwater management's best practices and sediment and erosion control practices along a walkway.

Some of the stormwater management tools that are at the demonstration area are: wet basins, shallow marshes, and bioretention areas.¹⁷¹ The basin at Fairland acts as temporary storage for storm runoff. It detains low intensity storms for approximately 20 hours and can also provide flood management for high intensity storms. The shallow marshes aid in removing extra nutrients from the runoff and increase wildlife habitat and food resources. The bioretention areas serve as a filtering system that uses trees, shrubs, and grasses in combination with a sand filter to provide water quality management.¹⁷²

After the development of the demonstration area, the watershed management division of the Montgomery County Department of Environmental Protection put out the Little Paint Branch Watershed Study in 1997. The study focused on resource conditions and restoration efforts. Samples from ten stations throughout the watershed were taken and analyzed to determine the condition of

¹⁶⁶ MDLandRec.net, Liber 5529, Folio 740 and Liber 6329, Folio 460.

¹⁶⁷ MDLandRec.net, Liber 6762, Folio 217.

¹⁶⁸ Edgewood Neighborhood Park, M-NCPPC, https://www.montgomeryparks.org/parks-and-trails/edgewood-neighborhood-park

^{169 &}quot;Learn About Stormwater Management at Fairland Park." MD Environment, September 1998. https://mde.state.md.us/programs/ResearchCenter/ReportsandPublications/Documents/www.mde.state.md.us/assets/document/general/mdesep.pdf.

¹⁷⁰ "Learn About Stormwater Management at Fairland Park." MD Environment, September 1998.

¹⁷¹ Ibid

¹⁷² Ibid.

the five tributaries.¹⁷³ The analysis of the samples revealed that the resources conditions worsened as you went south. This aligns with the development pattern of the area. Many of the developments in the south were built without stormwater management controls and stream protection measures. While northern developments were built after these practices became commonplace.¹⁷⁴ The main stressor of the watershed in all the tributaries was uncontrolled stormwater runoff. This was especially problematic in the Galway Tributary which received a poor overall resource condition rating.¹⁷⁵ Some of the restoration efforts discussed were identifying and stabilizing specific impaired stream habitat areas and getting uncontrolled runoff managed.¹⁷⁶

Years later the Montgomery County Department of Environmental Protection published the Little Paint Branch Subwatershed Action Plan. The purpose was to identify restoration targets within the subwatershed to be met by 2020, identify and describe specific problems, discuss methodologies used to evaluate potential restoration opportunities, and to present a prioritized list of restoration opportunities for implementation.¹⁷⁷ The restoration targets for the 10 year plan focused on eight areas: stormwater management, aquatic community, trash reduction, wetland creation and restoration, riparian corridors, environmental restoration programs, land acquisition, and outreach and public participation.¹⁷⁸ Each target focused on a specific area that would help to improve the watershed as a whole.

The existing conditions of the watershed had not changed much since the 1997 study. The area within the watershed consisted of 20% impervious surfaces and 31.5% of forested areas, the largest being Fairland Regional Park.¹⁷⁹ The amount of impervious surfaces caused many of the problems identified in the action plan. Changes in land cover led to changes in hydrology, causing the or aquatic habitats, water quality, and flooding.¹⁸⁰ To address these problems and lay out a timeline to meet the ten year goals the action plan evaluates 193 potential restoration projects.¹⁸¹ The potential projects are prioritized by environmental impact and ability to be completed within the ten year time frame.

The area is abundant in land-based resources as well. The M-NCPPC continues to acquire land and establish conservation easements to better protect its watersheds, stream buffers, and forested areas. Acquisition of land also enables the county to rehabilitate its natural resources and balance losses due to development. During the planning of the Intercounty Connector, fully completed in 2014, the county agreed to replace forested areas lost to road construction. However, in the period between 2009 and 2018, the tree canopy within the Fairland and Briggs Chaney Master Plan area has decreased by 4%. Within this area the native tree species are eastern white pine and northern red oak, but the master plan area has successfully sustained non-native species including elm, maple, and

¹⁷³ Little Paint Branch Watershed Study. Wheaton: Montgomery County Department of Environmental Protection Watershed Management Division, 1997. September 2021. p. 2-5 https://www.montgomerycountymd.gov/DEP/Resources/Files/ReportsandPublications/Water/Watershed%20studies/Anacostia/Little-Paint-Branch-Watershed-study-97.pdf

¹⁷⁴ Ibid.,17.

¹⁷⁵ Ibid., 6.

¹⁷⁶ Ibid.,17-18.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid., 52-53.

¹⁷⁹ Ibid., 4.

¹⁸⁰ Ibid., 9-13.

¹⁸¹ Ibid.,18.

¹⁸² InterCounty Connector Project Study: General Park Replacement and Mitigation Policy Guidance", M-NCPPC Memorandum, January 10,1997. 10.¹⁸³ "Montgomery County Tree Canopy", M-NCPPC, ArcGIS.

cherry. The addition of these species to the newer growth in and around the Fairland recreational Park and the Little Paint Branch watershed helps sustain the biodiversity of the area. The forested areas of the Master Plan area supports over one hundred bird species as well as deer, rabbit, and species common to the Mid-Atlantic woodlands.

Though the lands are no longer extracted for their mineral and stone contents, the sand and gravel deposits in the area were mainly used as fill base for concrete and highway construction within Montgomery County and the DMV metropolitan. The Coastal Plain strata provided valuable deposits of sand, quartzose gravel, quartz pebbles, quartzite, and multicolored clays and silts. Several quartz veins south of Fairland Recreational Park have traces of feldspar and mica as well.¹⁸⁴ Along the Paint Branch stream at the southern edge of the Master Plan area, the northern bank has traces of pegmatite, indicating that there may have been an undocumented mining site.¹⁸⁵

Conclusion

To conclude, the area of Fairland and Briggs Chaney has undergone many cultural and environmental changes over the last 11,000+ years. The area within the current boundaries of Montgomery County has been home to many diverse groups of indigenous people leading up to European colonization in the mid-seventeenth century. Indigenous people identified by state recognized tribes are represented today in the modern population demographics of Montgomery County. Montgomery County. Early colonization in Montgomery County began later than in southern counties and by the end of the American Revolutionary War several large plantations were already producing on the landscape. The Fairland and Briggs Chaney area was first developed in 1720 and land usage for mainly agricultural purposes continued on until the early 20th century. Tobacco was a major cash crop produced in Maryland including Fairland and Briggs Chaney that was labored by enslaved, trafficked Africans and African Americans. Historically, the black individuals have made up a significant portion of the area's population. Research conducted in this section showcases multiple local black residents whose stories are integral to the public displays of local history. The 20th century saw exponential growth in Fairland and Briggs Chaney particularly in the later half characterized by suburban housing developments and commercial construction. Currently, the Fairland and Briggs Chaney contains a racially and economically diverse population. This is also represented in the cultural landscape by many diverse religious organizations throughout the Master Plan area. Areas significant to the historic preservation of the area include single family neighborhoods, multi-family complex communities, Montgomery Auto Park and the Briggs Chaney MarketPlace, and multiple public green spaces.

^{184 1968} Maryland Geological Survey

¹⁸⁵ MinDat.org, "Paint Branch", https://www.mindat.org/loc-72836.html.

Cultural Landscape Typologies

Multiple cultural landscape typologies that reflect the culture and character of Fairland and Briggs Chaney exist within each of the quadrants defined for this plan. Both the single family and multi family housing types are reflective of American architectural styles that were popular at the time of construction. The parks and green spaces reflect the importance of environmental conservation that has been essential to Montgomery County since the mid-twentieth century, and the commercial sector is representative of typical shopping malls found in American suburbs.

Single Family Housing

This report has identified five single family housing typologies within the Fairland and Briggs Chaney Master Plan area: Colonial Revival, Four Square, Bungalow, Tudor Revival, and Ranch. The following are brief descriptions of the major characteristics of each house style accompanied by an image of a house representative of each type.

Colonial Revival/Neo-Colonial (1880-1955)

Colonial Revival or Neo-Colonial houses often have a front door that is accentuated by decorative elements, such as decorative pediments and door surrounds containing pilasters. Doors usually will have a fanlight or sidelights. The facades of this house type are symmetrically balanced when examining fenestration and windows are often 6/6 or 9/9 in adjacent pairs. In the Master Plan Area, the Colonial Revival houses have front doors that are topped with broken pediments and door surrounds that include pilasters (see figure 18). Most of the houses examined do not have covered front porches. The Colonial Revival style was very popular in the United States from 1910-1930, with about 40% of homes during this time period built in the Colonial Revival style. This style is common in the neighborhoods with newer homes in the Fairland and Briggs Chaney Master Plan area, along with Tudor Revival and Ranch-style houses.



Figure 18: Example of a Colonial Revival/Neo- Colonial style house on Loft Lane. Photo by Frankie Evans

Four Square (mid 1890s - late 1930s)

Four Square houses, like their name implies, are square in form and are two-and-one-half stories high, often with four large, square rooms on each floor. This house type often features a center dormer and a large front porch with wide stairs. These houses often have a hipped roof, arched entries between interior rooms, and Craftsman-style woodwork. American Four Squares incorporate elements of Prairie and Craftsman style houses, and are sometimes referred to as Transitional Period. In the Fairland and Briggs Chaney Master Plan area, there are a couple representative examples of the American Four Square located on Old Columbia Pike (see figure 19).



Figure 19: An American Four Square on Old Columbia Pike. Photo by Frankie Evans.

Tutor Revival (1890-1940)

Created in England and associated with the Arts and Crafts movement there, the Tudor Revival style was most popular in the United States much later. It was the most popular style for new homes during the 1970s and 1980s, aligning with much of the new construction/more recent neighborhoods in the Fairland and Briggs Chaney Master Plan area. Tudor Revival homes are typified by distinctive half-timbering (decorative), steeply pitched roofs, narrow windows, and large chimneys. Frequently, the style is modified by painting the decorative half-timbering in various colors (see figure 20).



Figure 20: Example of a Tutor Revival house on Loft Lane. Photo by Devon Murtha.

American Bungalow (1900 -1920)

American Bungalow style houses were extremely popular during the first quarter of the twentieth century, and are typical examples of middle and working class housing in the United States during this period. These houses were often purchased and then constructed through pre-fab kits sold by the Sears Company or the Aladdin Company. The American Bungalow style is associated with the Arts and Crafts movement, and usually feature low-pitched roof lines on gabled or pitched roofs, deeply overhanging eaves, dormer windows on the upper story, and a front porch beneath the extension of the main roof. The American Bungalow is a fairly common style in Montgomery County, Maryland. In the Fairland and Briggs Chaney Master Plan area, examples of the American Bungalow style include the Edgar Roby Property (see figure 21), the Lacy Shaw House, and the Ben Petree Property.



Figure 21: Edgar Roby Property (Bungalow Style), 13420 Old Columbia Pike. Photo by Frankie Evans.

Ranch (1930-1975)

The Ranch (or Rambler) style is a domestic architectural style that originated in California. Ranch-style homes became the dominant housing style in the United States during the 1950s and 1960s. The "rambling" Ranch style became popular in conjunction with the rise of the automobile; previously, street-car suburbs used compact housing styles on small lots, because people relied on public transportation. With the invention of automobiles, larger "rambling" homes on bigger lots were more common. The Ranch style is typically a one-story, asymmetrical shaped house with a low-pitched roof. These homes will usually have an attached carport or garage, and both brick and wooden cladding are common, sometimes in combination. Decorative wood or iron porch supports and decorative shutters are also typical of the style, as well as a large picture window on one side of the house (usually in the living room area). Ranch-style houses (see figure 22), as well as Colonial Revival and Tudor Revival houses are common housing styles in the newer neighborhoods located within the Fairland and Briggs Chaney Master Plan area.



Figure 22: Example of a Ranch-style house on Priscilla Drive. Photo by Devon Murtha.

Multi-Family Housing

Within the designated 'multi-family' region of Fairfield and Briggs Chaney there are thirteen significant apartment complexes and other categories of multi-family living arrangements: The Crest on Hampton Hollow (c. 1980s), Valor Apartments (c. 1980s), Montclair Apartments (c. 1980s), Arcadian Apartments (c. 1980s), Knights Bridge (c. 1980s), Vineyard Condos (c. 1991), Woodville Apartments (c. 1990s), The Centre at Silver Spring Apartments (c. 1990s), Dring's Reach Apartments (c. 1990s), Windsor Court and Tower Apartments (unknown date, most likely constructed in the 1980s-1990s), Hampton Point Apartment Homes (c. 1980s), Fairland Crossing Apartments (c. mid-2000s), Willow Manor at Fairland (c. mid-2000s), Greencastle Lakes Community (c. 1980s). The majority of rent prices of the above communities range from \$1,200-3,000 for studios to three bedrooms depending on the amenities, square footage, and construction date of the building. According to the American Community Survey conducted by the US Census in 2019, the median monthly gross residential rent in Montgomery County MD was \$1,768 which reflects its proximity to D.C. and the high median income of the county. The prices for apartments in Fairland and Briggs Chaney offer housing for lower-middle class and those ranging in higher income individuals and families.

All the previously stated communities were constructed from the 1980s onward and currently are ineligible for National Register nomination. Within the local history of Fairland and Briggs Chaney, the increased multi-family housing in this region of the unincorporated city underscores the period of suburbanization that many areas outside of D.C. experienced in the late twentieth century. Within the history of Fairland and Briggs Chaney, the construction of apartments in the late twentieth century also corresponds to the transition away from an agricultural economy toward one reliant on other industries discussed in the historical context sections.

These communities are placed within three general categories related to their architecture. The first is described as a garden style apartment complex and is defined by being a low rise apartment with exterior entrances to each unit. Due to their lack of vertical height, these communities tend to be

more spread out and typically only have 2-3 apartment units stacked on top of each other. Garden style apartment complexes also tend to have shared green spaces and amenities on site. Garden style apartments include the following multi-family communities located in Fairland and Briggs Chaney: The Crest on Hampton Hollow (see figure 23), Valor Apartments, Montclair Apartments, Knights Bridge II, Arcadian Apartments, The Vineyard Condominiums, The Centre at Silver Spring Apartments, Dring's Reach Apartments, Windsor Court and Tower Apartments, Hampton Point Apartment Homes.



Figure 23: Example of Garden Style Apartments (The Crest on Hampton Hallow) Photo by Devon Murtha

The second style is described as large-multi level apartment complexes that are defined by mid- to high-rise apartments with interior entrances to each unit. This category includes the apartment style that categorizes twentieth century multi-family architecture typical in cities as they maximize vertical space. It resembles a traditional hotel aesthetic. The communities that are represented in this category include: Woodvale Apartments (see figure 24), Fairland Crossing Apartments, Willow Manor at Fairland.

The contemporary row house inspired style of architecture is the final style of multi-family housing in Fairland and Briggs Chaney. Row-house houses are associated with single-family dwellings attached to nearly identical, low-rise structures attached by common walls. The American row house style has its roots in the colonial period and has been modified through the years to accommodate cost effective family dwellings in urban environments. The only multi-family complex that is identified in Fairland and Briggs Chaney with this style was Greencastle Lakes Community (see figure 25).



Figure 24: An example of Large Multi-Level Apartments (Woodvale Apartments) Source: www.woodvaleapts.com



Figure 25: An example of Contemporary Row Houses (Greencastle Lakes Community Source: www.Realtor.com

Parks

The Fairland and Briggs Chaney Master Plan area contains two M-NCPPC parks; Fairland Recreational Park (see figure 26) and Edgewood Neighborhood park. Both parks are categorized by the state as 'Protected Local Land' and contain built and natural elements. Since the historic landscape was severely altered due to agricultural use (nineteenth to mid-twentieth century) and gravel mining operations (1940s-50s), both parks were acquired as a way to protect watersheds, restore woodlands, and provide public greenspace. There are essentially three phases to the development of Fairland Recreational and Edgewood parks: acquisition; natural rehabilitation + construction; maintenance

and improvements. Most of the parks' lands were acquired in the 1960s to late 1980s. Structures, recreation equipment, and paved trails were added in the late 1980s to 1990s. Recreational equipment, playing fields, and trails are maintained and updated as needed.



Figure 26: Family celebration at Fairland Recreational Park pavilion. Photo by E. Resnick

There are essentially six built elements that make up the cultural landscape of the parks in the Master Plan area: pavilions, recreation zones, utility structures, signage, trails, and retention ponds. The natural elements are dense wooded areas, light wooded areas, open space with ground cover, and natural streams.

Pavilions

The pavilions are provided as a public amenity for picnics, parties, and special events. Both Fairland Recreational and Edgewood share a similar pavilion typology; open wood frame with corner posts, gable roof, exposed glulam rafters, and asphalt shingles. These pavilions date to the early 1990s with several newer versions imitating the original aesthetic (see figure 27).



Figure 27: Wood frame pavilion structure at Fairland Recreational. Photo by Devon Murtha

Recreation Zones

Playground equipment, sports fields, and sports courts are provided to support the recreational needs of the surrounding residential development. Both Fairland Recreational and Edgewood share a similar playground typology, while Fairland Recreational has the additional land to support sports fields and courts. Playground equipment is constructed of aluminum, PVC, and rubber, and painted in lively colors. Fairland has the additional space to support grass fields for baseball, football, and soccer; aluminum chain link fencing is added where boundaries are necessary. Fairland also has paved asphalt courts for basketball and tennis (see figures 28 & 29).

Utility Structures

Structures for visitor restrooms and facility maintenance were added in the 1990s. The restrooms are multi-stall, but no family or gender-neutral restrooms are available. This typology is categorized by its concrete block structure, gable and valley roof with asphalt shingles, steel doors, and decorative aluminum railings (see figure 30).

Signage

Signage provides a way for visitors to orient themselves and become familiar with the park facilities. The bulletin boards are more prominent and provide a recognizable marker to post community updates and upcoming events. Trail signage is more discrete but effectively provides direction for those hiking or bicycling along the trails (see figure 31).



Figure 28: Playground structure at Fairland Recreational. Photo by Devon Murtha.



Figure 29: Baseball field at Fairland Recreational. Photo by Devon Murtha.



Figure 30: Restroom structure at Fairland Recreational. Photo by E. Resnick.





Figure 31: Example of bulletin board style signage and trail post signage. Photos by D.Murtha (right) and E. Resnick (left)

Trails

There are two categories of trails: paved and packed. Asphalt paved trails provide ADA accessibility and prescribed circulation routes, with wood frame bridges at stream crossings. Packed trails are natural fill and gravel, and provide circulation through the natural landscape (see figures 32).







Figure 32: Top image: paved trail with bridge. Bottom: packed trail of fill + gravel. Photo by E. Resnick

Retention Ponds

Several retention ponds (see figure 33) have been constructed adjacent to parking lots and other impervious surfaces, or reclaimed as a result of historic agricultural/mining land use. They are maintained to blend in with the natural watershed landscape and feature sedges and tall grasses; however, swimming and fishing is strictly prohibited.



Figure 33: Retention pond at Edwood Neighborhood. Photo by E. Resnick.

Natural Elements

Ecosystems along the Little Paint Branch and Paint Branch watersheds are being conserved in a multi-decade effort to restore natural resources in the area. The streams are slow flowing and visibly support fish and wildlife (see figure 34).



Figure 34: Little Paint Branch stream in Fairland recreational Park. Photo by E. Resnick

Commercial Cultural Landscape

The Fairland and Briggs Chaney Master Plan area is home to two types of commercial typologies: the stripmall and the Auto Park. Bisected by a major highway, most retail endeavors in this area cater to automobile, rather than pedestrian, circulation. The strip mall boasts drive-through restaurants, ample parking space, and easy access from the highway. The Autopark, which consists of dealerships and auto repairs shops, is designed specifically for car owners.

The Briggs Chaney MarketPlace

The Briggs Chaney MarketPlace (see figure 35) is a 1980's strip mall bordered by Columbia Pike, Briggs Chaney Road, and Castle Boulevard. Following conventional strip mall design, it features a L-shaped row of connected-single-story commercial buildings built around a large parking lot. The store fronts have enframed window walls. Many of the storefronts also have a fabric awning that spans the entire width of the storefront. Both the Global Foods and Ross storefronts are an exception to this design. Global Food's storefront has a wrap-around veranda. Ross has an extended canopy that reaches the end of the sidewalk. The west side of the plaza features four commercial single-story buildings. The south side has an Exxon gas station (see figure 27).





Figure 35: Beauty Lane and Ross Dress for Less at the Briggs Chaney MarketPlace (2021). Photo by Devon Murtha.



Figure 36: Briggs Chaney MarketPlace (2021). Photo by E. Resnick

Mobile Architecture

Additional economic structures include mobile architecture. Site visits suggest that there are several food trucks in the area. Although food trucks can and do move, many take on permanent residences at specific locations. One Briggs Chaney food truck (see figure 36), located at the intersection of Randolph Road and Old Columbia Pike, is a fixture in the parking lot of the Exxon mobile.



Figure 37: Food Truck located at the Exxon Gas Station. Photo by Devon Murtha.

The Auto Park.

The Auto Park consists of over a dozen automobile related businesses, organized around a looped one-way road (see figure 37). The most common of these building types is the auto-dealership, which are all surrounded by extensive parking lots. Although there are many features common to auto-dealerships (high ceilings, boxy shapes, large glass facades), one of their main similarities is the commitment to individual brand aesthetics. The buildings act as advertisements for the products inside, and so each dealership has a unique façade, emphasizing its particular brand. The first building constructed was the Koons dealership in 1968, but current buildings were added in the 1970 through the present.



Figure 38: Car dealerships at the AutoPark. Photos by Devon Murtha.

Conclusion

The Fairland and Briggs Chaney Master Plan area can be understood through four different cultural landscapes: single family housing, multi family housing, parks and green spaces, and the commercial sector. The various typologies within each quadrant are reflective of the time periods in which such places were constructed, and also represent the early rural and later suburban characteristics of the area. In order to more holistically understand the Master Plan area, these four sectors should be considered first separately, and then as important parts of the whole region that are interconnected and exist together to form both the character and cultural aspects of Fairland and Briggs Chaney.

Chapter 4

Environmental Analysis

The conservation of the natural environments within the Fairland and Briggs Chaney Master Plan area is essential in maintaining the ecological health and biodiversity of the region. The Master Plan area is located within the Northern Piedmont Plateau but is adjacent to the geological transition zone between the Piedmont and Coastal Plain regions. This results in a landscape of undulating hills, steep streams, and gorges to the west, met with coastal deposits of sand and gravel to the east. Additionally, the area is within the Anacostia watershed, further demarcated as the Paint Branch and Little Paint Branch sub-watersheds. The geological and hydrological overlap of this region supports a number of terrestrial and aquatic species which add to the biodiversity of the region. The ecosystem services provided by the conservation of wetland, riparian, upland, and stormwater management areas not only helps to sequester pollutants and aid in groundwater recharge, but provides social benefits, health benefits, educational benefits, and economic benefits.

Context

An ecoregion is an area defined by its environmental conditions. This can consist of climate, landforms, and soil characteristics. It is a major ecosystem defined by distinctive geography and receives uniform solar radiation. The Fairland and Briggs Chaney Master Plan area is located in the Northern Piedmont Region. It is a transitional region, made up of low rounded hills, irregular plains, and open valleys. ¹⁸⁶ It is further subdivided into the Northern Inner Piedmont and Northern Outer Piedmont (see figures 38 & 39), each slightly different in their defining characteristics. This subdivision of the ecoregion roughly divides the more rugged terrain from the less rugged. Topographic levels, soil temperature, and geologic differences were the criteria used to divide the region. ¹⁸⁷

The Environmental Protection Agency identifies the Northern Inner Piedmont is identified as ecoregion 45e. It is made up of hills, irregular plains, isolated ridges, mountains, and monadnocks. This region's elevations are higher towards the western boundary, ranging from 200 feet to 1,000 feet. 188 The streams are more silty and sandy than neighboring ecoregions. Stream bed materials consist of silt, sand, gravel, and rubble. The difference in stream gradients, or slope of the stream, has the potential to affect fish habitats. Different species of fish will inhabit certain stream areas due to the stream gradient. Any changes to the gradient can have a negative impact on the biological diversity of that stream area. The natural vegetation is defined as an oak-hickory-pine forest, consisting of hickory, shortleaf pine, loblolly pine, white oak, and post oak. Historically, chestnut trees were also a major component of the forest. However a fungal blight caused the majority of Chestnut trees to be decimated. The land uses of ecoregion 45e is forestry and agriculture as well as urban and suburban areas in the northeast. 189

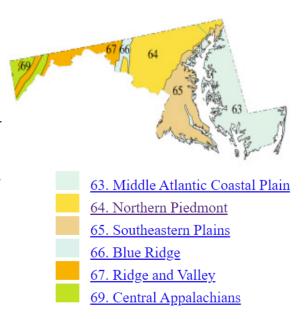


Figure 39: Level III Ecoregions of Maryland, (Revised April 2000), National Health and Environmental Effects Research Laboratory, US EPA

The Northern Outer Piedmont Region is slightly different from the inner region. It is identified as ecoregion 45f and is characterized by irregular plains, low rounded ridges, and shallow ravines. Its elevations range from 200 feet to 675 feet. Unlike its neighbors, this region has a fall zone along the eastern boundary. Rapids, cascades, waterfalls, pools, swampy streams, and islands provide the environment for aquatic habitats. The rapids in ecoregion 45f are more common and

^{186 &}quot;Primary Distinguishing Characteristics of Level III Ecoregions of the Continental United States." Level III Ecoregions. Accessed September 28, 2021

¹⁸⁷ Alan J Woods, et al. Level III and IV Ecoregions of Delaware, Maryland, Pennsylvania, Virginia,, and West Virginia. U.S Environmental Protection Agency, 1999, 4.

¹⁸⁸ Ibid.

¹⁸⁹ Ibid.

¹⁹⁰ Ibid., 5.

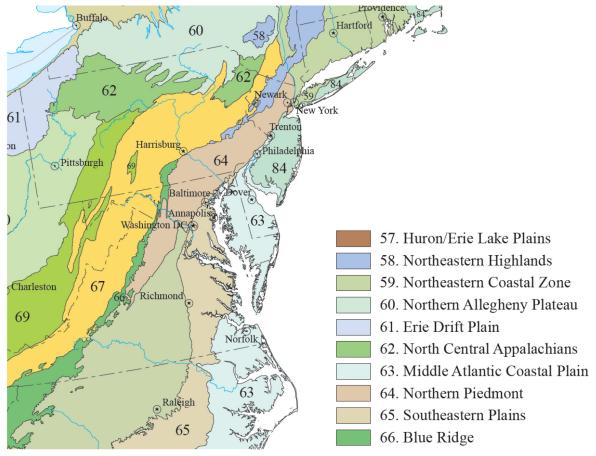


Figure 40: Level III and IV Ecoregions of the Continental United States: Northern Piedmont Ecoregion, (Revised April 2013) National Health and Environmental Effects Research Laboratory U.S. EPA

better developed than neighboring regions. However, some of the cascades and waterfalls can prevent upstream movement during low water and channel gradients affect the fish habitats.¹⁹¹ Like Northern Inner Piedmont, the vegetation is defined as an Oak-Hickory-Pine Forest. While marshes and wetlands are found in the region, they are not as common.

Within the Northern Piedmont Ecoregion are watersheds. A watershed is an area bounded peripherally by a divide and draining to a particular body of water. Fairland is located in the Anacostia River watershed. Consisting of 92,740.03 acres, the Anacostia River Watershed has a history of intensive development and pollution. Major development along the river led to the destruction of forests, meadows and wetlands. All elements that help to keep a watershed healthy. The high development and increasing population in the area also led to increased run-off, clogging the river and reducing its depth. This contributed to the flooding problem. Today there are actions in place to help the watershed mend and recover from its history of industrialization and pollution. Even with its history of pollution, the Anacostia River Watershed is still home to numerous species, such as rare and endangered species like the American eel, eastern box turtle, and the great blue heron, as well as birds, mammals, amphibians, etc. 193

¹⁹¹ Ibid

¹⁹² "Our Watershed: Where it all flows together." Anacostia Watershed Society. Accessed September 28, 2021. https://www.anacostiaws.org/our-watershed.html.

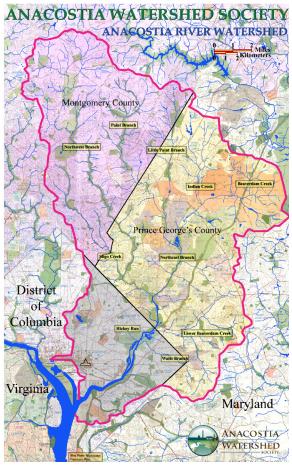
¹⁹³ Ibid.

The Anacostia River Watershed is further divided into smaller areas, known as subwatersheds. The master plan region falls in the Little Paint Branch subwatershed. Little Paint Branch is a transitional area between the Piedmont and Coastal Plain regions. It is located in northeast Anacostia watershed, a heavily developed area. The population density is 3,841 per square mile and 8.8% of the area is classified as highdensity residential.¹⁹⁴ The subwatershed has three major land uses: park land/open space, institutional lands, and residential consisting of medium density single family residential townhouses, medium density garden apartments, and high-density garden apartments. Due to the high level of development, 20% of surfaces in the subwatershed are impervious. Without access to permeable surfaces stormwater runoff cannot be absorbed into the earth. With nowhere to go, the stormwater simply remains on the surface causing issues such as flooding. Only 28% ofimpervious areas have stormwater controls, making stormwater management difficult. 195

Within the Little Paint Branch Subwatershed are multiple tributaries that flow to the Anacostia River and eventually the Potomac River. The tributaries that Figure 41: Anacostia River Watershed, Anacostia Watershed Society flow through the master plan area are: Silverwood, Greencastle, Galway, Snowden Farms, and Paint Branch-Middle Mainstream. In 2011 samples were collected from each tributary to see its condition (see figure 41). Silverwood, Greencastle, Tanglewood, Snowden, and Paint Branch- Middle Mainstream all received condition ratings of fair. 196 This indicated that stressors have impacted the area, but the area is still able to support viable biological communities. This condition rating is very common with streams in suburban areaswith some stormwater management. 197

Galway Tributary was given a condition rating of poor, 198

¹⁹⁴Little Paint Branch Subwatershed Action Plan. Montgomery County Department of Environmental Protection, 2010. September 2021, 4. 195 Ībid.



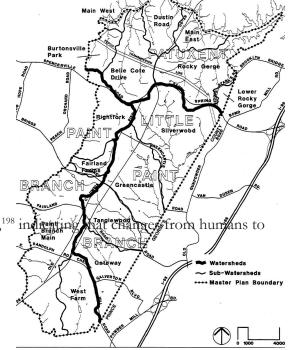


Figure 42: Subwatersheds of East Montogemery County

¹⁹⁶ Stream Conditions (2011-2015) [Map]. Scale Not Given. https://mcgov-gis.maps.arcgis.com/apps/MapTools/index.html?appid= d6ff0f6ce5214698b43fc114d69da297

^{197 &}quot;Watershed Health," County Watershed Health | Department of Environmental Protection, Montgomery County, MD, accessed September 28, 2021, https://www.montgomerycountymd.gov/water/streams/ watershed-health.html.

¹⁹⁸ Stream Conditions (2011-2015) [Map]. Scale Not Given.

the natural environment have caused major alterations to the structure of the biological community. Poor condition areas are usually in high urban areas with little to no stormwater management systems.¹⁹⁹

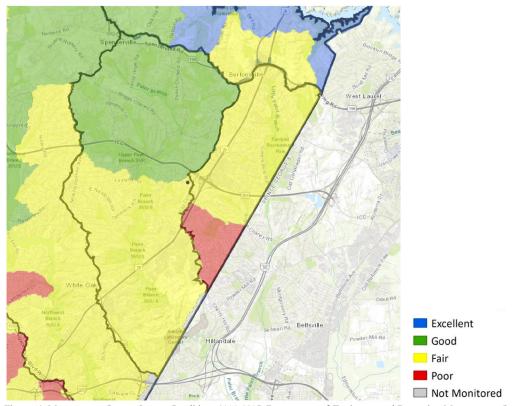


Figure 43: Montgomery County Stream Conditions 2011-2015, Department of Environmental Protection Montgomery County

Economic Value of Environmental Conservation Ecosystem services is a term that refers to the various services that the environment provides to sustain animal and human life. These different types of services can be condensed down to four major typologies:²⁰⁰

- 1. Provisioning Services Any direct products from the environment to humans which include drinking water, food (vegetables, livestock, fish), natural gas, oil, wood, etc.
- 2. Regulating Services This refers to services that help to regulate the environment for people, which include decomposition, water filtering, erosion/flood control, and climate regulation.
- 3. Cultural Services These refer to non-material benefits that are derived from the environment which include a sense of home, cultural/spiritual identity, and recreation activities like hiking and tourism.
- 4. Supporting Services Any natural services that sustain the foundation of life, such as photosynthesis, nutrient cycling, and soil formation.

Based on data given by Rachel Marks, Natural Resources Panner IV for the Department of Natural

¹⁹⁹ "Watershed Health," County Watershed Health | Department of Environmental Protection, Montgomery County, MD, accessed September 28, 2021, https://www.montgomerycountymd.gov/water/streams/watershed-health.html.

²⁰⁰ "Ecosystem Services," National Wildlife Federation, accessed October 4, 2021, https://www.nwf.org/Educational-Resources/Wildlife-Guide/Understanding-Conservation/Ecosystem-Services.

Resources, the total ecosystem service value of the Fairland and Briggs Chaney Master Plan area is nearly \$1.8 million dollars. Much of the economic value from the study area is attributed to the land's potential in stormwater mitigation, groundwater recharge, and wildlife habitat and biodiversity.

| Ecosystem Service | Biophysical Value | Economic Value (\$/yr) |
|---|-------------------|------------------------|
| Air Pollution Removal: | 995.78 kg/yr | \$1,396.44 |
| Carbon Monoxide (CO) | | |
| Air Pollution Removal: | 3401.25 kg/yr | \$1,393.62 |
| Nitrogen Dioxide (NO2) | | |
| Air Pollution Removal: | 591.47 kg/yr | \$60.27 |
| Sulfur Dioxide (SO2) | | |
| Air Pollution Removal: | 18629.06 kg/yr | \$44,629.81 |
| Ozone (O3) | | |
| Air Pollution Removal: | 1016.74 kg/yr | \$128,295.48 |
| Particulate Matter (PM2.5) | | |
| Air Pollution Removal: | 5000.84 kg/yr | \$32,958.34 |
| Particulate Matter (PM10) | | |
| Carbon Sequestration | 424.25 mT/ yr | \$62,221.22 |
| Groundwater Recharge | 132353.49 m3/yr | \$347,928.00 |
| Nitrogen Uptake Potential | 1.62 mean/year | \$48,965.00 |
| (1 = low to 3 = high) | | |
| Stormwater Mitigation Potential | 2.1 mean/year | \$720,606.00 |
| (1 = low to 5 = high) | | |
| Wildlife Habitat and Biodiversity Potential | 27.78 mean/year | \$401,210.00 |
| (0 = low to 100 = high) | | |
| Total Ecosystem Service Value | na | \$1,789,664.18 |

Figure 44: Ecosystem Services Value Table for Fairland and Briggs Chaney Master Plan Area

Credit: Rachel Marks, Natural Resources Planner IV for the Department of Natural Resource. Photo credit: Department of Natural Resources

Environmental conservation of green spaces provides a plethora of economic benefits. Parks that are located in and near neighborhoods can help increase the value of properties up to 20%.²⁰¹ This can result in higher property tax revenues which increase profit for municipal governments.²⁰² But this linkage between higher property value and green space can be further utilized to support lower-income neighborhoods.²⁰³ They typically do not have access or a lot of green space and an increase in either access of acquisition of these spaces would help raise property values for these neighborhoods. Besides increasing property value, green spaces are especially important for stimulating local economies. In 2019 alone, visitors at state parks contributed \$41.7 billion dollars to the national economy and helped to grow the overall U.S. economy by \$1.6 billion.²⁰⁴ Heritage

²⁰¹ John L Crompton. 2001. "The Impact of Parks on Property Values: A Review of the Empirical Evidence." Journal of Leisure Research 33 (1): 1–31. https://doi.org/10.1080/00222216.2001.11949928.

²⁰² "The Economic Benefits of Open Space, Recreation Facilities and Walkable Community Design," Active Living Research, May 2010, pp. 1-28, https://www.americantrails.org/files/pdf/Economic-Benefits-Active.pdf.

²⁰³ Garcia and Strongin, Healthy Parks, 11.

^{2014 &}quot;U.S. Department of Interior," U.S. Department of Interior (U.S. Department of Interior, June 11, 2020), https://www.doi.gov/pressreleases/na-

and green tourism help to fuel money into local economies by first attracting people to these places which in turn help to create jobs to maintain park systems and bring new money into local circulation.

Beyond the scope of parks, environmental conservation includes the protection of natural environmental services that mitigate damages caused by human activity. Water-filtering, erosion/flood control, photosynthesis are one of the many services that help to regulate climate change and pollution. According to Universal Ecological Fund's 2017 report, The Economic Case for Climate Change in the United States, they noted that the US loses over \$240 billion each year from climate change which is worth 40% of the total economic growth of the US economy. There is substantial economic value in the investment of pollution mitigation which should include protecting already-existing green spaces that naturally do these services. Within the Fairland and Briggs Chaney Master Plan area, their naturally occurring pollution reducing services alone is worth \$208,733.96. To disinvest in environmental conservation would result in a financial loss of these services and a burden on cities and local communities finances in order to regain back said services. The Lancet Commission on Pollution and Health furthered support for investment by reporting in the same year that for every dollar in the US that is spent in pollution mitigation, there is \$30 of benefits that is given back. In order to reduce costs to the local community, it is vital that conservation remains a key component of the Fairland and Briggs Chaney Master Plan.

Preserving the environment brings a plethora of health benefits. Exposure to green spaces can help with improving both mental and physical health by lowering rates of heart disease, obesity, diabetes, and reducing stress/depression.²⁰⁷ The economic impacts of health costs from both air pollution and other effects of climate change in the United States cost over \$800 billion per a year.²⁰⁸ These costs range from medical care for physical and mental conditions, lost wages and worker productivity, and premature deaths stemming from violent climate change events like hurricanes and forest fires. The conservation of green spaces is vital to sustain both economic and societal growth.

Conservation Areas in Fairland and Briggs Chaney Master Plan Area: Riparian, Upland, Wetland, and Stormwater Natural Infrastructure Riparian Areas

Riparian areas are lands that occur beside bodies of water or watercourses (such as brooks, streams, creeks, or artificially constructed water channels). Examples of riparian areas typically include flood plains and streambanks, and are different from surrounding lands due to their unique soil

and vegetation components that are directly related to their proximity to water.²⁰⁹ Soil, water, and

tional-park-visitor-spending-generates-economic-impact-more-41-billion.

²⁰⁵ "The Economic Case for Climate Action in the United States," FEUUS (Universal Ecological Fund, September 21, 2017), https://feu-us.org/our-work/case-for-climate-action-us/.

²⁰⁶ https://news.climate.columbia.edu/2017/10/23/the-human-and-financial-cost-of-pollution/

²⁰⁷ Slater SJ, Christiana RW, Gustat J. Recommendations for Keeping Parks and Green Space Accessible for Mental and Physical Health During COVID-19 and Other Pandemics. Prev Chronic Dis 2020;17:200204. DOI: http://dx.doi.org/10.5888/pcd17.200204

²⁰⁸ "The Costs of Inaction: The Economic Burden of Fossil Fuels and Climate Change on Health in the United States" (New York, NY: Natural Resources Defense Council, 2021), pp. 1-16.

²⁰⁹ USDA Natural Resources Conservation Service. "Riparian Areas Environmental Uniqueness, Functions, and Values." https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/technical/?cid=nrcs143_014199

vegetation are general indicators of riparian areas. Riparian areas vary across the United States, but all have similar ecological attributes including energy flow, nutrient cycling, hydrologic function, and plant and animal populations unique to their surrounding landscapes. Riparian zones are some of the most important and productive natural resources, because they are nutrient-rich ecosystems owing to the presence of water and groundwater which provide valuable nutrients to the soil and vegetation.²¹⁰

Alluvial soil, or sedimentary material deposited by moving water, is usually quite deep and stores large amounts of water. This allows for base flow (the amount of water flowing in a stream due to groundwater seepage) to become further maintained by riparian vegetation that shades the water, keeping it cool and slowing evaporation.²¹¹ Nutrients, including nitrogen, phosphorus, calcium, magnesium, and potassium, are taken up by riparian vegetation and then reintroduced into the water course when vegetation decomposes, allowing for a reliable nutrient cycle.²¹² Riparian zones also benefit from energy transfer, wherein organic matter is transported through the water flow and then can be utilized by the in-stream animal communities, supporting food web diversity. Riparian vegetation also reduces downstream flooding by providing resistance to the flow of water and dissipating the energy so that water has more time to be absorbed by the soil for plant use.²¹³ Riparian areas intercept sediment and nutrients from adjacent upland areas. In terms of aquatic life, riparian vegetation like rooting herbaceous and woody plants stabilize streambanks, mitigate erosion, and can create overhanging banks for fish habitats, as well as trapping sediment before it reaches the stream, creating a cleaner stream bottom for sustaining aquatic life.²¹⁴ Additionally, riparian ecosystems also provide diverse habitats for terrestrial wildlife.²¹⁵

Riparian areas may be threatened or disturbed by intense flooding and subsequent erosion or deposition. Other threats include removing or clearing vegetation, or the conversion of a riparian area to farmland or urban land. The benefits of riparian areas are numerous, and include aiding in the control of pollution; providing areas for recreation as well as scenic or aesthetic values; supplying food, cover, water, and migration routes for a diverse animal population; and riparian vegetation can stabilize stream banks and reduce the velocity of floodwater. On the conversion of a riparian vegetation can stabilize stream banks and reduce the velocity of floodwater.

There are many riparian areas within the Fairland and Briggs Chaney Master Plan area (see figure 45), most located by the Paint Branch watershed to the south (adjacent to Paint Branch SVU 5), and the Little Paint Branch watershed to the northwest (surrounding Fairland Recreational Park and Edgewater Recreational Park). These areas are currently unprotected, though riparian areas within the parks are protected. The EPA's Watershed Resources Registry of Maryland (WRR) determined that riparian areas in the Fairland and Briggs Chaney Master Plan area range from moderately to

highly suitable for preservation. Riparian areas are beneficial both generally and within the Fairland and Briggs Chaney Master Plan area due to a number of reasons, including maintaining and

²¹⁰ Ibid.

²¹¹ Ibid.

²¹² Ibid.

²¹³ Ibid.

²¹⁴ Ibid

²¹⁵ See "Species that Benefit," University of Maryland Extension for more information on aquatic and terrestrial wildlife in riparian areas (https://extension.umd.edu/programs/environment-natural-resources/program-areas/riparian-buffer-systems/species-benefit)

²¹⁷ Ibid.

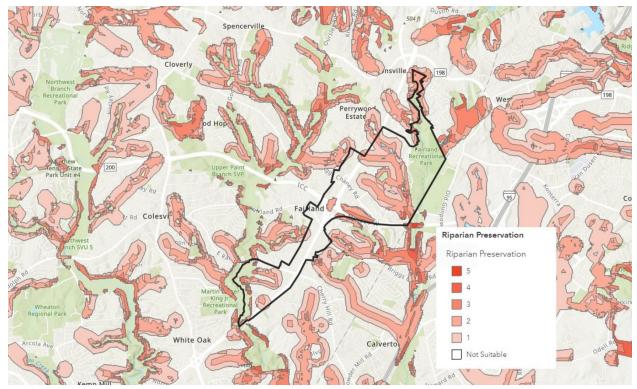


Figure 45: Riparian Areas Recommended for Preservation within the Fairland and Briggs Chaney Master Plan Area Data from EPA's Watershed Resources Registry of Maryland (WRR)

Credit: Winnie Cargill

furthering environmental sustainability, numerous economic benefits, protection of riparian flora and fauna, and physical and mental health benefits for residents.²¹⁸

Upland Preservation

Plains are composed of both upland and lowland areas, with lowlands being no more than 200 meters above sea level, and uplands usually being between 200 to 500 meters above sea level. The Environmental Protection Agency defines upland as "any area that does not qualify as a wetland because the associated hydrologic regime is not sufficiently wet to elicit development of vegetation, soils, and/or hydrologic characteristics associated with wetlands. Such areas occurring within floodplains are more appropriately termed non-wetlands." The National Park Service states that uplands are areas above the elevation where flooding occurs (but they are beyond riparian zones, and differ from wetlands). ²²⁰

Upland areas tend to have colder climates than lowland areas because of their higher elevations, and can include mountains with fast-moving streams. Upland ecosystems in the United States include forests, woodlands, grasslands, and scrublands, badlands, and rock outcrops, and these ecosystems

vary depending on the geographic location of the upland area. For example, in the Fairland and Briggs Chaney Master Plan area, uplands are generally forested areas. Upland ecosystems conserve

²¹⁸ Roxane Palone and Albert Todd, eds, Chesapeake Bay Riparian Handbook: A Guide for Establishing and Maintaining Riparian Forest Buffers, 1998. United States Department of Agriculture. https://www.chesapeakebay.net/content/publications/cbp_13019.pdf

²¹⁹ Environmental Protection Agency. Aquatic Resources Awareness Course for Real Estate Appraisers Glossary. https://www.epa.gov/sites/default/files/2016-02/documents/realestate_glossary.pdf

²²⁰ National Park Service. "Upland Vegetation and Soils." https://www.nps.gov/im/ncpn/uplands.htm

soil, sequester carbon, and cycle water, energy, and nutrients.²²¹ Additionally, upland areas have a significant impact on riparian zones, as upland areas can retain soil and nutrients, absorb and release water, and provide a buffer for high-runoff precipitation events.²²²

Flora found in the upland areas of Maryland include little bluestem, Virginia wildrye, partridge pea, blackeyed Susan, wild senna, calico aster, heath aster, narrowleaf mountainmint, butterfly milkweed, tall white beardtongue, wild bergamot, gray goldenrod, sundrops, hairy beardtongue, and early goldenrod.²²³ Upland fauna found in Maryland include game birds like pheasants and quail, cottontail rabbits, meadow vole, field mice, and butterflies and other insects.²²⁴ The Maryland Department of Natural Resources recommends planting upland grasses such as indian grass, big blue-stem, and little blue-stem along with a variety of legumes, forbs, and wildflowers in order to sustain and increase upland wildlife.²²⁵

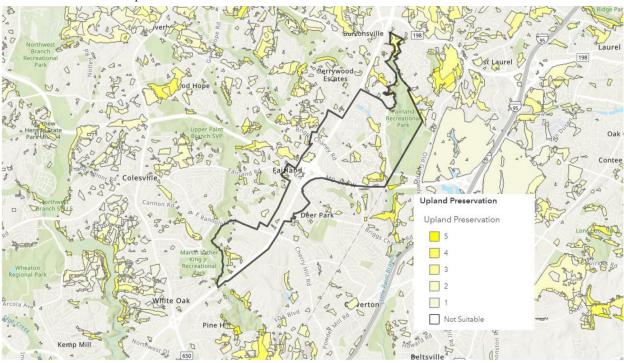


Figure 46: Upland Areas Recommended for Preservation within the Fairland and Briggs Chaney Master Plan Area Data from EPA's Watershed Resources Registry of Maryland (WRR)
Credit: Winnie Cargill

The EPA's Watershed Resources Registry of Maryland (WRR) has determined that a fair amount of upland areas within the Fairland and Briggs Chaney Master Plan area (see figure 46) are ideal for preservation. A significant upland area is situated by the riparian zone clustered around Paint Branch SVU 5, at the southern end of the Master Plan. Within Montgomery County, upland areas include oak and hickory forests, as well as upland meadows, and provide important recharge areas for groundwater and wetlands.²²⁶ These forests also provide wildlife migration paths between

²²¹ National Park Service. "Upland Ecosystems Monitoring." https://www.nps.gov/im/scpn/upland-ecosystems.htm

²²² National Park Service. "Upland Vegetation and Soils." https://www.nps.gov/im/ncpn/uplands.htm

²²³ Ernst Seeds. "Maryland Upland Mix." https://www.ernstseed.com/product/maryland-upland-mix/

²²⁴ Maryland Department of Natural Resources. "Habitat for Wildlife: Upland Game Habitat Recommendations." https://dnr.maryland.gov/wildlife/Pages/habitat/recommendations.aspx

²²⁶ Maryland National-Capital Park and Planning Commission and Montgomery County Department of Park and Planning. Environmental Resources: Eastern Montgomery County Master Plan Areas. 1996. https://montgomeryplanning.org/wp-content/uploads/2017/11/EasternMontgomeryCountyMasterPlanAreasEnvironmentalResources1996ocr300.pdf

the stream valleys. The Maryland Department of Natural Resources (DNR) designated the Paint Branch watershed upstream from Fairland Road as a "Special Trout Management Area" in 1980, which was the first designation of its kind in the state of Maryland, and was intended to give designated streams a protected status.²²⁷ The health of the brown trout population in the Paint Branch watershed is dependent on the upland recharge areas to support temperature requirements and stream baseflow.²²⁸ According to an Environmental Resources report by M-NCPPC and Montgomery County Parks and Planning published in 1996, upland areas in eastern part of the county are "particularly vulnerable because they are generally viewed as having the least environmental value and therefore are considered ideal for development disturbance."²²⁹ In the same report, large upland and riparian forested tracts and urban forests were highlighted as important resources to preserve, amongst other areas including wetlands and brown trout aquatic habitats.²³⁰

Wetland Preservation

Wetlands are land areas that are covered by water at or near the surface, either permanently, seasonally, or by tidal cycles. Due to their shallow condition and saturation, wetlands support plant and animal species living in or on the soil. Terrestrial and aquatic life are supported by wetlands and the "prolonged presence" of water favors growth of hydrophytic vegetation and hydric soils.²³¹ There are two types of wetlands as defined by the EPA: coastal/tidal wetlands and inland/non-tidal wetlands.

Coastal/tidal wetlands are found adjacent to our oceans where freshwater and saltwater mixes. The salinity of this water, combined with the fluctuation of tides, creates a muddy or sandy condition that has limited the amount of plant and tree species that can adapt.²³² These wetlands are able to support aquatic life and certain terrestrial species, such as birds and smaller animals. Inland/nontidal wetlands are found along floodplains adjacent to rivers and streams, adjacent to lakes and ponds, as isolated depressions in otherwise dry areas, and in other areas where groundwater is sufficiently concentrated near the soil surface. Depending on the climate, inland wetlands can be dry for a portion of the season. Within the Fairland and Briggs Chaney Master Plan area, nontidal Palustrine wetlands are found along the Little Paint Branch and Paint Branch watersheds. Palustrine wetlands support "trees, shrubs, persistent emergents, and emergent mosses or lichens" but can also be found in tidal areas with salinity levels of less than 0.5%.²³³ Due to the biodiversity of this wetland type, terrestrial and aquatic species are supported.

²²⁷ Montgomery Parks. "Upper Paint Branch Stream Valley Park." https://www.montgomeryparks.org/parks-and-trails/upper-paint-branch-stream-valley-park/

²²⁸ Environmental Resources: Eastern Montgomery County Master Plan Areas. 1996, p. 47.

²²⁹ Ibid.

²³⁰ Ibid

²³¹ "What is a Wetland?", Environmental Protection Agency, https://www.epa.gov/wetlands/what-wetland

²³² "Precipitation and the Water Cycle", United States Geological Survey, https://www.usgs.gov/special-topic/water-science-school/science/precipitation-and-water-cycle?qt-science_center_objects=0#qt-science_center_objects

²³³ "Palustrine System", Classification of Wetlands and Deepwater Habitats of the United States, U.S. Fish & Wildlife Service. https://www.fws.gov/wetlands/documents/classwet/palustri.htm



Figure 47: Palustrine wetlands within Fairland and Briggs Chaney Master Plan Area. Data from Maryland Department of Natural Resources²³⁴

Both wetland types are important in supporting local ecosystems and biodiversity, and aid in the sequestration of pollutants transmitted by air and water. Sedges and other species of wetland grasses are especially successful at filtering harmful contaminants from fossil fuel sources and stormwater drainage. Though a majority of coastal and riparian wetlands are protected as state/federal resources, the adjacency to development and population centers directly impacts the health and stability of wetlands. Sea level rise also impacts wetlands as the tidal cycles of these land areas are being altered with more frequent high-water events and increased salinity levels from streams and stormwater runoff. Due to the dynamic nature of isolated wetlands they may not afford the same protections if they are not recognized as such. These wetlands provide the same environmental benefits and support diverse species of plant, aquatic, and terrestrial life.

The identification, evaluation, and protection of wetlands is very important to sustain diverse coastal and inland ecosystems. In the Fairland and Briggs Chaney Master Plan area, the continued protection and conservation of wetlands directly counters the environmental impact of adjacent development. Wetlands not only act as a sponge by sequestering the pollutants of human activity, but also act as a vital buffer between water bodies and dry ground. This buffer must be conserved in order to protect developed areas and landscapes from erosion and over saturation.

Stormwater Natural Infrastructure Preservation

The flow of water vapor from the atmosphere to the surface of the earth is a continuous cycle. This water reaches the ground in the form of rain, freezing rain, sleet, snow, or hail, and will either infiltrate the ground surface or evaporate back into the atmosphere.²³⁵ Water that does not infiltrate the surface or evaporate into the atmosphere is called stormwater.²³⁶ Impermeable surfaces, whether built or natural, prevent this infiltration or natural recharge of the ground layer. The human species

²³⁴ "GreenPrint", Maryland Department of Natural Resources, https://geodata.md.gov/greenprint/

²³⁵ "Precipitation and the Water Cycle", United States Geological Survey, https://www.usgs.gov/special-topic/water-science-school/science/precipitation-and-water-cycle?qt-science_center_objects=0#qt-science_center_objects

²³⁶ "What is Stormwater?", Texas A&M University, https://texaswater.tamu.edu/stormwater/what-is-stormwate

has essentially taken two approaches to dealing with stormwater; collection and/or diversion. While stormwater collection can serve as gray-water or irrigation water, diversion channels water into oceans, flowing waterways, or lakes. Water can also be diverted to permeable land areas in a process known as artificial recharge.²³⁷ These channels can be simple and only several feet in length, or more complex networks of concrete and piping that are miles in length.

A primary issue in stormwater management is that impermeable surfaces and stormwater networks inadvertently collect pollutants and discharge them into natural water bodies and the ground. Parking surfaces, roadways, roofs, and other paved surfaces prevent natural infiltration and act as collection points for pollutants created by human activity. Stormwater networks can also cause severe soil erosion since water is now channeled at much higher rates and in greater quantities than natural discharge points can handle. For cities with combined sewer overflow systems, heavy precipitation events overwhelm the combined stormwater-sewage system; the combined storm and sewer water are diverted from the wastewater treatment facility and discharged into local waterways.

Within the Fairland and Briggs Chaney Master Plan area there is great opportunity to treat stormwater at the source and utilize natural ecosystems to treat polluted water (see figure 40). The areas adjacent to and within commercial development zones should be preserved to manage stormwater naturally and relieve the area's built stormwater infrastructure. Areas adjacent to and within multi-family residential zones should also be considered due to the amount of impermeable surface parking. Reducing the need for stormwater networks and treatment facilities prolongs the life of stormwater infrastructure and ultimately results in a positive environmental impact that supports adjacent ecosystems. Reducing the area of impermeable surfaces would create the greatest impact, though contemporary technologies and methods can mitigate the impact of our impermeable surfaces. In the interim, permeable pavement and pavers allow stormwater to infiltrate the ground surface and reduce the need for collection/diversion. Where impermeable surfaces are necessary or impossible to avoid, local methods for infiltration are possible. At the building scale, rainwater collection barrels/basins, rain gardens, and green roofs reduce the need for stormwater networks by recycling water for irrigation and gray-water uses. This ultimately supports micro ecosystems on site, whose plantings can further sequester carbon and harmful pollutants. Utilizing native plantings that reduce or eliminate the need for fertilizers, pesticides, and insecticides improves the quality of the entire stormwater network. At the neighborhood scale, curb-cut rain gardens can replace parking spots and be utilized to collect and filter stormwater before it reaches a stormwater drain. Like rain gardens, these micro-ecosystems can help support biodiversity within a neighborhood. For larger developments with more roof surfaces, parking surfaces, and paved areas, bioswales, retention ponds, and detention ponds treat stormwater locally. Bioswales are linear tracts of land that collect, filter, and recharge water into the ground; retention ponds are engineered solutions to collect runoff, but can support aquatic life, wetland plantings, and bird species; detention ponds are considered to be dry, but are activated when the other systems are overwhelmed. Although this method still requires mowing and maintenance, it reduces the need for large infrastructure networks.

Natural areas for stormwater management are imperative, as the built interventions still require ²³⁷ "Artificial Groundwater Recharge", United States Geological Survey, https://www.usgs.gov/mission-areas/water-resources/science/artificial-groundwater-recharge?qt-science_center_objects=0#qt-science_center_objects

space, maintenance, and owner agreement. The most effective solution for mitigating the impact of stormwater on our natural ecosystems is to preserve permeable landscapes and reduce the amount of impermeable surfaces introduced into a given area.

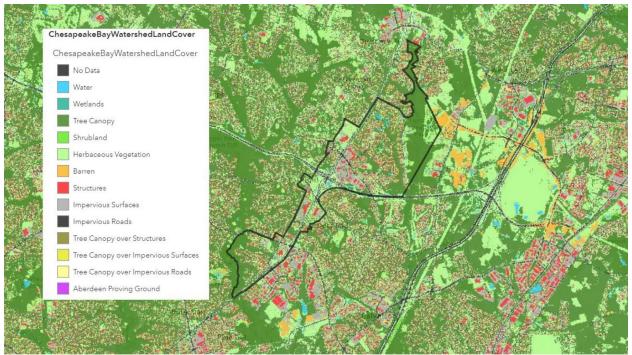


Figure 48: Chesapeake Conservancy Landcover within the Fairland and Briggs Chaney Master Plan Area. Data from EPA's Watershed Resources Registry of Maryland (WRR). Credit: Winnie Cargill²³⁸

Benefits of Green Space

Physical and Mental Benefits

The restorative effects of spending time in green spaces and nature have been shown to lower elevated levels of stress and increase positive feelings. This discovery is not new, however. Historical accounts from Eastern and Western cultures from past centuries have linked spending time outdoors to feelings of peacefulness. Payne, Loi, and Thorsteinsson found that spending time in nature reduces levels of stress in students, while van den Berg et al found a substantial improvement in negative mood, including stress, after participants in their study viewed video and photo presentations of a natural environment. There is paces have also been shown to foster a greater sense of well-being and reduce depression. The dependent of the planning stress reduction than visual stimuli. This is important to note because urban planners currently prioritize visual stimuli when planning green

^{238 &}quot;Chesapeake Conservancy Landcover", Watershed Resources Registry, https://watershedresourcesregistry.org/map/?config=stateConfigs/maryland.json

²³⁹ Emma A. Payne, Natasha M. Loi, and Einar B. Thorsteinsson, "The Restorative Effect of the Natural Environment on University Students' Psychological Health," Journal of Environmental and Public Health, 2020, 1.

²⁴⁰ Ibid., 6.

²⁴¹ A.E. van den Berg, A. Jorgensen, and E.R. Wilson, "Evaluating restoration in urban green spaces: does setting type make a difference?" Landscape and Urban Planning 127 (2014).

²⁴² R.S. Ulrich, R.F. Simons, B.D. Losito, E. Fiorito, M.A. Miles, and M. Zelson, "Stress recovery during exposure to natural and urban environments," Journal of Environmental Psychology 22, no.3 (1991).

²⁴³ D.E. Bowler, L. Buyung-Ali, T.M. Knight, A.S. Pullin, "The importance of nature for health: is there a specific benefit of contact with green space?" Collaboration for Environmental Evidence, 2010.

²⁴⁴ Marcus Hedblom, Bengt Gunnarsson, Behzad Iravani, Igor Knez, Martin Schafer, Pontus Thorsson, and Johan N. Lundstrom, "Reduction of physiological stress by urban green space in a multisensory virtual experiment," Scientific Reports, July 2019.

spaces; when taking the research of Hedblom et al. into account, planners should also consider multisensory qualities of the green spaces they plan.

The vegetation in parks and green space have additional benefits to physical health, including cooling cities and reducing heat effects, decreasing the amount of polluted stormwater runoff, and cleaning the air. Several studies of select neighborhoods in cities show that proximity to green space is positively associated with urban residents' physical activity levels and cardiovascular health.²⁴⁵ Parks, more specifically, have the potential to raise property values, promote economic revitalization of adjacent communities, increase tourism, create jobs, and reduce healthcare costs through the physical benefits they provide.²⁴⁶ Green spaces may also facilitate strong social connections and interactions, providing community residents with a space to bond with each other, develop a sense of community, and take a step away from the stresses of daily life.²⁴⁷ Increased perceptions of social cohesion and social capital, thereby creating a sense of place, can provide positive benefits to an individual's well-being. Specifically, Kazmierczak et al. posit that these benefits include place attachment, belonging, social support, and empowerment.²⁴⁸

Educational Benefits

While green space provides many mental and physical benefits for individuals, green space has also been linked with academic performance rates. Kweon, Ellis, Lee, and Jacobs studied the links between the environments surrounding schools and student academic performance, finding that school grounds with greater numbers of trees had a higher percentage of proficient or advanced scores in Reading and Math standardized tests.²⁴⁹ The authors suggest that green spaces can create environments where students are more motivated and have a deeper connection with their learning environment, which therefore allows them to place a greater importance on their overall academic success.²⁵⁰ However, it should be noted that different types of landscapes have different effects on academic performance, not all positive. For example, schools with "featureless landscapes," such as large areas of campus lawns and athletic fields result in negative effects on academic performance.²⁵¹ Green space also contributes to an individual's ability to focus and concentrate. There are two theories that explain this relationship: attention restoration theory and stress reduction theory. The former argues that green spaces may provide a remedy for attention fatigue (which would allow students to do better in school) while the latter posits that forms of nature deemed to be nonthreatening can help reduce stress.²⁵² Green space is also considered an environmental justice issue, as racial minorities and low-income residents usually have less access to green space. Therefore, it is imperative that the efforts of conservationists and planners in areas with high minority populations ensure that green spaces are preserved and accessible for everyone in a community.

State of Natural Environment in Master Plan

The Fairland and Briggs Chaney Master Plan area covers two watersheds; the Paint Branch and

²⁴⁵ G. Brown, M.F. Schebella, and D. Weber, "Using participatory GIS to measure physical activity and urban park benefits," Landscape and Urban Planning, 2014.

²⁴⁶ Robert D. Bullard, The Quest for Environmental Justice: Human Rights and Politics of Pollution, San Francisco: Sierra Club Books, 2005, 146.

²⁴⁷ A. Kazmierczak, "The contribution of local parks to neighbourhood social ties," Landscape and Urban Planning, 2013.

²⁴⁸ Ibid

²⁴⁹ Byoung-Suk Kweon, Christopher D. Ellis, Junga Lee, and Kim Jacobs, "The link between school environments and student academic performance," Journal of Urban Forestry & Urban Greening, February 3, 2017, 40.

²⁵⁰ Ibid., 36.

²⁵¹ Ibid., 35.

²⁵² Ibid., 36.

Fith Bring Branch. Paint Branch Watershed is a tributary of the Northeast Branch, which flows to the Anacostia River, Potomac River, and the Chesapeake Bay. Paint Branch flows south and joins with the smaller Little Paint Branch tributary in College Park, Maryland. The Montgomery County Department of Environmental Protection last addressed the health of the Little Paint Branch Subwatershed and a 10-year vision plan for the subwatershed (to be completed by 2020) in 2010.²⁵³ At the time of publication, the Little Paint Branch was designated as a Use I stream (suitable for water recreation and support of aquatic life) by the Maryland Department of the Environment (MDE).²⁵⁴ While the upper main stem conditions for macroinvertebrate populations were rated as good, the middle and lower conditions for these populations were rated as being poor/fair.²⁵⁵ Plans to restore the Little Paint Branch included "stormwater management focusing on the employment of low impact development (LID) and environmentally sensitive design (ESD) techniques, aquatic and terrestrial habitat restoration, fish barrier modification/removal, wetland creation, riparian reforestation, invasive plant management, and potentially additional fish reintroductions."²⁵⁶ Although the goal for the Little Paint Branch Subwatershed Action Plan was intended to be reached by 2020, a report discussing the success or failure of the action plan has not yet been published.

Montgomery County has created a number of programs aimed towards environmental conservation and protection. The Montgomery County Planning Department runs the Forest Conservation Bank program, which protects large areas of forest by establishing banks, either through planting a new forest or by protecting a forest that has already been established. After a bank has been created, the forest is protected permanently.²⁵⁷ Additionally, Reforest Montgomery, which is supported by the Forest Conservation Fund, plants trees and forests throughout the county and provides incentives for property owners to plant trees within the county.²⁵⁸ The Montgomery County Parks Department protects many aspects of the natural environment, including vegetation and wildlife habitats, meadow management, wildlife management, and water resources.²⁵⁹ The Parks Department also runs a number of nature centers in the county. Wildlife common to Montgomery County and the Fairland and Briggs Chaney Master Plan area includes but is not limited to raccoons, foxes, snakes, White-Tailed deer, Canada geese, beavers, coyotes, Black bears, and ticks.²⁶⁰ The county's parks department offers information on their website for how to live peacefully with wildlife, and what to do should you encounter a wild animal.

For FY2022, Montgomery County will be conducting a Stream Valley Improvements project to provide for the design and construction of both habitat restoration and for stabilization measures in areas with significant erosion, sedimentation, and habitat degradation. The Stream Valley Improvements project will address the goals of the Chesapeake Bay Watershed Agreement, the Anacostia Watershed Restoration Agreement, and the County's water quality goals and MS4 permit (which authorizes the county to discharge stormwater collected by storm sewer systems into waters of the US). It will stabilize and improve local stream habitats that have been damaged by stormwater

²⁵³ Little Paint Branch Subwatershed Action Plan. Montgomery County Department of Environmental Protection, 2010. October 2021. 254 Ibid., 3.

²⁵⁵ Ibid.

²⁵⁶ Little Paint Branch Subwatershed Action Plan, 9.

²⁵⁷ Montgomery Planning. "Montgomery County Forest Mitigation Bank Program." https://montgomeryplanning.org/planning/environment/forest-conservation-and-trees/forest-conservation-banks/. 2021.

²⁵⁸ Montgomery Planning. "Reforest Montgomery: Planning a Greener Future." https://montgomeryplanning.org/planning/environment/forest-conservation-and-trees/reforest-montgomery/. 2021.

²⁵⁹ Montgomery Parks. "Natural Spaces." https://www.montgomeryparks.org/caring-for-our-parks/natural-spaces/. 2021.

²⁶⁰ Montgomery Parks. "Living with Wildlife." https://www.montgomeryparks.org/caring-for-our-parks/wildlife/. 2021

Environmental and Natural Areas for Community Use

Within the Master Plan area, Unit 6 of Paint Branch Stream Valley Park is located at the southern end of the area, on the north bank of Paint Branch. Paint Branch SV Unit 5 comprises 129 acres. Little Paint Branch is located at the northern end of the Fairland and Briggs Chaney Master Plan area, and bisects Fairland Recreational Park, the only bi-county park of the Maryland-National Capital Park and Planning Commission. On the Montgomery County side, the park comprises 322 acres, with 39 acres developed with athletic fields and courts, and the rest being preserved in its natural state. ²⁶² Over three miles of natural surface trails allow visitors to explore the preserved and undeveloped areas in the park. ²⁶³ Edgewood Recreational Park is the last park located in the Fairland and Briggs Chaney Master Plan area. It is located on Robey Road, west of Fairland Recreational Park.

Land Use Protections for Natural Resources in Fairland and Briggs Chaney

MN-CPPC owns and runs land that includes Fairland Recreational Park and Edgewood Recreational Park. Additionally, a 900-acre conservation district located around Rocky Gorge Reservoir provides protection for water quality and provides erosion control. Relevant land use protections for the natural resources in the Fairland and Briggs Chaney Master Plan area include:

- "Rural and Rural Cluster Zones" (1974) Montgomery County Council established
 protections for rural lands and farmlands in an effort to concentrate development along
 primary corridors.²⁶⁴
- "Eastern Montgomery County Master Plan" (1981) The county planned to preserve vegetation, watersheds, and overall water quality, by maintaining sprawl. Controls were set for phased land clearing, stormwater management, and sediment/erosion control.²⁶⁵
- "Patuxent River Policy Plan" (1984) Maintained water quality by protecting and restoring the transition area(s) between streams and (new) development.
- "Maryland Planning Act" (1992) Identified stream buffers, identified threatened/ endangered habitats, and established a 100-year flood plain. 266
- Forest Conservation (1992) County legislation that protected forest and woodlands from future development.
- Protection of Paint Branch Watershed (1995) Protected as one of the only streams in the nation that sustains long-term reproduction of trout.²⁶⁷
- Montgomery County Master Plan (1997) Fairland became part of an Environmental Restoration Area and Fairland Regional Park became an Environmental Preservation

²⁶¹ Montgomery County Maryland Capital Budget. "Misc: Stream Valley Improvements." https://apps.montgomerycountymd.gov/BASISCAPITAL/Common/Project.aspx?ID=P807359&CID=8&SCID=63. 2021.

²⁶² Montgomery County Parks. "Fairland Recreational Park," Maryland-National Capital Park and Planning Commission, https://www.montgomery-parks.org/parks-and-trails/fairland-recreational-park/. 2021.

²⁶³ Ibid

²⁶⁴ Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.135

²⁶⁵ Ibid., 134.

²⁶⁶ Montgomery County Department of Park and Planning, The Fairland Master Plan, 132

²⁶⁷ Ibid., 136.

Area. Proposals sought to limit impervious surfaces and acquire further properties for conservation. The National Environmental Protection Act and Federal Clean Water Act provided further protections for watersheds and parklands.²⁶⁸

Priority Areas for Preservation

According to the EPA's Watershed Resources Registry of Maryland (WRR), riparian and stormwater infrastructure preservation is "highly suitable" and recommended within the Fairland and Briggs Chaney Master Plan area.²⁶⁹

The density of commercial, multi-family, and single-family development adjacent to the streams and tributaries of the Little Paint Branch and Paint Branch watersheds makes riparian preservation and restoration a high priority (see figure 41). This same development has resulted in significant impermeable surfaces such as roads, parking lots, and roofs, all of which create additional issues for stormwater management and preservation of permeable surfaces. The WRR has recommended preservation of riparian zones and natural stormwater management strategies in the land areas around the Briggs Chaney MarketPlace, auto mall, Verizon offices, and the multi-family housing developments east of Route 29 (see figure 48 & 49). The buffer area adjacent to the Intercounty Connector is also noted as a priority zone.

²⁶⁸ Ibid., 129

²⁶⁹ "WRR Suitability Analyses", Watershed Resources Registry, Environmental Protection Agency, https://watershedresourcesregistry.org/map/?config=stateConfigs/maryland.json

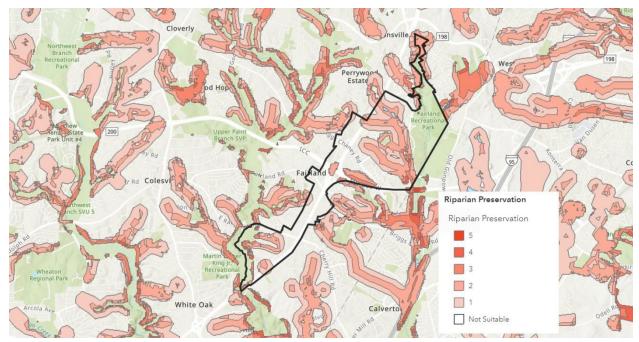


Figure 49: Riparian Areas Recommended for Preservation within the Fairland and Briggs Chaney Master Plan Area Data from EPA's Watershed Resources Registry of Maryland (WRR), credit: Winnie Cargill

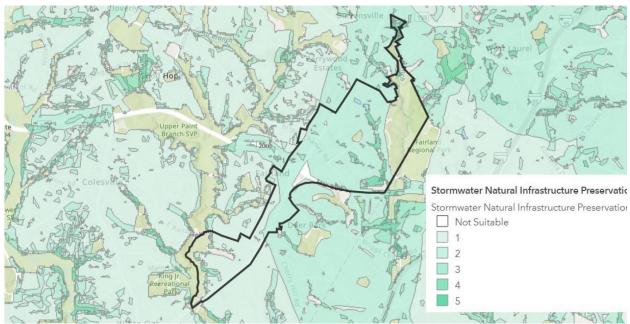


Figure 50: Stormwater Natural Infrastructure Preservation areas within the Fairland and Briggs Chaney Master Plan Area Data from EPA's Watershed Resources Registry of Maryland (WRR), credit: Winnie Cargill²⁷⁰

Upland preservation adjacent to multi-family housing and the ICC is recommended in the master plan area as well (see figure 51), but riparian and stormwater management take precedence. Most of the areas categorized as wetlands within the area are protected by state and local laws but should continue to be monitored for their health and ability to support biodiversity. As the area's

²⁷⁰ "Stormwater Natural Infrastructure Preservation", Watershed Resources Registry, Environmental Protection Agency, https://watershedresources-registry.org/map/?config=stateConfigs/maryland.json

landscape changes over time and water tables fluctuate, the area should be monitored for the natural development of additional inland wetland zones. The areas adjacent to watersheds and highly saturated swales can naturally develop as diverse ecological areas and must be preserved to mitigate the impact of development.

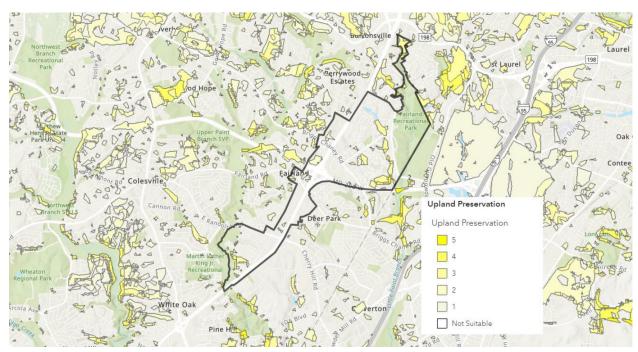


Figure 51: Upland Areas Recommended for Preservation within the Fairland and Briggs Chaney Master Plan Area. Data from EPA's Watershed Resources Registry of Maryland (WRR). Credit: Winnie Cargill²⁷¹

Greenspace Preservation Outcomes

The research above indicates the myriad benefits of preserving greenspaces in the Fairland and Briggs Chaney Master Plan area including environmental, economic, and overall health benefits to those living in the area.

The economic benefits of green space conservation ranges from economic growth and sustainability of human health. Green spaces are important for mitigating damages by human activity which cost local and national economies millions of dollars each year. The protection of green spaces not only brings profit when there is active investment in conservation but also helps to reduce burdens on the environment itself and the medical care system. This is particularly important for the Fairland and Briggs Chaney Master Plan area where a majority of the green space is responsible for sustaining animal life, and is in constant usage by residents for recreational activity, and health activities.

The environmental benefits of greenspace preservation within the Fairland and Briggs Chaney Master Plan area extends beyond political boundaries and supports a diverse network of riparian, upland, and wetland habitats in the region. Preservation of greenspace within the master plan area is essential in countering the environmental impacts of development and sprawl, and ensures

²⁷¹ "Upland Preservation", Watershed Resources Registry, Environmental Protection Agency, https://watershedresourcesregistry.org/map/?config=stateConfigs/maryland.json

that the ecological health of the area is maintained for future generations. As part of the Paint Branch and Little Paint Branch Watersheds, the area is directly affected by upstream activity and all actions within affect downstream activity as well. For this reason the greenspace within the Fairland and Briggs Chaney Master Plan area is not isolated, but part of a diverse regional ecosystem. Preservation of riparian, upland, wetland, and natural stormwater infrastructure aids in the overall quality of water, air, and soil, and supports the health of vegetation, terrestrial species, aquatic species, and ultimately human inhabitants. With development outpacing the regrowth and restoration of natural ecosystems, it is important to actively preserve the greenspace that is already available and work towards restoring that which has been adversely impacted.

To summarize the health benefits discussed in a previous section, greenspaces are invaluable to maintaining a healthy lifestyle, which can positively influence other areas of life, including education. Greenspaces have been proven to be restorative, lowering levels of stress and anxiety and promoting an overall sense of wellbeing. Greenspaces also offer an opportunity for physical recreation that can improve an individual's cardiovascular health, among other benefits. Studies have also found that greenspaces are linked to higher academic performance rates because they allow students to focus and concentrate. Scholars focusing in this area have two theories based on this observation: attention restoration theory and stress reduction theory. The former posits that greenspaces alleviate attention fatigue while the latter argues that non-threatening environments, such as natural environments, reduce stress in students. Parks and recreation areas can create strong social connections by providing individuals with the opportunity to gather with other community members thus creating a sense of social cohesion and fostering social capital. In addition to the spaces themselves, the vegetation in parks helps to reduce heat effects in cities (thereby cooling the cities), cleans the air, mitigates the amount of polluted stormwater runoff contaminating various water sources in the area, including streams, tributaries, and major waterways.

When examining these specific benefits within the context of the Fairland and Briggs Chaney Master Plan area, the importance of preserving the area's greenspaces cannot be overstated. In regard to education, the Master Plan Area has two schools, Greencastle Elementary School and Paint Branch High School. Standardized test scores found for Greencastle Elementary School include scores for mathematics and reading. Sixty percent of students in third grade met the state standard in both reading and mathematics while the scores of fourth and fifth graders overall were below fifty percent when compared to the state average. Students at Paint Branch High School performed well below the state average in mathematics, but performed slightly higher than the state average for reading. According to the US News "College Readiness Score," Paint Branch High School received a 49.9 out of 100 rating. When looking at academic performance data in the Master Plan Area, it is clear that attainment of higher scores is certainly possible. There are various tools and resources that can be implemented in or can be made more available to students in the area, such as greater access to greenspaces to help increase focus and lower stress and, hopefully, increase academic achievement.

^{272 &}quot;Greencastle Elementary." SchoolDigger. Accessed September 30, 2021. https://www.schooldigger.com/go/MD/schools/0048001510/school.aspx#:~:text=Compare%20Details%20Greencastle%20Elementary%20ranks,Average%20Standard%20Score%20was%2045.13.

²⁷³ "Paint Branch High in Burtonsville, MD - US News Best High School" US News & World Report. Accessed September 30, 2021. https://www.usnews.com/education/best-high-schools/maryland/districts/montgomery-county-public-schools/paint-branch-high-9142.

²⁷⁴ "Paint Branch High in Burtonsville, MD - US News Best High School" US News & World Report. Accessed September 30, 2021. https://www.usnews.com/education/best-high-schools/maryland/districts/montgomery-county-public-schools/paint-branch-high-9142.

The Fairland and Briggs Chaney Master Plan area is not reflective of the commonly-held idea of a community. The area was historically farmland until the mid-twentieth century and its resources, therefore, have greater distance between them. While infrastructure improvements in the area have provided a physical connection between the elements of the study area, including single family homes, multi-family homes, the commercial area, and parks, they do not create ideal spaces for social interaction. The parks in the Master Plan area, including Fairland Recreational and Edgewood Neighborhood, provide a gathering space for community members and for visitors to the area. These spaces therefore allow for a traditional sense of community in an area that does not have a "traditional" community-centered landscape. As a result, the preservation of these two parks should be prioritized for the benefit of the community and overall area.

Chapter 5

Social Media Analysis

This chapter serves as an overview of the informal social media analysis, conducted as a supplementary community engagement activity for this report. Although limited in its capabilities, a thorough social media analysis can offer planners and preservations access to local knowledge, especially in relation to the behavior, opinions, and feelings of area residents. It is important to note that this analysis was purely informational, rather than collaborative or participatory. Data was mined from existing sources; no attempts to prompt responses were attempted during this phase of research.

Engagement

This studio recognized the importance of resident input in making value determinations about cultural resources. Unfortunately, engagement was curtailed by a variety of obstacles. These obstacles included time constraints (the timeframe of a one-semester course) and public health issues (the Covid-19 pandemic). Additionally, Montgomery County planners requested that preservation students refrain from conducting independent outreach out of respect for the county's own ongoing community engagement efforts. The county's engagement efforts were led by county planners, who were interested in hearing community input about development. Unfortunately, these challenges severely limited the ability of this project to get a fuller sense of resident needs, or to ask questions about the existing culture of the area.

Despite these challenges, students did participate in all engagement activities offered to them. Preservation students attended Burtonsville Day, alongside Montgomery County planners, where students were able to interface with residents about their vision for the area. Students from both planning and preservation attended county "listening sessions" to hear from stakeholders. Additionally, preservation students performed a social media analysis of the area, which sourced data from a variety of platforms, such as Twitter, Instagram, Facebook, Youtube and GoogleReviews. Although much more community engagement needs to be conducted during this planning process, students were able to make some preliminary observations. At Burtonsville Day, residents cited community resources such as the recreation center, parks, and libraries as major draws to the area, as well as access to the ICC and transit convenience. Proposed changes to the area focused on education, safety, traffic congestion, jobs, and housing.

Due to restrictions and limitations much of the information from this studio was obtained via a social media analysis.

In this informal analysis, there were several key takeaways about the values of residents in the Master Plan area, as well as persons who come to the area for a variety of reasons. This analysis found that:

- Residents do not refer to the Master Plan area as Fairland or Briggs Chaney, but instead tend to refer to the area as Burtonsville or Silver Spring.
- Social media posts indicated that residents placed a high value on their greenspaces, especially the Fairland Recreational Park, and participated in a wide variety of recreational uses.
- Many community services in the area were offered by non-governmental community centers in the area.
- Although residents are frustrated with the transit options in the area, there appears to
 be a sentimental attachment to the Auto Park in the area, which provokes some feelings
 of nostalgia amongst residents. The future preservation and planning of the area should
 consider the autopark area as a potential heritage area and consider saving the space for
 future re-use.
- Major sites of importance appear to be the Fairland Recreation Park, the Briggs Chaney MarketPlace, the Montgomery Auto Park, the Guru Nanak Foundation of America, and the The Islamic Society of Greater Washington. These spaces seem to facilitate a wide range of cultural activities, services and traditions reflected in the analyzed social media platforms.

Research Approach

The data outlined in this section was derived from a brief social media search on Facebook, Twitter, Tiktok, YouTube, GoogleReviews, and Next Door. These platforms were investigated for their potential as sources of community-based information. On Facebook, Twitter, Tiktok, and Next Door, the search method was to use a collection of key terms to identify related posts to the Study Area. These search terms included "Fairland" "Fairland Parks," "Briggs Chaney," and "Fairland, Maryland." The team also pulled data from the Burtonsville Facebook Page and searched for specific businesses and landmarks.

The second phase of this approach was to "code" the data, and identify overall themes. These themes were determined based on the frequency that they appeared in the data set. Some of the recurring themes were:

- 1. Auto Park and Transportation
- 2. The Economy
- 3. Community Services
- 4. Social and Ethnic Identities

Research Limitations

Social Media Analysis results in limited research that is skewed by access to Social Media, the search methods employed by the research team, and overall interest in the area. The data presented in the sections below does not provide a complete idea of the interest and identities of their residents in the Fairland and Briggs Chaney Master Plan area, but does provide a brief look at some individuals' perspectives on the study area. Any posts that were obviously made by individuals under 18, were ignored and not incorporated in the data. Furthermore, in this specific case, "Fairland" is not a term often used by residents in the community to describe their neighborhood. Conversations with local residents and County employees revealed that residents refer to their neighborhood as "Silver Spring" or "Burtonsville", complicating the search for related information to the study area. These limitations should be considered in any applications of the data.

Social media can also present a skewed data set, favoring younger residents and those with regular access to the internet. According to a fact sheet compiled by the Pew Research Center,²⁷⁵ there is a significant differential in the age of social media users; 84% of persons 18-29 use social media, as compared to only 45% of persons aged over 65. Although age is the largest determinant for social media use, other smaller differences across race, income level and gender also exist. Women are slightly more likely to use social media than men, and Hispanic and Black populations use social media at a higher rate than white populations.



Figure 52: Facebook post about the Briggs Chaney Auto Park

²⁷⁵ Pew Reserach Center, "Who Uses Social Media." https://www.pewresearch.org/internet/fact-sheet/social-media/?menuItem=ad42e188-04e8-4a3c-87fb-e101714f1651

Social media is largely consistent across all income levels, although people who own over 75,000 a year are marginally more likely to use social media.

Auto Park and Transportation

Fairland and Briggs Chaney residents reported mixed feelings about the transportation options in the area, indicating that some major concerns were traffic congestion and limited public transit access. Much of the twitter discourse about the area indicated that residents were frustrated with routes into and out of the master plan area. Complaints ranged from poor long-distance bus routes to regular traffic problems.

By contrast, several residents indicated that the Montgomery Auto Park held some degree of community importance and heritage value for long-term residents. One post on the Burtonsville Facebook asked local residents what they remembered about the Auto Park when it was less developed. High post engagement and comments implies that many residents feel a high-degree of nostalgia for the site. These comments included references to people having worked at the dealerships, making significant (and sentimental) purchases there, and learned to drive.

The car dealerships that make up the Auto Park all have fairly positive reviews on Google, but there are no Google reviews that echo this sense of sentimental value. This is most likely due to the nature of Google reviews being about existing services and recent experiences. Each dealership has nearly or over 1,000 positive reviews on Google, showing that the area still provides positive services to Montgomery County and the local community.



Figure 53: Social media comments on the Auto Park



Dronify is at Briggs Chaney Auto Park. December 7, 2020 at 11:31 AM ⋅ Silver Spring, MD ⋅ 🚱

It's beginning to look a lot like Xmas! As covid infections soar, the shopping center parking lots are mostly full, but not like years before.

#topdowndroneshots

Figure 54: Parking at Briggs Chaney Auto Park

The Economy

Two primary economic themes were frequently referenced on social media in the area. The first was the Briggs Chaney MarketPlace, a strip mall located at 13807 Outlet Dr, Silver Spring. The majority of posts about the strip mall refer to new business openings, including establishments like Island Quizine and the new Popeyes. A few posts referenced parking at the mall, with one post noting that the parking area is frequently congested.

The Briggs Chaney MarketPlace had Google reviews that suggested the place was popular and locals liked the shops provided in the strip mall. One reviewer wrote that they hadn't known it was there, but enjoyed the stores.

The other major theme in social media data was the presence of an informal economy. For privacy purposes, these posts will not be described in detail in this report. Generally speaking, the informal economy of the area includes both beauty and repair services, homemade clothing and jewelry as well as food/beverage sales.

Community Services

The most frequent posts related to the search terms of this analysis focused on the Fairland Recreational Park. Posts indicated a wide variety of uses for the park, including soccer games, walking tours, and wildlife watching. The Fairland Recreational Park also appears to be a mountain-biking hub for the area. This is evident by the multiple bike POV videos uploaded to TikTok and Youtube that were hashtagged with variations of "Fairland". These videos were more easily found through our search terms because of the



Figure 55: Screenshot of mountain biking video at Fairland Regional Park

name of the park and are thus favored in the dataset. The popularity of bike POVs illustrates the use of the park for outdoor community building over the online platforms that connect bikers to each other and informally advertise the park to those unaware of its location. The Montgomery County government advertised free youth mountain biking lessons in the park, and several people posted photos of themselves biking in the park on their Facebook account.

The Fairland Regional Park and Calverton-Galway Park are both popular parks in the study region. Google reviews for the Calverton-Galway revealed that many found the park a quiet, nice place to explore the trails. But, several reviews marked areas for improvements including general "TLC" and that many visitors couldn't find "any sort of restrooms." The Fairland Regional Park is a place where many visitors go to enjoy long trails, "views of the stream" and other nature scenes, and to take their dogs for walks or horses for a ride. One visitor reviewed the park positively, but asked "please clean

up after your dog and your HORSE."

One particularly interesting tweet referenced a soccer game between a Ugandan soccer team and a Kenyan soccer team in Fairland Park, in which the ambassadors for both countries were present.

There are two Montgomery County
Community Centers in and around the
study area: Marilyn J Praisner Community
Recreation Center and the East County
Community Recreation Center. Reviews
for both community centers discuss the
wide variety of public programming
available. One visitor remarked that "I
used to go here as well. Dropped off at
the community center to participate in
the after-school stuff." However, some
community members believe the existing
programs could be expanded, suggesting

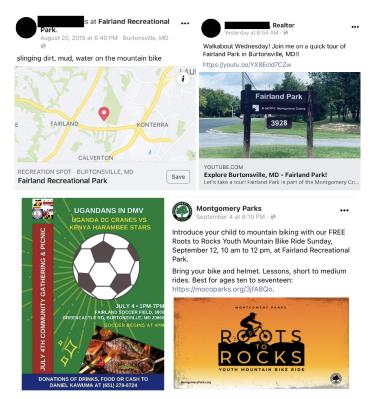


Figure 56: Social media posts for park events

that "I hope that they would have different activities for preschool kids because the community is surrounded by many apartment communities." Depending on the existing community programs, advertising or working with the apartment complexes could expand the usability of the community centers and increase community engagement.

Social and Ethnic Identities

Other major community services in the area appear to revolve around cultural centers, especially the Guru Nanak Foundation of America (a Sikh temple) and the The Islamic Society of Greater Washington. The Guru Nanak Foundation offered free grocery drive-through, covid-testings, and an AAPI health fair. Most of these activities are advertised in both English and Spanish. On GoogleReviews, one community member remarked "I drove to this location to deliver food for donations, however the people were very friendly and they offered me something to eat. He offered me something to drink they asked me if I wanted to use the restroom. They were very nice people." This is one example of community services being provided by local organizations and revealing areas that might be places for more community engagement.

The Islamic Society of Greater Washington organizes community events, including interfaith runs and BBQs. These invitations appear to extend beyond the Islamic community in the area and attempt to incorporate a wide local audience.



Figure 57: Community event flyers

Conclusion

Overall, this limited social media analysis highlighted several key opportunities for community engagement, and shed a spotlight on the different ways in which spaces are being used. Social media posts showcased extremely diverse uses for the community meeting areas, such as the Sikh temple, the Islamic Society, and Fairland Recreational Park. It also shed light on some unexpected heritage zones (the Auto-Park) and major concerns (traffic congestion). Researchers suggest that future use of social media should include more direct interaction with the Fairland and Briggs Chaney communities that may result with a more dynamic dataset. This may come in the form of facebook polls that elicit responses from various communities revealed through this section that are related to a specific research question related to heritage or historic preservation.

This media analysis did identify sites of nostalgia, which may serve as a driving force behind community heritage decisions in the future. Nostalgia is a common theme in heritage preservation, as residents often feel an emotional connection for the past through vestiges in the built environment. Nostalgia is a useful tool for preservation planning because it can shed light on places of importance to the community. Laurajane Smith and Gary Campbell argue that nostalgia can be a "potentially productive, positive and future oriented process which mobilises emotions drawing on the past to do something in the present, and is potentially oriented to influencing the future." It is critical in an area like Briggs Chaney to identify what residents think is important, or what they are emotionally connected to, so that these places maintain essential community qualities going forward.

²⁷⁶ Gary Campbell, Laurajane Smith & Margaret Wetherell (2017) Nostalgia and heritage: potentials, mobilisations and effects, International Journal of Heritage Studies, 23:7, 609-611, DOI: 10.1080/13527258.2017.1324558

Local and County Preservation & Environmental Policy

Managing growth and establishing guidelines for future land-use in Montgomery County is the Planning Department's raison d'être, or primary function. Montgomery County's Planning Department is unique in that it is part of the bi-county Maryland-National Capital Parks and Planning Commission (M-NCPPC), which also oversees planning in neighboring Prince George's County. While there are common goals and federally/state mandated guidelines that both counties must adhere to, Montgomery County Planning has the authority to establish goals, guidelines, and policy that is specific to its geospatial and political boundary. The county aims to "improve quality of life by conserving and enhancing the natural and built environment for current and future generations."277 Historic preservation and environmental conservation plans at the county level have been established specifically to evaluate, protect, and enhance the county's historic and environmental landscapes. Continued evaluation of resources, trends, and societal needs requires amendments to past plans and sometimes the creation of new plans with specific goals and guidelines that manage growth and protect resources. The following plans are significant for their impact and importance in the county's history.

²⁷⁷ "About", Montgomery County Planning Department, 2020. https://montgomeryplanning.org/about-planning/

General Plan on Wedges and Corridors (1964)

The 1964 "General Plan on Wedges and Corridors" was the first significant bi-county comprehensive plan established by the M-NCPPC, serving both Montgomery and Prince George's counties. It foresaw the urban development and growth of the National Capital Region and established land-use guidelines to maintain agricultural "wedges" and residential "corridors." In terms of conservation, the M-NCPPC stated that it was their responsibility for the "provision of parks and recreation centers" and recommended that a Natural Resource Advisory Committee be established to help the Park and Planning Commission carry out the goals of the "General Plan." This committee would work with county, state, and federal departments of wildlife, forest, geology, and waterway protection. A direct quote from this plan stated that "Our nation, looking toward a future of continuing economic progress, it is well advised to take stock of its natural resources." ²⁸⁰

This plan specifically noted the need for park and conservation plans to protect natural resources from development, and included stream valley parks, natural stream beds, steep slopes, and floodplains as areas to be prioritized and "turned into assets through the use of subdivision controls." Conservation zoning was recommended as a regulatory way to protect natural areas against urban development and prevent further development at the sites of sand and gravel deposits, steep slopes, and floodplains. Within this plan, watershed protection was also mentioned as a priority.

The "General Plan" acknowledged that the M-NCPPC's current park inventory was 6500 acres and proposed that 40,000 acres be acquired by 1980. Six park types were identified and included: high density recreation areas; general outdoor recreation areas; natural environment areas; unique natural areas; primitive areas; and historic and cultural sites. This early mention of historic and cultural sites was not expanded upon, but stated that these areas should be acquired "as needed". Natural environment areas would remain in private ownership and acquired through scenic/recreation easements.

Adopted Plan for Fairland-Beltsville and Vicinity (1968)

The "Adopted Plan for Fairland-Beltsville and Vicinity" was developed as a refinement to the 1964 "General Plan on Wedges and Corridors". The plan focused specifically on the Fairland and Beltsville area and included Colesville, Burtonsville, and the western edge of Prince George's County. The plan was intended to provide a "comprehensive visualization" of what a corridor city would look like as envisioned by the 1964 "Wedges and Corridors" plan. 282

The plan acknowledged "current" (1968) and potential environmental threats to the area, but made no mention of historic resources or conservation. The prominence of sand and gravel extraction in the area was highlighted as a future concern, as it was directly noted that the "reuse of the areas from which gravel has been extracted constitutes a future development problem" and could "scar"

²⁷⁸ "General Plan on Wedges and Corridors," M-NCPP, 1964. https://montgomeryplanning.org/planning/master-plan-list/general-plans/wedges-corridors-general-plan-1964

²⁷⁹ Ibid.

²⁸⁰ Ibid.

²⁸¹ Ibid

²⁸² "Adopted Plan for Fairland and Beltsville and Vicinity", M-NCPPC, 1968.

the landscape.²⁸³ Conversely, the plan also acknowledged the forced abandonment of sand and gravel resources by premature development, insinuating that these resources should be fully extracted before planning for future use. Other areas of concern within the plan area included water supply resources, destruction of natural assets, and scenic beauty. The plan proposed that the Patuxent River (north of Fairland) and its wooded banks act as a buffer between the quickly urbanizing Washington, DC and Baltimore metropolitan regions.

The 1968 plan proposes that natural assets and regional open space be preserved, to "provide a balanced system of community facilities and services sufficient to meet the economic, social and cultural needs of future population."²⁸⁴ Methods to ensure protection of natural assets and open space include retention of low-density residential development within the Patuxent River watershed, and development of a 2100 acre park system, 450 acres of which are regional parks and 40 acres of which are neighborhood parks. In addition to acquiring park land, the plan proposed a system to administer scenic easements to preserve natural landscapes against mining and development, and work to conserve areas containing floodplain soils or slopes exceeding 15 percent.

This plan reveals that there were initially zones for 'conservation and private recreation' which included country clubs; these areas were later rezoned to accommodate multifamily housing. It is also revealed that the proposal for the Intercounty Connector (Rt.200) existed as early as 1968, the path almost identical to its actual construction four decades later.

Updated General Plan (1969 + 1993)

The updated "1969 General Plan" expanded upon the original theme of "Wedges and Corridors", and in terms of conservation, recategorized conservation and environmental protection separately. The 1969 plan provided specific conservation concerns and objectives and stated erosion control, steep slope protection, flooding, runoff, ecological conservation, waterway conservation, and preservation of scenic vistas as primary concerns. It specified the importance of protecting open space within stream valley development and suggested prohibiting construction adjacent to steep slopes, floodplains, and water courses.

Environmental concerns stated that water quality should be maintained and sewage discharge accounted for. By implementing land use controls adjacent to sewage intakes and proposing the construction of sewage treatment facilities, the plan considered how current (1969) actions would affect the water supply for future generations. The environmental section equated that residents' health and wellbeing were directly impacted by the quality of the built and natural environment.

The 1993 "General Plan Refinement" did not concentrate on conservation or environmental topics but clarified that the 1969 plan implied historic preservation in its environmental goals.²⁸⁶ This was brief, since a separate Master Plan for Historic Preservation was published in 1979.

²⁸³ "Adopted Plan for Fairland and Beltsville and Vicinity", M-NCPPC, 1968.

²⁸⁴ Ibid

²⁸⁵ "Updated General Plan", Montgomery County Planning Board, M-NCPPC, 1969. https://montgomeryplanning.org/planning/master-plan-list/general-plans/updated-general-plan-1969/

²⁸⁶ "General Plan Refinement", M-NCPPC, 1993. https://montgomeryplanning.org/planning/master-plan-list/general-plans/general-plans-refinement-goals-amp-objectives-1993

Master Plan for Historic Preservation (1979)

The 1979 "Master Plan for Historic Preservation" was the first time the county established a plan that specifically addressed the need to "evaluate, protect, and enhance Montgomery County's heritage" and historic resources. ²⁸⁷ Its goal was to integrate preservation and resource protection into the overall planning process, and recommended "incentives and educational programs" to encourage both public and private preservation efforts. ²⁸⁸ The Plan's recommendations were officially implemented by the addition of Chapter 24A to the County Code, which set into law the Historic Preservation Ordinance (HPO) and establishment of a Historic Preservation Commission (HPC).

Prior to publication of the 1979 Plan, the county had already begun to identify its historic resources and archaeological sites. In 1968 the M-NCPPC published the "Bi-county Planning, Past, Present, Future" report which provided a map of the known historic and archaeological sites, 70 of which were in the bi-county parks system. Further identification occurred in the mid 1970s, and between 1973 and 1975 over 1000 resources were identified and published in the county's "Locational Atlas and Index of Historic Sites". Over 40 of these resources were nominated to the National Register of Historic Places, but historic resources — both identified and unidentified — were still threatened by development, transportation growth, neglect, abandonment, and vandalism. Even with National Register nomination and the Section 106 review process, protections remained procedural, not substantive or guaranteed. The Department of Housing and Community Development oversaw preservation activities at this time, and managed federal funding for sites listed on the National and State registers. In 1978 the county enacted an interim ordinance that protected the indexed sites from alteration or demolition by requiring an approval review process. This was the first regulation that protected resources until the adoption of the HPO in 1979. With its adoption, the HPC would be responsible for evaluating additional resources not identified in the "Locational Atlas and Index of Historic Sites."

The 1979 "Master Plan" included the "Locational Atlas" and guidelines for immediate evaluation and preservation efforts, but also established guidelines for future evaluation and conservation efforts. These guidelines highlighted the importance of: historic districts; rural lands; spatial buffer zones between development and historic resources to maintain "integrity" and "setting"; citizen participation; and financial incentives to encourage preservation. Expressing the qualitative reasons for preservation supported the societal and cultural benefits, but financial incentives would provide quantitative reasons for both the private and public sector to actively identify and preserve historic resources. The plan stated that the HPC should establish "revolving funds, grants, and easements" to encourage preservation activities and that the county should establish a "tax credit for easements." State and Federal tax incentives were also noted and encouraged the county to take advantage of a State Code which could provide property tax credits within designated districts, foreshadowing the importance of historic district area plans.

²⁸⁷ "Master Plan for Historic Preservation", M-NCPPC, 1979. https://montgomeryplanning.org/wp-content/uploads/2021/06/Master-Plan-for-Historic-Preservation.pdf

²⁸⁸ Ibid

²⁸⁹ "Master Plan for Historic Preservation", M-NCPPC, 1979. https://montgomeryplanning.org/wp-content/uploads/2021/06/Master-Plan-for-Historic-Preservation.pd

Overall, the "Master Plan for Historic Preservation" presented preservation planning as a way to "protect and enhance" the county's heritage for the current and future benefit of all residents. In this capacity, preservation was seen as a method of "providing continuity with the past" and maintaining "character and quality." The inherent shortcomings in this plan was the focus on tangible resources and property based incentives, but its goal was in establishing the importance of preservation and providing a groundwork for future amendments, historic district nomination, local plans, and a more inclusive framework to recognize diverse histories.

Preservation of Agriculture and Rural Open Space: Functional Master Plan (1980)

The "Preservation of Agricultural and Rural Open Space in Montgomery County" is a functional master plan that was adopted in 1980. The county council requested the planning board to identify elements of an effective program for agricultural land preservation. The goal of the plan was to preserve farm activity without a large expenditure of public funds.²⁹¹ In 1960, Maryland enacted the statewide "Agricultural Use Assessment Law" to provide preferential assessments on farmland that was "actively used" for agricultural use. This tax relief was to encourage farmers not to sell their property to developers.²⁹² The "Preservation of Agricultural and Rural Open Space" plan built on this to further persuade farmers from selling their land due to developmental pressures.²⁹³

The plan focuses on development and preservation policies, plans, and objectives for the identified agricultural preservation study area. It finds that it is in the public interest to preserve farmland. Not only does it preserve individual farms and productive soils, it also preserves a way of life important to the history of the area.²⁹⁴

The plan offers recommendations as to how to best preserve the land located in the study area. The main recommendations were: stabilize land values, minimize development pressures, avoid premature and fragmented subdivision, protect agricultural practices, improve agricultural support services, maintain a critical mass of agricultural land, relate county farmland preservation efforts to neighboring counties, and channel developmental growth into Clarksburg, Damascus, Olney Town Center, and Poolsville.²⁹⁵ To enact these recommendations, the plan also described a Farmland and Rural Open Space Land Use Program and public service guidelines. The land use program organized the land into four categories based on their need for preservation: agricultural reserve (primary agricultural areas), rural open space (secondary agricultural areas), rural communities and villages, and corridor cities and satellite communities (growth centers).²⁹⁶ The public service guidelines focused on water and sewerage, transportation, and environmental guidelines.²⁹⁷ Some future recommendations outlined in the plan focused on planning, programming, and regulatory actions.

²⁹⁰ "Master Plan for Historic Preservation", M-NCPPC, 1979. https://montgomeryplanning.org/wp-content/uploads/2021/06/Master-Plan-for-Historic-Preservation.pd

²⁹¹ "Functional Master Plan for the Preservation of Agriculture and Rural Open Space in Montgomery County," M-NCPPC, 1980. https://montgomeryplanning.org/wp-content/uploads/2016/09/Preservation AgricultureRuralOpenSpaceFunctionalMasterPlan1980ocr300.pdf

²⁹² Ibid. ²⁹³ Ibid.

²⁹⁴ Ibid.

²⁹⁵ Ibid.

²⁹⁶ Ibid.

²⁹⁷ Ibid.

These consisted of suggesting to revise the ten year water and sewer plan, continue and expand marketing information programs for farmers about the benefits of preserving their land, and working with the board of education to highlight careers in agriculture.²⁹⁸

Eastern Montgomery County Master Plan (1981)

The "Eastern Montgomery County Master Plan" was adopted in 1981 to specifically address the growth and development of Eastern Montgomery County. The plan recognized the shift from rural agricultural to developed suburban landscapes, and focused on land-use provisions to control development and subdivision construction. Within this plan environmental concerns were raised, and assessment and protections were proposed to conserve the habitats, air quality, and water quality adjacent to watersheds. It was suggested that density be limited in those areas that drain to the Paint Branch watershed.

This plan led to the creation of four separate, area specific master plans in the eastern part of the county: Cloverly, Fairland, Four Corners, and White Oak. These plans were updated simultaneously to address "common issues" and concerns of regional growth, transportation, and environmental protection, as they apply to the specific coverage areas. These plans build off of the previously amended "General Plan" (1964, 1969,1993) and the "Master Plan for Historic Preservation" (1979). The plans were published as follows: White Oak (1996), Four Corners (1996), Cloverly (1997), and Fairland (1997).

Environmental Resources Technical Report: Eastern Montgomery County Master Plan Areas (1996)

The "Environmental Resources Technical Report for the Eastern Montgomery County Master Plan Areas" was generated in 1996. This provided the technical and historical background to support the environmental recommendations for the four Eastern Montgomery County master plans: Four Corners, White Oak, Cloverly, and Fairland.²⁹⁹ The report assessed current (1996) natural resources, environmental planning issues, resource management issues, and environmental protection resources in Eastern Montgomery County. Findings from the report informed the master plan areas and their general environmental goals: protect and enhance natural resources for the enjoyment of residents, and sustain a healthy environment.³⁰⁰ The specific environmental recommendations for each area can be found in that area's master plan.

The areas of this report provided an overview of environmental protection in Eastern Montgomery County. Topics that are covered are the approach to water resource protection in master planning, habitat preservation, forest conservation, greenways, air quality, public utilities and solid waste.³⁰¹ For each topic the report outlines the existing conditions and provides the background information needed to generate the recommendations found in the four master plans.

²⁹⁸ Ibid.

²⁹⁹ "Environmental Resources Technical Report", M-NCPPC, 1996.

³⁰⁰ Ibid.

³⁰¹ Ibid.

Fairland Master Plan (1997)

The "Fairland Master Plan" was adopted in 1997 as a "comprehensive amendment" to the 1981 "Eastern Montgomery County Master Plan". Adoption of the plan was intended to guide the development of Fairland into a "livable suburban community" by assuring its growth occurred in a manner consistent with the 1964 "General Plan" and the 1993 "General Plan" refinement. In the 1980s Fairland experienced a period of significant growth; the Metro extension and continued commercial development made Fairland an attractive and affordable community, conveniently located between Washington, DC and Baltimore. Housing units increased from 5,000 to 13,000+ units and employment rose from 5,700 to 15,800+ jobs. The 1997 plan recognized that this period of growth occurred prior to strict environmental protections and recommended further protection of environmental and historic resources as a priority.

Building upon the 1969 "General Plan" refinement, the protection of stream quality, wetlands, steep slopes, floodplains, and forested areas is noted and it is further recommended that lands adjacent to the tributaries of the upper Paint Branch be acquired to improve the water quality of streams and aid in stormwater management. It was also recommended that development be clustered to maintain a buffer between built and natural environments. The plan notes the importance of maintaining impervious surfaces to help with stormwater management, thus helping maintain stream temperatures and aquatic life. Environmental concerns also proposed a reduction in single-occupancy vehicles to help reduce emissions and noise, and improve air quality in the area. Forest cover was prioritized for conservation and it was recommended that cover be expanded upon in areas conducive to growth and reforestation.

The "Historic Resources and Preservation" section of the 1997 "Fairland Plan" reiterated the importance of recognizing significant historic sites, protecting and enhancing the area's historic and architectural heritage for future generations, and integrating historic sites into new and existing development. The "Fairland Plan" references the Montgomery County "Master Plan for Historic Preservation" and identifies seven designated sites within Fairland; two additional sites were recommended for designation and five sites were recommended for removal due to extensive alterations. The section on historic preservation is brief and in order to recognize and protect historic sites, relies upon the effectiveness of both the "Locational Atlas and Index" and the "Master Plan for Historic Preservation".

Thrive Montgomery 2050

The Thrive Montgomery 2050 is an update to the "General Plan", which was last updated in 1993. This plan seeks to address the new challenges and changing circumstances that Montgomery County

^{302 &}quot;Fairland Master Plan", Montgomery County Planning, M-NCPPC, 1997. https://montgomeryplanning.org/planning/communities/upcounty/fairland/fairland-master-plan-1997/

^{303 &}quot;Fairland Master Plan", Montgomery County Planning, M-NCPPC, III, 1997. https://www.montgomeryplanning.org/community/plan_areas/eastern_county/master_plans/fairland/documents/FairlandMasterPlan3.pdf 304 Ibid.

³⁰⁵ Ibid.

^{306 &}quot;Fairland Master Plan", Montgomery County Planning, M-NCPPC, VI, 1997. https://www.montgomeryplanning.org/community/plan_areas/eastern_county/master_plans/fairland/documents/FairlandMasterPlan6EnvHx.pdf
307 Ibid.

is and will face. 308 It also acknowledges that the "Wedges and Corridors Plan" had unintended consequences such as inequitable investment between the east and west county, excessive reliance on cars, and zoning more than one-third of the county for single family homes.³⁰⁹ Thrive Montgomery 2050 seeks to address the challenges of climate change, the changing demographics of the county, and needs of its residents to help shape Montgomery County for the next 30 years.

Thrive 2050 covers a broad range of elements. To organize and achieve the goals outlined, the plan breaks it down into six categories: complete communities, transportation, housing, parks and recreation, compact growth, and design, arts, culture. Through these categories Thrive 2050 covers recommendations for land use, zoning, housing, economic development, equity, transportation, parks and open space, the environment, and historic resources. This comes in the form of defining the basic land use setting and context for all public and private actions in the county and addressing the land-use planning issues covered by all comprehensive plans. 310

Thrive 2050 addresses historic preservation in the design, arts, and culture section. They encourage the preservation, renewal, and reuse of existing and historic buildings, districts, and landscapes. This is to help ensure the evolution of communities and celebrate the local culture and identity of the county.311 This plan also focuses on incentivizing "the resume of historic buildings and existing structures to accommodate the evolution of communities, maintain building diversity, preserve naturally occurring affordable space, and retain embodied energy of structures."312 The plan supports the idea that historic preservation can be a vehicle for continued development, economic growth, and affordable housing all while preserving the culture of the county.

A major way the Thrive 2050 plan addresses environmental conservation is in the parks and recreation section. This section addresses the changing needs of a more culturally diverse population and a need for sustainable practices. Through focusing on the preservation of open space, the plan sets out goals such as creating high quality urban parks, promoting active lifestyles, ensuring parks and recreation opportunities are accessible and equitable distributed, updating strategies to align with infill development and adaptive reuse, etc. 313 Thrive 2050 recognizes the importance of integrating parks, recreation, and public spaces into economic development strategies and land use planning. This helps to attract employers and workers, build social connections, and encourage healthy lifestyles.³¹⁴ Through championing the conservation of parks and openspaces, the plan also addresses sustainability. Parks and openspaces help to address the effects of climate change and enhance environmental resiliency. Stream restoration, stormwater management projects, wildlife corridors, and urban tree canopies are all methods mentioned that mitigates the effects of pollution.³¹⁵

^{308 &}quot;Thrive Montgomery 2050," Montgomery Planning, last modified April 29, 2019, accessed October 17, 2021, https://montgomeryplanning.org/ planning/master-plan-list/general-plans/thrive-montgomery-2050/.

³⁰⁹ Ibid.

³¹⁰ Ibid., 4.

³¹¹ Ibid., 64.

³¹² Ibid., 65.

³¹³ Ibid., 116-122.

^{315 &}quot;Thrive Montgomery 2050," Montgomery Planning, 124

Conclusion

The policies outlined here include the local and county laws, regulations, and evaluations related to preservation and conservation. While historic preservation and environmental conservation plans evaluate, protect, and enhance the county's historic and environmental landscapes, amendments would be required to existing policies to see to the continued evaluation of resources, trends, and societal needs.

Chapter 7

Federal, State, and Local Preservation & Environmental Policy

There are numerous laws, regulations, rules, and guidelines at the federal, state, and local levels that shape the preservation field and directly impact the historic resources located within the Fairland and Briggs Chaney Master Plan Area. In addition to historic preservation policies that impact Fairland's historic resources, this chapter also examines federal, state, and local policies that govern environmental conservation. The policies outlined below are not a comprehensive list of every preservation and environmental conservation policy in existence; rather, the policies below were chosen as they are most applicable to the Fairland and Briggs Chaney Master Plan Area.

Before the various guidelines, rules, and regulations for historic preservation, environmental protection, and conservation are examined at the federal, state, and local levels, it is important to make a distinction between each of the aforementioned terms. Laws (statutes) are passed by elected bodies; through administrative procedures, government agencies create regulations to implement a law. Rules are the specific sections in a regulation that can be legally enforced. Government agencies create guidelines to interpret how regulations and rules should be followed. Guidelines, therefore, are not legally binding, but are instead enforced by government agency staff who are charged by the agency to apply these guidelines in their work. Below is an example related the National Register of Historic Places:

- Law: National Historic Preservation Act (NHPA)
- Regulation: 36 CFR 60 (implements Section 101 of the NHPA to create the National Register of Historic Places)
- Rule: 36 CFR 60.4 (establishes evaluation criteria for historic resources)
- Guideline: National Register Bulletin 16 (how to complete a National Register nomination)

To use a more applied example when a State Historic Preservation Office (SHPO), which is charged with implementing federal preservation rules and regulations, evaluates whether or not a National Register nomination can be accepted, the requirement that the resource be at least 50 years old is a legally binding rule; the requirement that the argument for historical integrity in the nomination cannot be based solely on feeling and association is a guideline from the National Register Bulletin. The 50 year rule can be enforced in a court of law, while the integrity guideline cannot. However, functionally, in the way SHPOs are required by their agency to narrowly adhere to a guideline for integrity has the same functional outcome to an applicant as does a rule.

Historic Preservation

Federal

National Historic Preservation Act (1966):

The National Historic Preservation Act, at the time it was passed, was the most comprehensive preservation law in the United States as it created permanent institutions and defined a process for historic preservation in the country. The law stipulates that historic structures that will be affected by federal projects or by federally-funded work must be documented according to standards issued by the Secretary of the Interior. The law also created the Advisory Council on Historic Preservation (ACHP) and the National Register of Historic Places. Section 106 of the law requires each federal agency to do two things prior to carrying out, approving financial assistance to, or issuing a permit for a project that may affect a historic properties listed or eligible for listing in the National Register of Historic Places: 1) the agency must consider the impact of the project on historic properties and

2) the agency must seek the ACHP's comments on the project.³¹⁷ This law is applicable to the Master Plan Area because of the significant historic and cultural resources that are present and the potential National Historic Preservation Act, 54 U.S.C. §§ 300101-307108 (1966).

³¹⁷ Further information regarding Section 106 can be found on the Advisory Council on Historic Preservation website at the following link: https://www.achp.gov/protecting-historic-properties/section-106-process/introduction-section-106.

for each resource to be affected by federal or federally-funded projects in the area.

National Register Criteria:

The National Register Criteria was established by the National Park Service to guide the selection of properties included in the National Register of Historic Places. The criteria are as follows:

"The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded, or may be likely to yield, information important in prehistory or history."³¹⁸

There are also seven criteria considerations that are special requirements for certain types of properties that are not usually considered for listing, including religious and moved properties, birthplaces and graves, cemeteries, reconstructed properties, and properties that have become significant within the past fifty years.³¹⁹

These criteria are directly applicable to the cultural and historical resources in the Master Plan Area through their documentation of each resource on the Maryland Inventory of Historic Properties Form. The form is based off of the nomination form for the National Register of Historic Properties and properties have the potential to be listed in Maryland's State Register of Historic Places. The criteria's emphasis on a specific period of significance has the potential to limit the significance of a place to one specific point in time, which excludes the multiple layers of history that often belong to a site. The Fairland/Briggs Chaney area has such a diverse history that trying to fit the entire area into one period of significance may leave out important histories that are integral to the story of the area's development. Criteria for listing in the National Register has historically been focused on architectural merit. Because criteria for listing on the National Register is so heavily focused on architectural integrity, the historic structures and sites belonging to marginalized groups have rarely been recognized for their historic significance because those structures no longer possess adequate integrity, which is the case with the Master Plan Area. Listing and designation often come with many benefits, including funding and some form of protection.

NPS Integrity Standards:

The National Park Service (NPS) defines integrity as the "ability of a property to convey its historical associations or attributes." The aspects of integrity evaluated to be listed on the National

^{318 36} CFR § 60.4

³¹⁹ Ibid

^{320 &}quot;National Park Service: Glossary of Terms," National Parks Service (U.S. Department of the Interior), accessed October 17, 2021, https://www.

Register are defined as a historic site's location, design, setting, materials, workmanship, feeling and association. For a site to maintain its "integrity" the aspects that most pertain to its significance must be retained. For example, if a site is significant because it is associated with a certain style of architecture, the modern site must maintain the architectural components related to that style to maintain its integrity. If too much construction or alteration is performed on a site associated with a significant style of architecture, it risks losing integrity and its chance of historic designation. These integrity standards laid out by the NPS are utilized to determine a site's eligibility to the National Register and are often utilized by state and local governments to determine the integrity of sites of local significance.

In recent years these integrity standards have been critiqued by practitioners as they often result with sites associated with affluent, white men being protective over more diverse sites. Integrity often translates in historic preservation to architectural components of a site. Preservation and National Register eligibility criteria has, and continues to place, too much emphasis on architectural integrity which negatively impacts historic resources in our area. Sites associated with richer individuals, able to incorporate stylish architectural trends of a given era, are more likely to be preserved by descendants or historians/preservationists and therefore will have a higher degree of historical integrity than vernacular resources. For example, slave cabins associated with African American history were constructed with less expensive materials and were often modified after emancipation to suit the needs of tenants or sharecroppers. The modification or decay of a slave cabin may under these integrity standards not be considered for designation which denies the site resources for continued preservation. In relation to Fairland and Briggs Chaney, our research shows that many of the Maryland Inventory of Historic Property listings for historic structures in the Master Plan area state they lack sufficient integrity to be listed. Therefore, it is prudent of future historic preservation plans in Fairland and Briggs Chaney to incorporate intangible heritage arguments for saving a structure that may not contain architectural integrity.

Secretary of the Interior's Standards for the Treatment of Historic Properties:

There are four approaches to the treatment of historic properties outlined by the Secretary of the Interior's standards" preservation, rehabilitation, restoration, and reconstruction. These standards for the treatment of historic properties relate to the Fairland and Briggs Chaney Master Plan area because they will guide the planning of future preservation efforts. The following describes each approach:³²¹

- Preservation concerns the maintenance of an existing building and emphasizes the retention of distinctive and integral qualities of said building.
- Rehabilitation allows for alteration, repairs, or additions to a historic property while still
 maintaining its distinctive historical character or architectural features. Rehabilitation allows
 for the alteration to meet modern day needs of the structure.
- Restoration refers to re-constructing or removal of modern additions to a particular room or feature of a historic structure.
- Reconstruction refers to the process of the new construction of a structure that no longer

nps.gov/subjects/nationalhistoriclandmarks/glossary.htm#:~:text=Historic%20Integrity,its%20historical%20associations%20or%20attributes.

321 See: Revised by Anne E. Grimmer. 2017. "THE SECRETARY OF THE INTERIOR'S STANDARDS FOR THE TREATMENT OF HISTORIC PROPERTIES". Prepared for: U.S. Department of the Interior National Park Service Technical Preservation Services Washington, D.C. https://www.nps.gov/tps/standards/treatment-guidelines-2017.pdf

exists on the landscape.

Historical and Archaeological Data Preservation Act (1874):

The Historical and Archaeological Data Preservation Act (HADPA) provides for the preservation of archaeological and historical data that might otherwise be lost as a result of changes in terrain caused by a federal or federally licensed program or activity. To carry out the purposes of the act, HADPA allows for the transfer of up to one percent of the appropriations for the project to the Secretary of the Interior. Unlike Section 106, which mandates that federal agencies consider historic properties during their planning, HADPA guides the implementation of mitigation measures once an agency reaches a decision.

Archaeological Resources Protection Act (1979):

The Archaeological Resources Protection Act (ARPA) was designed to protect archaeological resources on Indian and federal lands and to encourage the exchange of information concerning such properties between the archaeological community and the federal government. ARPA strengthens HADPA by providing specific permit procedures that all persons must follow before excavating or removing any archaeological resource on Indian or federal lands. Unlike the NHPA, ARPA provides civil and criminal penalties for failure to comply with the act.

HADPA and ARPA apply in regard to the archaeologically sensitive areas in the Fairland Briggs Chaney Master Plan Area. Although many identified archaeological sites are not shared with members of the public, there is no doubt that the Master Plan Area does contain significant archaeological sites, including the Jackson Homestead, which was paved over during the ICC project. While the visible landscape of the Fairland/Briggs Chaney area has changed throughout the past half century from farmland to a more suburban area, many cultural resources that exist below ground still remain.

NAGPRA:

The Native American Graves Protection and Repatriation Act (NAGPRA) was signed into federal law on November 16, 1990. NAGPRA requires entities that receive federal funding return Indignenous cultural items to federally recognized, lineal descendants or culturally affiliated indigenous organizations. The cultural items that are required to be returned to said indigienous people groups include human remains, funerary or sacred objects, and objects of cultural patrimony. An item that falls under cultural patrimony is defined as "having ongoing historical, traditional, or cultural importance central to the Native American group or culture itself." This law also created federal grants that fund projects of repatriation. NAGPRA also established procedures for the inadvertent or purposeful discovery of Native American cultural items during archaeological excavations on federal or tribal lands. Finally, NAGPRA established trafficking of Native American human remains and cultural items without right of possession a criminal offense.

As with all lands currently located in what is now called Maryland, it is likely that Fairland and Briggs Chaney contain archaeological or heritage sites that relate to Indignenos history and culture, including sites of ancient and contemporary importance. If future archaeological excavations occur

³²² U.S. Congress. United States Code: Archaeological Resources Protection, 16 U.S.C. §§ 470aa-470mm. 1988. Periodical. https://www.loc.gov/item/uscode1988-006016001b/.

³²³ The Native American Graves Protection and Repatriation Act (NAGPRA), Pub. L. 101-601, 25 U.S.C. 3001 et seq., 104 Stat.

in the master plan area that receive federal funding and the above mentioned cultural items are excavated, NAGPRA will apply in how that excavation continues or is halted. Further, if there have been excavations in the past located in the master plan area that have revealed said cultural items that are now being curated in a Maryland archaeological depository or elsewhere, NAGPRA will require the repatriation of those items to a federally recognized affiliated tribe. While there are no federally recognized tribes currently in Maryland, that is not to say that the three state recognized tribes may become federally recognized in the future and this federal law will become relevant to such sites. Finally, state laws that concern the same issues as NAGPRA often utilize the same language as the federal law and apply the regulations to state recognized tribes, see below.

State

Land Use Article:

The current Land Use Article was made into law in 2012 by the Maryland General Assembly thereby repealing Article 66B and Article 28. The Land Use Article dictates the functions of the planning commission of Maryland and outlines the rules related to planning and zoning. Under the Land Use Article, 5A-324 establishes the Maryland Advisory Council on Historic Preservation and local Historic Preservation Commissions. This section describes the seven membership positions of the council who are appointed by the governor, tenure of the members, and the duties of the council members. The council meets when the Maryland Historical Trust and other state agencies disagree on avoiding adverse effects from state undertakings on properties listed or eligible for the National Register of Historic Places. The Maryland Advisory Council on Historic Preservation relates to the preservation of Fairland and Briggs Chaney in the event that a decision cannot be made concerning the adverse effects of a state undertaking or destruction of a historic property. While charter counties including Montgomery utilize Title 10 of the Local Government Article for zoning and planning, however, Montgomery county must abide by certain provisions of the Land Use Article. Title 10 has similar language to the Land Use Article.

Maryland Commission on Indian Affairs:

The Maryland Commission on Indian Affairs works for the interests of Native American communities in Maryland. The commission aids indigenous groups in obtaining state or federal recognition. This commision follows much of the criteria of NAGPRA by protecting indigenous burial and culturally significant sites. It also supports indigenous communities by providing resources related to their educational, social, and economic needs. Similar to NAGPRA, This commission is relevant to the historic preservation of Fairland and Briggs Chaney as it relates to the discovery of indigenous archaeological and cultural sites.³²⁵

Local

Montgomery County Historic Preservation Ordinance

Chapter 24A of Montgomery County Code includes the Montgomery County Historic Preservation

³²⁴ See: Maryland Department of Planning, "Comprehesnive Plans, Legal Basis for Planning" https://planning.maryland.gov/Pages/OurWork/compplans/legal.aspx

³²⁵ The Governor's Office of Community Initiatives. "Maryland Commission on Indian Affairs". https://goci.maryland.gov/maryland-commission-on-indian-affairs/

Ordinance.³²⁶ A historic preservation ordinance is created by local code to ensure the protection of historic structures from destruction. The Montgomery County Ordinance creates guidelines utilized by the county's Historic Preservation Committee (HPC) to assist property owners with caring for their historic properties. A historic preservation commission is also responsible for the identification of historic resources and the protection of historic resources from adverse effects of new construction, owner alteration, neglect, or decay. The design guidelines of a historic area are also utilized by the HPC to give historic area work permits to property owners. A historic area work permit is required prior to making extensive changes to the exterior of a designated historic structure. In relation to the historic preservation of Fairland and Briggs Chaney, the Montgomery County design guidelines should be followed to ensure the historic characteristics of various areas of the city are preserved. If the alteration of a designated historic site commences for whatever reason the historic preservation commission must be involved and depending on the situation a historic preservation work permit may be necessary prior to any changes. While Fairland and Briggs Chaney are named in the design guidelines, nearby areas such as Silver Spring and Wheaton may be used in substitution.

Environmental Conservation

Federal Level

NEPA:

In 1970, The National Environmental Policy Act (NEPA) was written into law. NEPA established a broad national framework that promotes the protection of the environment. The created the President's Council on Environmental Quality which coordinates federal environmental conservation in the USA and promotes environmental initiatives within federal agencies. NEPA requires federal agencies to instigate environmental assessments and environmental impact statements. Environmental assessments investigate the environmental consequences of federal undertakings and to ensure the environmental impacts of a proposed project. Environmental impact statements are required for projects or actions that significantly impact the human environment. NEPA is often utilized with Section 106 reviews as both processes require federal agencies to consider the impact of undertakings on the cultural landscape. The use of environmental impact statements and Section 106 can be utilized together to strengthen causes related to saving endangered historic structures or landscapes.

State Level

Maryland Environmental Protection Act (1973):

The Maryland Environmental Protection Act (MEPA) was designed after the National Environmental Policy Act (NEPA) but varies slightly from the federal law.³²⁸ MEPA requires a formal analysis of the environmental effects (in the form of an "environmental effects report") of a proposed action only in circumstances when an agency requests legislative action. MEPA's language also has broad directives concerning the obligations state agencies have to consider environmental

³²⁶ See: https://www.montgomeryplanning.org/historic/documents/historic_preservation_ordinance.pdf

³²⁷ National Environmental Policy Act of 1969 (P.L. 91-190): Bibliography. Washington, D.C.: Congressional Research Service, Library of Congress, 1975.

³²⁸ Maryland Environmental Policy Act of 20120 (S. 1-301): MAryland Department of Natural Resources. https://law.justia.com/codes/maryland/2010/natural-resources/title-1/subtitle-3/1-301/

impacts when forming policy and making decisions similar to those found in NEPA. In general, the law promotes the protection, preservation, and enhancement of the State's environment, which is recognized as necessary for maintaining public health and welfare and contributes significantly to the State's economy.

Maryland Forest Conservation Act (1991):

The Maryland Forest Conservation Act was created to minimize the loss of the state's forest resources during land development by including the identification and protection of forests and other environmentally-sensitive areas an important part of the site planning process. Areas of specific focus include areas adjacent to wetlands or streams, those within or next to large contiguous areas of forest or wildlife corridors, and those on steep or erodible soils. Projects subject to this act will require an application for a subdivision, grading permit, or sediment control permit on areas one acre or greater.

Local Level

Montgomery County Forest Conservation Law (1992):

This law, which is based on Maryland's Forest Conservation Act, aims to protect and maintain trees and forests for the myriad benefits they provide to county residents, while also promoting the planting of trees. 330 The law applies to developers, government entities, and some property owners who require approval for a development plan, sediment control permit, or activity that may harm a champion tree. Any person or organization subject to this law must meet a forest planting or a calculated forest retention requirement. This requirement can be met through purchasing credits from one of the county's forest mitigation banks, protecting or planting forests with forest conservation easements, or contributing to the county's Forest Conservation fund.

Montgomery County Special Protection Area Law (2013):

A Special Protection Area (SPA) is an area designated by the County Council within a watershed where wetlands, streams, and other related natural resources are of a high quality and where special measures must be applied to protect the area from land development and certain land uses that may cause harm to the natural features.³³¹ Montgomery County has five SPAs: Upper Paint Branch, Piney Branch, Upper Rock Creek, Clarksburg, and the portion of Ten Mile Creek watershed that lies within the Clarksburg Master Plan.³³² This law strengthens water resource protection measures in regard to new and expanded development projects and goes beyond standard environmental laws, regulations, and guidelines for land uses and land development.

Guidelines for Environmental Management of Development in Montgomery County:

The Guidelines for Environmental Management of Development in Montgomery County were approved in 1997 and comprises the current policies and guidelines relevant to natural resources during the planning and development process.³³³ The purpose of these guidelines is to protect

³²⁹ See: Maryland Department of Natural Resources. "Forest Conservation Act". https://dnr.maryland.gov/forests/Pages/programapps/newfca.aspx ³³⁰ See: Montgomery County Planning, MD. "Montogmery County Forest Conservation Law". https://montgomeryplanning.org/planning/environment/forest-conservation-and-trees/montgomery-county-forest-conservation-law/

³³¹ See: Montgomery County Planning, MD. "Special Protection Areas". https://montgomeryplanning.org/planning/environment/water-and-wet-lands/special-protection-areas/

^{332 &}quot;Frequently Asked Questions." Montgomery County Planning Department. http://montgomeryplanning.org/environment/spa/faq.shtm 333 See: Montgomery County Planning, MD. "Guidelines for Environmental Management of Development in Montgomery County," https://montgomeryplanning.org/planning/environment/environmental-guidelines-reports/environmental-guidelines/

Montgomery County's natural resources and to require environmental impact prior to approval of development projects by the Montgomery County Planning Board. The guidelines called for the construction of the Natural Resource Inventory of Montgomery County natural resources to ensure future construction of environmentally friendly site designs.

Other Local Environmental Conservation Codes and Acts

- 'Rural and Rural Cluster Zones' (1974) Montgomery County Council established
 protections for rural lands and farmlands in an effort to concentrate development along
 primary corridors.³³⁴
- Eastern Montgomery County Master Plan (1981) The county planned to preserve vegetation, watersheds, and overall water quality, by maintaining sprawl. Controls were set for phased land clearing, stormwater management, and sediment/erosion control. 335
- Patuxent River Policy Plan (1984) Maintained water quality by protecting and restoring the transition area(s) between streams and (new) development.
- Maryland Planning Act (1992) Identified stream buffers, identified threatened/ endangered habitats, and established a 100-year flood plain.³³⁶
- Forest Conservation (1992) County legislation that protected forest and woodlands from future development.
- Protection of Paint Branch Watershed (1995) Protected as one of the only streams in the nation that sustains long-term reproduction of trout.³³⁷
- Montgomery County Master Plan (1997) Fairland became part of an Environmental Restoration Area and Fairland Regional Park became an Environmental Preservation Area. Proposals sought to limit impervious surfaces and acquire further properties for conservation. The National Environmental Protection Act and Federal Clean Water Act provided further protections for watersheds and parklands.³³⁸

³³⁴ Montgomery County Department of Park and Planning, The Maryland-National Capital Park and Planning Commission, The Fairland Master Plan, March 1997, p.135

³³⁵ Ibid., 134.

³³⁶ Montgomery County Department of Park and Planning, The Fairland Master Plan, 132.

³³⁷ Ibid., 136.

³³⁸ Ibid., 129.

Preservation & Environmental Grant/ Funding Analysis

There are a number of financial resources available for both environmental conservation and historic preservation in the Fairland and Briggs Chaney Master Plan area. These financial resources are available at the national, state, and local levels. This chapter provides an overview of the most applicable and relevant resources for conservation and preservation within the Master Plan area, a gap analysis of the current resources available versus potential future resources or tools, and finally, a more comprehensive list of financial resources available for environmental conservation and historic preservation within the Fairland and Briggs Chaney Master Plan area.

Environmental Conservation Financial Tools

National Level

There are two major national grant programs that the Fairland and Briggs Chaney Parks and Recreation may apply to:

- 1. Nature Conservancy Grant
- 2. Robert Wood Johnson Foundation Grants

The National Conservancy Grant is dedicated to protecting natural resources that help mitigate climate change. This includes the wetland restoration, reforestation, enforcement of buffer flood zones, and other natural activities that help to reduce the impact of climate change on the environment. Funding for this grant ranges from \$50,000-\$200,000 and the grant term is 15 months. All 501(c)(3) nonprofits are eligible to apply and this would require local Fairland and Briggs Chaney organizations to be applicants. While public-private partnerships result in substantial risk, this would provide an opportunity for Montgomery Planning to foster a deeper relationship with the community while also having stakeholder and expert input during the planning process. The Nature Conservancy requires proposals that are related to climate mitigation and successful projects are selected based on project impact, likelihood of transforming the area, and if the project will be successful. Potential topics for Fairland and Briggs Chaney would include reforestation of park areas and protection of current wetland areas.

The Robert Wood Johnson Foundation grant focuses on how conservation and green spaces have excluded underrepresented communities. The grant is meant to reduce the inequality in access to green spaces such as playgrounds, parks, and outdoor recreational facilities. All eligible applicants must be non-profits, public entities, certified 501(c)(3) groups or at least financially sponsored by a tax-exempt group. This grant does exclude university/academic institutions from being primary applicants. Grants can reach up to \$500,000 and circulate on a 2 year cycle. Eligible projects must be related to reducing inequity in green space. Successful applicants are those who are those who also include policy and systemic change because access to greenspace is not solely a physical issue. While Fairland and Briggs Chaney have two recreational centers, it is important to have other green spaces accessible to all residents given the health benefits that are derived from green space access. (See Chapter on Environmental Analysis).

State Level

There are several Maryland State grants that are offered through the Department of Natural Resources (DNR). The two that are most relevant to Fairland and Briggs Chaney are:

- 1. Community Grants for Parks and Playgrounds Program Assistance
- 2. Conservation Easement Program Conservation Property Tax Credit

The Fairland and Briggs Chaney Master Plan area has two major recreational parks: Fairland Recreational Park and Edgewood Recreation Park which are both owned by Montgomery County.

The community grant offered by DNR is available for local governments such as Montgomery County, to rehabilitate, improve, or expand existing parks. While both parks are in fairly good condition, the grant provides an opportunity to improve and replace park equipment as needed, and create safe trails which include proper signage of trail maps and properly paved paths. The caveat with this grant is that projects must have a minimum of a 20-year life span, which may exclude some projects. Part of this grant also be used to fund new green spaces that center around community gathering. Recent public engagement activities from the Montgomery County Planning Department with the Fairland and Briggs Chaney community had found that residents were deeply interested in increasing community meeting spaces as there is a lack of them in the area.

The Conservation Easement tax credit is offered for private landowners who wish to protect their natural lands in perpetuity. These lands are considered a charitable donation and may be deducted from federal income taxes and can be deducted for one years of taxes if the property value of the land donation is 50% less than the landowner's adjusted gross income or spread over a course of 15 years if it is not. In order to qualify for Maryland Income Tax credit, the land must be donated to the Maryland Environmental Trust. The max credit for state-income tax credits is \$5,000 a year and a max credit of \$80,000 based on the value of the easement. This particular program is an option for private landowners in Fairland and Briggs Chaney who wish to preserve their green spaces. Owners who may be interested in this type of tax credit program would be those with large plots of lands.

County Level

Local community resources for environmental protection are funded by the Montgomery County government:

- 1. Montgomery County Watershed Restoration and Outreach Grant Program
- 2. RainScapes Rebate programs

The Fairland and Briggs Chaney Master Plan area covers two watersheds; the Paint Branch and Little Paint Branch. Paint Branch Watershed is a tributary of the Northeast Branch, which flows to the Anacostia River, Potomac River, and the Chesapeake Bay. Paint Branch flows south and joins with the smaller Little Paint Branch tributary in College Park, Maryland.

The Montgomery County Watershed Restoration and Outreach Grant Program is a joint program offered by Montgomery County and the Chesapeake Bay Trust. The grant program promotes initiatives to improve water quality in Montgomery County's local streams and waterways, and funds a number of projects, including public outreach and stewardship projects, community-based restoration water quality implementation projects, and litter reduction projects in the Anacostia River Watershed. Any 501(c)(3) nonprofit organizations can apply to the Montgomery County Watershed Restoration and Outreach Grant Program, under either:

- Track 1 (up to \$30,000 for Public Outreach and Stewardship projects)
- Track 2 (up to \$100,000 for Community Based Restoration projects) or
- Track 3 (up to \$50,000 for Litter Reduction in the Anacostia River Watershed projects).

Matching funds are encouraged but not required. The Montgomery County Watershed Restoration and Outreach Grant Program is an excellent financial resource for improving the health of both the Paint Branch and Little Paint Branch tributaries within the Fairland and Briggs Chaney Master Plan area.

The Rainscapes Program is a Montgomery County funded initiative to encourage community members through rebates to install Rainscapes techniques. Rainscaping refers to the installation of landscape alterations or installations that reduce stormwater runoff which can include rain gardens, rain barrels, green roofs, and other activities. This program is open to all Montgomery County residents with the exclusion of Rockville, Gaithersburg, and Takoma Park. Rebate maximums for properties run with the parcels for a lifetime, and includes a maximum rebate value of \$7,500 for residential properties, and \$20,000 for commercial, HOAs, multi-family or institutional properties. Stormwater runoff can be problematic for the environment because they can damage existing stream banks by pushing excess sediment, de-regulate temperatures of waterways, and ruin vegetation. This rebate program is beneficial to the Fairland and Briggs Chaney residents who have expressed interest in helping mitigate climate change while also having an added incentive.

Historic Preservation Financial Tools

National Level

There are several financial resources available for historic preservation projects at the national level. Of these, only one is relevant for the Fairland and Briggs Chaney Master Plan area, as the National Park Service (NPS) Federal Historic Preservation Tax Incentives Program is applicable only to income-producing buildings, and historic structures within the Fairland and Briggs Chaney Master Plan area are currently privately-owned homes.

The National Trust for Historic Preservation (NTHP) African American Cultural Heritage Action Fund may be a helpful financial resource for one particular site within the Fairland and Briggs Chaney Master Plan area. The Jackson Homestead Site (18MO609) was identified through a Phase I survey and excavated by archaeologists prior to the construction of the Intercounty Connector (ICC)/Route 200 as the Maryland State Highway Administration (SHA) was required to comply with Section 106 of the National Historic Preservation Act (NHPA), as well as the National Environmental Policy Act (NEPA) and the Maryland Historical Trust Act. Malinda Adams Jackson was born into slavery in Fairland in 1825. Malinda and her mother were enslaved by Zachariah Downs, who willed them to his daughter, Ann Magruder Downs. In 1869, Malinda purchased 8.75 acres of the Prospect of Peace tract from her former owner, Ann Magruder Downs, and lived there with her family until her death. In 1915, the house was destroyed by a fire, and Malinda's daughter Mary sold the property in 1916. Archaeologists excavated more than 160,000 artifacts from the site, and it has been called "one of the most intact archaeological sites in Maryland." The structure was fully excavated with 100% collection, and the artifacts are currently housed at the Maryland Archaeological Conservation Laboratory. The structure was fully excavated with 100% collection, and the artifacts are currently housed at the Maryland Archaeological Conservation Laboratory.

³³⁹ Mary Otto, "Make Way for Tomorrow," The Washington Post, April 24, 2008.

³⁴⁰ Sara Rivers Cofield, "18MO609 Jackson Homestead c.1800-1915," Diagnostic Artifacts in Maryland, Jefferson Patterson Park & Museum, State Museum of Archaeology, accessed 10/16/2021. https://apps.jefpat.maryland.gov/diagnostic/SmallFinds/Site%20Summaries/18MO609-JacksonHomestead-SiteSummary.htm

The National Trust for Historic Preservation (NTHP) African American Cultural Heritage Action Fund would aid in furthering interpretation of the Jackson Homestead site. Although the site has been destroyed (paved over by the ICC), there is still signage nearby that can be improved upon, and further interpretation would benefit the Fairland and Briggs Chaney community. Public agencies, 501(c)(3), and other federally recognized non-profit organizations are eligible to apply for a grant from this fund. Interpretation of the site falls under the eligible activity of "Programming and Interpretation," and applicants can request up to \$50,000 in funds and can direct up to 10% for indirect support or overhead costs. The Jackson Homestead is particularly suited to receive a grant from this fund as it adheres to one of the themes that the National Trust is particularly interested in -- Free Black Settlements and Agricultural History.

State Level

At the state level, two important financial resources for historic preservation within the Fairland and Briggs Chaney Master Plan area include:

- 1. Maryland Historical Trust (MHT) Homeowner Tax Credit
- 2. National Park Service (NPS) Certified Local Government (CLG) Program

The Maryland Historical Trust (MHT) Homeowner Tax Credit may be applicable to a number of historic structures in the Fairland and Briggs Chaney Master Plan area. Currently, only the Conley House (also known as Greenridge) and the Lacy Shaw House are eligible for listing on the National Register of Historic Places, but there are other historic properties ineligible for NR listing within the master plan area. These properties are ineligible due to additions or construction projects that have significantly diminished their historic integrity, but may still be eligible for the MHT Homeowner Tax Credit. The structures must be locally designated, so homeowners of historic properties in the area must have their properties included in the Montgomery County Master Plan for Historic Preservation before applying for the MHT Homeowner Tax Credit. Homeowners of these historic properties may be able to earn a state income tax credit equal to 20% of qualified rehabilitation expenditures. The credit is capped at \$50,000 in a 24-month period and must have a minimum of \$5,000 of eligible expenses in order to qualify.

The National Park Service (NPS) Certified Local Government (CLG) Program is jointly administered by the National Park Service and the State Historic Preservation Offices (SHPOs). Montgomery County is a Certified Local Government, and is eligible to receive state funding from the state of Maryland, from annual appropriations from the Federal Historic Preservation Fund. These grants can fund a wide variety of projects, including surveys, National Register nominations, rehabilitation work, design guidelines, educational programs, training, structural assessments, and feasibility studies. As a CLG, Montgomery County also has direct access to SHPO staff for general preservation assistance. Each SHPO has a designated CLG coordinator, and SHPO staff and NPS offer regular training for CLGs.

County Level

Finally, at the county level, the most relevant financial resources for historic preservation projects

within the Master Plan area include:

- 1. Montgomery County Historic Preservation Tax Credit
- 2. Montgomery County Historic Preservation Easements

Properties must be listed within the Montgomery County Master Plan for Historic Preservation in order to be eligible for the Montgomery County Historic Preservation Tax Credit. Currently, only the Conley House and the Lacy Shaw House may be eligible for the tax credit, as the Conley House is eligible for National Register listing and is listed in the Montgomery County Master Plan for Historic Preservation and the Lacy Shaw House is recommended for listing on the National Register of Historic Properties, under Criterion C, as an excellent example of the bungalow style. The Lacy Shaw House should be considered for inclusion in the Montgomery County Master Plan for Historic Preservation. The Montgomery County Historic Preservation Tax Credit provides homeowners of historic structures with a 25% property tax credit for restoring the exterior of their historic structures. The tax credit is applied towards County real property taxes. Examples of eligible projects include but are not limited to:

- Painting
- · Repairing roofs or windows or replacing them in-kind
- Repairing architectural trim or ornament
- Uncovering and repairing original siding
- Repointing brick or stone foundations or chimneys
- Restoring a documented feature such as a dormer or porch that was previously altered or removed
- Repairing and maintaining outbuildings such as barns and garages

The Montgomery County Historic Preservation Commission (HPC) will approve tax credit applications, and the approved tax credit will be applied to a property owner's bill. Any unused portion of the tax credit may be carried forward for as many as five years, unless the property is removed from the Montgomery County Master Plan for Historic Preservation.

Montgomery County Historic Preservation Easements are legal instruments that can provide permanent protection for historic, archaeological, or cultural resources. Property owners who convey an easement can negotiate specific restrictions on the building in return for permanent preservation. Easements are held by the County in perpetuity and run with the land, so successive property owners are subject to the terms of the easement agreement. The easement program can also allow for a reduction in the taxable basis of the property in return for conveying the easement. Within the Fairland and Briggs Chaney Master Plan area, preservation easements are recommended for the Conley House and the Lacy Shaw House, in order to preserve their historic integrity.

Conservation

The most important gap that is not addressed in a majority of the conservation grants is the lack of grant programs that approach environmental issues from a holistic perspective. The Robert Wood Johnson grant is an exception because they ask that applicants design proposals that include policy changes in order to combat inequality in green space access and design. It is important to

understand that climate change is a multifaceted issue that is not solved solely by creating designs or products but rather addressing social, economic, and political inequalities that have contributed to climate change.

Gap Analysis

In addition to this, there are also grant programs like the Rainscapes Program and Community Grant for Park and Playgrounds Program Assistance that have long-term requirements that may not adapt to new technological designs or safety codes. For instance, the Community Grant for Park and Playgrounds Program Assistance requires proposals to have a minimum of a 20-year lifespan. However, this requirement should be reduced in order to conform to everchanging safety regulations on children's equipment and include the increasing rate of deterioration on playground equipment/trails as a result of climate change. The Rainscapes program is also problematic in that rebates run for a lifetime with the property which is an issue if there is a need to repair or remodel rainscape additions or If they need to be removed and replaced with a more effective alteration.

Preservation

The largest gap found in the financial resources for historic preservation largely stems from the qualifications needed to apply for these grants. Almost all of the available grants require that the historic structure is listed on the National Register of Historic Places, or that the structure is historically designated at the local level, and must be included in a Historic Preservation Master Plan. As previously mentioned, within the Fairland and Briggs Chaney Master Plan area, only two structures are eligible for National Register listing, and only one is currently included in the Montgomery County Master Plan for Historic Preservation. The remaining historic structures in the area are privately-owned residences that have been significantly altered in ways that have damaged their historic integrity. As such, those altered historic properties are currently considered ineligible properties for historic preservation grant programs and funds. If the National Register criteria for integrity were changed in the future, many historic properties located in the master plan area could be considered eligible for NR listing, and thus eligible for historic preservation grants and tax credits. However, until this changes, the criteria for integrity excludes the vast majority of historic properties in the area from NR listing, local designation, historic preservation grants, and ultimately protection. If these structures were included on the Montgomery County Master Plan for Historic Preservation, they would be protected from further exterior alterations that could potentially increase damage to their historic integrity.

Additionally, none of the historic structures within the Fairland and Briggs Chaney Master Plan area are income-producing properties. Only income-producing properties are eligible for the Federal Historic Rehabilitation Tax Credit. Due to the rural nature of the area, most historic properties are located in places that are a good distance away from the current commercial sector, and are located on older roads or near residential neighborhoods. Even if these historic properties were able to be included on the National Register of Historic Places or the Montgomery County Master Plan for Historic Preservation, their locations may create difficulties in regards to becoming income-producing properties.

Conclusion

There are several financial opportunities available for Montgomery County community organizations and government entities to better support development in the Fairland and Briggs Chaney area. The application process for some of these grants also provides a way for county residents to better communicate their needs to the county through partnerships and allows community members to take the first steps in creating change for their local neighborhoods.

List of Financial Resources for Conservation and Preservation

National Resources for Environment:

• Nature Conservancy Grant
(https://www.nature.org/en-us/what-we-do/our-priorities/tackle-climate-change/
climate-change-stories/natural-climate-solutions-accelerator-grant/)

State Resources for Environment:

- Keep Maryland Beautiful (Maryland Department of Natural Resources) (https://dnr.maryland.gov/met/Pages/grant_programs.aspx)
- Watershed Assistance Grant Program
 (Maryland Department of Natural Resources) (https://cbtrust.org/grants/watershed-assistance/)
- Community Grants for Parks and Playgrounds Program Assistance (Maryland Department of Natural Resources)
 (https://dnr.maryland.gov/land/Pages/ProgramOpenSpace/cpp.aspx)
- Conservation Easement Program Conservation Property Tax Credit (https://dnr.maryland.gov/met/pages/land_conservation.aspx)

Local Resources for Environment:

- Montgomery County Watershed Restoration and Outreach Grant Program (https://cbtrust.org/grants/montgomery-county-watershed-restoration-outreach/)
- Reforest Montgomery, which is supported by the Forest Conservation Fund
 (https://montgomeryplanning.org/planning/environment/forest-conservation-and-trees/reforest-montgomery/)
- Forest Conservation Bank program, run by Montgomery County Planning
 Department
 (https://montgomeryplanning.org/planning/environment/forest-conservation-and-trees/forest-conservation-banks/)
- RainScapes Rebate program (https://www.montgomerycountymd.gov/water/rainscapes/rebates.html)
- County Council Grants

(https://www.montgomerycountymd.gov/COUNCIL/grants/council_grants.html)

National Resources for Preservation:

- National Park Service Federal Historic Rehabilitation Tax Credit (https://www.nps.gov/tps/tax-incentives.htm)
- National Park Service Underrepresented Communities Grant (https://www.nps.gov/preservation-grants/community-grants.html)
- National Trust for Historic Preservation Grants
 - African American Cultural Heritage Action Fund
 (https://savingplaces.org/african-american-cultural-heritage#.
 YXgmK5NKgUs)
 - Telling the Full History Preservation Fund (https://forum.savingplaces.org/build/funding/grant-seekers/specialprograms/tellingthefullhistoryfund)
- Andrew W. Mellon Humanities in Place Program (https://mellon.org/programs/humanities-place/)

State Resources for Preservation:

- Historic Preservation Capital Grant (https://mht.maryland.gov/grants-capital.shtml)
- Historic Preservation Non-Capital Grant (https://mht.maryland.gov/grants-noncap.shtml)
- Maryland Historical Trust Preservation Tax Credit (https://mht.maryland.gov/taxcredits_homeowner.shtml)
- Maryland Heritage Areas Program (https://mht.maryland.gov/heritageareas.shtml)
- National Park Service Certified Local Government Program (https://www.nps.gov/subjects/clg/index.htm)

County Resources for Preservation:

- Montgomery County Historic Preservation Tax Credit (https://montgomeryplanning.org/planning/historic/tax-credit-program/)
- Montgomery County Historic Preservation Easements (https://montgomeryplanning.org/planning/historic/easements/)

The Fairland and Briggs Chaney Master Plan area is a predominantly Black/African American neighborhood and includes many foreign born individuals.³⁴¹ In the study area, 51.8 of the population are Black/African American, 24.1% are White, 15.3% are Asian, 5.3% identify as another race, 3.8% identify as two or more races, and .2% identify as American Indian/Alaska Natives. The Fairland and Briggs Chaney Master Plan area is much more diverse than the surrounding Montgomery County that includes 53.1% white individuals. The area is made up of 54.5% of

³⁴¹ Census Data provided by Sophie Kotzker, Alondra Morales Luna and Tim von Stetten through analysis of multiple census tracts. Data derived from multiple census tracts of the 2020 US Census.

Chapter 9

Stakeholder Analysis & Public Engagement Strategy

The following stakeholder analysis presents some general information on the existing stakeholders in the Fairland and Briggs Chaney Master Plan area. We examined the existing and proposed methods for community engagement from the Montgomery County Planning Department. Then, we outline a few potential gaps in their outreach strategies and propose a few methods for bridging those gaps from existing historic preservation literature.

Demographics females and 45.6% males (see figure 57). 342

Importantly, 37.2% of the study area residents are foreign born. Of foreign born residents, 41.6% were from African countries, 20% from Asia, 24.7% from Latin America, and 4.7% were from Europe.³⁴³ Only 58.5% of the population speak English at home. Other languages spoken include Spanish, French/Haitan/ Cajun, Other Indo-European languages, Arabic, Vietnamese, Korean, Vietnamese, Tagalong, Chinese, and other Asian languages. The most common languages besides English are Spanish, French/ Haitian/Cajun, and other unspecified languages (see figure 58).344

The majority of neighborhood residents are renters and residents have a median household income of \$89,338. Within the study area, 57% of households are renter occupied and 43% are owner occupied and 73% of residents reported commuting alone to work.³⁴⁵

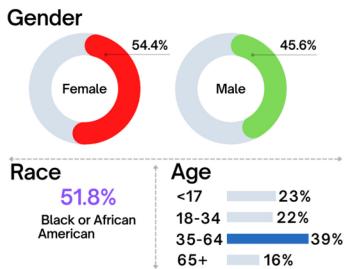


Figure 58: Gender, Race, and Age info-graphics for the Study Area Found and created by URSP Planning Studio Students

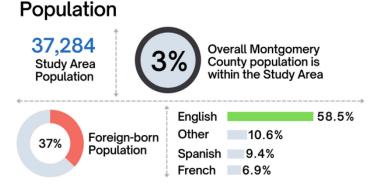


Figure 59: Population, Foreign-born, Language info-graphics for the Study Area Found and created by URSP Planning Studio Students

³⁴² Social Explorer. (2019). ACS 2019 (5-year Estimates). https://www.socialexplorer.com/tables/ACS2019_5yr/R12915516 (Found and created by URSP Planning Studio Students: Sophie Kotzker, Alondra Morales Luna and Tim von Stetten)

³⁴³ Census Data provided by Sophie Kotzker, Alondra Morales Luna and Tim von Stetten through analysis of multiple census tracts

³⁴⁴ Social Explorer. (2019). (Found and created by URSP Planning Studio Students: Sophie Kotzker, Alondra Morales Luna and Tim von Stetten)

³⁴⁵ Data provided bySophie Kotzker, Alondra Morales Luna and Tim von Stetten through analysis of multiple census tracts.

Public Engagement Strategy

This section presents an analysis of the existing methods of engagement Montgomery County has suggested or completed for the Fairland and Briggs Chaney Master Plan area. We also present data, analysis and observations from our attendance at some of the Montgomery County community engagement events and meetings.

Montgomery County

In the 1997 Fairland Master Plan, Montgomery County organized a Citizens Advisory Committee, which included representatives from a variety of homeowners organizations, civic associations, citizen coalitions and community associations. This advisory committee provided input into the original Fairland Master Plan.

In 2017, Montgomery County revisited the goals of the 1997 Master Plan to see what had been achieved in the 20-years since the plan's inception. Montgomery County found that the successes included an increase in single-family housing units and public section investments in open space and transportation. However, the goal of creating retail centers without a strip-mall aesthetic was not fully realized, and Montgomery County indicated that the original plan had "vague, often conflicting, articulation about environmental goals." ³⁴⁶

In this most recent iteration of the plan, Montgomery County has focused on a more in-depth community engagement strategy. The cornerstone of this plan in the County's four-part series of listening sessions, which are organized into four themes:

- Parks, Recreation, and Places to Play
- An Equitable Community, a Vibrant Economy and a Healthy Environment
- Mobility and Equitable Infrastructure
- Food to Thrive

These listening sessions are open to the public and virtual, and aim to initiate conversations about the Master Plan area. Listening sessions create a bilateral communication pathway, in which Montgomery County planners can offer residents more insight into the master planning process, and residents can submit informed feedback.

Planners have also put on a series of record panel conversations, focusing on speakers who can offer more insight into the history and resources of the Fairland and Briggs Chaney Master Plan area. This three-part speaker series was entitled CommUNITY Conversations in Fairland. Themes included:

- Green Space: Mastering the Art of CommUNITY Collaboration
- The Importance of People-First Transportation Planning
- New Discoveries on Sacred Ground: Paying Homage to Local Pioneers

These speaker series included a question-and-answer component at the end, and the recordings were made available to the public online. This engagement strategy was largely informative, rather than collaborative.

Montgomery County planners have also solicited feedback at local events. At the Burtonsville day ³⁴⁶ Holdzkom, N., H. Baek., R. Ruiz and C. McCarthy, "Update on the Master Plan Reality Check Study." Montgomery County Planning Department, 2017. http://www.montgomeryplanningboard.org/agenda/2017/documents/MasterPlanRealityCheck02-23-17_mmoMCPB_Final.pdf

parade, Montgomery County set up a tent with a series of interactive elements, through which parade attendees could communicate their values and needs for the area. Preliminary data analysis from this event reveals a few trends.³⁴⁷ Local residents indicated a desire for funding to go towards housing and environmental issues. Affordable housing is a main area of concern, as well as housing for the unsheltered population. A lack of gathering spaces may be preventing the community cohesion. Residents also stated that the cultural diversity of Montgomery County was a major draw for people wanting to live in the area.

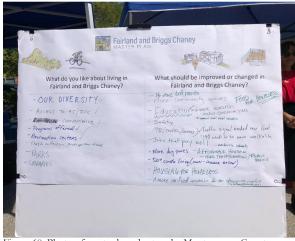


Figure 60: Photo of poster board set up by Montgomery County Planners of Burtonsville day. Poster invited attendees to write down their thoughts about the area. Photo by Samantha Lee



Figure 61: Photo of engagement activity set up by Montgomery County planners of Burtonsville day. Planners distributed Monoploy money to attendees, who then "spent" their money on various topics, including parks, housing and transportation. Photo by Samantha Lee

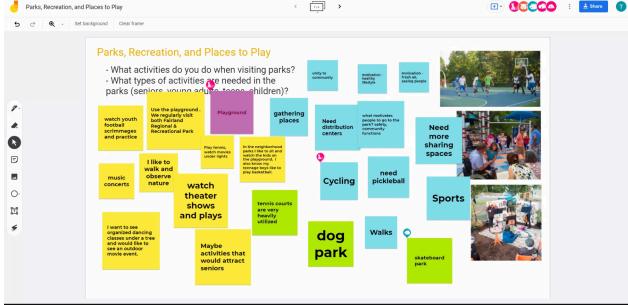


Figure 62: Screenshot of a jam board from the Montgomery County planning department's parks listening session. Screenshot by E. Resnick

Moreover, Montgomery County's larger community engagement strategy is laid out in both the Thrive Montgomery Outreach plan, which focuses on the County's larger goals for 2050. This outreach process involves both in-person and digital outreach. Digital engagement includes an online

³⁴⁷ Data and analysis courtesy of email exchanges with Montgomery County planner Molline Jackson.

thrive quiz, e-newsletters and digital advertising campaigns. In-person engagement has included community events, presentations, one-on-one conversations, youth workshops, and interagency meetings.³⁴⁸

Overall, Montgomery County's community engagement strategy for the current Fairland and Briggs Chaney Master Plan area is much more informed by community input than the engagement strategy for the 1997 plan. There is little evidence to suggest that planners attempted to reach out to the public in a meaningful way in the 1997 plan, and instead relied on an extremely limited group of citizens to represent a large and diverse population. Current attempts at public engagement look for more direct communication with Fairland and Briggs Chaney residents, not mediated by an advisory committee. However, there are still opportunities for growth, and many Fairland and Briggs Chaney populations may be more difficult to reach.

Who are Stakeholders / Difficult to Reach People

There are a number of stakeholders both inside and affiliated with the Fairland and Briggs Chaney Master Plan area. Stakeholders include those who live and work in the area, including homeowners, renters, students, community leaders, religious organizations, local media, business owners, employees, and people engaged in informal economies.³⁴⁹ Stakeholders are also people who travel from outside of the area to use resources, such as customers, park-goers, and commuters who use the roads which pass through the area. Additional stakeholders can include potential developers and planning professionals.

Many of these stakeholders may be more difficult to reach. A significant portion of the study area do not speak English as the primary language at home, and there may be substantial language barriers in trying to solicit feedback. Other stakeholders may have financial or time constraints that limit their ability to participate in feedback sessions, including those with limited/no access to the internet, hourly workers, persons without access to childcare, non-citizen residents, senior citizens, and communities/individuals who are distrustful of government intervention. Additionally, due to the unique geographic boundaries of the Master Plan area, it may be difficult for residents to determine whether or not they are included in the demographic for the area. Several of the communities are separated by major highways, and may be unaware that their participation is relevant.

Furthermore, the Montgomery County Planning Department has identified several gaps in their community outreach including young people, disabled individuals, and renters. To effectively ensure the community is being reached, the planning department should pay attention to who is not attending community outreach events and meetings.

For the University of Maryland's Urban Planning studio, students have proposed several additional

³⁴⁸ Montgomery County Planning. "Thrive Montgomery Outreach." https://montgomeryplanning.org/planning/master-plan-list/general-plans/thrive-montgomery-2050/thrive-montgomery-outreach/

³⁴⁹ Informal economies refers to the economic activities which are unregulated by the state, such as employment in small, unregistered business operations.

community engagement measures.³⁵⁰ Generally, these measures fall into a four-part strategy, which includes listening, visioning, refinding and sharing. The current engagement tools proposed by Montgomery county include door canvassing, visiting local businesses, using web-based tools, and attending existing community meetings and events (such as local festivals and farmers markets). UMD students plan to amend these engagement tools by using multiple engagement methods, rewardings/empowering participants, and "assigning citizens to be planners." Additional ideas include "community happy hours," conversational survey techniques, and building one existing community gathering.

Proposed Avenues for Public Engagement (including review of literature)

As we discuss in the section above, there are a number of ways Montgomery County Planning Department could bolster their outreach efforts to the local community.

To reach out to younger community residents, one method is to offer community engagement plans to children and students who live in the area. In "Historic Preservation and Elementary Student Extracurricular Community Service," Ronald V. Morris discusses a field experiment where they trained elementary school students to survey historic structures and explore their neighborhood. Morris concluded that this process engaged students in their community and developed a new understanding of their own neighborhood. While a large-scale project like this might not be feasible for the Fairland and Briggs Chaney community, the Planning Department could engage students in similar activities that ask them to engage with their community. One suggested method would be to create a contest for elementary and high school students in the region to "draw their neighborhood" or write a short essay about their neighborhood. This project would reveal what local students conceive as the most important aspects of their community and capture their input in a more informal process.

To reach individuals who typically do not attend open listening sessions or engage with Montgomery County Planning booths at local events, researchers can employ more ethnographic methods of community engagement and work to center the difficult to reach voices in their outreach efforts. One example of this was completed by Andrea Roberts and Grace Kelly in "Remixing as Praxis: Arnstein's Ladder Through the Grassroots Preservationists Lens." In this article, Roberts and Kelly discuss preservation planning fieldwork that centered grassroots preservationists of color and local stakeholders in all discussions. The project applied "remixing as praxis" by integrating existing preservation activities like "storytelling, commemorative events, and assemblage that already sustain citizen control and participation" into their research methodology and government event planning. In short, the research team designed engagement methods that met citizens who were already engaging and discussing critical community issues. In the scope of developing a Master Plan, the researchers and planners could better engage local stakeholders that may not have been reached otherwise. This might look like designing programs and events that would attract these stakeholders

or going into the community and talking to these individuals in already existing platforms: church

³⁵⁰ Community engagement ideas were put forward by students Nicholas Alden Johnson, Khayla Iman Trowell, and Max Van Allen. Ideas are proposed in the Midterm slideshow for the URSP650 class.

³⁵¹ Ronald V. Morris (2016) Historic Preservation and Elementary Student Extracurricular Community Service, The Social Studies, 107:6, 181-185, DOI: 10.1080/00377996.2016.1190916

³⁵² Andrea Roberts & Grace Kelly (2019) Remixing as Praxis, Journal of the American Planning Association, 85:3, 301-320, DOI: 10.1080/01944363.2019.1622439

meetings, community meetings/picnics, block events, the community centers, school events, and other similar places.

Conclusion

As outlined above, one major barrier to stakeholder engagement in the Fairland and Briggs Chaney Master Plan area is the lack of local use of the study area name. This issue became known to us at Burtonsville Day in conversations with locals and during our social media analysis. The name of a particular region and setting a region's boundaries is a topic that comes up frequently in historic preservation in ideas like how do we name a historic structure, how do we integrate indigenous or local languages in naming processes, and how to set boundaries for historic districts. To capture a more holistic view of the region, Claudia Guerra discusses how the San Antonio Historic Preservation Office integrated Spanish names on English maps. The process of developing these maps and collecting oral histories of the area allowed the researchers to capture stakeholder knowledge, emphasize their understanding, and meet stakeholders where they were already discussing critical issues. Integrating locally known names for the region might help Montgomery County Planning capture broader opinions from local stakeholders.

The Fairland and Briggs Chaney Master Plan area is a diverse part of Montgomery County housing more renters and more foreign born residents than the surrounding areas of Montgomery County. Stakeholders within the Master Plan boundary include residents, local business owners, participants in informal economies, and visitors to the area. The Montgomery County Planning Department has a strong outreach plan that will capture multiple stakeholder perspectives in the region. If additional time, resources, and interests are available, there is more room for expansion of their research methodologies.

³⁵³ Claudia Guerra, (2016). Cultural Mapping: Engaging Community in Historic Preservation. Forum Journal 30(4), 29-37. https://www.muse.jhu.edu/article/631476; Margaret Wickens Pearce (2014) The Last Piece Is You, The Cartographic Journal, 51:2, 107-122, DOI: 10.1179/1743277414Y.0000000078

Chapter 10

Theme Analysis

In this chapter three main focus areas were chosen for a trend analysis. These areas are: Climate change, benefits of historic preservation to the economically disadvantaged, and heritage-led development. Each analysis looks at the current trends which then informed the scenario plans discussed in the following chapter.

Climate Change

Climate Change Defined

Climate change can be broadly defined as a long-term phenomenon where temperature and typical weather conditions and patterns are altered, mainly due to human activity, such as the burning of fossil fuels and the emission of greenhouse gasses. Certain gasses, such as carbon dioxide and methane, act as a one-way mirror for infrared radiation; heat in the form of infrared radiation enters the atmosphere and greenhouse gasses absorb this radiation and then re-radiate it back to the Earth's surface. In this way, the heat coming onto the planet's surface cannot escape back into the atmosphere and gets trapped, thereby warming the planet substantially. Rising temperatures resulting from climate change can cause both gradual changes, such as sea level rise and more extreme effects, including storms and droughts. The following are several effects of climate change that will only continue to worsen if limited action is taken:

- Since the 1970s, the eastern parts of North and South America have seen higher amounts of rainfall while northern Africa, the Mediterranean, parts of southern Asia and southern Africa have experienced drying.³⁵⁴
- Arctic sea ice has shrunk approximately 2.7% per decade, according to satellite data collected since 1978.³⁵⁵
- Sea level rise in the 20th century alone was estimated to be half a foot.³⁵⁶

According to the United Nations, if no changes are made to slow climate change, these problems will continue to worsen: the average global sea level (compared to 1989-1999 levels) is predicted to rise by ten to twenty inches by the end of the 21st century; there will be increased heat waves and worsening drought in some parts of the world; and other parts of the world will receive heavier precipitation.³⁵⁷ The myriad effects of climate change will continue to affect every aspect of human life, from the agricultural industry to the built environment and historic landscapes of the world.

Impacts of Climate Change on Historic & Cultural Resources

Climate change and its effects will have major implications for historic preservation both in the way we approach how and if to "save" historic places and how we view historic integrity in light of necessary adaptations that will have to occur in order to save historic fabric from being permanently destroyed. In the United States, extreme rainfall is occurring more frequently throughout the nation, especially east of the Mississippi, resulting in more floods while warmer, drier weather in the West has lengthened wildfire season by two months and led to an increase in the number of wildfires;³⁵⁸ both changes in weather patterns pose major threats to historic and cultural resources and landscapes in the nation.

³⁵⁴ Robert Melnick, "Climate Change and Landscape Preservation: A Twenty-First-Century Conundrum," APT Bulletin: Journal of Preservation Technology, (2009), 35.

³⁵⁵ Ibid.

³⁵⁶ Ibid.

³⁵⁷ Ibid 36-37

³⁵⁸ John Englander, "Climate Change and Rising Sea Level: Implications for Historic Preservation," National Trust for Historic Preservation Forum Journal 29, no. 4 (Summer 2015), 6-7.

- Sea level rise and increased storms with greater severity will undoubtedly pose threats to historic buildings, structures, landscapes, and archaeological sites, particularly in coastal zones. Increased flooding will lead to greater moisture problems in historic buildings, including delamination of masonry, wood rot, and mold growth, to name a few. Intense storms with high winds also have the potential to destroy historic fabric. In addition, extreme wet/dry cycles will accelerate the decay of wood and stonework.
- Increasing amounts of precipitation may cause erosion at archaeological sites and could lead to flooding in historic areas, leading to greater decay of historic fabric.
- Vegetation patterns could change and, in theory, threaten historic landscapes.
- Increasing temperatures (and changing precipitation patterns) could make it difficult to plant/maintain historically authentic trees and plants.

The above list is a short and general description of the negative impacts that climate change will have on sites of cultural and historic significance. The next three sections will examine in greater detail the effects of increasing temperatures and sea level rise on historic landscapes, and will also look at several case studies where flooding and rising sea levels and drier conditions have begun to threaten historic sites.

Cultural Landscape Impacts

When it comes to the effects of climate change, it can be harder to identify the resources being lost and the values that matter to people regarding historic and cultural landscapes. The relationship between humans and buildings is easier to understand: buildings have always been seen as places of shelter and as sites for economic transactions. The historic relationship between humans and landscapes, on the other hand, is much harder to understand because it is more difficult to see the landscape within a set period of time (unlike buildings where we can date their construction).³⁵⁹ And, in preservation terms, landscapes are ultimately harder to protect than buildings because they are dynamic and constantly changing. It can be difficult to see when these changes are outside the normal boundaries since we expect to see change, mostly with seasonal fluctuations.

Climate change can affect historic landscapes in two ways. First, temperature changes and their effects could lead to extreme weather events that could potentially destroy or remove character-defining features of the landscape. On the other hand, climate change effects can be so gradual that we are unaware until it is too late. Rising sea levels and frequent flooding can lead to losses of land and the growth of invasive plant species can change the visual appearance of a historic landscape. Insect movement can wipe out certain plant species and is often unstoppable by the time scientists recognize that there is an infestation. For example, southern pine beetles are some of the most destructive insects that have invaded North America's pine forests, who are now able to survive farther north due to a lack of winter cold snaps that killed beetles in their larval stage. Some cultural landscapes are also tied to specific cultural groups; coastal erosion and drought, leading to a loss of land in the former and unsustainable land in the latter, can lead to a diaspora of cultures.

³⁵⁹ Robert Melnick, "Climate Change and Landscape Preservation: A Twenty-First-Century Conundrum," APT Bulletin: Journal of Preservation Technology, (2009)., 38.

³⁶⁰ Bob Berwyn, "Tree-Killing Beetles Spread into Northern U.S. Forests as Temperatures Rise," Inside Climate News, August 28. 2017, https://inside-climatenews.org/news/28082017/southern-pine-beetles-spreading-climate-change-northern-canada-new-jersey-maine/.

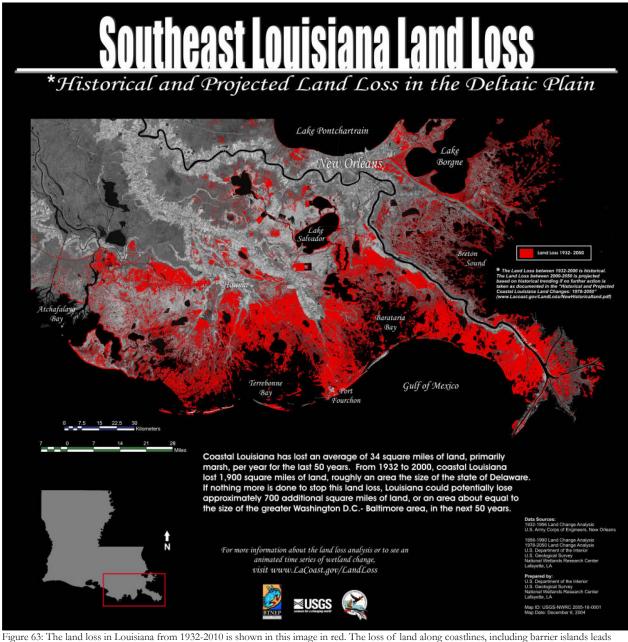


Figure 63: The land loss in Louisiana from 1932-2010 is shown in this image in red. The loss of land along coastlines, including barrier islands leads to greater exposure to storms. (Source: United States Geological Survey).

Reversibility, which is an important principle in preservation practice, in the aforementioned instances is very limited. Therefore, historical integrity, a flawed yet widely valued concept in preservation practice, can be placed at the center of the intersection of preservation and climate change. There is a conflict between preservationists' reluctance for many changes to significant historic sites (an attitude ingrained in the minds of many preservationists accustomed to the strict integrity standards set forth by the National Park Service) and the fact that the landscape is dynamic and will always be in a state of flux.³⁶¹

³⁶¹ Melnick, "Climate Change and Landscape Preservation," 38.

Rising Sea Level and Flood Impacts

Cultural and natural resources in coastal areas are most vulnerable to the effects of climate change, including deterioration, destruction, and inundation due to sea level rise and storm flooding. The following are several historic sites that have been affected by rising sea levels and floods due to climate change.³⁶²

The effects of flooding and elevated sea levels during Hurricane Sandy in 2012 caused Ellis Island (which was completely submerged) and Liberty Island (which was 75 percent underwater) to close for more than eight months. Not only did the storm cause millions of dollars in damage but it also caused economic loss for businesses associated with the islands. Statue Cruises, which ferries people between the two islands and gives harbor tours, saw its annual ridership of almost four million decrease by more than half and the company lost 80 percent of its overall revenue and had to lay off ³/₄ of its workforce during the closures. ³⁶³ Considering that sea levels have risen by more than 1.5 feet in the New York area since the 1850s, ³⁶⁴ other historic sites in this area, including the two islands, will remain under threat.

The Harriet Tubman Underground Railroad Monument, located in Dorchester County, Maryland, could be largely underwater by 2050 as the Chesapeake Bay sea levels have risen at almost twice the global average. The wetlands in the National Wildlife Refuge, parts of which are included in the Tubman monument, are diminishing by 300 acres each year as the ocean continues to rise. Communities in the area will be deprived of protection against storms and sea level rise when the wetlands become fully submerged within this century.

Historic Annapolis contains the largest concentration of 18th century brick buildings and was one of the first planned cities in the United States having been laid out in 1695. Waters along the 620-mile Atlantic Coastline north of Cape Hatteras, North Carolina, have risen nearly four times faster than the national average. Warmer ocean temperatures are also leading to increased storm severity; storm surge from Hurricane Isabel in 2003 caused millions of dollars in damage to the US Naval Academy and the City Dock area. Major storm events notwithstanding, Annapolis is also subject to frequent nuisance flooding.

Jamestown Island's archaeological resources are under threat from rising sea levels and may one day be permanently underwater. Waters surrounding the site (which is only five feet above sea level) have been rising twice as fast as the global average. Hurricane Isabel damaged nearly one million Jamestown artifacts, which had to be evacuated and hand dried to prevent rot and mildew. The submersion of the site would harm the local economy, to which visitors contribute an estimated \$62.6 million into each year. Additionally, the artifacts and archaeological sites in the park help us better understand the lives of the early settlers and the Native Americans who lived in the area before them; losing them would limit our understanding of earlier times in our nation's history.

³⁶² To look more in depth at sea level rise and coastal flooding impacts, check out NOAA's Sea Level Rise Viewer here: https://coast.noaa.gov/slr/#/layer/slr.

³⁶³ Debra Holtz, Adam Markham, Kate Cell, and Brenda Ekwurzel, "National Landmarks at Risk: How Rising Seas, Floods and Wildfires Are Threatening the United States' Most Cherished Historic Sites," Union of Concerned Citizens, (May 2014), 8.
³⁶⁴ Ibid.

³⁶⁵ Ibid., 10.

³⁶⁶ Ibid.

³⁶⁷ Ibid., 14.

³⁶⁸ Holtz et al., "National Landmarks at Risk," 17.

The National Park Service (NPS) is actively working to protect the site and a riprap (a breakwater constructed of large stones) was erected around most of the site to prevent additional shoreline erosion in the future.

When Cape Hatteras Lighthouse was completed by the Army Corps of Engineers in 1870, it was 1,500 feet from the sea; by the end of the 20th century the distance between the ocean and lighthouse was only 120 feet.³⁶⁹ To prevent structural damage and the eventual complete loss of the structure to the sea, the NPS decided to move the whole structure (and several related buildings) 3,000 feet from the shoreline. The lighthouse attracts 3 million visitors each year and, as a result, its relocation was vital in maintaining the area's economy.

Wildfire and Drought Impacts

Studies of US national parks, which contain many of the nation's important historic and cultural resources, have indicated that parks in the West are being affected by global warming trends at a faster rate than those in the Eastern part of the country. As a result, glaciers in Montanna's Glacier National Park, for example, are rapidly disappearing and forest fires have become an increasing concern, posing threats to plant and wildlife as well as historic structures and cultural resources. 371

Mesa Verde National Park, the first national park designed in 1906, contains 4,500 archaeological sites and contributes approximately \$47 million to the local economy. Mesa Verde is home to well-preserved Native American artifacts that are representative of the cultural heritage of many current-day tribes. Temperatures in the area have been steadily increasing over the past 50 years which have led to a greater risk of wildfires that spread more easily due to drier conditions. To put it in a broader perspective, the average number of larger (over 1,000 acres) wildfires in the western US have increased from 140 per annum in the 1980s to 250 per annum between 2000 and 2012. During the summer of 2000, back-to-back fires burned almost half of the park's 52,000 acres, causing damage to park infrastructure. Because of Mesa Verde's terrain, fire crews have to use aerial water drops and fire retardant which damages and stains the sandstone. Fire also accelerates spalling which can ruin ancient rock carvings and the burned landscape is more susceptible to floods and erosion during the winter rains.

Santa Clara Pueblo and Bandelier National Monument in New Mexico tell the stories of several of the earliest inhabitants in the Americas, containing evidence of human presence dating back over 10,000 years.³⁷⁶ In addition, the landscape is also home to modern pueblo communities and plays an important role in contributing to their sense of cultural identity. Increasing temperatures in the southwest have led to more extreme flooding events and larger wildfires; research has suggested that an increase in the average yearly temperature of just under two degrees could multiply the occurrence of wildfires in New Mexico by four.³⁷⁷ The 2011 Las Conchas Fire, the second largest in the state's history, burned much of the forest in Bandelier National Monument and over 16,000

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<sup>369</sup>Holtz et al., "National Landmarks at Risk," 26.
<sup>370</sup> Ibid., 27.
<sup>371</sup> Melnick, "Climate Change and Landscape Preservation," 36.
<sup>372</sup> Holtz et al., "National Landmarks at Risk," 37.
<sup>373</sup> Ibid., 36-38.
<sup>374</sup> Ibid., 36.
<sup>375</sup> Ibid.,
<sup>376</sup> Ibid., 39.
<sup>377</sup> Holtz et al. "National Landmarks at Risk," 39.
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forested acres that belonged to the Santa Clara Pueblo.³⁷⁸ Increased flooding and the erosion caused by greater amounts of precipitation is now a major threat to the archaeological resources in the Bandelier National Monument.

Groveland and other Gold Rush-era towns in California are increasingly threatened by large wildfires which have increased twofold in number burning in the state each year compared to the 1970s.³⁷⁹ Climate change is causing an earlier melting of the winter snowpack, which means that there is less water available during the hotter months of the region. As a result, forests are drier and are highly combustible and susceptible to fire. The Rim Fire in 2013, which burned an area eight times greater than the size of San Francisco, smothered Groveland with smoke, forcing businesses to close during the height of tourist season and lose a substantial amount of revenue.³⁸⁰ As noted earlier, the burned landscape surrounding the historic town of Groveland increases the risk of flash floods when rain storms hit in the winter months. Because wildfires are expected to burn more land on the west side of the Sierras in mid-elevation sites, Gold Rush-era communities and the Yosemite Valley are at a higher risk.

Implications to Historic Preservation and Mitigation

Preservation at its core is about saving places that contain historic and cultural significance both to the nation as a whole and the individual communities that utilize and are part of each significant site. The effects of climate change on historic and cultural resources should create sense of urgency in the preservation field to figure out what lengths we are willing to go in order to protect historic resources and, if drastic measures are required, how the field's views of integrity should change in order to adapt to the many threats posed by climate change.

There are many scholars and organizations that have suggested preservationists and planners take a more proactive approach in making existing historic areas and sites more resilient and adaptable. Sharon Park, in her article "Sustaining Historic Properties in an Era of Climate Change" discusses the National Oceanic and Atmospheric Administration's complex study and focuses the study on heritage areas in particular, using a three tiered level for mitigation. The approaches include:

- 1. Relocation when it is no longer sustainable to occupy the land or property;
- 2. Modifying buildings architecturally to accommodate change; and
- 3. Protect historic communities and/or settings with barriers, land reconfiguration, or a combination of both.³⁸¹

The first approach, while preserving communities, has major implications for community members, including disrupting the local economy and creating extremely stressful conditions. However, there are some communities that are giving it a try. In Alaska, tribal inhabitants of Newtok, a fishing village, are losing 70 feet of land per year as permafrost tundra thaws as temperatures rise due to climate change, among other variables. In 2018, the community was awarded federal funding to begin a phased relocation inland. In order to remain close to their livelihood and fishing areas, they

379 Ibid., 42

³⁷⁸ Ibid.

³⁸⁰ Ibid.

³⁸¹ Sharon C. Park, "Sustaining Historic Properties in an Era of Climate Change," APT Bulletin: The Journal of Preservation Technology 49, no. 2–3 (2018): 35–44. https://www.jstor.org/stable/26502501.

are looking into rehabilitating vacant military housing on a nearby army base. By reusing existing building stock, this plan is a sustainable way to resolve the community's land erosion problem. While this approach does allow communities to remain together, historic preservation has generally not accepted relocated buildings and communities as eligible for listing in the National Register of Historic Places. In the future, as climate change mitigation on historic buildings and at historic sites becomes necessary for their survival, the NPS must reexamine integrity standards and new criteria considerations may have to be developed in order to recognize historic significance while also acknowledging necessary climate change mitigation measures. This approach also has benefits for the environment; by relocating communities, natural habitats can be restored along shorelines, including wetlands which help protect against flooding.

Because most of preservation practice is driven by regulatory requirements, including NPS integrity standards, which determine designation which can lead to more funding sources, places our work in conflict with adaptations to historic sites and structures that are necessitated by climate change. For example, buildings and structures can be elevated to protect them from flooding and seawalls can be constructed to resist rising sea levels; however, in doing so the integrity of a building and the integrity of the setting of a historic area may be compromised. In essence, changes to prevent damage to historic sites by the many threats of climate change may also be seen as threats to those sites' integrity, despite the fact that those sites may not exist one day if measures are not taken. Many of our nation's historic sites are located along the coasts and therefore need flood adaptation plans and flood-proofing measures. These plans and measures, however, may not be in line with preservation laws at all levels of government; making a property more resilient through elevation or adding modern materials change the appearance of the property and conflict with integrity and may be seen as an adverse effect.

Resilience in historic buildings can be improved by using materials that are more adapted to climate change effects, such as materials that can withstand moisture more than historic materials. The use of synthetic materials has generally only been accepted in preservation practice when it is limited and when those materials are used in areas that are not visible. Complete replacement of materials has been determined to adversely affect the integrity of historic buildings. To protect against flooding and the moisture issues (rot, mold, mildew, and bugs) that follow, swales can be built around buildings to redirect water and utilities and ductwork can be relocated from crawl spaces. Park notes that resilience is most successful when existing historic elements are reinforced by additive elements. The addition of new structural elements, vapor-impermeable materials, and waterproof coatings can cause more harm than good, therefore, it is important to plan carefully. It is also important to consider the original appearance of historic buildings--adding porches where none existed or adding visible solar panels to a roof in a way that is different from the existing roof configuration, for example, are not consistent with the Standards.

Conversely, some individuals claim that historic building materials are inherently more resilient to the effects of climate change, such as rising water levels which lead to increased risk of water damage due to flooding. For example, gypsum, which is water soluble, is the major component of drywall. Traditional plaster walls can get wet and dry without major damage whereas drywall, a more modern material, must always be replaced.

³⁸² Ark, "Sustaining Historic Properties in an Era of Climate Change," 42.

Minimal Defense

Many communities have developed right along the ocean with only minimal natural defenses from a small strip of beach between them and the ocean.

Natural

Natural habitats that can provide storm and coastal flooding protection include salt marsh, oyster and coral reefs, mangroves, seagrasses, dunes, and barrier islands. A combination of natural habitats can be used to provide more protection, as seen in this figure. Communities could restore or create a barrier island, followed by oyster reefs and salt marsh. Temporary infrastructure (such as a removable sea wall) can protect natural infrastructure as it gets established.

Managed Realignment

Natural infrastructure can be used to protect built infrastructure in order to help the built infrastructure have a longer lifetime and to provide more storm protection benefits. In managed realignment, communities are moving sea walls farther away from the ocean edge, closer to the community and allowing natural infrastructure to recruit between the ocean edge and the sea wall.

Hybrid

In the hybrid approach, specific built infrastructure, such as removable sea walls or openable flood gates (as shown here) are installed simultaneously with restored or created natural infrastructure, such as salt marsh and oyster reefs. Other options include moving houses away from the water and/or raising them on stilts. The natural infrastructure provides key storm protection benefits for small to medium storms and then when a large storm is expected, the built infrastructure is used for additional protection.

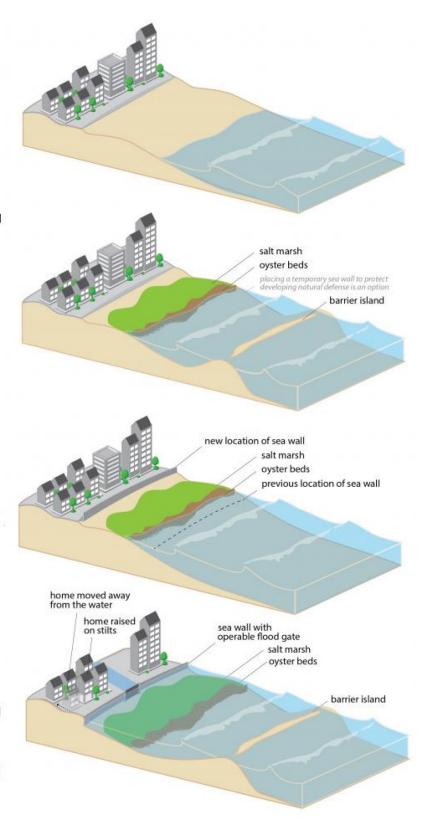


Figure 64: This planning graphic was developed by the National Oceanic and Atmospheric Administration as a guide to make shorelines more resilient utilizing man-made and natural infrastructure. (Source: Ariana Sutton-Grier and K. Crossett, NOAA, 2018)

Not only are these historic structures in danger from being damaged by flooding, but stewards of the site may not be able to afford to implement mitigation measures on their own. The Federal Emergency Management Agency (FEMA), through the National Flood Insurance Program, has the ability to provide flood insurance to qualified sites whose habitable floors are at least one foot above the floodplain level.³⁸³ While private insurance is also available, it is also expensive and may not cover all damages. As previously stated, while elevating buildings will help protect them from water damage, this approach is not always consistent with federal standards. In 2019, the Secretary of the Interior's Standards for Rehabilitation & Guidelines on Flood Adaptation for Rehabilitating Historic Buildings were issued, providing guidance on how to adapt historic properties to flooding risk in ways that will meet the Secretary of the Interior's Standards for Rehabilitation and noted that "treatments that might not be considered in other rehabilitation contexts because of their impacts on the historic character of a property may be acceptable in the context of adapting the property to flooding hazards." These guidelines are a promising sign that the preservation field can adapt to the many changes ahead, regarding climate change and other past limitations of the field.

Finally, the third approach posits that a historic community or setting can be protected with barriers, land reconfiguration, or a combination of both. For example, the National Archives Building in Washington, DC, has submerged floodgates (they are not visible when retracted) that were designed to use the force of rising flood water itself. In Europe, removable flood panels that are flexible, can be increased and decreased in height, and do not alter historic buildings, are rising in popularity to curb flooding from rivers. One of the most important steps before taking any climate change mitigation measures is to document historic resources through HABS/HAER documentation at the very minimum and the use of other high-tech methods, including laser scanning and satellite and drone imagery. It is important to get a baseline for determining appropriate mitigation strategies before any physical changes are carried out.

Because of the changes and adaptations that must happen to protect historic and cultural resources from the impacts of climate change, the Secretary of the Interior's Standards for the Treatment of Historic Properties must become more flexible and preservationists need to embrace less rigid notions of integrity. If this cannot be achieved, these buildings will not be eligible for federal funding and therefore have less of a chance of being preserved for future generations. For a start, Neubauer and Payne argue that local governments should consult the public and community stakeholders to identify which resources are valued most highly so measures can be implemented to protect those resources before they are irreparably damaged by the effects of climate change.³⁸⁵

Relevancy to the Fairland and Briggs Chaney Master Plan Area

Many of the cultural and historic resources in the Fairland and Briggs Chaney Master Plan area are ineligible for National Register listing due to a lack of historical integrity. Many of these homes are privately owned and, while deemed ineligible based on federal standards, still hold historic value. Similar to buildings adapted for climate change, we must look beyond the confines of integrity standards to protect the resources that are most valuable to community members and that represent

³⁸³ Ark, "Sustaining Historic Properties in an Era of Climate Change," 40.

³⁸⁴ Jenifer Eggleston, Jennifer Parker, and Jennifer Wellock, "The Secretary of the Interior's Standards for Rehabilitation & Guidelines on Flood Adaptation for Rehabilitating Historic Buildings," US Department of the Interior, National Park Service, 2021, 11.

³⁸⁵ Rebecca Neubauer and Heather Payne, "Historic Preservation Laws and Long-Term Climate Adaptation: Challenges and Opportunities," Seton Hall Public Research Paper (2019).

the history of the Master Plan Area. If we continue to rely on strict measures of integrity, the historic buildings in the Fairland and Briggs Chaney Master Plan area will continue to be vulnerable to demolition and further losses of historic fabric.

Impacts of Climate Change on Archaeological Sites

Environmental Disasters

The increase in environmental disasters as a result of climate change has extremely detrimental effects on archaeological sites, and while some mitigation techniques have been implemented to decrease the severity of these disasters, it is not feasible to save all archaeological sites. Archaeologists must face the daunting challenge of choosing which archaeological sites to save. The list of archaeological sites that are currently affected (or were affected by climate disasters and subsequently destroyed) would be too long to include here. For the purposes of this paper, a few notable examples will be mentioned. Examples of the effects of climate disasters on various types of archaeological sites include:

- Rising sea levels eroding coastal sites
 - California's Channel Islands
- Increased rainfall washing away mud-brick ruins
 - Site of Leh-Ladkh in India
- Desert sands are blasting the remains of ancient civilizations
 - Musawwarat es-Sufra in Sudan and Chinguetti in Mauritania
- Melting ice is causing organic remains preserved within the ice to become exposed and rot
 - Scythian tombs in the Altai Mountains of Siberia that were previously frozen are becoming exposed and the human remains are rotting
 - Mitigation techniques: reflecting sunlight away by painting them white, stabilizing the underground temperature by installing thermo-pumps
 - Melting glaciers in places like the Swiss Alps are uncovering remains and sites that were previously preserved by the ice
 - Greenland's melting sea ice is causing site destruction for archaeological sites along the coast that were previously protected by the frozen turf, including Qeqertasussuk, a 4,5000 year old settlement thought to be evidence of the earliest settlement in Greenland

Archaeological sites like Chan Chan, a pre-Colombian city in Peru, are in extreme danger of becoming lost due to climate disasters, like the worsening of events like El Niño. Chan Chan was placed on UNESCO's list of World Heritage Sites in Danger in 1986 because it was threatened by erosion. Since then, the site has suffered more deterioration. Archaeological sites that have been untouched or unexcavated are sometimes better protected than sites where excavation has already occurred. Excavation units as well as holes created by looters can trap moisture and cause site destruction. Better protected than sites where excavation units as well as holes created by looters can trap moisture and cause site destruction.

³⁸⁶ Andrew Curry. "Climate Change: Sites in Peril." Archaeology. March/April 2009. Vol 62(2): 32-35.

³⁸⁷ Andrew Curry. "Climate Change: Sites in Peril." Archaeology. March/April 2009. Vol 62(2): 33.

³⁸⁸ Ibid.

In addition to harming or destroying archaeological sites, climate change can also reveal sites and artifacts that were previously hidden. For example, in the summer of 2018, extended and exceptional dry spells in places like Ireland and the United Kingdom revealed the locations of previously unknown archaeological sites.³⁸⁹ In Ireland, over 800 additional sites were identified in 2018 due to these dry spells. The sites were identified through crop marks found by aerial survey or by drone operators reporting the discoveries to the National Monuments Service.³⁹⁰ The discovery of new archaeological sites due to heat waves indicates that more and more sites may be revealed in the future, and also demonstrates that archaeologists and heritage managers must now consider the impacts of climate change on these recently-revealed sites.



Figure 65: Prehistoric monuments and settlement near Eynsham, Oxfordshire, England revealed after 2018 heat wave Photo: Damian Grady/Historic England

UNESCO's List of World Heritage Sites in Danger

UNESCO's list of World Heritage Sites in Danger includes 52 sites categorized as Cultural sites, Natural sites, or Mixed sites.³⁹¹

"The list may include only such property forming part of the cultural and natural heritage as is threatened by serious and specific dangers, such as the threat of disappearance caused by accelerated deterioration, large- scale public or private projects or rapid urban or tourist development projects; destruction caused by changes in the use or ownership of the land; major alterations due to unknown causes; abandonment for any reason whatsoever;

³⁸⁹ Maev Kennedy. "Millennia of human activity': heatwave reveals lost UK archaeological sites." The Guardian, 14 Aug 2018. https://www.theguardian.com/science/2018/aug/15/millennia-of-human-activity-heatwave-reveals-lost-uk-archaeological-sites

³⁹⁰ Michael MacDonagh. "Riding the Storm." Archaeology Ireland, Vol. 33(3): 30-33. Autumn 2019. P. 33.

³⁹¹ "List of World Heritage in Danger." UNESCO (United Nations Educational, Scientific, and Cultural Organization). 2021. https://whc.unesco.org/en/danger/

the outbreak or the threat of an armed conflict; calamities and cataclysms; serious fires, earthquakes, landslides; volcanic eruptions; changes in water level, floods and tidal waves. The Committee may at any time, in case of urgent need, make a new entry in the List of World Heritage in Danger and publicize such entry immediately."³⁹²

The purpose of the list of World Heritage Sites in Danger is "to inform the international community of conditions which threaten the very characteristics for which a property was inscribed on the World Heritage List, and to encourage corrective action."393 Issues such as armed conflict and war, earthquakes and other natural disasters, pollution, poaching, uncontrolled urbanization and unchecked tourist development all pose threats to World Heritage Sites. These issues are then categorized as an "ascertained danger" or "potential danger" to better understand the issues that these sites currently face or will potentially face.³⁹⁴

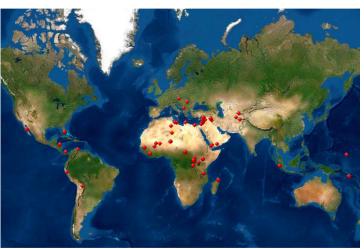


Figure 66: Map of UNESCO's list of World Heritage Sites in Danger Source: https://whc.unesco.org/en/interactive-map/?search=&danger=1

World Monuments Watch

The World Monuments Watch program of the World Monuments Fund was started in 1996, and a new issue of World Monuments Watch (formerly the World Monuments Watch List of 100 Most Endangered Sites) is published every two years. Sites are nominated by international and local preservation groups and professionals, and then are voted on by an independent panel of international experts. World Monuments Watch includes currently-standing buildings and structures as well as archaeological sites threatened by neglect, vandalism, armed conflict, commercial development, natural disasters, and climate change. WMF's Crisis Response Program is aimed at providing the necessary funding to support cultural heritage sites that have been physically affected by natural disasters, armed conflict, or other disruptive events. Their website (https://www.wmf. org/explore) allows for their watch list to be searched by event type, such as climate change.

³⁹² "Convention Concerning the Protection of the World Cultural and Natural Heritage: Article 11.4." UNESCO (United Nations Educational, Scientific, and Cultural Organization). 2021. https://whc.unesco.org/en/conventiontext/#Article11.4

³⁹³ "World Heritage in Danger." UNESCO (United Nations Educational, Scientific, and Cultural Organization). 2021. https://whc.unesco.org/en/158/

³⁹⁴ Ibid.

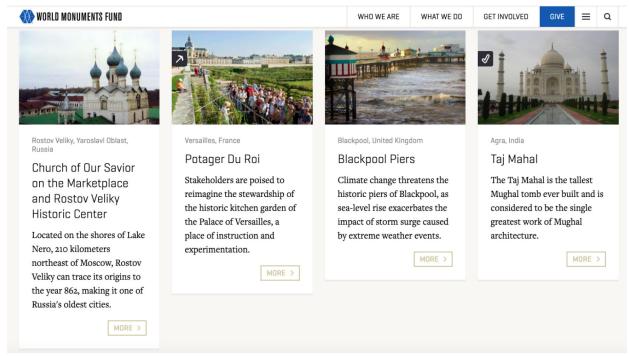


Figure 67: Cultural heritage sites that are currently affected by climate change, according to the World Monuments Fund's World Monuments Watch. Source: https://www.mf.org/explore/project_theme/climate-change-89

Planning as a Mitigation Strategy

Mitigating the impacts of climate change on archaeological sites can involve a variety of different measures, each suited for the differing needs of each impacted site. Climatic events force archaeologists to consider how to react in the future -- events like storm surge damage associated with superstorms call for preemptive archaeological salvage measures. Nonclimatic events can also help with planning, as with the damage caused by the 2011 tsunami that can be used as a proxy for what will become the norm due to sea level rise and an increase in storm intensity.

Recently, heritage managers and organizations have begun creating plans for how to deal with the impact of climate change on archaeological and other heritage sites. In 2016, the National Park Service (NPS) published Cultural Resources Climate Change Strategy, providing direction for implementing the policies of the Climate Change and Stewardship of Cultural Resources policy memorandum outlining the NPS position on responding to climate change and its potential effects on cultural resources.³⁹⁷ Cultural Resources Climate Change Strategy presents four separate goals to address the impacts of climate change on cultural and historic resources:

- Connect Impacts and Information
 - Set the broad scope of cultural resources and climate change response by connecting the concepts of impacts and information with the four pillars of climate change response: science, adaptation, mitigation, and communication.

³⁹⁵ Tom Dawson, Joanna Hambley, Alice Kelley, William Lees, and Sarah Miller. "Coastal heritage, global climate change, public engagement, and citizen science." PNAS, Vol. 117(15): 8280-8286. April 14, 2020. P. 8281

³⁹⁷ Rockman, Marcy, Marissa Morgan, Sonya Ziaja, George Hambrecht, and Alison Meadow. 2016. Cultural Resources Climate Change Strategy. Washington, DC: Cultural Resources, Partnerships, and Science and Climate Change Response Program, National Park Service. https://www.nps.gov/subjects/climatechange/upload/NPS-2016_Cultural-Resources-Climate-Change-Strategy.pdf

- Understand the Scope
 - Coordinate science, management, and communication to identify and improve understanding of the effects of climate change on cultural resources.
- Integrate Practice
 - Incorporate climate change into ongoing cultural resources research, planning, and stewardship.
- Learn and Share
 - Collaborate with partners to grow and use the body of knowledge and practice for cultural resources and climate change.³⁹⁸

The third goal, Integrate Practice, is perhaps the most helpful for actively combating and mitigating the effects of climate change on cultural heritage sites. This section offers seven "adaptation options" ranging from doing nothing (No Active Intervention) to preparing for the worst case scenario (Document and Prepare for Loss) to looking towards the future (Interpret the Change):

- 1. No Active Intervention
- 2. Offset Stress
- 3. Improve Resilience/Resistance
- 4. Manage Change
- 5. Relocate/Facilitate Movement
- 6. Document and Prepare for Loss
- 7. Interpret the Change

The authors reiterate that "taking no action is a decision."³⁹⁹ Archaeologists and individuals working in the heritage sector must assess which adaptation options are suitable for an archaeological site, depending on the site. For example, a site with low vulnerability may warrant the "No Active Intervention" option, while a site on an eroding coastline may be more suitable for the "Improve Resilience/Resistance" option. However, these decisions are often not black and white, and there is always the risk of losing a site to climate change events before it is able to be excavated or preserved in other ways.

Ireland has also developed an effective plan for managing the impacts of climate change on cultural heritage sites. Under the National Adaptation Framework, Ireland's Department of Culture, Heritage and the Gaeltecht developed the Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan, published in September 2019. Archaeological sites in Ireland have been greatly impacted by climate change events in recent years. For example, in 2014, after the Storm Darwin hit Ireland, the National Monuments Service received 206 reports of damage to monuments or historic buildings, up five times the number from the previous year, with almost half of the reports related to impacts from erosion or weathering (six times higher than the previous year). The Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan was created as part of the requirements for a National Adaptation Framework, and utilized stakeholder adaptation workshops

³⁹⁸ Ibid., 4-5.

³⁹⁹ Ibid., 36.

⁴⁰⁰ Carrig Conservation International for the Department of Heritage, Culture and the Gaeltecht. Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan. September 2019.

⁴⁰¹ Michael MacDonagh. "Riding the Storm." Archaeology Ireland, Vol. 33(3): 30-33. Autumn 2019. P. 30.

as well as a public consultation process to identify current and potential risks as well as mitigation techniques to combat the effects of climate change on heritage sites in Ireland. 402 Priorities for adaptation planning include:

- Flooding (inland and coastal)
- Storm damage
- Coastal erosion
- Soil movement (landslip or erosion)
- Changing burial preservation conditions
- Pests and mold
- Wildfires and maladaptation (poor examples of adaptation that may lead to future problems)⁴⁰³

The Built & Archaeological Heritage Climate Change Sectoral Adaptation Plan was created as a five-year plan, but also provides a long-term strategic vision in order to consider the impacts of climate events on heritage sites in the future and the best ways to build site resilience and reduce vulnerability. The adaptation strategy and action plan aim to:

- Build adaptive capacity within the sector
- Reduce the vulnerability of built and archaeological heritage to climate change
- And capitalize on potential opportunities

Citizen Science & Mitigation Technologies

A number of states, countries, and organizations have turned to more creative measures to protect their archaeological sites from the impacts of climate change. Perhaps the most well known example is Scotland's SCAPE (Scottish Coastal Archaeology and the Problem of Erosion) Trust, which creates partnership projects with heritage managers, academics, and local communities. 404 In 2010, SCAPE conducted an analysis of all sites recorded in rapid coastal surveys in which significance and vulnerability were scored and five priority categories were created based on significance and vulnerability scores. SCAPE has created multiple citizen science projects, wherein citizens can participate in scientific research by contributing in some way. One such project was Shorewatch, where local people could monitor damage done to archaeological sites after storm events. In 2012, SCAPE launched SCHARP (Scotland's Coastal Heritage at Risk Project) which included ShoreUPDATE, a mobile application where individuals can access a web-based interactive "Sites at Risk" map, as well as download site information and survey forms, and contribute information on new sites and update already existing sites with photographs, condition records, and GPS functions. Between 2012 and 2017, over one thousand site records were updated. 405 Finally, SCAPE has also created the ShoreDIG project to explore the "creation of alternative futures for threatened heritage."406 Utilized in conjunction with ShoreUPDATE surveys, ShoreDIGs are collaborative projects conducted with local communities. Community members are encouraged to propose solutions that address management issues, site interpretation, or address the need for further investigation at locally valued archaeological sites threatened by coastal erosion, making ShoreDIGs

⁴⁰² Ibid., 31.

⁴⁰³ Ibid., 32.

⁴⁰⁴Dawson et al. "Coastal heritage, global climate change, public engagement, and citizen science." 2020. p. 8282

⁴⁰⁵ Dawson et al. "Coastal heritage, global climate change, public engagement, and citizen science." 2020. p. 8284.

⁴⁰⁶ Ibid.

collaborative at every stage. 407 Examples of ShoreDIG projects include conventional archaeological excavations, digital recording, three-dimensional (3D) model making, and relocating prehistoric structures for public display and interpretation. 408

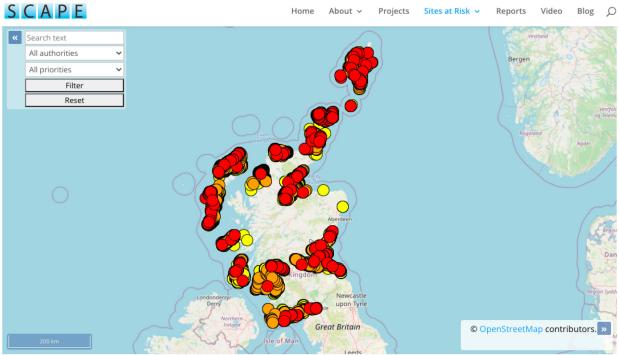


Figure 68: SCAPE Trust's interactive web-based Sites at Risk map. Source: https://scapetrust.org/sites-at-risk/?action=sites

Influenced by SCAPE's SCHARP model, in 2015 the Florida Public Archaeology Network (FPAN) also created a citizen-based solution to monitor the impacts of climate events on archaeological and heritage sites. The Heritage Monitoring Scout (HMS) Florida project is a public engagement program focused on tracking changes to at-risk archaeological sites, particularly those impacted by climate change in the form of erosion and sea level rise. 409 Unlike in the UK, site information in the United States is generally unavailable to the public due to fears of looting. Therefore, HMS Florida uses vetting techniques for its members, and members of the public must apply to be HMS Scouts and complete scout training programs in order to access and update the HMS Florida Arches Database. 410 As of 2020, HMS Florida had over 640 HMS Scouts, or volunteers, who had submitted over 1,100 monitoring forms across the state. 411

Maine is another coastal state that has developed a citizen science approach with its Midden Minders (MM) program. 412 Maine has around 2,000 middens on its coastline (and all are vulnerable to the impacts of climate change, specifically shoreline erosion and rising sea levels) but only

has the financial resources to conduct two or three professional field investigations per year. The

⁴⁰⁷ Ibid.

⁴⁰⁸ Ibid.

⁴⁰⁹ Florida Public Archaeology Network. "Heritage Monitoring Scouts." Division of Anthropology and Archaeology, University of West Florida. Accessed Nov. 8 2021. https://flpublicarchaeology.org/projects/HMSflorida.php
⁴⁰ Thid

⁴¹¹ Dawson et al. "Coastal heritage, global climate change, public engagement, and citizen science." 2020. p. 8282

⁴¹² A midden is the archaeological term for a dump, trash pit, or refuse heap associated with human occupation. Shell middens in the United States are often associated with Native American occupation of sites, but can sometimes be attributed to other groups as well.

MM program was created with the Maine Historic Preservation Commission (MHPC) to create relationships between academic/governmental research at shell middens and local citizens and tribal members to monitor and document erosion at numerous recorded but unstudied sites. The Midden Minders program utilizes three approaches to data collection: 1) monthly midden "minding," 2) annual midden erosion survey, and 3) assessing storm damage. The HMS Florida Project, members of the public must apply to become Midden Minders, and must complete hands-on training, an online skills assessment, and provide evidence of permission to access private property before being able to collect data at midden sites in the form of notes, photographs, and other information entered into an online database.

While many places are turning to "salvage" or "rescue" archaeology as ways to save sites (or collect as much information from sites as possible before they are destroyed), there are other avenues of site conservation to consider, as it is impossible to do salvage excavation on all vulnerable archaeological sites, or even those considered most at-risk. Even if archaeologists were able to conduct salvage excavations at all of these sites, archaeologists and museum curators are currently facing a curation crisis, due to a lack of space to store artifacts and the funding to correctly conserve and store them. Additionally, many Native American tribes view salvage archaeology as colonial archaeology. Instead, many heritage managers are turning to digital preservation methods, such as laser scanning, photogrammetry, and reflectance transformation imaging, all of which were utilized in Scotland's Save Wemyss Ancient Caves Society's project for recording Pictish cave carvings. The data collected was used to create a 3D digital model online, so that individuals around the world could view and appreciate the carvings and coastline and access historic documentation. In this way, sites can be "preserved" digitally, allowing for people in the present and in the future to experience these places that cannot be physically saved from the impacts of climate change.

Adaptive Reuse and Embodied Energy

Embodied energy is not always a topic that is discussed along with historic preservation. More often than not embodied energy is part of the sustainability discussion. How can we lower the embodied energy of a project? How can we source local materials? Historic preservation can help answer these questions. Through the adaptive reuse of buildings, project energy costs and consumption can greatly decrease.

Effects and Statistics of Energy Consumption in Buildings

In the United States around 43% of carbon emissions and 39% of total energy used is the result of the construction and operations of buildings. Energy consumption is not the only thing the built environment contributes to. Manufacturing building materials and associated products are also a major contributor to greenhouse gas emissions. Furthermore, related construction and demolition materials make up two-thirds of all non-industrial solid waste generation in the United States:

• The average building demolition yields 155lbs of waste per square foot

⁴¹³ Dawson et al. "Coastal heritage, global climate change, public engagement, and citizen science." 2020. p. 8283

⁴¹⁴ Ibid.

⁴¹⁵ Ibid., 8284.

⁴¹⁶ Ibid.

⁴¹⁷Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation (Washington State Department of Archaeology and Historic Preservation, 2011), https://www.dahp.wa.gov/sites/default/files/209SustainabilityStudy_ExecutiveSummary.pdf.

⁴¹⁸Ibid.

- The average new construction project yields 3.9 lbs of waste per square foot of building area⁴¹⁹
- According to the EPA deconstructing over demolishing a building can save 90% of a building's materials from ending up in landfills.⁴²⁰
- By 2030 49% of the total carbon emissions of global new construction between now and 2050 will come from material production and acquisition⁴²¹

Everytime an existing building is demolished, energy is lost and wasted. According to a ACHP study, about 80 billion BTUs (British thermal units) of energy is embodied in a typical 50,000 sq. ft. commercial building. This is the equivalent of about 640,000 gallons of gasoline. Once this building has reached its perceived usability and is demolished all the embodied energy it holds is lost to landfills. Many buildings are not used long enough to ever recover its initial embodied energy costs. The United Nations energy program estimates it takes twenty years of a typical building's one-hundred year operation just to offset the expenditure of its construction energy and materials. It is often the case that buildings that are constructed quickly are not built with long-term operations in mind, thus making it a challenge to recoup the initial energy costs.

Historic buildings tend to be built for long-term use. "Data from the US Department of Energy indicates that commercial buildings constructed before 1920 actually use less energy per square foot than buildings from any other decade up until 2000." These historic buildings, with passive design techniques embedded in them, are a great resource for adaptive reuse and energy conservation.

Energy

Multiple types of energy are a part of construction of a building. Operational energy is the energy consumed through heating, lighting, and similar functions throughout the life of the building. Demolition energy is the energy needed to remove the existing building and dispose of the materials. Embodied energy can be defined as the sum total energy consumed to extract and prepare materials for and to construct a building. The ACHP defines embodied energy as "the energy used to process the materials required to construct a building and the [energy] needed to put them into place. Embodied energy is not always fully understood by sustainability proponents. Many sustainability efforts focus on creating a sustainable environment by removing buildings and replacing them with new buildings that are more "energy efficient." These efforts are justified based on the benefits of the lower operational energy usage of the new buildings, but it does not account for the large amount of embodied energy lost by demolition. Many of the

⁴¹⁹ Ibid

⁴²⁰ "Climate Action 2021: The Adaptive Reuse Revolution," Gensler, April 14, 2021, accessed December 14, 2021, https://www.gensler.com/climate-action-2021-the-adaptive-reuse-revolution.

⁴²¹ Ibid

⁴²² Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

⁴²³ Ibid.

⁴²⁴ Ibid.

⁴²⁵ Erica Avrami, "Making Historic Preservation Sustainable," Journal of the American Planning Association 82, no. 2 (January 28, 2016): 104–112.

⁴²⁶Robert A. Young, "Historic Preservation and Adaptive Use: A Significant Opportunity for Sustainability". ARCC Conference Repository (August 1, 2014). Accessed December 14, 2021. https://www.arcc-journal.org/index.php/repository/article/view/365.

⁴²⁷ Avrami, 104-112.

⁴²⁸ Young, "Historic Preservation and Adaptive Use: A Significant Opportunity for Sustainability".

⁴²⁹ Ibid.

demolished buildings could have been adapted to meet the desired operational costs and there would be minimal embodied energy lost. Lost embodied energy has significance in the goal of achieving a sustainable built environment. A new office building may take up to 40 years to recover the new energy used to build it. For a new office building, this period approaches 65 years when a building is torn down to make room for the new building, as it has to recover the energy lost in demolition. This leads to the energy recovery period exceeding the expected useful lives of many new buildings currently being constructed.⁴³⁰

Buildings also have embodied carbon that is lost once demolished. Embodied carbon represents the carbon emissions from the actuarial construction process. To achieve a carbon neutral future, adaptive reuse and renovation must be viewed as a powerful way to mitigate the carbon impact of the built environment. All Net zero carbon emissions can not be reached through new buildings alone. Instead there must

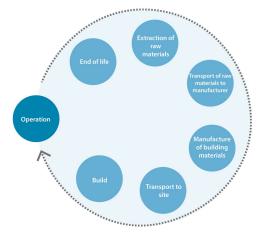


Figure 69: Graphic of elements of embodied energy. Source: ArchDaily

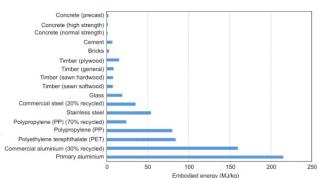


Figure 70: Embodied energy values of construction materials. Source: Waste and Supplementary Cementitious Materials in Concrete, 2018

be a focus on decarbonizing existing building stock.⁴³² Adaptive reuse and renovation reuse and salvage materials in a low impact way. Many times these approaches allow architects to design and even exceed current codes to improve energy performance and operational carbon of the existing building and in certain cases making it perform as well or better than new buildings.

What is embodied carbon?



Figure 71: Graphic defining and illustrating elements of embodied carbon. Source: U.S. General Services Administration (GSA)

⁴³² Ibid.

⁴³⁰ Ibid.

⁴³¹ "Adaptive Reuse: A Winning Sustainability Strategy - Ideas," ZGF, accessed December 14, 2021, https://www.zgf.com/ideas/2064-adaptive-re-use-a-winning-sustainability-strategy.

Adaptive Reuse of Historic Buildings and Sustainability

Advances in high performance or "green" buildings have primarily focused on new construction. The preservation and adaptive reuse of historic and old buildings has not always been at the forefront of the green movement. The majority of sustainability research focuses on new construction. To fill this informational gap, preservation organizations have commissioned life cycle assessment studies to show the energy savings and reduced carbon impact of rehabilitated buildings. The distribution of the preservation of the preservation organizations have commissioned life cycle assessment studies to show the energy savings and reduced carbon impact of rehabilitated buildings.

National Trust for Historic Preservation Green Lab (now Research and Policy Lab) 435

- 2011 report contextualizes embodied energy in an avoided impact approach
- Demonstrates the positive environmental impacts of rehabilitating an existing building
- The avoided impacts are quantified in terms of the number of years it would take for a new, energy efficient building to recover all carbon expended during the initial construction. 436

While preservationists advocate that older buildings are inherently green and promote their preservation on the basis of energy conservation, the data to back this up is not available. The energy benefits of preserving buildings is not backed up because the data and assessment methods are lacking. In addition, operational and embodied energy are valued differently, and designated historic buildings are often exempted from complying with energy codes. 437

Historic and older buildings are often energy efficient from inherent characteristics, making them a valuable existing resource. Many historic buildings were designed with passive systems before the invention of electric lighting and powered heating and cooling systems. These buildings were designed to take advantage of natural daylight, ventilation, and solar orientation. All these characteristics are now being used as sustainable design attributes today. 438 The materiality of historic buildings was often traditional, durable materials such as concrete, wood, glass, and steel. 439 When properly maintained these materials have a long lifespan. Even if these historic buildings do not meet the desired energy standards they can be upgraded with new technologies to maximize energy performance.

Historic features are mistakenly regarded as one of the major sources of energy loss in buildings. According to the Department of Energy, only an average of 10% of energy loss is caused by windows. More energy is lost through plumbing openings and uninsulated HVAC ducts. Rehabilitating and maintaining historic features, like windows, can be energy efficient:

- Historic windows can be repaired and restored to address any energy loss.
- Reduces the disposal of materials into landfills

⁴³³ Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

⁴³⁴ Avrami, 104-112.

⁴³⁵ For more information on NTHP's Research Policy Lab visit: https://savingplaces.org/research-lab

^{436 &}quot;Research & Policy Lab," National Trust for Historic Preservation, accessed December 14, 2021, https://savingplaces.org/research-lab

⁴³⁷ Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

⁴³⁸ Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

⁴³⁹ Ibid.

⁴⁴⁰ Ibid.

- Reduces new window manufacturing costs and effects on environment
- Can last indefinitely if properly maintained (new windows last only 10-20 years)
- Reduces resource and material consumptions
- Consumes less energy than demolishing buildings and constructing new ones⁴⁴¹

Case Study | The Cobb Building, Seattle, WA

The Cobb Building is a National Register listed building for being one of the first commercial buildings in the nation to consist of medical and dental offices. Through an adaptive reuse project, the building was transformed for residential use. The project received LEED 'registered' certification and met the Secretary of the Interior's Standards.⁴⁴²

Features: • All original windows restored

- All original windows restored and seals tightened, while a removable low-e film was applied to increase insulation on the original glazing
- Large operable windows were restored to preserve daylighting and natural air flow ventilation (just as they did historically)
- Heating and cooling was improved with a hybrid heat pump system that saves an estimated 5% a year over water heat pumps and improves indoor air quality
- Comprehensive waste management plan diverted 95% of waste from landfills
- New materials have recycled content
- Saving the brick and terracotta exterior equals the embodied energy equal to powering 145 homes for a year

Case Study | The Pearl Apartments, Spokane, WA

As a contributing resource to the west downtown historic district, the Pearl Apartments was rehabilitated into affordable housing. Formerly an apartment complex, the adaptive reuse project retained the historic use of the building, while providing it with a second life. The project also met criteria for the Built Green Multi-Family Certification and the Secretary of the Interior's Standards. Features:

- Rigid insulation added to exterior masonry walls for higher performance; blown-in insulation at roof
- Energy star fixtures and bulbs installed throughout
- Heat-recovery ventilator and high efficiency heat pumps installed in units
- Doors + windows weather-stripped to reduce infiltration
- Spokane bio-based tile and linoleum used for better indoor air quality
- Light interior finishes add reflectivity of natural light
- Recycling stations at each floor for occupants

Case Study | The Post Office, Chicago, IL

Designed by Gensler, this adaptive reuse of a historic post office into housing and mixed use is an example of a large scale adaptive reuse preservation project. It is currently "the largest reuse project in the United States with 97% of potential construction waste diverted from landfill."

⁴⁴¹ Ibid.

⁴⁴² Ibid.

⁴⁴³ Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

^{444 &}quot;Climate Action 2021: The Adaptive Reuse Revolution," Gensler, April 14, 2021, accessed December 14, 2021, https://www.gensler.com/cli-

Features:

- Restoration of the building's facade, windows, main lobby, Postmaster-General suite, and historic corridors
- Detailed documentation of existing equipment
- Preservation of elements paired with graphic stories and displays of postal relics to capture the building's history
- Platinum Winner, 2020 Building Design + Construction's Reconstruction Awards⁴⁴⁵

Tips for Sustainable Rehabilitation Projects

The following is a compilation of tips for having a successful and sustainable rehabilitation of a historic building:

- Insulate unfinished areas (attics and basements) where historic fabric is less likely to be altered⁴⁴⁶
- Diagnose existing insulation and infiltration conditions with technologies that can detect where improvements can be made
 - Blower test
 - Energy audits
 - Infrared thermographic inspections
- Evaluate existing heating, ventilation, and air conditioning (HVAC) systems to ensure they are functioning properly
 - Replace with higher efficiency units if needed
 - Maintain units for best performance
 - Supplement with low-energy boosters (fans and shading devices)
- Check with preservation consultants to see how renewable energy sources (ground source heat pumps, solar panels and wind turbines) can be integrated into the project
 - Rebates for renewable energy sources
- Evaluate existing lighting conditions
 - Prioritize electric lighting only when needed
 - Install sensors
 - Look for ways to improve interior natural day lighting
- Install low-flow plumbing fixtures and install aerators in existing fixtures to reduce water use by up to 40%
 - Provide rain barrels at downspouts to catch runoff and use water for landscaping

Adaptive Reuse Strategies at Various Scales

The architecture firm Gensler research team has looked at applying adaptive reuse strategies at all scales that may impact the construction process. This research looks at the scale of products, interiors, buildings, and cities, and examines the best practices at each scale:⁴⁴⁷

Products

mate-action-2021-the-adaptive-reuse-revolution.

⁴⁴⁵ "The Post Office," Gensler, accessed December 14, 2021, https://www.gensler.com/projects/the-post-office.

⁴⁴⁶ Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

⁴⁴⁷ "Climate Action 2021: The Adaptive Reuse Revolution," Gensler, April 14, 2021, accessed December 14, 2021, https://www.gensler.com/climate-action-2021-the-adaptive-reuse-revolution.

- Engage with vendors and processes that re-purpose material assemblies, furniture and office equipment
- Balance reuse of appliances with current demands and energy efficiency
- Use locally sourced products: can reduce transportation related emissions, support local economies, and encourage reuse

• Interiors

- Design for disassembly
- Select low-carbon materials (many are historic materials)
- Choose materials that are easy to reuse and reuse them

Buildings

- Reposition and retrofit→ anticipate future uses and design for flexibility and multi-use
- Assess the building's core and shell
 → slabs facade, and roof are often completely repurposable
- Consider the building envelope

Cities

- Examine new strategies that meet community needs
 → adaptive reuse strategies can revitalize communities and create more sustainable cities
- Look for partnership opportunities with municipalities for neighborhood planning and infrastructure
- Connect with community: may be historical, social, and cultural reasons to reuse buildings

Next Steps

A main next step that needs to be taken is that historic building energy performance needs to be further researched so that decisions concerning adaptive reuse are based not only on preserving the historic character of a building but also on data that supports its environmental impact. This research can then help place historic preservation and adaptive reuse strategies as a major resource for a sustainable built environment. Educational efforts to highlight preservation technologies as sustainable can also increase both knowledge and curiosity about preservation as a sustainable tool. 448 Other next steps include new innovative building codes to integrate preservation and energy conservation, new partnerships and collaboration between preservation groups, government agencies, and green designers, and planning for sustainable development at various scales (building, neighborhood, city).

Historic Preservation Benefits to the Economically Disadvantaged

Introduction

The field of historic preservation is often viewed as white, elitist, and geared towards the upper class. This reputation is certainly well-earned, but does not reflect how historic preservation can be, and often is, used to benefit the economically disadvantaged. Although preservation policies and practices can serve as an obstacle for economic development, there are also ample examples of good preservation practices offering economic assistance to a wide range of people.

In its 2011 study, Measuring Economic Impacts of Historic Preservation, PlaceEconomics

⁴⁴⁸ Washington State Department of Archaeology and Historic Preservation, Sustainability and Historic Preservation.

recognized that, "the relationship between preservation and the economy... remains imperfectly understood and only partially documented." With a limited body of research available, it is then critical to look at successful case studies, which show how preservation can be effectively utilized to make the built environment accessible and beneficial to diverse demographics. Adaptive reuse, easements, tax credits, land trusts, and legacy businesses programs are just some of the strategies preservationists have had success with in the past.

Definitions:

Economically disadvantaged individuals are people who do not have the same access to credit and capital opportunities like other individuals who have a similar or same business because of their differences in social disadvantages.

Developer Prioritization occurs when the needs and interests of the developer are given a higher value than those of the community.

Adaptive Reuse Economic Benefits

Adaptive reuse can be defined as modifying the function of a building, while maintaining much of the building's original fabric. Although alterations are almost always necessary, an adaptive reuse project seeks to maintain some of the building's existing structure or character when modifying it for a new use. Commonly referred to as a rehabilitation, conversion, or retrofit, the practice of adaptive reuse is inherently a preservation one; original character or material remains largely intact, even as the building takes on a new life.

The debate over the economic benefits of adaptive reuse versus new construction is a complicated one. Developers often believe that adaptive reuse is a more expensive endeavor than demolition and new construction, and there is some merit to this argument. Adaptive reuse projects often include more financial risk, and the existing conditions of the building are difficult to predict. Moreover, bringing a historic building up to modern standards can present real challenges. However, there are also proponents who argue that adaptive use can offer significant economic benefits. The existing fabric of the building allows for lower material costs, and programs like historic preservation tax credits can help offset some of the unexpected costs.

Adaptive reuse can also have larger economic benefits for entire communities, including job creation, "the multiplier effect," heritage tourism, and reinvestment in downtown cores.⁴⁴⁹

- Adaptive reuse projects can generate opportunities for local labor. According to Donovan Rypkema, historic rehabilitation investment created an average of 43 jobs per US\$1 million, compared to only 40 jobs per US\$1 million for new construction.⁴⁵⁰
- The multiplier effect describes the theory that the labor wages from a reuse project stay within a given community, thus magnifying the economic effects in a set location.⁴⁵¹

⁴⁴⁹ Nart Stas (2007). The Economics of Adaptive Reuse of Old Buildings: A Financial Feasibility Study & Analysis. UWSpace. http://hdl.handle.net/10012/2707

⁴⁵⁰ Ibid

⁴⁵¹ Rypkema, D. (1994). The Economics of Rehabilitation: A Community Leader Guide. National Trust for Historic Preservation.

• Maintaining historic materials can help retain historic character for places, which can then be leveraged into heritage tourism opportunities.

Moreover, some studies suggest that reusing vacant buildings is much more economically savvy than demolition. According to the National Vacant Properties Campaign, "an examination of the St. Paul, Minnesota's budget for maintenance and security costs associated with vacant buildings revealed that while demolition saves \$4,697, the rehabilitation of a vacant building will save an estimated \$7,141 in maintenance costs over a twenty-year period." Moreover, research in Philadelphia concluded that residential homes near vacant buildings experienced a net loss in property value. For both the government and nearby homeowners, there is a definite financial benefit to reusing existing buildings, as opposed to leaving them neglected or demolishing them.

Adaptive Reuse as Financially Accessible | Case Study Detroit, Michigan

One particularly interesting case study looking at how adaptive reuse can help the economically disadvantaged is the Motor City Match program in Detroit, Michigan. This program aims to connect vacant buildings with local entrepreneurs looking for a space. The driving principle behind this program is that both buildings and people can benefit from this relationship; buildings need someone invested in their upkeep, and small entrepreneurs need low-cost space for their businesses. The appeal of adaptive reuse in this context is that there is less upfront cost for small businesses to acquire a brick and mortar work area and less construction time/upfront costs. Here, the cheapest building is the one already built.

The program specifically looks to benefit low and moderate income persons, with the secondary aim of removing "blight" from the city. In order to achieve this, Motor City Match also offers "one-on-one consultations, subject specific workshops, technical assistance, access to professional services, site selection assistance, competitive grants, and loan counseling." Small businesses and "micro entrepreneurs" (businesses with less than five people) can apply for the program, which gives them access to both technical assistance and financial assistance awards.

Adaptive Reuse as Financially Accessible | Case Study Los Angeles, CA

In his article, Latino New Urbanism: Building on Cultural Preferences, Michael Mendez considers the ways in which adaptive reuse has historically been a tool for latinx communities in the United States (even if it isn't always referred to as such). 452 Mendez writes that,

"The adaptive reuse of homes is visible throughout California, but it is most evident in East Los Angeles, where a distinct spatial form represents the cultural, economic and regional solutions residents have developed to meet their criteria for the built environment. In East Los Angeles, as James Rojas (1991) has described, the residents have developed a working peoples' manipulation and adaptation of the environment, where Mexican-Americans live in small wooden houses, built by Anglos, that have evolved to what he calls the "East Los Angeles Vernacular."

⁴⁵² Mendez, M. (2005). Latino New Urbanism: Building on Cultural Preferences. Opolis, 1(1). Retrieved from https://escholarship.org/uc/item/0mz-4k5pb

Evolution of East Los Angeles vernacular

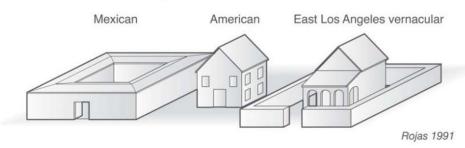


Figure 72: Illustration of the evolution of vernacular architecture in East Los Angeles. Source: Rojas 1991.

The article goes on to detail the ways in which minority communities adapt existing buildings (and landscape) to meet their needs, with some modifications. These modifications speak to the relative affordability of adaptive reuse on a small scale; it is more cost effective to modify existing landscapes for latinx needs than to construct entirely new ones.

Mendez referenced the idea of the ""third border," coined by urban geographer Mike Davis, to explain some of the barriers latinx communities face in these attempts at adaptive reuse. Davis argues that laws and regulations privilege new high-density housing development, while at the same time create obstacles for homeowners attempting to put on additions and modify homes for additional tenants or renters. While the existing adaptive reuse practices of latinx communities create medium-density housing within existing buildings, planners too often discourage this practice. Davis writes that subsequently, "there is a proliferation of bootlegged, substandard garage and basement conversions that keep Latino homeowners embroiled in costly conflicts with city building inspectors."

Flexible adaptive reuse policies, in conjunction with culturally-sensitive building practice, may serve as a way to increase density in a neighborhood, and create income for homeowners wanting to take on renters or additional tenants.

Adaptive Reuse as Local Economic Driver | Case Study Louisville, Kentucky

For a larger scale example of the benefits of adaptive reuse, John Gilderbloom, Matthew Hanka, and Joshua Ambrosius conducted a mega-study on how Louisville, Kentucky's preservation policies have positively impacted residents, both in terms of economics and sustainability. The study uses Louisville as the focus area because it has some of the most progressive preservation policies in the country, as well as ample historic resources. Louisville boasts one of the largest National Register districts in the United States, and the largest collection of Victorian-era homes.

One of the major findings for this report was that good preservation policies, including emphasizing adaptive reuse over new construction, in conjunction with historic tax credits, had a positive impact on job creation in Louisville, and Kentucky overall. This study suggests that the Main Street Program in Kentucky created 4720 jobs, which resulted in \$149 million in income in 2006. According to the data from this article, for every one million spent on Main Street, 29 new jobs were

⁴⁵³ Historic preservation's impact on job creation, property values, and environmental sustainability. July 2009 Journal of Urbanism International Research on Placemaking and Urban Sustainability 2(2):83-101

created. Moreover, job creation is likely grossly underestimated, as it is difficult to quantify the exact numbers of persons maintaining, restoring, and upgrading thousands of historic homes around Kentucky. The jobs created by preservation programs include some white collar labor, especially in regards to designation and architectural design, but also a substantial amount of blue collar jobs, including specialized trade skills, general labor, and maintenance.

Affordable Housing and Historic Preservation

The Federal Department of Housing and Urban Development defines affordable housing as "housing [in] which the occupant is paying no more than 30 percent of gross income for housing costs, including utilities." Wage stagnation, increased cost of living, rising home prices and materials costs all contribute to the affordable housing crisis in the United States. While solutions to combat the affordable housing crisis include the construction of mixed-income and low-income housing, the reality is that these new buildings are not an effective long-term solution. New infrastructure is impacted by the cost of development which include wages, material cost, public facilities creation etc. and these costs are often passed down to consumers by increased rent/housing pricing, reduction of unit quality or dependency on governmental subsidies to retain profit. 455

Historic preservation thus presents itself as a solution for affordable housing by the readaption of historic buildings instead of focusing on new development. Rehabilitated historic buildings can be cheaper than new construction, as certain costs can be reduced. For instance, historic buildings are typically located in neighborhoods with pre-established access to transportation, grocery stores, and schools which is cheaper than having to build access with new development. In addition, Low Income Housing Tax Credits (LIHTC) can be combined alongside the Federal Historic Preservation Tax Incentives program to help reduce the cost of rehabilitation. In 2016, the National Park Service had reported that about half of all HTC projects were related to housing in some form, and between 1978-2016 there were 549,005 housing units created. In 2016, the National Park Service had reported the cost of the National Park Service had reported that about half of all HTC projects were related to housing in some form, and

Case Study | Fells Point Station, Baltimor, MD

There are many case studies that have looked into affordable housing and historic preservation. Particular case studies that are of value to the Fairland-Briggs Chaney area are those that combine both LIHTC and Historic Tax Credits. The Fells Point Station was a police station built in the 1920s and was later turned into a mixed-used and income building in 2014. Henson Development Company and Missionfirst HDC purchased both the historic building and the adjacent parking lot. The Fells Point Station was rehabilitated and connected to the new mixed-use building being built on the parking lot. The project had totaled at \$13.6 million and was partially funded with 9% LIHTC and Baltimore City Historic Tax Credits. The new building featured 47 apartment units which included 34 affordable housing units. 459

141

⁴⁵⁴ https://archives.hud.gov/local/nv/goodstories/2006-04-06glos.cfm

⁴⁵⁵ Rypkema, Historic Preservation and Affordable Housing, 4-5.

⁴⁵⁶ Ibid., 10.

⁴⁵⁷ Rutgers University. Annual Report on the Economic Impact of the Federal Historic Tax Credit for FY 2016, n.d. https://www.nps.gov/tps/tax-incentives/taxdocs/economic-impact-2016.pdf.

⁴⁵⁸ "Developer Turning Vacant Fells Point Police Station into 47-Unit Apartment Building," Bmore (Bmore, July 16, 2013), http://www.bmoremedia.com/devnews/vacantfellspoint07/16/2013.aspx.

Case Study | The Garage, New Orleans, LA

This particular case study is directly related to the car dealerships located in the autopark inside of Briggs Chaney-Fairland. While the car dealerships are currently in operation, there is potential for the units to be converted into affordable housing units should the future require it. The conversion of car dealerships into mixed-use buildings has been seen across the United States. While the Garage is not an example of affordable housing, it presents a study on how dealerships can be turned into housing with the help of historic preservation. The Garage was built in 1951 and had served previously as a car dealership and was sold in 2008 to the Wisznia Architecture + Development company. Through the combination of both federal and state historic tax credits, the dealership turned into a 51 multi-family apartment, 11 penthouse, and ground floor retail building.

Preservation Easements

Overview:

A historic preservation easement is a voluntary legal agreement by a property owner (attached to a deed), which serves to protect the property from significant alterations, in perpetuity. Easements can also be written to provide environmental protections and land conservation, preservation of open space, and protection of scenic viewsheds.⁴⁶¹

- A qualified holding organization, such as a public entity or land trust, is given legal responsibility to ensure the terms of the easement are abided by should the property be transferred. These agreements "run with the land" and apply to all future owners of the property.
- If certain conditions are met, property owners may be eligible for Federal/State tax deductions, however, the long-term benefits of easements as a land-use protection benefit the general public and non-property owners.
- Depending on the terms of the easement, public access may be a requirement so all
 can enjoy the benefits of learning from and interacting with the protected property or
 landscape.
- Research, maintenance, and curation of easement properties can lead to local job opportunities.

How easements can benefit the economically disadvantaged:

- Building/facade easement protects tangible buildings/structures, which could prevent further development, gentrification, and displacement within rapidly changing neighborhoods. If an easement is on a commercial building, protection can protect businesses and local jobs. Depending on the context, the scale of blocks or even entire neighborhoods can be maintained so a sense of place is retained. Property owners who are considered low-income can utilize the tax deduction as a way to reduce potential financial burdens, and depending on the arrangement with the holding organization, may receive assistance in maintenance and repair.
- Environmental protections and land conservation terrestrial and aquatic landscapes

⁴⁶⁰ "Unique Adaptive-Reuse Development in New Orleans' Warehouse District Receives \$30 Million in Bridge Financing via Walker & Dunl." Bloomberg, Bloomberg, January 7, 2021. PR Newswire. https://www.bloomberg.com/press-releases/2021-01-07/unique-adaptive-reuse-development-in-new-orleans-warehouse-district-receives-30-million-in-bridge-financing-via-walker-dunl.

^{461 &}quot;Easements to Protect Historic Properties: A Useful Historic Preservation Tool with Potential Tax Benefits", NPS, 2010.

- are protected, preventing development that could disturb wildlife and vegetation. Protection can maintain water and air quality, mitigate flood risk, and reduce noise and light pollution.
- **Preservation of open space** benefits are similar to above, and depending on terms of the easement, could create public lands that all can enjoy for recreation, events, or solitude. Whether large or small in scale, preservation of open space can lead to development of parks for public use.
- **Protection of scenic viewsheds** provides visual protection of natural and historic landscapes and/or waterscapes, so hypothetically, all public stakeholders can enjoy the mental/psychological benefits of natural, unaltered view sheds.

Preservation Easement as a Public Good | Case Study: Colorado

Colorado's Conservation Easement Tax Credit⁴⁶²

- The conservation easement protects family farms and ranches from development.
- Between 1995 and 2008, \$595 million investment in conservation easements returned \$3.51 billion in public benefits; for every \$1 spent on easements the state received \$6 in economic benefits.
- Public benefits include:
 - Water supply protection
 - Waste water treatment and flood control
 - Farm and ranch production (maintains jobs and local food sources)
 - · Recreation, including fishing and hiking

Preservation Easement as a Tool for Intergenerational Growth | Case Study: north Carolina

Laurel Mill and the Allen Tract, North Carolina 463

- The preservation easement protected the land and mill house that once belonged to the Allen family, giving time for the family to reacquire their assets. Adjacent ecosystems and scenic viewsheds were also protected.
 - Allen family owned the land between 1868 and 1964
 - Easement in 1992 ensured protection of lands as Allen family heirs worked to accumulate wealth to repurchase
 - Allen family regained ownership in 1999 and included easement as part of their trust.
- Public benefits:
 - Protected watershed and water quality
 - Preservation of natural ecosystems
 - Preservation of significant architectural elements to learn from

⁴⁶² "Economic Analysis Shows Benefits Of Easements", The Trust for Public Land. February 1, 2010. https://www.tpl.org/media-room/economic-analysis-shows-benefits-easements

⁴⁶³ Camilla M. Herlevich and Lee Lewis Leidy. "Conservation & Historic Preservation Easements to Preserve North Carolina's Heritage", North Carolina Coastal Land Trust, 2004,

http://coastallandtrust.org/wp-content/uploads/2016/09/conservation-historic-preservation-easement-book-1.pdf.

Community Land Trusts

A community land trust is a non-profit organization that "ensures community stewardship of land" through its preservation and maintenance. 464 The primary purpose is to ensure land remains affordable and accessible for long-term housing and (sometimes) community led retail and commercial endeavors. Land trusts protect land values against external pressures of development, speculation, and gentrification.

- The land trust maintains ownership of the land and leases it to prospective homeowners, typically for 99 years. The lease is able to build on the land or renovate existing structures, acknowledging that there are limits to the amount of equity to be gained upon sale of the structure. By limiting profits to a percentage of the increased value, affordability is maintained for future owners.
- There are approximately 291 community land trusts in the United States. 465
- Community Land Trusts maintain affordability of housing and provide protections for tangible and intangible historic resources.
 - Historic places and environments receive additional protections under the terms of a land trust.
 - Intangible resources such as cultural traditions and sense of place can also be protected from external development pressures and gentrification.

Community Land Trust as Public Asset | Case Study: Albuquerque, NM

Sawmill Community Land Trust - Albuquerque, New Mexico 466

- Founded in 1994, SCLT combined the efforts of existing community organizations
 who worked to preserve the "character of the ethnically diverse" Sawmill community.
 The land trust was a way to "empower" the community by creating stewardship,
 protecting sense of place, and protecting affordable housing from speculation and
 future development. 467
- A former 27-acre industrial site was acquired in partnership with the city, as a way to maintain an affordable community and mitigate environmental damages due to past industrial use.
- Today:
 - SCLT has 34 acres, 93 affordable homes, and 3 affordable apartment buildings, with a plaza, parks, and playgrounds.
 - Housing serves low to moderate-income families and those earning less than 80% of the area's median income. Live/work spaces provide further opportunity for income and wealth accumulation.
 - Despite the absence of tangible resources, the goal of the land trust is to preserve the natural attributes and cultural history of the community for future generations. Ecological renewal and energy conservation further this tradition of stewardship for future generations.

^{464 &}quot;Overview: Community Land Trusts", Community-Wealth.org, 2020. https://community-wealth.org/strategies/panel/clts/index.html
465 "Global CLT Map + Directory", Center for Community Land Trust Innovation, https://cltweb.org/resources/clt-directory/

^{466 &}quot;About", Sawmill Community Land Trust, https://www.sawmillclt.org/about-us/completed-projects/

⁴⁶⁷ Rosalind Greenstein, Yesim Sungu-Eryilmaz, "Community Land Trusts: Leasing Land for Affordable Housing", Lincoln Institute of Land Policy, 2005.

Preservation Tax Credits

Overview

A preservation tax credit is a financial incentive that encourages the rehabilitation and preservation of historic buildings. The credit is calculated as a percentage of the project's qualified rehabilitation expenses and is deducted from the investor's income tax liability.

- Tax credits are available for qualified projects at the federal, state, and local level.
 - The Federal Historic Preservation Tax Credit (HTC) provides a 20% credit for the rehabilitation of certified historic structures that are listed on the National Register (NR), eligible for the NR, or contribute to a NR historic district. These properties must be income producing, negating owner-occupied residential properties. Since 1979, it is estimated that \$173.7 billion has been invested as part of the HTC program.⁴⁶⁸
 - The Maryland Historic Revitalization Tax Credit provides a 20% credit for the rehabilitation of certified historic structures that are listed on the National Register, eligible for the NR, contribute to a NR historic district, listed on the Maryland Inventory of Historic Properties, or designated historic under local law. This tax credit is administered by the Maryland Historic Trust and can be used by homeowners and commercial property owners.⁴⁶⁹
 - The Montgomery County Historic Preservation Tax credit provides a 10%-25% credit for eligible repair work for properties that are listed in the Montgomery County Master Plan for Historic Preservation.⁴⁷⁰

How Preservation Tax Credits con Benefit the Economically Disadvantaged

- Tax credits help property owners with out-of-pocket rehabilitation expenditures, but allocation of tax credits creates opportunities for non-property owners, as well as economically disadvantaged communities.
 - Jobs are created as demand increases for construction labor, material manufacture and sale, and equipment manufacture and sale. The 'trickle down' effect of tax credits goes beyond construction related industries; depending on the size of the project, local businesses, restaurants, and vendors can benefit from local rehabilitation projects and the increased workforce presence. Between 1978 and 2019, 2.78+ million jobs were created as a result of the HTC, 31% of which were directly related to construction. 471
 - With an improved streetscape and the potential for increased visitation, adjacent properties and businesses can benefit from increased traffic (assuming long-time residents and businesses are not displaced).
 - Federal Historic Tax Credits can be used to create affordable housing units, especially when paired with HUD's Low-Income Housing Tax Credit (LIHTC)

⁴⁶⁸ "Annual Report on the Economic Impact of the Federal Historic Tax Credit for Fiscal Year 2019", Rutgers University and National Park Service, 2019. https://www.nps.gov/tps/tax-incentives/taxdocs/economic-impact-2019.pdf

⁴⁶⁹ "Maryland Historic Revitalization Tax Credit Program", Maryland Historical Trust. https://montgomeryplanning.org/planning/historic/tax-credit-program/

⁴⁷⁰ "Tax Credit Program", Montgomery County Planning, Historic Preservation. https://montgomeryplanning.org/planning/historic/tax-credit-program/

⁴⁷¹ "Annual Report on the Economic Impact of the Federal Historic Tax Credit for Fiscal Year 2019", Rutgers University and National Park Service, 2019. https://www.nps.gov/tps/tax-incentives/taxdocs/economic-impact-2019.pdf

or Community Development Block Grants (CDBG). In 2019, use of the HTC resulted in the creation of 6,200+ low and moderate income housing units, adding to the over 172,400 units created under the HTC since 1979.⁴⁷²

Preservation Tax Credits for Community Development | Case Study: New Orleans, LA

St. Rose de Lima Church Complex - New Orleans, Louisiana 473

- St. Rose de Lima complex was built in 1915 and contributes to the Esplanade Ridge National Register Historic District in the 7th Ward. The complex includes a framed schoolhouse, brick schoolhouse, and church.
- Rehabilitation was completed in 2018 at a cost of \$12.1 million; possible due to \$1.4 million in Historic Tax Credits, \$1.8 million in Louisiana State HTC, \$2.6 million in Federal New Markets Tax Credit, and \$5.0 million in Community Development leverage loans.
- Rehabilitation of the three buildings:
 - The frame schoolhouse was rehabilitated as offices for social justice organizations and incubation spaces for local entrepreneurs.
 - The brick schoolhouse was rehabilitated as a nonprofit school for grades pre-K through 8th.
 - The church was rehabilitated as a community theater that offers additional programs for youths and seniors.
- The project is expected to attract 30,000 visitors per year, create 165+ new and fulltime jobs, support 100+ entrepreneurs, and serve 200+ students (100% scholarships provided for low-income students).

Job Creation

Historic preservation impacts job creation in different forms because it spans so many different sectors.

- Within historic rehabilitation, it was found that historic rehabilitation investment created an average of 43 jobs per US\$1 million, compared to only 40 jobs per US\$1 million for new construction.474
- The Main Street Program which focuses on heritage led development has led to both new jobs and businesses. For example, Washington D.C.'s Main Street Program reported that in FY2019, 1,617 net jobs and 60 new businesses were created and that since DC Main Street was created in 2004, over 7,500 jobs have been created. 475
- In a 2019 report for the impact of historic preservation, it was found that Nashville's designated historic district sites had a 24% increase in jobs related to heritage tourism.476
- Heritage tourism is a particularly important economic component of historic

⁴⁷² "Federal Tax Incentives for Rehabilitating Historic Buildings: Annual Report for Fiscal Year 2019", National Park Service, Technical Preservation Services, 2019. https://www.nps.gov/tps/tax-incentives/taxdocs/tax-incentives-2019annual.pdf

⁴⁷³ "Annual Report on the Economic Impact of the Federal Historic Tax Credit for Fiscal Year 2019", Rutgers University and National Park Service, 2019. https://www.nps.gov/tps/tax-incentives/taxdocs/economic-impact-2019.pdf

⁴⁷⁵ "DC Main Streets Program," DC Main Streets Program, accessed November 9, 2021, https://dslbd.dc.gov/service/DCMS.

⁴⁷⁶ Donovan Rypkema et al., "The New Nashville: A Study of the Impacts of Historic Preservation" (PlaceEconomics, April 2019), https://www. placeeconomics.com/wp-content/uploads/2019/06/Nashville-Report-6.19.19-spreads-smaller2-compressed.pdf.

preservation as the industry itself represents 5% of the world's GDP, and 1/10 jobs are related to tourism.⁴⁷⁷ The heritage tourism industry impacts not only job creation for services related to hospitality, but also invests money back into the local economy.

Case Study: San Francisco Legacy Business Program

The San Francisco Legacy Program was introduced in 2015 to preserve San Francisco's culturally significant businesses and nonprofits that have operated for at least thirty years and contribute to the heritage of the neighborhood. An addition to making the public aware of these significant cultural businesses, the San Francisco Legacy Business program also started a grant program which helps listed business owners with funds to maintain long-term leases with landlords. The fund provides a \$4.50 per square foot grant (up to 5,000 square feet) to landlords who agree to maintain 10 year leases. This is particularly important in retaining businesses who rent their properties during a time where real estate has risen.

Heritage Led Development

Introduction

Heritage-led development centers the community and cultural attributes in economic and community development, planning, and resource allocation. Many academic authors suggest that heritage-led development includes the management of the cultural resources, the activities within the built environment, and how both these factors impact or address the needs of local stakeholders. Most commonly, heritage-led development strategies center heritage tourism and tourists' interest in development efforts.

Heritage tourism is defined as "traveling to experience the places, artifacts, and activities that authentically represent the stories and people of the past and present." Heritage tourism is often done in a way that is "destructive of culture, the environment, and the built resources that have contributed to the development of alternative forms of tourism." Heritage-led development, more broadly, centers heritage and culture at the center of development projects by centering the voices of the community and local stakeholders. While tourism might be possible to the Fairland and Briggs-Chaney, there is no current evidence of tourism to the region and any short-term travel to the area is primarily for retail-shopping, work, some use of local and regional parks, and visiting the Auto-Park. Considering the impacts and nature of heritage tourism and the cultural landscape of Fairland and Briggs-Chaney, we focus our analysis in this section on the heritage of suburbs and suburbanization in the United States and similar international case studies.

As previously mentioned in above sections, the area designated Fairland and Briggs Chaney has experienced centuries of historic events that are worth researching and remembering through historic preservation and other means. However, as the area is represented today, the majority of the structures associated with these historical events are destroyed or exist only as archaeological sites. The earliest houses that are still utilized as a domestic structure are from the late 19th century.

⁴⁷⁷ Koff, R., & et.al., "Cultural Heritage Tourism" (Partners for Liveable Communities, 2014), https://www.americansforthearts.org/sites/default/files/culturalheritagetourism.pdf

^{478 &}quot;San Francisco Legacy Businesses," San Francisco Heritage (San Francisco Heritage), https://www.sfheritage.org/legacy-businesses/.

⁴⁷⁹ Noha Nasser. "Planning for Urban Heritage Places: Reconciling Conservation, Tourism, and Sustainable Development." Journal of Planning Literature 17, no. 4 (May 2003): 467–79. https://doi.org/10.1177/0885412203017004001.

⁴⁸⁰ Jamesha Gibson, "[Preservation Glossary] Today's Word: Heritage Tourism," National Trust for Historic Preservation, https://savingplaces.org/stories/preservation-glossary-todays-word-heritage-tourism#.YYhI4RrMI2w.

⁴⁸¹ Noah Nasser, "Planning for Urban Heritage Places: Reconciling Conservation, Tourism, and Sustainable Development."

The majority of standing structures that are representative of Fairland and Briggs Chaney are characteristic of mid-late 20th century suburbanization seen in many areas in the D.C. metropolitan area. When looking ahead to the near future, the garden style apartments, auto park, strip malls and other distinctly suburban environments will be representative of our present, and will be considered the recent heritage of the area. While historic preservationists are tasked with preserving heritage by maintaining integral aspects of the cultural landscape, there are essential characteristics of suburban areas that are not congruent with 21st century goals.

Identifiable characteristics of suburbia:482

- Emphasis on private and single use buildings
- Auto-dependent
- Lower density and more evenly spread out in the landscape
- Funded by short term investors such as real estate developers
- Roads are not interconnected compared to urban areas

How can historic preservation redefine maintaining integrity without preserving the negative aspects of suburban environments?

How do we preserve the heritage of suburbs whilst still allowing for the growth of issues relevant to today such as environmentalism, diversity inclusion, and affordable housing?

The following section discusses case studies that offer precedence in the field of historic preservation for recognizing suburban sites similar to those offered by Fairland and Briggs-Channey. Additionally, we discuss case studies related to historic preservationists' approaches to suburban heritage as a technique for smart growth and potential areas for heritage tourism. Fairland and Briggs-Chaney offer historic resources relating to suburbanization and late 20th century development that are becoming more relevant within historic preservation as a discipline.

Suburbs in America were popularized in the mid-19th century related to the decline of the centralized city replaced with the 'commuter city'. This rise of the suburb is intertwined with the development of the car industry and highway construction.

However, it should be noted that suburban neighborhoods are not a monolith and offer unique understandings for the development of specific areas. While suburban areas are commonly associated with middle-upper middle class white communities, research has shown they often exhibit areas of cultural, racial and economic diversity. 483 Thus, they bring forth research opportunities related to their architectural styles, layouts, and persons of interest in the same manner as any historic area.

⁴⁸³ Brookings Institution Metropolitan Policy Program, The State of Metropolitan America: On the Front Lines of Demographic Transformation (Washington, DC.: The Brookings Institution, 2006), 32-34.

Adaptive Reuse of Auto Related Sites

This section focuses on adaptive reuse of auto related sites, like the Auto Park in the Fairland and Briggs Chaney Master Plan area. As discussed in previous sections of this report, the Auto Park carries significant economic and cultural value to the Master Plan area. According to a report completed for the Maryland State Highway Administration in 2019 that analyzed potential National Register nominations for sites associated with the Suburban periods in Prince George's and Montgomery counties, auto dealerships or showrooms are not likely to be eligible. Auto dealerships created by national chains like the one located in Fairland and Briggs Chaney that do not contain unique architectural designs or associated with important persons are likely not eligible for National Register nomination. 484 While it is possible for a future auto oriented tourism site in the location of the current automall, its potential is discussed below, the reuse of this site is possible and has precedence in other locations. As traditional modes of car shopping change and the rates of car ownership decrease for environmental goals, similar to turn of the century car showrooms, late 20th century sites of auto related businesses will close. Baltimore, a city once associated with modern and stylish auto-showrooms in the turn of the century, has already seen multiple similar historic sites destroyed such as the Odorite showroom in 2004. 485 There is a need for reuse of structures notable for local history and that are already integrated into a community's layout.

- Hua Xing Asian Market, Ypsilanti, Michigan⁴⁸⁶
 - The Hua Xing Asain Market is located near the Ypsilanti Historic District in Michigan right outside of Ann Arbor. The market was formerly the location of a Toyota dealership. This is the only Asain market in Ypsilanti and its construction among other Asain owned and operated businesses speak to the growing population in and around the suburb of Detroit. The Toyota dealership was built in the late 20th century and represents a similar layout to car lots exhibited in Fairland.
- Motor House, Baltimore, Maryland
 - The Eastwick Motors Ford Dealership located on 120 West North Avenue in Baltimore was built in 1914. Motor House, formerly named the Load of Fun building, was created and the historic structure was transformed into an arts center, including the Single Carrot Theater, an art gallery, and art studios. The site is notable and stylistic enough to be included on the Explore Baltimore Heritage online tour of essential Baltimore historic sites. Essential elements such as the Art Deco front facade with original leaded glass were restored and interior layout of the showroom's large open space were maintained. Additionally, the original freight elevator that was once used to move cars between floors was restored for everyday use.
- Al's Motors, Arlington County, Virginia
 - Al's Motors is located on Wilson Boulevard in Arlington County, Virginia. 487 It was placed on the National Register in 2001 under Criterion C. The site is described as a high style streamline moderne automobile dealership constructed in 1948 and designed by the Rosytone, Grimm, and Sammons Firm. It includes a level lot of

⁴⁸⁴ Manning, Matt et. al. May 2019, "Suburbanization Historic Context Addendum (1961-1980), Montgomery and Prince George's Counties, Maryland." Prepared for the Maryland Department of Transportation: F.4.1

⁴⁸⁵ Baltimore Heritage. January 9, 2011. "Monumental Motorcar Company (Odorite Building)"https://baltimoreheritage.org/issue/monumental-motorcar-company/

⁴⁸⁶ Concentrate, "New Chinatown developing near Ypsilanti?," February 17, 2010.

⁴⁸⁷ https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.739.3852&rep=rep1&type=pdf

.78 acres in a commercial area of Wilson Boulevard. The structure was once an automobile showroom and service garage promoted as a modern scientific auto-lab. It was originally operated by Al and Bertha Wasserman and the showroom was a part of several other auto related businesses on Wilson Boulevard. The site was turned into a Gold's Gym in the early 2000s, however, the architectural components were maintained.

Tourism and Historic Designation

Greenbelt Historic District:

The Greenbelt Historic District located in Greenbelt, Prince George's County, was designated a National Historic Landmark in 1997. Greenbelt, Maryland is one of three other 'greenbelt towns' constructed in 1935 designed by economist Rexford Guy Tugwell, advisor for President Franklin D. Roosevelt. It was designed to be the ideal suburban town constructed on land being used for agriculture. The construction of Greenbelt towns was funded by the New Deal and was created as a social and political experiment. The town is designed into 'superblocks' with two rows of multi-family developments linked with paths with communal garden space. The centralized town includes the original commercial district with community centered businesses and a school within walking distance of the residential areas. Architecture was inspired by modernist and Art Deco styles. Greenbelt is considered a social experiment as it required new residents to demonstrate a desire to create a strong community with emphasis on environmental integration while still embracing characteristic suburban elements. Some of this intentional design was destroyed with the construction of the Baltimore Washington Highway and the Capital Beltway, the town's overall integrity to its original form and tenants were maintained.

Today, many of the original structures maintain their integral design elements and are utilized to enhance its tourism economy. While the Greenbelt Historic district was a planned community from the start, it represents the suburban area's potential for retrofitting desirable elements such as walkability, greenspace, racial and economic diversity into suburban spaces. To note, the layout of Greenbelt is now utilized as an essential aspect of marketing for mainly localized tourism.

Strip Mall President: Cary Street Park and Ship Center, Richmond, VA

The Cary Street Park and Shop Center is located on West Cary Street in Richmond Virginia. The center was listed on the National Register of Historic Places in 2001 under Criterion B and C. It is an example of a planned retail complex designed by architect Carl Messerschmidt in 1938 and was the first of its kind in the Southeastern United States. Its "Park and Shop" paradigm would become iconic for retail shopping in the coming decades within growing suburban communities. The two acre complex that includes 17 storefronts is indicative of the Art Deco and International genre styles. It underwent some alterations in the late 20th century but retained its integral aspects of the initial design. Interestingly, the asphalt parking lot associated with the complex is included as a contributing resource. Today, the strip mall maintains its historic facade, asphalt, and other essential design characteristics. It is included in the privately owned Discover Richmond Tours under food tourism as it contains multiple historic restaurants and bars.

Conclusion

Heritage-led development centers heritage and culture at the center of development projects by focusing on the voices of the community and local stakeholders. In the Fairland and Briggs Chaney Master Plan area, some local heritage focuses on the history of the Auto Park and the suburban nature of the community. In this section we explore how heritage-lead development could center the Auto Park history and the culture of the suburbs to prioritize heritage and history that is important to the community in future development projects. Importantly, our limited stakeholder analysis and community engagement for this report, does not depict a complete picture of the history or heritage of the Master Plan area. Further research could identify other areas of important heritage and history that should be considered in any future development projects.

Chapter 11

Scenario Planning

Status Quo | Reformist | Revolutionary

Introduction to Scenario Planning

This studio uses scenario planning as a tool to assist preservationists in responding and adapting to the evolving needs and future conditions in the Fairland and Briggs Chaney Master Plan area. Although originally developed as a military planning strategy in the mid-twentieth century, seenario planning has since been co-opted by a variety of disciplines. The process of scenario planning relies on analyzing current trends in order to develop a well-informed forecast of multiple plausible futures. Unlike traditional planning forecasting exercises, scenario planning does not rely on a single vision for the future. The Futures (Working) Group of Philadelphia offers this guidance on successful scenario planning:

Exploratory scenario planning does not try to predict the future or identify a preferred vision of it. Rather, its aim is to anticipate different ways the future could unfold. Good scenarios are stories that help us to understand what the region and world may look like 20 to 30 years from now, based on the driving forces we expect to shape the future and the decisions we make today.⁴⁸⁹

These scenarios offer preservationists and planners a guiding framework to make decisions as challenges and opportunities arise. Although scenario planning is a fairly new concept for the field of historic preservation, it can empower preservationists to respond dynamically to chan ging climates. For this studio project, the scenarios were informed by the same trends and external forces, but in different ways.

The first scenario, referred to as "the status quo," conjures a vision of what Fairland and Briggs Chaney might look like in the future if preservationists continue to operate with the existing preservation strategies. The second scenario, the "reformist" scenario, presents an argument for how the master plan area could look like with some major modifications to preservation policies, strategies, and priorities. Our final scenario, the "Revolutionary scenario" offers a possible future in which all of the preservation ideals and goals are fully met. It is important to note that the revolutionary scenario is largely a visioning tool, which reflects an outcome that is not always achievable given real-world conditions.

The scenario plans were informed by a variety of trends and major themes. The trends reference current topics in historic preservation thought and literature, including climate change, historic preservation as a way to benefit the economically disadvantaged, and heritage-led development. The major themes drew on issues that are directly relevant to the Fairland and Briggs Chaney Master Plan area, including issues such as the future of the area's cultural resources, historic preservation eligibility, environmental concerns, community identity, and the role of the preservation profession

⁴⁸⁸ Richard K. Norton, Stephen Buckman, and Guy A. Meadows & Zachary Rable, "Using Simple, Decision-Centered, Scenario-Based Planning to Improve Local Coastal Management," in the Journal of the American Planning Association (Taylor & Francis Journals, vol. 85(4), pages 405-423, October

⁴⁸⁹ Jeremy Stapelton, Exploratory Scenario Planning (XSP) Navigating an Uncertain Future (Lincoln Institute of Land Policy: Cambridge, MA, 2020), 4.

Theme Analysis

Climate Change

This theme analysis first defines climate change and discusses the impacts of rising sea levels and increased occurrences of droughts and wildfires on historic resources, including archaeological sites. The value that the preservation field places on integrity and traditional mitigation practices are reconsidered as current approaches that adhere to the Secretary of the Interior's Standards for the Treatment of Historic Properties may not allow for adequate protection from the effects of climate change. Various climate change plans and strategies are discussed along with creative measures utilized by states, countries, and organizations to protect archaeological sites from the impacts of climate change. The climate change trend analysis also examines adaptive reuse projects and embodied energy in existing buildings and discusses the importance of both in promoting sustainability.



Benefits of Historic Preservation to the Econonomically Disadvantaged

This theme analysis utilizes various case studies to emphasize the economic benefits of historic preservation practices to the economically disadvantaged and communities in general, including job creation, heritage tourism, and reinvestment in downtown cores. Case studies examine adaptive reuse as encouraging local economic development while also promoting historic preservation as a potential solution to create more affordable housing. The analysis also covers preservation easements, land trusts, preservation tax credits, and how historic preservation positively impacts job creation.



Heritage Led Development

This theme analysis defines both heritage-led development and heritage tourism before examining several case studies that offer precedence in the field of historic preservation for recognizing suburban sites similar to the Fairland and Briggs Chaney Master Plan area. Additional case studies related to preservationists' approaches to suburban heritage as a technique for smart growth and potential areas for heritage tourism are discussed.



Overview: a guide to driving themes in each scenario

In order to better organize and gradually build onto our scenarios plans, five major themes were selected: cultural resource, eligibility, climate change, community identity, and the preservation profession. Each of these themes are interrelated with each other and are current trends in historic preservation practice.

Cultural Resources:

The primary cultural resource of concern was the Silver Spring Auto park. It presented a challenge as the property was deemed culturally significant based on community analysis but was not quite eligible on the National Register of Historic Places due to integrity issues and it's position as an automobile park. Despite this, visioning was conducted to preserve this landmark building for future generations as it has served as a reminder of the community's working past and reliance on the automobile industry.

Eligibility:

Historic resources must meet certain criteria in order to be listed on the National Register of Historic Places or be amended into Montgomery County's Historic Preservation Master Plan. One criteria requirement is that a property maintains some degree of integrity which is the property's ability to convey its significance. There are seven aspects of integrity: location, design, setting, materials, workmanship, feeling and association. It is important to note that five of these aspects are dependent on physical features which has resulted in preservation focusing on architectural significance and physical integrity as indicators of historical importance. As climate change, social justice, and rapid urbanization impacts society, these criteria for eligibility must be modified to adapt to these changes in order for public history to become more diverse and inclusive.

Climate Change:

Natural resources such as Fairland and Briggs Chaney's watersheds, stream buffers, steep slopes, riparian, and wooded areas have been historically protected between the years of 1960-1990 through policies that recognized the importance of environmental protection. While current county initiatives like the Climate Action Plan will still be in effect to protect natural resources and reduce pollution, overall global trends like the rise of temperature in the next century will still have an impact on the area. Climate change is not an isolated issue and will likely have a butterfly effect on societal trends, economy, and politics.

Developing Community Identity:

Throughout the research process, it was discovered that Fairland and Briggs Chaney has a multitude of identities which include identifying the area as part of Burtonsville and Silver Spring. Fairland and Briggs Chaney has its own colorful history that dates the area back to agricultural farming, enslaved history to its current position as a multicultural area. The preservation and advocacy for the heritage and history of the area will help to aid the community in fostering their own unique identity - separate from Silver Spring and Burtonsville.

Preservation Profession:

The preservation profession must learn to adapt to the changes within the historic preservation field as it evolves from focuses on tangible heritage and moves toward leveraging cultural heritage as a means of obtaining social justice for underrepresented communities, aiding in community revitalization, and mitigating climate change. Preservation professionals will need to work outside of traditional preservation processes in order to support underrepresented communities in a holistic manner.



Definition & Overview

Status quo scenario planning refers to scenarios in which current trends and policies continue without any major changes. This type of scenario presents an opportunity to analyze the impacts of inactivity. The visions, goals, and strategies for this scenario were based on current Montgomery County policies, historic preservation literature, and research conducted on the historic heritage of the Fairland and Briggs Chaney area.

Vision

In 2031, the status quo scenario sees currently known and cultural resources as continuing to retain their current listing status (on the national, state, and local registers) by maintaining current standards for designation. Documented historic resources such as the Lacy Shaw House and Conley House remain ineligible for National Register designation until owner-consent is received. Newer resources, like the Auto park, continue to remain an important landmark for the community bu may not be eligible for designation in the future depending on both owner consent and integrity. The status quo scenario expects that there will be identification of contemporary resources in the future as buildings reach eligibility status for designation per the current standards. Nonetheless, the already-documented cultural resources, regardless of their designation help to play a role in helping the Fairland and Briggs Chaney area in solidifying their community identity.

As climate change policies remain in place to protect cultural resources, global trends continue to place a strain on preserving natural and cultural landscape. The status quo scenario expects to see a positive impact from the current Montgomery County Climate Action Plan on local preservation practice. Earlier cases of approval for electric vehicle charging stations in the Takoma Park Historic District as well as the passage of the solar panel policy in 2019 prove to be beneficial for historic preservation's role in mitigating climate change in the later years. In addition to addressing climate change, the historic preservation field as a whole continues to adapt to change in cultural, societal, and economic landscapes. The status quo scenario sees the preservation planning field continuing to actively collaborate with other disciplines and planning departments.

Vision One | Cultural Resources

The Auto Park remains as a car dealership and there are no changes to the current use of the building. The Auto Park will provide cars, jobs, and repair work to vehicles and the neighborhood is still built around the Auto Park environment. There will be additional eco-friendly cars added onto the current fleet.

Objectives

- 1. Green-friendly cars and brands at the dealership
- 2. Retain current neighborhood transportation plan

Strategies

- 1. Encourage community input to current planning community meetings to confirm the need for the Auto Park.
- 2. Encouraging the use of hybrid and electric cars will result in the Auto Park companies retaining those types of cars as demands rise.
- 3. Bring awareness of the benefits of hybrid and electric cars.
- 4. Consider installation of charging stations around gas stations and mall areas

Vision Two | Historic Preservation Criteria

Properties that are eligible for the current set of standards for nomination will be nominated onto the register while other properties will remain ineligible.

Objectives

- 1. Nominate properties for listing on the NRHP and Locational Atlas
- 2. Maintain current nomination efforts

- No renomination of properties that have already been listed as ineligible including the Malinda Jackson Homestead and the Verizon Center. Properties that are eligible will be nominated.
- 2. No changes to current standards for listing on the Locational Atlas and the National Register of Historic Places.
- The historic preservation department will continue not going around actively to individual property owners to tell them that their properties may be significant in the future.

- 4. Property owners will need to ask for resources if they're interested in historic preservation.
- 5. Historic preservation department will note that certain properties will reach the 50-year-old age but will determine that they have no significance due to lack of physical integrity, and not meeting the basic criterion requirements.

Vision Three | Conservation

As climate change begins to worsen, there will be some mitigation efforts from the county-level for environmental and cultural resource conservation. Green initiatives will be the primary cause for development.

Objectives

1. Montgomery County's Climate Action Plan:

Planning and other government-level departments are required to reduce greenhouse gas emissions per the Climate Action Plan. (GHG emissions must be reduced 80% by 2027 and 100% by 2035.

2. Research and Note Automobile-related Historic Resources:

Automobile-related historic resources may become more historically valuable in the future as there is a push for walkability, and public transit systems result in a reduction in automobile infrastructure.

- 1. The Historic Preservation department will continue to alter current guidelines to meet these standards.
- 2. Solar Panel Policy changes in 2020 will allow historic property owners to become more green-friendly.
- 3. This also includes potential changes to historic district guidelines to adapt to green-friendly equipment and buildings like electric vehicle charging stations.
- 4. Research and note the value of the automobile park and other historic properties relating to automobiles.

Vision Four | Community Identity & Collaboration

Recreational spaces are important community assets for health, environmental, and cultural benefits. Retaining and maintaining these spaces are important.

Objectives

- 1. Preserve and Maintain Recreational Spaces
- 2. Communication the History of Fairland

Strategies

- 1. Upkeeping includes lighting, trashcans, maintained trails, police emergency boxes, park equipment, and light up pedestrian crossways.
- 2. History plaques placed alongside walkways in the park and the surrounding area.
- 3. Landmarks and other signage with the history of Fairland and Briggs Chaney on pedestrian and bikeways.
- 4. Malinda Jackson Homestead has new and clear signages.
- 5. Murals that are reflective of the history and culture of Fairland and Briggs Chaney

Vision Five | Preservation Profession

The preservation profession retain a regulatory role within County Planning Departments. The preservation profession retains an interdisciplinary approach.

Objectives

- 1. Promote more Historic Context Studies in the Fairland study area.
- 2. The preservation profession continues to collaborate with other disciplines: anthropology, sociology, archaeology, architecture, and community organizations.

- 1. Obtain funds or delegate funds to conduct a history on the African American or Rural Farming context study on the area.
- 2. Nothing changes, the Historic Preservation department retains their regulatory role and are consulted for research as needed by other departments.



Definition and Overview

The reformist scenario advocates for reform in the existing traditions, regulations, and practices of the historic preservation field. This scenario explores the potential future impacts of the application of revised preservation best practices to traditional preservation tools, practices, models, and ideas at the local state, and national levels.

The visions for this scenario were created based upon information gathered from research across social media and existing historic preservation literature throughout the semester. The social media analysis revealed the nostalgic value of the Auto Park to residents and those outside the Master Plan area and became a major area of focus when envisioning the area's potential future historic resources. Attending County-led listening sessions and Burtonsville Day revealed what community members like about the Fairland and Briggs Chaney Master Plan area and what they wish could be improved. In Montgomery County Planning's Burtonsville Day activity, community members noted that they liked having easy access to the ICC; using this feedback, our scenario visions reflect residents' continued use of the ICC and, as a result, centered our visions around the adaptive reuse of the Auto Park.

Because there are so few eligible historic resources in the Fairland and Briggs Chaney Master Plan area, the reformist vision seeks to remedy the difficulties and strict standards of nominating historic and cultural resources so that more of the area's resources can be considered eligible in the future. The field of historic preservation has long been plagued by criticisms of being elitist and unrepresentative of America's diverse history primarily due to the field's concentrated focus on architectural significance and merit over intangible heritage and an inclusive mindset in the representation of cultures and different social groups. One way to remedy this situation is to allow community members to choose which historic and cultural resources they would like to see designated or protected. Much of the vision for the reformist scenario highlights ways in which preservationists and planners can deepen their interactions with the community in the future, forefronting resident input as the primary driver for preservation decisions.

The visions of the reformist scenario, like the other scenarios discussed in this report, were also based upon the analysis of trends in historic preservation relating to climate change, the benefits of preservation to the economically marginalized, and heritage-led development. For example, visions regarding the adaptive reuse of buildings were centered around how the preservation field can be used as a way to prevent further contributions to the climate change crisis and how policies in Montgomery County can change to aid in this goal.

Vision

In 2031, the Fairland and Briggs Chaney Master Plan area retains the economic and cultural benefits of the Auto Park, which strikes a balance of existing services and new, greener services to adapt to changing automotive technology. Community collaboration is the main driver for local preservation and community members are considered the experts of their own cultural resources, which are preserved to reflect community values. As a result, Fairland and Briggs Chaney residents develop a stronger named community identity, which reflects and includes community values.

Local heritage and the importance of natural conservation are communicated effectively to both residents and visitors to the area while historic resources are maintained for the benefit of future generations. More historic resources in the Fairland and Briggs Chaney area are eligible for National Register listing which represent the area's diverse history and more resources become eligible for listing because they are properly maintained. More historic and cultural resources in Montgomery County and those in the Fairland and Briggs Chaney Master Plan area will be preserved due to financial incentives offered. The Fairland and Briggs Chaney area becomes a more environmentally sustainable area and becomes more resilient towards potential/future impacts of climate change. Montgomery County also works toward sustainability using historic preservation techniques and methodologies, recognizing the value of adaptive reuse and preservation as part of a sustainable future and creating policy accordingly.

Vision One | Cultural Resources: AutoPark

Fairland and Briggs Chaney retains the economic and cultural benefits of the Auto Park in the future. The Auto Park remains a central economic driver for the area, successfully modifying existing buildings to new uses.

Objectives

Auto Park retains many of its historic character but over-time the buildings adapt to service and sell cars with developing green technology.

Strategies

- 1. Montgomery County educates developers on the cost benefits of adaptive reuse
- 2. Montgomery County increases tax credits for reuse projects
- 3. Montgomery County requires developers to pay additional demolition fees on buildings to curtain demolition
- 4. Montgomery County conducts a more in-depth study of the heritage value of the Auto Park, including residents in participatory conversations about future of the space.
- 5. Relevant Auto Park buildings are nominated for historic eligibility

Vision Two | Historic Preservation Criteria

More historic resources in Fairland are eligible for National Register listing which represent the area's diverse history. More resources become eligible for National Register listing because they have been properly maintained.

Objectives

- 1. Integrity standards need to be modified
- 2. Restoring integrity is possible
- 3. Fairland residents have access to more preservation resources for their own homes, including training on how to rehabilitate historic features and are informed of funding opportunities open to them:

This is a proactive preservation approach that would occur as houses and buildings become historic so that owners are more informed about how to make proper repairs. This might help more historic resources retain integrity. Homeowners may not be interested in designation, but they may still want to preserve the architectural style of their house. This would make it more feasible for future homeowners who may want to designate that house because characteristics and features related to the house's architectural style will have been preserved/rehabilitated.

Strategies

- 1. Individuals can write to political leaders and lobby congressional and state representatives to inform policymakers about the issues with integrity standards in order to influence/change current laws and policies.
- 2. Organizations such as Preservation Action, the National Trust, Preservation Maryland, Heritage Montgomery, and Montgomery History will aid in aforementioned lobbying efforts to influence/change current laws and policies.
- 3. Preservationists can lead online campaigns to inform the wider population, partnering with popular social media influencers, including Cheap Old Houses and Craftsman Blog
- 4. The wording for integrity standards can be changed to become less strict, thereby allowing more resources to possess higher levels of integrity.
 - The NPS should amend its National Register guidelines to allow for arguments for integrity to rely on feeling and association.
- 5. There are more categories for property types under Section 5 ("Classification") in National Register Nomination forms. In addition, criteria for evaluation and desired level of integrity for listing is specific to each property type

A tiered system for criteria that recognizes the importance of historic sites without placing so much emphasis on physical integrity should be created. These criteria can be organized by categories for designation that have varying levels of integrity. For example, in a three-tiered system, category one would include sites that are historically important and possess a high level of integrity while the desired level of integrity decreases in the second and third categories (to moderate and low) while the sites are still recognized as being historically significant. By adopting a system like this, more sites that carry significance and are meaningful to certain cultural groups can be recognized, even if they do not possess high levels of physical integrity.

Different criteria should be created for different types of sites. In this system, there would be separate criteria for different types of historic sites that are tiered based on a site's integrity; buildings and structures would have different eligibility criteria, for example, than sites with less physical structures, but greater cultural significance and intangible heritage. By being more specific in terms of criteria and adjusting levels of integrity accordingly, more histories would be officially recognized thus allowing the National Register (and many state registers that use the same criteria and standards) to become more inclusive of groups that are at a disadvantage when places of importance to them are not deemed significant based on their lack of material integrity.

- 6. Policy is created that creates uniformity in the evaluation of federal and state reviews of historic properties that were once deemed to have a lack of integrity but have since been restored to their period of significance using available evidence and historic documentation
- 7. Montgomery County partners with community organizations such as the Guru Nanak Foundation of America, The Islamic Society of Greater Washington, and Paint Branch High School to offer workshops, educational sessions, and information about available funding opportunities for historic resources

Vision Three | Conservation

Fairland and Briggs Chaney becomes a more environmentally sustainable area and becomes more resilient towards potential/future impacts of climate change. Montgomery County works towards sustainability using historic preservation techniques and methodologies.

Objectives

- 1. Ecological areas including riparian zones, uplands, wetlands, and stormwater natural infrastructure will be actively protected and maintained.
- 2. Historic buildings will be adaptively reused, thus furthering both sustainability and economic growth in Fairland and Briggs Chaney.

Strategies

- Follow the EPA's Watershed Resources Registry of Maryland (WRR) suggestions regarding ecological zones in Fairland and Briggs Chaney that are suitable for conservation:
 - Allot and apply for funding to conserve riparian zones, uplands, wetlands, and stormwater natural infrastructure areas that the WRR has deemed highly suitable for conservation. Maintain natural habitats of native species to prevent further growth of invasive species.
- 2. Adaptive reuse of historic buildings is encouraged through county incentives for adaptive reuse projects and the county's disincentivization of new construction:

 Could include adapting the autopark for the sale of electric/green vehicles as the auto industry continues to move in a "greener" direction.

Vision Six | Community Involvement & Collaboration

Fairland residents develop a stronger named community identity, which reflects and includes community values. The history of Fairland Recreation Park (and smaller parks) is made communicable to both residents and visitors. The agricultural history of Fairland is communicated to both residents and visitors. Fairland historic resources represent the community's values.

Objectives

- 1. Planners hold community visioning/education activities to change the name of signage for streets or areas.
- 2. Include Signage that explains the agricultural history of the park, as well as the history of gravel mining and the Contee family ties to the domestic slave trade.
- 3. The County develops signs, exhibits, and a space for curated archaeological artifacts

4. Fairland residents are continually involved in developing and determining what is a historic resource in Fairland. These resources are preserved for the future, and planners collaborate with the community to determine what spaces are valuable.

Strategies

- 1. Create an extensive/collaborative community education campaign for residents to be better informed about names in their community and link efforts to M-NCPPC Montgomery County Street and Parks Facilities Renaming Review Project.
- 2. County preservationists delve deeper into the history of the Contee family and the park.
- 3. Partner with the MAC lab to create a plan for artifact interpretation/curation for Jackson homestead. Contact living descendants for more in-depth testimonies/oral histories (both Sara Lea and Malinda Jackson) and other relevant community members. Oral history is valued as a preservation strategy. Survey other known African-American historical sites. Montgomery County to conduct a in-depth African-American resources study.
- 4. County preservationists host collaborative workshops, visioning sessions, and survey community members. County preservationists also talk to county planners.

Vision Five | Preservation Profession

More historic and cultural resources in Montgomery County and those in the Fairland and Briggs Chaney Master Plan Area will be preserved due to financial incentives offered.

Objectives

Montgomery County residents who own historic properties/resources will have access to more funding even if not listed/designated.

- 1. Change eligibility requirements for the Montgomery County Historic Preservation Tax Credit:
 - Currently, properties must be listed within Montgomery County's Master Plan for Historic Preservation to be eligible for the county tax credit. Currently only two properties in the Master Plan Area are eligible for the tax credit. These properties should be added to the Montgomery County Master Plan for Historic Preservation and should have preservation easements to allow for their protection. The tax credit should be expanded to include properties that are not listed in the county's historic preservation master plan and new criteria for tax credit eligibility should be created.
- 2. Financial incentives should be created at the county level to encourage adaptive reuse of existing buildings while new construction should be disincentivized.

3. Training and Collaboration with Montgomery County Historic Preservationists:

Montgomery County should partner with community organizations including the Sikh Temple, Islamic Center,the local high school, and recreation/community centers. MoCo historic preservationists will offer workshops on restoring historic structures, education, and information about funding opportunities on the national, state, and county level. Montgomery County preservationists will be open to collaboration with community members and amenable to suggestions and input regarding the preservation of historic resources within the county



Definition & Overview

A revolutionary planning scenario exceeds the limitations imposed by contemporary thought and practice. The scenario draws from current trends and hypothesizes what the future condition could be if traditional regulatory, economic, and social notions are blurred.

The visions for the revolutionary preservation planning scenario are based upon the same research and community engagement processes noted in the reformist scenario — social media analysis, participation at Burtonsville Day, and participation at multiple community listening sessions — and further draws upon the trends revealed in the historic context study, policy and stakeholder analysis, environmental analysis, cultural landscape typology analysis, and the theme and precedent analysis. The vision is further informed by the demographic, employment, housing, and transportation data gathered by the Urban Studies and Planning studio report. The synthesis of the data gathered by both the Historic Preservation studio (HISP) and the Urban Studies and Planning studio (URSP) inform the visions proposed for the revolutionary preservation planning scenario. Past trends of historic erasure, environmental injustice, and the inequities of being geographically located on the edge of a county-council led government has posited the need for a preservation planning future that not only values, but places stakeholder participation and input above bureaucratic processes. The revolutionary vision positions historic preservation as a transparent and accessible public function that elevates the local community to self-determine the significance of their tangible and intangible resources, and how these resources can be leveraged for growth and continued sustenance. Based on our participation at all the listening sessions provided to us, it is clear that the community values the Fairland and Briggs Chaney Master Plan area, but feel that planning processes and engagement events continue to contribute to a history of citizen tokenism and placation during participatory processes. Thus, the revolutionary scenario presents the achievability of a citizen controlled planning process that provides citizen capacity to leverage the community's identity and cultural resources as catalysts for growth and sustenance.

Vision

In the Fairland and Briggs Chaney Master Plan area, current community networks are now stronger because bureaucratic processes have been eliminated and socioeconomic status has been deemphasized. Inclusivity, equity, and environmental justice are normalized as social and institutional values. Preservation activities are empowered and valued as an intrinsic good, becoming methods for conservation and upcycling.

The community is empowered to retain their existing tangible and intangible assets, and leverages them to solidify their communal network and quality of life. People have devalued historic aesthetics and value is based on the continued use of resources, normalizing preservation as a method for conservation upcycling. Innovative reuse of sites such as the Auto Park and Verizon Building showcase how the radical reuse of aging commercial structures has improved the community's quality of life. Additionally, an adaptive framework has replaced current preservation criteria and is responsive to local needs and the community values of Fairland and Briggs Chaney residents. Due to the age of national and state preservation acts – coupled with a shift in preservation theory – national, state, and local acts have been rewritten to be inclusive of intangible and recent histories, devaluing the emphasis on property ownership. The preservation of legacy businesses and cultural traditions – such as the African Heritage Ministry's "African Diaspora Festival", Guru Nanak Foundation of America's "Vaisakhi Mela Celebration", and "Picnics and Performances at the Parks" – has provided the community with resources to protect and strengthen the identity that they have built.

Due to the previous loss of historic and environmental resources, the Fairland and Briggs Chaney area emphasizes environmental protection and integrates preservation and conservation policy; historic resources and environmental resources have become significant parts of the community's identity and are protected as one. The preservation of wetland, riparian, upland, and stormwater management areas are thriving due to earlier policy initiatives, and the ecosystems have begun to successfully mitigate the damages due to auto-centric development. After experiencing supply chain shortages and inflation, Fairland and Briggs Chaney returns to local agricultural practices and maintains a sustainable local economy. Local industry and food production has been incentivized through progressive land use policy and vocational training, and the area has realized its potential as a cradle to cradle society.

Vision One | Cultural Resources

The community is empowered to retain their existing tangible and intangible assets and leverages them to solidify their communal network and quality of life. People have devalued historic aesthetics and value is based on continued use of resources. Sites such as the Auto Park and Verizon Building showcase how the radical reuse of existing structures can improve quality of life.

Objectives

- 1. Fairland and Briggs Chaney pioneers the transition from traditional to green transportation
- 2. Auto Park becomes an innovation hub

Strategies

1. Historic commercial resources and aging infrastructure become assets for research and green commerce:

Auto Park's history as a regional hub for automotive sales/repair positions it to become a regional leader in green transportation and carbon-negative mobility. Existing Auto Park facilities converted to support research and development. Abandoned office parks become support facilities for research. ICC becomes testing grounds for carbon-negative vehicles and aero-cars. Auto Park maintains its status as an economic driver and continues to attract visitors to the area. Sales and repair of battery powered electric vehicles (EV), hydrogen fuel cell electric vehicles (FCEV), solar powered vehicles. Workforce is maintained and trained in new transportation technologies.

2. Preserve auto-era history as a reminder of our dependency on fossil fuels and the ecological/social destruction that ensued

Tangible timeline with auto artifacts and ecological exhibits - used as an interactive tool to teach about transportation trends + effects from 1960s sprawl to the current revolutionary green era. National memorial for cultures + histories lost due to sprawl and highway expansion (i.e. erasure of Jackson Homestead for ICC).

3. Environmental remediation

Site is damaged due to decades of leaking gasoline and automotive fluids. Auto Park landscape and remediation strategy leads the way in green clean-up and land reclamation. Auto Park is PARK.

Notes

- Federal law mandates that all vehicles be zero emissions by 2050
- Montgomery County moratoriums on demolition force reuse of existing commercial buildings
- Maryland environmental policy requires that industrial/commercial sites maintain 80% permeable surface; reintroduce native plantings to aid in phytoremediation via state distribution program

Vision Two: Historic Preservation Criteria

An adaptive framework has replaced current preservation criteria, responsive and adaptable to local needs and community values. Preservation and conservation represents the community's current identity. Aging national, state, and local acts have been rewritten to be inclusive of intangible and recent histories. Property ownership has been devalued.

Objectives

- 1. Preservation criteria is dynamic to local needs.
- 2. Reuse of resources preserve history of the area and provide for the needs of the community.
- 3. Preservation equally benefits non-property owners.
- 4. NRHP, MIHP, Montgomery MPHP provide protections for intangible, recent histories.

- 1. Significance is prioritized over tangible integrity:
 - Sites destroyed by the ICC are given status. Listing also offers protection and direct funding rather than through grants/tax credits.
- 2. Dynamic reuse of late twentieth century/early twenty-first century multi-family housing accommodates green initiatives and technologies:
 - Community value and adaptive reuse of buildings for conservation purposes is assumed and a part of permitting applications. Obtaining 'recognition' is less of an 'honor' and utilized to ensure proper use/re-use of historic structures in modern communities.
- 3. Preservation activities rewarded regardless of ownership:
 - Ownership and 'income producing properties' no longer a requirement to receive economic benefits. Long-term renters receive stimulus for maintenance and curation of neighborhood history. Organizers of cultural events and traditional celebrations receive stimulus to maintain intangible heritage and folkways. Ownership and wealth secondary considerations to receive preservation stimulus; stimulus prioritized for those who are most vulnerable or in-need.
- 4. Participatory Action Research integrated into the identification and nomination of community valued resources:
 - Community workshops on tangible and intangible preservation: tangible reuse, maintenance, recovery, intangible recording family and community histories through photos, descriptions, trees, and archiving ephemera. Community members ARE the primary source to identify significance. Preservation studies part of county K-12 curriculum. Preservation fundamentals merges history and political science curriculum at upper levels preservation policy, research, curation, and conservation taught. Prepare students for jobs in preservation, negating the requirement of a college degree in preservation.

Vision Three | Conservation

Due to current emphasis on environmental protection and loss of historic resources, preservation and conservation policy has been integrated within Fairland and Briggs Chaney; historic resources and environmental resources have become part of the community's identity. The preservation of wetland, riparian, upland, and stormwater management areas are thriving due to earlier policy initiatives, and the ecosystems have begun to successfully mitigate the damages due to auto-centric development.

Objectives

- 1. Conservation practice become the main avenues for preservation work
- 2. Conservation of environmental resources are integrated into current preservation practices
- 3. Preservation is environmental conservation
- 4. Historic resources are viewed as a historic environment
- 5. Conservation of environmental resources are integrated into current preservation practices

Strategies

- 1. Protection of Intangible heritage follows format of World Heritage Criteria, and becomes integrated into existing local preservation practices
- 2. No land clearing if open plots exist
- 3. Existing building stock is utilized before new developments are approved
- 4. Any development will be offset via a purchase/protection of open land at a 2:1 ratio

Vision Four: Community Identity & Collaboration

After experiencing supply chain shortages and inflation, the Fairland and Briggs Chaney area has followed a national trend and positioned itself as a sustainable local economy. Local industry and food production has been incentivized through progressive land use policy and vocational training; the area has realized its potential as a cradle to cradle society.

Objectives

- 1. Regenerative (self-sustaining) Society
- 2. Fairland and Briggs Chaney residents have full access to fresh veggies etc.

Strategies

- 1. Re-use of the Verizon Building into a hydroponic farm to aid in local food production.
- 2. Trade expansion is limited
- 3. Limits to international and state imports on goods that can be generated in the community
- 4. To meet other needs trade networks are established with local communities
- 5. Land Repatriation
- 6. Integration of sustainable agricultural practices and open spaces
- 7. Revive local economies, practices, traditions

Vision Five | Preservation Profession

Expansion of Historic Preservation from Government

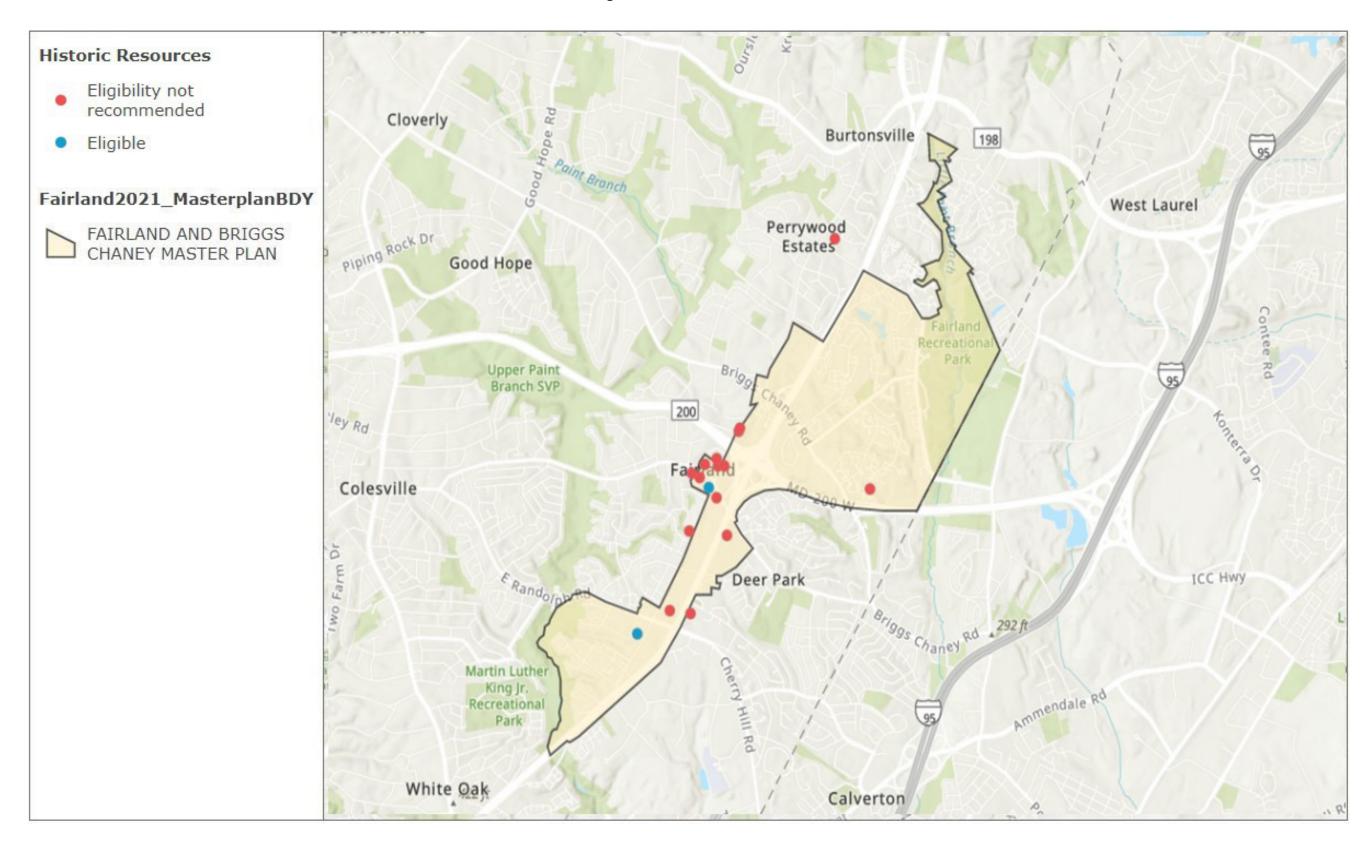
Objectives

- 1. Preservation as a licensed profession becomes more prevalent.
- 2. This results in more jobs outside of conventional preservation jobs available today that allows for a more diverse profession.

- 1. Community value of structures is recognized as worthy of preservation and adaptive reuse is encouraged over concerns like outdated definitions of integrity.
- 2. Conservation and preservation is integrated into grade school curriculum
- 3. Master's degree is no longer a professional requirement
- 4. Historic preservation returns to community driven projects rather than through relying on government recognitions and honors.
- 5. Community value of structures is recognized as worthy of preservation and adaptive reuse is encouraged over concerns like outdated definitions of integrity.

Appendices

Appendix A:
Map of Historic Resources



Appendix B:

Table of Historic Properties in the Master Plan Area (taken directly from MIHP forms)

| Property Name | Year | Style | Address | Description of Property (Taken directly from HIH forms) | Status |
|--|--------------|--|--|--|--|
| Richard Bryant Property | 1920 | Bungalow | 13301 Dogwood Dr, Silver Spring | The Richard Bryant Property, constructed c. 1920, is a 1 $\frac{1}{2}$ story front-gable cottage with asphalt shingles and two brick chimneys. The first is a central chimney, while the second is an exterior chimney located at the northeast corner of the north facade. The structure is of wood frame construction. It has a molded concrete block foundation, and the exterior walls are covered with asbestos siding. The windows are double-hung wood sash. The house has an enclosed 1-story full-width entry porch on the front, or west, elevation. The porch has a hipped roof covered with asphalt shingles and a wood floor | Eligibility not recommended integrity is compromised |
| Fairland Data Center Chesapeake and Potomac Telephone Company Data | 1965-1975 | International Style office and research building | 13101 Columbia Pike (US 29) | The FDC is an International Style office and research building designed for the Chesapeake & Potomac (C&P) Telephone Company by Washington, DC architect Leon Chatelain and consists of two clearly identifiable sections. FDC-1 is located at the north and was built in 1965. FDC-2 is located at the south end ofFDC-1 and was built in 1975, with the two buildings connected by a long one-story hyphen or gallery also built in 1975. | Eligibility not recommended integrity is compromised |
| Conley House | c. 1910 | Classical Revival | 12500 Old Columbia Pike, | This is a handsome, Classical Revival home of c. 1910. The original Conley house on this site burned and this is a replacement, although some older farm buildings remain. This is a large, two-story, frame house that faces east. The main (east) facade is of five bays, and an imposing, two-story, pedimented portico covers the three center bays. The center door has a Palladian-style arrangement of fanlight, sidelights, and moldings. There are two dormers on the slate roof that sit on either side of the pediment. Large brick chimneys sit on the exterior north and south walls. Siding is clapboard. Some old barns across the street burned ca. 1970. The old springhouse, etc., remain on the property. | Eligible for National Register under Criterion C |
| Elbert Beckwith House | c. 1865/1980 | Gothic Revival (formerly), now renovated | 13150 Old Columbia Pike, Fairland | The Elbert Beckwith House is a greatly altered c. 1865 two-story, side-gabled frame I-house with a center hall plan. In a 1960 appraisal, the house was described as a two-story frame house with five rooms and a bath on the first floor. Before being altered, the Beckwith house was representative of the small frame center gable Gothic Revival dwellings commonly built by Montgomery County's farmers in the mid-nineteenth | Eligibility not recommended integrity is compromised |
| Fairland School | 1934-1947 | One-story school building | 13313 Old Columbia Pike, Fairland | The present Fairland School building is a one story building with a flat roof. It has 23 classrooms containing 45,082 square feet. It features red brick and metal casement windows that have been modified. There are several later additions featuring yellow brick accented with blue bricks. The school is located on 9.8 acres and includes a | Eligibility not recommended integrity is compromised |
| Lacy Shaw House | 1924 | Bungalow | 13308 Old Columbia Pike, Silver Spring | The Lacy Shaw House is a 1-story, 3-bay bungalow-style house on the west side of the Old Columbia Pike in the Silver Spring vicinity, Montgomery County. Constructed in 1924, the building is a traditional bungalow form with integral porches and shed roof dormers with exposed rafters on both the front and rear elevations. The porch on the front elevation has formed concrete piers with chamfered wood posts above. A decorative band with an egg and dart pattern divides the piers and posts. The rear | Eligibility not recommended integrity is compromised |

| Fairland Schoolhouse | c. 1895 | Former one-room schoolhouse, now residential | 2510 Fairland Rd | The Fairland schoolhouse, built ca. 1895, was a simple, one room gable front clapboard building. The schoolhouse/residence now has an L-shaped plan with a prominent gable front facing southeast toward Fairland Road. | Eligibility not recommended integrity is compromised |
|-----------------------------|---------|--|----------------------------|--|--|
| Edgar Roby Property | c. 1920 | Bungalow | 13420 Old Columbia Pike | The Edgar Roby Property is a 1-story, 3-bay bungalow on the west side of the Old Columbia Pike in the Silver Spring vicinity, Montgomery County. Constructed c. 1920, the building is a traditional bungalow form with a full-width integral porch on the front facade. The porch has wood columns, a wood railing and wood lattice skirting. The structure has a side-gable, metal roof with a large shed dormer. It is of wood frame construction with wood siding on the first story and wood shingles above, and it has a | Eligibility not recommended integrity is compromised |
| Ben Petree Property | c. 1920 | Cottage with bungalow features | 13490 Old Columbia Pike | The Ben Petree Property is a 2-story cottage with bungalow features on the west side of the Old Columbia Pike in the Silver Spring vicinity, Montgomery County. Constructed c. 1920, the building is extensively altered and has a raised basement with a garage. The structure has a side-gable roof with large shed dormers. The dormers, which are located on the front (south) and rear (north) elevations, were added at a later date. The structure is of wood-frame construction with wood shingle siding, a concrete foundation, and double-hung wood windows. The house has 1-story, shed roof porches on both the south and the east elevations, which date to a later period. The porch on the east elevation is screened and has wood posts. The porch on the south elevation has wood posts and a solid wood railing. In addition, a 1-story addition projects from the north | Eligibility not recommended: it is an undistinguished example of a common building type or architectural style |
| Hollen House | c. 1930 | Cottage | 13701 Old Columbia Pike | The Hollen House is a 1-story, 3-bay front-gable cottage on the east side of the Old Columbia Pike in the Silver Spring vicinity, Montgomery County. Constructed c. 1930, the building is a cottage with multiple alterations and additions. The structure has a gable roof with asphalt shingles and an exterior brick chimney. It is of wood frame construction with aluminum siding, and it has a poured concrete foundation. The windows are double-hung aluminum sash. The house has an enclosed, 1-story porch on | Eligibility not recommended: it is an undistinguished example of a common building type or architectural style |
| Edwards House | c. 1930 | Cottage | 13705 Old Columbia Pike | The Edwards House is a 1-story, 3-bay cross-gable cottage on the east side of the Old Columbia Pike in the Silver Spring vicinity, Montgomery County. Constructed c. 1930, the building is a small cottage with 1/1 windows, and a central entrance on the west (front) elevation. The structure has a cross-gable, asphalt shingle roof with an interior brick chimney. It is of wood frame with asbestos siding, and it has a poured concrete foundation. The windows are double-hung aluminum sash. The house has a 1-story, shed roof porch on the west (front) elevation. The porch covers the central entry and is supported with wood posts. | Eligibility not recommended: it is an undistinguished example of a common building type or |
| St. Mark's Chapel (site) | c. 1876 | Cemetery | 12621 Old Columbia Pike | The St. Mark's/Paint Chapel Episcopal Church and Cemetery, constructed in 1876, with the cemetery dating from c.1880, was previously surveyed by the Maryland-National Capital Park and Planning Commission in August 1975. The property has been altered since the previous survey. A new church was constructed on the site in 1980, behind the original church. The original church was then destroyed by fire in 1987. The church cemetery, which dates to the 1880s, is not eligible for the National Register of Historic | Eligibility not recommended integrity is compromised |

Appendix C: Graphic Representation of Scenario Plans

SCENARIO: STATUS QUO

| | VISION | OBJECTIVES | STRATEGIES |
|---------------------------------------|--|--|--|
| Cultural Resources | The Auto Park remains as a car dealership and there are no changes to the current use of the building. The Auto Park will provide cars, jobs, and repair work to vehicles and the neighborhood is still built around the Auto Park environment. There will be additional eco-friendly cars added onto the current fleet. | Green-friendly cars and brands at the dealership Retain current neighborhood transportation plan | Encourage community input to current planning community meetings to confirm the need for the autopark Encouraging the use of hybrid and electric cars will result in the Auto Park companies retaining those types of cars as demand rise Bring awareness of the benefits of hybrid and electric cars |
| Historic Preserva- tion Criteria | Properties that are eligible for the current set of standards for nomination will be nominated onto the register while other properties will remain ineligible. | Nominate properties for listing on the NRHP and Location Atlas Maintain current nomination efforts | No renomination of properties that have already been listed as ineligible including the Malina Jackson Homestead and the Verizon Center. Properties that are eligible will be nominated. No changes to current standards for listing on the Locational Atlas and the National Register of Historic Places The historic preservation department will continue not going around actively to individual property owners to tell them that their properties may be significant in the future. Property owners will need to ask for resources if they're interested in historic preservation Historic preservation department will note that certain properties will reach the 50-year-old age but will determine that they have no significance due to lack of physical integrity, and |
| Conservation | As climate change begins to worsen, there will be some mitigation efforts from the county-level for environmental and cultural resource conservation. Green initiatives will be the primary cause for development. | Montgomery County's Climate Action Plan: Planning and other government-level departments are required to reduce greenhouse gas emissions per the Climate Action Plan. (GHG emissions must be reduced 80% by 2027 and 100% by 2035. Automobile-related historic resources may become more historically valuable in the future as there is a push for walkability, and public transit systems result in a reduction in automobile infrastructure. | The Historic Preservation department will continue to alter current guidelines to meet these standards. Solar Panel Policy changes in 2020 will allow historic property owners to become more green-friendly. This also includes potential changes to historic district guidelines to adapt to green-friendly equipment and buildings like electric vehicle charging stations. Research and note the value of the automobile park and other historic properties relating to automobiles. |
| Community Identity & Collaboration | Recreational spaces are important community assets for health, environmental, and cultural benefits. Retaining and maintaining these spaces are important. | Preserve and maintain recreational spaces Communicate the history of Fairland | Upkeeping includes lighting, trashcans, maintained trails, police emergency boxes, park equipment, and light up pedestrian crossways History plaques placed alongside walkways in the park and the surrounding area Landmarks and other signage with the history of Fairland and Briggs Chaney on pedestrian and bikeways Malinda Jackson Homestead has new and clear signages |
| Preservation Profession | Preservation Planning Processes | Historic context studies Separated planning process | Obtain funds or delegate funds to conduct a history on the African American or Rural Farming context study on the area Nothing changes, the Historic Preservation department retains their regulatory role and are consulted for research as needed by other departments. |



| | Vision | Objectives | Strategies |
|-------------------------------------|---|--|---|
| Cultural Re- | Fairland and Briggs Chaney area retains the economic and cultural benefits of the Auto Park in the future. | Auto Park retains many of its historic character but over-time the buildings adapt to service and sell cars with developing green technology. | Montgomery County educates developers on the cost benefits of adaptive reuse Montgomery County increases tax credits for reuse projects Montgomery County requires developers to pay additional demolition fees on buildings to curtain demolition Montgomery County conducts a more in-depth study of the heritage value of the Auto Park, including residents in participatory conversations about future of the space |
| Historic Preserva- tion Criteria | More historic resources in Fairland are eligible for National Register listing which represent the area's diverse history. More resources become eligible for National Register listing because they have been properly maintained. | Integrity standards need to be modified & restoring integrity is possible Fairland residents have access to more preservation resources for their own homes, including training on how to rehabilitate historic features and are informed of funding opportunities | Individuals can write to political leaders and lobby congressional and state representatives to inform policymakers about the issues with integrity standards in order to influence/change current laws and policies. Organizations such as Preservation Action, the National Trust, Preservation Maryland, Heritage Montgomery, and Montgomery History will aid in aforementioned lobbying efforts to influence/change current laws and policies. Preservationists can lead online campaigns to inform the wider population The wording for integrity standards can be changed to become less strict, thereby allowing more resource to possess higher levels of integrity. There are more categories for property types under Section 5 ("Classification") in National Register Nomination forms. In addition, criteria for evaluation and desired level of integrity for listing is specific to each property type Policy is created that creates uniformity in the evaluation of federal and state reviews of historic properties that were once deemed to have a lack of integrity but have since been restored to their period of significance using available evidence and historic documentation |
| Conserva- | Fairland and Briggs Chaney becomes a more environmentally sustainable area and becomes more resilient towards potential/future impacts of climate change. Montgomery County works towards sustainability using historic preservation techniques and methodologies. | Ecological areas including riparian zones, uplands, wetlands, and stormwater natural infrastructure will be actively protected and maintained. Historic buildings will be adaptively reused, thus furthering both sustainability and economic growth in Fairland and Briggs Chaney | Follow the EPA's Watershed Resources Registry of Maryland (WRR) suggestions regarding ecological zones in Fairland and Briggs Chaney that are suitable for conservation Adaptive reuse of historic buildings is encouraged through county incentives for adaptive reuse projects and the county's disincentivization of new construction |
| Community Identity & Collaboration | Fairland residents develop a stronger named community identity, which reflects and includes community values. The history of Fairland Recreation Park (and smaller parks) is made communicable to both residents and visitors. The agricultural history of Fairland is communicated to both residents and visitors. Fairland historic resources represent the community's values. | Planners hold community visioning/education activities to change the name of signage for streets or areas. Include Signage that explains the agricultural history of the park, as well as the history of gravel mining and the Contee family ties to the domestic slave trade The County develops signs, exhibits, and a space for curated archeological artifacts Fairland residents are continually involved in developing and determining what is a historic resource in Fairland. These resources are preserved for the future, and planners collaborate with the community to determine what | Create an extensive/collaborative community education campaign for residents to be better informed about names in their community & Link to M-NCPPC Montgomery County Street and Parks Facilities Renaming Review Project County preservationists delve deeper into the history of the Contee family and the park. Partner with the MAC lab to create a plan for artifact interpretation/curation for Jackson homestead Contact living descendants and community members for more in-depth testimonies/oral histories. Oral history is valued as a preservation strategy. Survey other known African-American historical sites. Montgomery County to conduct a in-depth African- |
| Preservation Profession | More historic and cultural resources in Montgomery County and those in the Fairland and Briggs Chaney Master Plan Area will be preserved due to financial incentives offered. | Montgomery County residents who own historic properties/resources will have access to more funding even if not listed/designated | Change eligibility requirements for the Montgomery County Historic Preservation Tax Credit |

SCENARIO: REVOLUTIONARY

| | VISION | OBJECTIVES | STRATEGIES |
|------------------------------------|--|--|--|
| Cultural Resources | The community is empowered to retain their existing tangible and intangible assets and leverages them to solidify their communal network and quality of life. People have devalued historic aesthetics and value is based on continued use of resources. Value increases as more people live, benefit, and add to the history of resources. Sites such as the Auto Park and Verizon Building showcase how the radical reuse of | Fairland and Briggs Chaney pioneers the transition from traditional to green transportation Auto Park becomes an innovation hub | Promote research + green commerce Auto-era history interpreted and curated Environmental remediation |
| Historic Preservation Criteria | An adaptive framework has replaced current preservation criteria, responsive and adaptable to local needs and community values. Preservation and conservation represents the community's current identity. Aging national, state, and local acts have been rewritten to be inclusive of intangible and recent histories. | Preservation criteria is dynamic to local needs Reuse of resources preserve history of the area and provide for the needs of the community Preservation equally benefits non-property owners NRHP, MIHP, Montgomery MPHP provide protections for intangible, recent histories | Significance prioritized over tangible integrity Participatory Action Research integrated into the identification and nomination of community valued resources Dynamic reuse of multi-family housing accommodates green initiatives and technologies |
| Conservation | Due to current emphasis on environmental protection and loss of historic resources, preservation and conservation policy has been integrated within Fairland and Briggs Chaney; historic resources and environmental resources have become part of the community's identity. The preservation of wetland, riparian, upland, and stormwater management areas are thriving due to earlier policy initiatives, and the ecosystems have begun to successfully mitigate | Conservation practice become the main avenues for preservation work Conservation of environmental resources are integrated into current preservation practices Preservation is environmental conservation Historic resources are viewed as a historic environment Conservation of environmental resources are integrated into current preservation practices | Protection of Intangible heritage follows format of World Heritage Criteria, and becomes integrated into existing local preservation practices No land clearing if open plots exist Existing building stock is utilized before new developments are approved Any development will be offset via a purchase/protection of open land at a 2:1 ratio |
| Community Identity & Collaboration | After experiencing supply chain shortages and inflation, the Fairland and Briggs Chaney area has followed a national trend and positioned itself as a sustainable local economy. Local industry and food production has been incentivized through progressive land use policy and vocational training; the area has realized its | Regenerative (self-sustaining) Society Fairland and Briggs Chaney residents have full access to fresh veggies etc. | Re-use of the Verizon Building into a hydroponic farm to aid in local food production Trade expansion is limited Limits to international and state imports on goods that can be generated in the community To meet other needs trade networks are established with local communities Land Repatriation Integration of sustainable agricultural practices and open spaces Revive local economies, practices, traditions |
| Preservation Profession | More historic and cultural resources in Montgomery County and those in the Fairland and Briggs Chaney Master Plan Area will be preserved due to financial incentives offered. | Preservation as a licensed profession becomes more prevalent This results in more jobs outside of conventional preservation jobs available today that allows for a more | Community value of structures is recognized as worthy of preservation and adaptive reuse is encouraged over concerns like outdated definitions of integrity. Conservation and preservation is integrated into grade school curriculum Master's degree is no longer a professional requirement Historic preservation returns to community driven projects rather than through relying on government recognitions and honors. Community value of structures is recognized as worthy of preservation and adaptive reuse is encouraged over concerns like outdated definitions of integrity. |

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