

URSP708: Community Planning Studio

Equitable Development for Langley Park, MD

Before



After



Fall 2024

URSP708: Community Planning Studio

Equitable Development for Langley Park, MD

STUDENTS

Aaron Stiegler
Andrew Melmed
Ari Santana
Ashley Morand
Carey Thorpe
Ebenezer Amanguah
Elle Provolo
John Abu
Khairun Fahmi
Sururah Abdulrazaq
Tayo Taiwo
Thomas Suchecki

UNDER THE SUPERVISION OF

Professors Clara Irazábal and Kevin Nelson

COURSE

URSP708: Community Planning Studio

PALS

Kim Fisher, PALS Director



**Partnership for
Action Learning
in Sustainability**

Table of Contents

List of Figures
List of Tables
Abbreviations

Executive Summary	12
Introduction	14
Part 1: Analysis	15
Literature Review	15
Research Methods	17
Historical Context	18
Demographics and Socio-Economic Analysis	22
Site Analysis	23
Stakeholder Analysis	24
Equitable Development Principles	26
Analysis of Current Conditions	27
Community Engagement Strategy	52
Community Feedback	58
Part 2: Recommendations	70
Key Issues	70
Goals	72
Objectives, Strategies, and Action Plans	73
Limitations	198

Conclusion	198
References	200
Appendix A - Final Community Engagement Results	206
Appendix B - Stakeholder Log	218

List of Figures

Figure 1: Map of the proposed Purple Line stations in Langley Park.....	19
Figure 2: Modern-day image of the McCormick-Goodhart mansion, now the headquarters of CASA.....	20
Figure 3: Langley Park shopping center in 1954.....	20
Figure 4: Day laborers waiting outside of a shopping center.....	21
Figure 5: Community gathering at Langley Park Community Center.....	21
Figure 6: Population Changes in Langley Park.....	22
Figure 7: 5 Main urban elements of the city’s image.....	23
Figure 8: Socio-ecological model of stakeholders in Langley Park.....	25
Figure 9: Apartment complexes in Langley Park.....	29
Figure 10: Decades of building construction in Langley Park.....	33
Figure 11: 2022 Annual Average Daily Traffic (AADT).....	38
Figure 12: Afternoon air temperature in Langley Park and Takoma Park.....	39
Figure 13: Income distribution in Langley Park, compared to county, state, and national levels	42
Figure 14: Poverty rate in Langley Park, compared to county, state, and national levels.....	43
Figure 15: Trends of unemployment in Langley Park and Maryland.....	44
Figure 16: Education level in Langley Park, compared to county, state, and national levels.....	45
Figure 17: Percentage of work type in Langley Park.....	46

Figure 18: Job density.....	47
Figure 19: Inflow/outflow of employment.....	48
Figure 20: 15th Avenue in Langley Park.....	49
Figure 21: Example of Northern Gateway CDC collaborative project.....	49
Figure 22: The side of a residential apartment building on 15th Avenue, in front of CASA.....	53
Figure 23: "Passports" given to all participants.....	53
Figure 24: Dinner spread at event and live guitarist Payin Moreno.....	54
Figure 25: Presenters at community event.....	55
Figure 26: Activity board at a community event.....	56
Figure 27: Photographing community members at event.....	56
Figure 28: Activity board engagements.....	57
Figure 29: University of Maryland students handing out raffle prizes.....	57
Figure 30: UMD students and faculty dancing at conclusion of event.....	62
Figure 31: Map of residents perception of "Heart of the Neighborhood".....	63
Figure 32: Map of resident perceptions of safety.....	63
Figure 33: Map of resident perceptions of quality.....	66
Figure 34: Map of Community Member's perception of air pollution and elevated surface temperatures.....	67
Figure 35: Reasons people choose to live in Langley Park.....	68
Figure 36: Map of where Langley Park residents want to see businesses.....	100
Figure 37: Potential Stationary Air Quality Monitor Locations in Langley Park, Maryland.....	110
Figure 38: Potential 600 Square Foot Community Garden Locations in Langley Park.....	111
Figure 39: Before and after rendering of trees lining University Boulevard.....	125
Figure 40: Impervious surface area map of Langley Park.....	130
Figure 41: Aerial map image of 15th Ave and Kanawha St.....	146
Figure 42: Green space located behind one of the residential buildings.....	147

Figure 43: Evaluation metrics for pedestrian safety and accessibility study by Prince George's County.....	151
Figure 44: Complete, sheltered bus stop in Washington, D.C.....	152
Figure 45: Guideline for design and placement of transit stops.....	153
Figure 46: Zero emissions, fully electric bus in Prince George's County.....	154
Figure 47: Rendering of a bus-only lane in Philadelphia.....	155
Figure 48: Rendering of a complete street from West Palm Beach, Florida's proposed light rail line.....	162
Figure 49: Narrow sidewalk on the south side of University Blvd facing east from the New Hampshire Avenue intersection.....	163
Figure 50: A car speeds through the southbound slip lane at the University Blvd and Riggs Road intersection.....	164
Figure 51: Intersection of University Boulevard and New Hampshire Ave, slip lanes circled.....	164
Figure 52: Intersection of University Boulevard and Riggs Road, slip lanes circled.....	165
Figure 53: Pedestrian footbridge over MD-410 in Hyattsville.....	166
Figure 54: Pedestrian bridge over MD-5 Southbound in Camp Springs.....	167
Figure 55: Riggs Road facing north from the Merrimac Drive intersection.....	169
Figure 56: Gap in the sidewalk on the north side of University Blvd approaching the New Hampshire Ave intersection due to Purple Line construction.....	169
Figure 57: Gap in the sidewalk on the north side of University Blvd to the west of the Riggs Road intersection.....	170
Figure 58: Dual-light streetlights installed during the BMORE Bright Program.....	173
Figure 59: Alignment of the pedestrian-bike access trail currently being constructed by PGDPW&T.....	182
Figure 60: Proposed alignment of a bicycle lane on Merrimac Drive.....	183
Figure 61: Merrimac Drive facing west between Tahona Drive and University Blvd.....	184
Figure 62: Community preferred option for the layout of a 60-foot right-of-way.....	184

Figure 63: Merrimac Drive facing east from the intersection of New Hampshire Ave and Merrimac Drive and New Hampshire Ave.....	185
Figure 64: Proposed dimensions for the street layout on Merrimac Drive. Created using Streetmix.....	185
Figure 65: Proposed alignment of a bicycle lane on Keokee Street.....	186
Figure 66: Keokee Street facing northwest from the Riggs Road intersection.....	187
Figure 67: Community preferred option for a bicycle lane on Keokee Street.....	187
Figure 68: Proposed alignment of the proposed bicycle lane on Quebec Street.....	188
Figure 69: Quebec Street facing east from the intersection of Quebec Street and 12th Avenue.....	189
Figure 70: Community preferred option for the layout of a 60-foot right-of-way.....	189
Figure 71: Proposed alignment of a mixed-use trail going from CASA in the Villas at Langley Apartments to the Northwest Branch Trail.....	190
Figure 72: The current informal path from the Villas At Langley Apartments to Merrimac Drive.....	191
Figure 73: The lockable gate at the northern boundary of the Villas at Langley apartment complex.....	191
Figure 74: The view north from Merrimac Drive onto the Langley Park Community Center property.....	192
Figure 75: Northwest Branch Trail.....	192
Figure 76: Proposed alignment of a mixed-use off-street path on the New Riggs Road median.....	194
Figure 77: An aerial view of the southern portion of the New Riggs Road right-of-way.....	194
Figure 78: The southern section of the New Riggs Road right-of-way, facing north from the Jasmine Terrace area.....	195
Figure 79: Community preferred option for a mixed-use path on the southern section of the New Riggs Road right-of-way.....	195
Figure 80: The northern section of the New Riggs Road right-of-way, facing north from the Keokee Street intersection.....	196

Figure 81: Proposed dimensions for the street layout of the northern section of New Riggs Road.....	196
Figure 82: Proposed alignment of a mixed-use path in the median of Merrimac Drive.....	197
Figure 83: Merrimac Drive facing east.....	197
Figure 84: Proposed dimensions for the street layout of Merrimac Drive mixed-use path.....	198
Figure A1: Posters shared at final community engagement event.....	206
Figure A2: Posters shared at final community engagement event.....	208
Figure A3: Posters shared at final community engagement event.....	209
Figure A4: Posters shared at final community engagement event.....	210

List of Tables

Table 1: Educational Attainment and Language Proficiency.....	23
Table 2: Listing of Apartment Complexes in Langley Park.....	30
Table 3: Housing profile.....	30
Table 4: Housing occupants, comparison to county and state.....	31
Table 5: Housing unit audit.....	32
Table 6: Age of housing stock.....	32
Table 7: Housing affordability gap analysis.....	35
Table 8: Vehicle availability.....	36
Table 9: Bus systems servicing Langley Park.....	51
Table 10: Langley Park quality of spaces activity.....	58
Table 11: Langley Park community visioning activity.....	59
Table 12: Langley Park mobility engagement activity.....	69
Table 13: Strategic planning for housing goal #1.....	73
Table 14: Strategic planning for housing goal #2.....	84

Table 15: Strategic planning for housing goal #3.....	91
Table 16: Strategic planning for environment goal #1.....	96
Table 17: Strategic planning for environment goal #2.....	113
Table 18: Strategic planning for economic and community development goal #1.....	132
Table 19: Strategic planning for economic and community development goal #2.....	140
Table 20: Strategic planning for transportation goal #1.....	148
Table 21: Strategic planning for transportation goal #2.....	159
Table 22: Strategic planning for transportation goal #3.....	173
Table 23: State funding programs for transportation projects.....	177
Table A1: Housing feedback analysis.....	211
Table A2: Environment and sustainability feedback analysis.....	211
Table A3: Community and economic development feedback analysis.....	213
Table A4: Transportation feedback analysis.....	216

Abbreviations

AADT - Annual Average Daily Traffic

ACS - American Community Survey

ADA - Americans with Disabilities Act

ADU - Accessory Dwelling Unit

AMI - Area Median Income

BGE - Baltimore Gas & Electric

CAP - Climate Action Plan

CDFI - Community Development Financial Institutions

CEEJH - Community Engagement, Environmental Justice, and Health

CHAS - Comprehensive Housing Affordability Strategy

CLG - Community Learning Garden

CLT - Community Land Trust

CNU - Congress for New Urbanism

CPTED - Crime Prevention Through Environmental Design

DHCD - Department of Housing and Community Development

DNR - Department of Natural Resources

DPPE - Department of Permitting, Inspections, and Enforcement

DPW&T - Department of Public Works and Transportation

FHWA - Federal Highway Administration

EDC - Economic Development Corporation

EFC - Environmental Finance Center

EPA - Environmental Protection Agency

HITF - Housing Investment Trust Fund

HGIC - Home and Garden Information Center

HUD - Housing and Urban Development

HVAC - Heating, Ventilation, Air Conditioning

GHG - Greenhouse Gas

GIS - Geographic Information System

KPI - Key Performance Indicator

LEC - Limited Equity Housing Cooperative

LEDC - Latino Economic Development Authority

LPCA - Langley Park Civic Association

LTO-C - Local Transit-Oriented Core

LTO-E - Local Transit-Oriented Edge

MDE - Maryland Department of the Environment

MDOT - Maryland Department of Transportation

MSBDFa - Maryland Small Business Development Financing Authority

MOU - Memorandum of Understanding

NABCEP - North American Board of Certified Energy Practitioners

NHTSA - National Highway Traffic Safety Administration

NOAH - Naturally Occurring Affordable Housing

OST - Office of the Secretary of Transportation

PALS - Partnership for Action Learning in Sustainability

PEPCO - Potomac Electric Power

PGCPS - Prince George's County Public Schools

PM - Particulate Matter

ROFR - Right of First Refusal

SBDC - Small Business Development Center

SHA - State Highway Administration

SNAP - Supplemental Nutrition Assistance Program

SSBCI - State Small Business Credit Initiative

SS4A - Safe Streets and Roadways for All

SWOT - Strengths, Weaknesses, Opportunities, Threats

TAPI - Teledyne Advanced Pollution Instrumentation, Inc

TCN - Thriving Communities Network

TIF - Tax Increment Financing

TNI - Transforming Neighborhoods Initiative (Prince George's County)

TLCDA - Takoma-Langley Crossroads Development Authority

TOD - Transit-Oriented Development

UHAB - Urban Homesteading Assistance Board

UHI - Urban Heat Island

WABA - Washington Area Bicycle Association

WIC - Women, Infants, Children

WIOA - Workforce Innovation and Opportunity Act

WMATA - Washington Metropolitan Area Transit Authority

Executive Summary

Langley Park, an unincorporated Census Designated Place, straddles Prince George's County and Montgomery County in Maryland. Its unincorporated status blurs the boundaries between Langley Park and the neighboring communities of Takoma Park, Silver Spring, Long Branch, and Hyattsville. Langley Park's position in Prince George's County and Montgomery County and the fluidity of the community's boundaries present challenges for policy-making strategies. However, this situation offers an opportunity to strengthen regional relationships between Prince George's County and Montgomery County and their communities. Through this study, we encourage these entities to collaborate to achieve shared goals for affordable housing, transportation, environment and sustainability, and community and economic development.

As members of the Community Planning Studio from Fall 2024 at the University of Maryland's School of Architecture, Planning, and Preservation (MAPP at UMD), we have envisioned an equitable future for Langley Park, Maryland. We received support from our interlocutors – CASA Maryland, Langley Park Civic Association, and Takoma/Langley Crossroads Development Authority), Prince George's County's Planning Department, PALS, and the Urban Studies and Planning Program at UMD. Members of the community of Langley Park were co-creators and collaborators in the studio's effort.

The studio analyzed existing conditions through a framework of equitable development principles and provided improvement recommendations. We hope that the partnership with the Langley Park organizations named above will facilitate the consideration and potential implementation of recommendations in our proposed Strategic Plan.

The studio was divided into two parts. Part 1 focused on an analysis of the planning conditions of Langley Park. Students participated in site visits, dialogued with our interlocutors, and conducted a literature review to understand community needs and assets. Considering conversations with stakeholders, analysis of secondary data, the input of guest speakers, and guided research tours of neighboring communities and their solutions to similar challenges, the studio composed analyses of demographics, stakeholders, the spatiality of the site, and other current planning conditions.

In Part 2, the studio proposed a Strategic Plan for Langley Park that includes visions, goals, objectives, strategies, action plans, indicators, targets, stakeholder analysis, place interventions, and people's impact in the areas of housing, transportation, environment and sustainability, and community and

economic development. This report aims to provide tools for government officials, community advocates, residents, and business owners to protect, honor, and celebrate Langley Park's existing cultural identity and assets while planning together for its future.

Introduction

Langley Park, an unincorporated Census Designated Place, straddles Prince George's County and Montgomery County in Maryland. Its unincorporated status blurs the boundaries between Langley Park and the neighboring communities of Takoma Park, Silver Spring, Long Branch, and Hyattsville.

Langley Park has a unique community identity with strong mutual support and advocacy networks within immigrant groups. This community identity, born of the majority immigrant population, drives commerce, identity, and culture in Langley Park. Immigrants or their families own businesses operating in the area and serve those same immigrant communities. While the largest immigrant groups in Langley Park come from Guatemala, El Salvador, and Honduras, immigrant groups from other parts of Latin America, the Caribbean, Africa, and Asia weave together to form the diverse tapestry of businesses, languages, religions, and values that constitute the cultural identity of Langley Park. To continue building on the community's successes in entrepreneurship and grassroots advocacy toward an equitable future for Langley Park, we must protect, honor, and celebrate its unique cultural identity and those who create it. This report aims to provide tools for government officials, community advocates, residents, and business owners to protect, honor, and celebrate Langley Park's existing cultural identity and assets while planning together for its future.

The studio used an equitable development principles framework proposed by the Urban Institute to guide the initial analysis. The Urban Institute proposes this strategy to ensure that everyone, especially low-income communities of color, benefits from investments in their neighborhoods (PolicyLink 2016; cited in Urban Institute, 2024, 2). The studio chose four equitable development principles to analyze in the Langley Park context: housing and neighborhoods; environment, climate, and sustainability; community and economic development; and transportation. We evaluated the current conditions in Langley Park through the framework of those principles. Community engagement occurred throughout the studio through ongoing interactions with our interlocutors and other community members, site visits, fieldwork, participation in community events, and two significant community engagement events — one at midterm and one at the end of the semester.

Studio Objectives

The objective of the Community Planning Studio was to analyze existing planning conditions in Langley Park through the lens of the Urban Land Institute's Equitable Development Principles and recommend changes to

advance those principles of equity in planning for the future of Langley Park through a Strategic Plan proposal. The analysis and recommendations are presented report and distributed to the studio's partners in Langley Park, the University of Maryland, Prince George's County Planning Department, and the public.

The analysis of existing conditions includes reviewing current data and literature concerning Langley Park, analyses of people and places from site visits, informal conversations with residents, business owners, and guest speakers, and more formal input from community engagement events. We informed the recommendations in the report with these analyses and the input from conversations with stakeholders.

The community planning studio allows students to put the theories they learned in prior coursework into practice. The report produced is intended to be a tool that the community and planning officials may use to inform planning action. It carries no legal commitments but is an aspirational guide for equitable planning.

Part 1: Analysis

Literature Review

The students critically analyzed and synthesized the existing literature to understand the context to the Langley Park case study and supplement first-hand knowledge and second-hand data gathering. The relevant literature examines vital themes related to Langley Park's critical issues. This brief review identifies the interconnected ideas and areas for future investigation. Understanding the existing research is essential to guide the analyses in Part 1 and inform decisions in Part 2.

Lung-Amam et al. (2023) investigated the need for trusted community-based policing alternatives within Latinx immigrant communities such as Langley Park. With trust in legal systems already fractured in Latinx immigrant communities, they demonstrated that safety can be enhanced through neighborhood investments, capacity strengthening, and infrastructure improvements. Similarly, Lung-Amam et al. (2022) explained that a decrease in violent crime directly results from community-based organizations acting as conduits for social cohesion. In Langley Park, campaigns were conducted to invest in the built environment and strengthen collective efficacy to prevent crime in the community.

In terms of housing, renters in Langley Park are vulnerable to rent increases due to the Purple Line – an under-construction, light-rail transit system that will connect Montgomery and Prince George's Counties – and there is a particular lack of affordable housing protections (Lung-Amam et al., 2019). Successes in preventing displacement have focused on preserving affordable housing, empowering businesses despite disruptions from Purple Line construction, and offering workforce development programs. The Housing Matters Report (Lung-Amam et al., 2019) also illustrated a need to increase awareness of tenant rights and improve code enforcement, despite successes in addressing the language barrier and enhancing communication with tenants. Affordable housing development would also provide better connectivity to schools, which helps strengthen social capital among school-aged children (Hanna, 2003).

Equitable transit-oriented development (TOD), a dense, mixed-use development around and along transit service that creates vibrant and connected communities, is another way to advance community goals. In diverse suburbs such as Langley Park, equitable TOD can allow residents to shape their community visions because an integrated planning process is at the concept's core (Lung-Aman et al., 2014). However, Lung-Amam et al. (2014) found it challenging to get Langley Park residents to participate in the planning process because of fear of involvement due to their immigration status and a lack of time and resources. One identified way to mitigate this challenge was participatory story mapping, in which residents conceptualized their neighborhoods and highlighted community assets on two-dimensional maps (Lung-Amam & Dawkins, 2020). This process created meaningful engagement and allowed residents to be part of the Purple Line corridor planning process.

Dr. Lung-Amam's book [The Right to Suburbia: Combatting Gentrification on the Urban Edge](#) (2024) provides insight into the challenges of power building in suburban communities. Due to the displacement effects of gentrification, primarily brought about by the Purple Line, the Langley Park community has gained collective wisdom about achieving justice. A 'silver lining' of gentrification has been the power for agency and participatory power in the suburbs, effectively strengthening the community's capacity to achieve collective visions.

The literature imparted beneficial information to this studio, especially regarding what initiatives have been attempted in Langley Park and which were successful. Specifically, the literature illustrated the importance of community-based organizations and strengthening collective efficacy. In Part 2, when the studio proposes solutions, we focus on how community members

can guide the solutions and how this community power can result in positive change.

Research Methods

Fieldwork

We divided our fieldwork into two parts: the pre-midterm and the post-midterm parts. We conducted the pre-midterm community fieldwork from early September to mid-October. This work included site visits, guided tours of Langley Park, guided tours of neighboring communities, presentations, and conversations with interlocutors, business owners, community organizations, property managers, and residents.

We visited and toured the locations of our interlocutors – the CASA offices in the Villas at Langley Apartments development, the Takoma-Langley Crossroads Development Authority offices, and the Langley Park Community Center, where the Langley Park Civic Association offers many programs. Our interlocutors guided tours to explain their work in the Langley Park community. They introduced us to local business owners, with whom we had informal conversations about their experiences in Langley Park.

We returned to Langley Park several times to reconnect with our interlocutors and expand our community network. We learned about a Wednesday farmer's market hosted by the Crossroads Community Food Network, which has served as an example of equitable access to healthy food, accepting SNAP and WIC benefits to double customers' purchasing power for produce at the market. We first visited the market as volunteers, connecting with the market's manager, other staff, vendors, and customers as we helped set up, take down, and perform many different tasks. We also used the opportunity to promote our midterm engagement event with the permission of the market manager.

Soon after, we attended a Hispanic Heritage Month celebration at the Langley Park Community Center, where we helped one of our interlocutors, the Langley Park Civic Association, and spoke with county agencies in attendance about our upcoming midterm engagement event.

The Takoma-Langley Crossroads Development Authority invited us to attend their board meeting, where we took notes on what most concerned the board and Langley Park business owners. We visited the Crossroads Farmer's Market a second time to reconnect with the market manager, who invited us to witness a community conversation in memory of a teenager who had

recently tragically passed away. At this event, we also noted what concerned residents expressed about public safety.

We found spending time with community members invested in Langley Park's future to be the most valuable part of our fieldwork experiences. Making those connections led to more opportunities for community engagement soon after and helped us build personal relationships with community leaders in Langley Park. These individual relationships with local leaders proved critical to practicing collaborative planning in collecting community input and producing recommendations for this report.

Historical Context

Langley Park is a census-designated and unincorporated area in Maryland, located north of Takoma Park. The area straddles both Montgomery and Prince George's Counties. As of the 2020 census, 20,126 people live in Langley Park, with a median household income of \$77,731. Twenty-six point three percent of the population lives in poverty.

Background

Langley Park was initially established as a 540-acre estate in 1924 by the McCormick-Goodhart family. The McCormick-Goodhart mansion became the focal point of the estate and still exists today, serving a purpose similar to that of a community gathering spot. The estate was subsequently developed as a planned community by Pierre Ghent & Associates of Washington, DC, responding to the post-World War II housing crisis. Subdivided and expanded, Langley Park began to take form. The community initially consisted of middle-class, white, Jewish families until the 1960s; this demographic declined and was replaced by most African American families. Another demographic shift occurred in the 1980s after a wave of Central American migration to the region. By 1990, forty percent of the Langley Park population identified as Hispanic. CASA, an immigration advocacy and assistance organization and one of our studio interlocutors, opened their headquarters in the McCormick-Goodhart mansion in 2010, solidifying the organization as a mainstay in the community.

Purple Line

In 2015, Governor Hogan officially approved the Purple Line, and two of its stations will be in Langley Park. One of the Purple Line stations will be located across the Megamart on University Boulevard. This Takoma-Langley Station will feature upgraded pedestrian features to ensure accessibility. The second station, Riggs Road Station, will be at an intersection of Riggs Road and University Boulevard, down the street from La Union Mall. The Purple

Line developers expect this station to be ideal for visiting local businesses along this corridor. The stations will be accessible from both sides of the road.

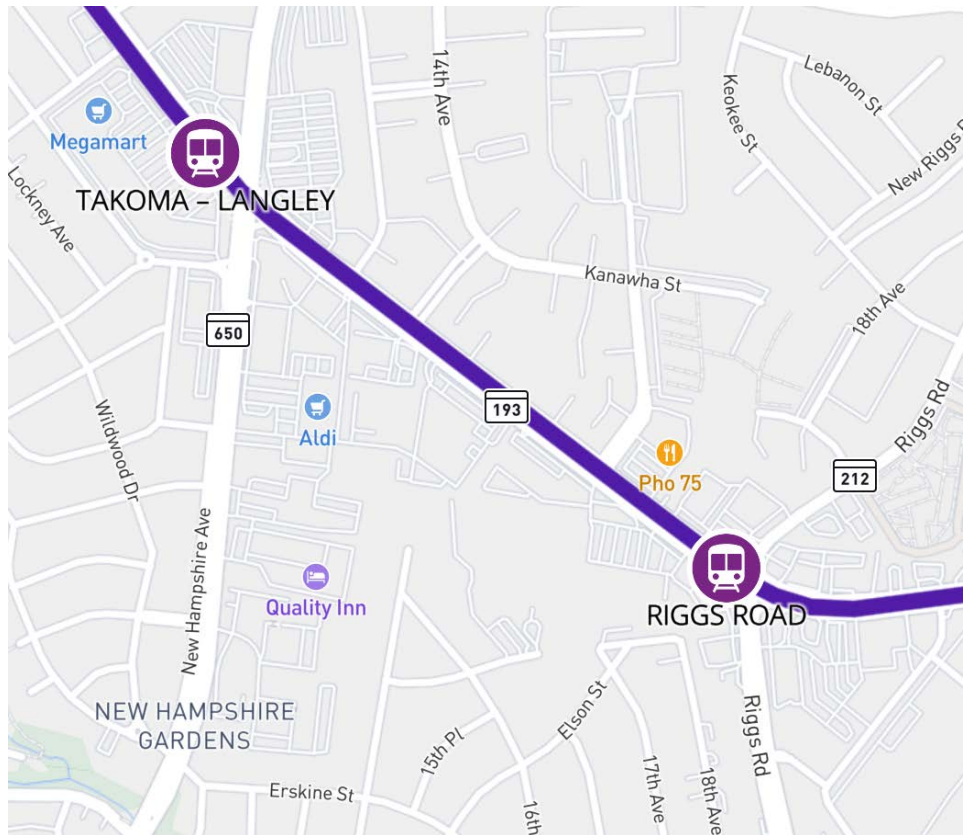


Fig. 1. Map of the proposed Purple Line stations in Langley Park. PurpleLineMD, 2024.



Fig. 2. Modern-day image of the McCormick-Goodhart mansion, now the headquarters of CASA. Wikipedia, 2010.



Fig. 3. Langley Park shopping center in 1954. JustUpthePike, 2008.



Fig. 4. Day laborers waiting outside of a shopping center in 2007. Flickr.



Fig. 5. Community gathering at Langley Park Community Center. Langley Park Community Center, 2022.

Demographics and Socio-Economic Analysis

We analyzed Langley Park's socio-economic characteristics using secondary data. The analysis determined that Langley Park has experienced significant population growth, increasing by 19.9%, from 18,159 in 2010 to 21,778 in 2020. This growth, however, has not been steady, with notable fluctuations, including a dip in 2016. This possibly indicates socio-economic disruption.

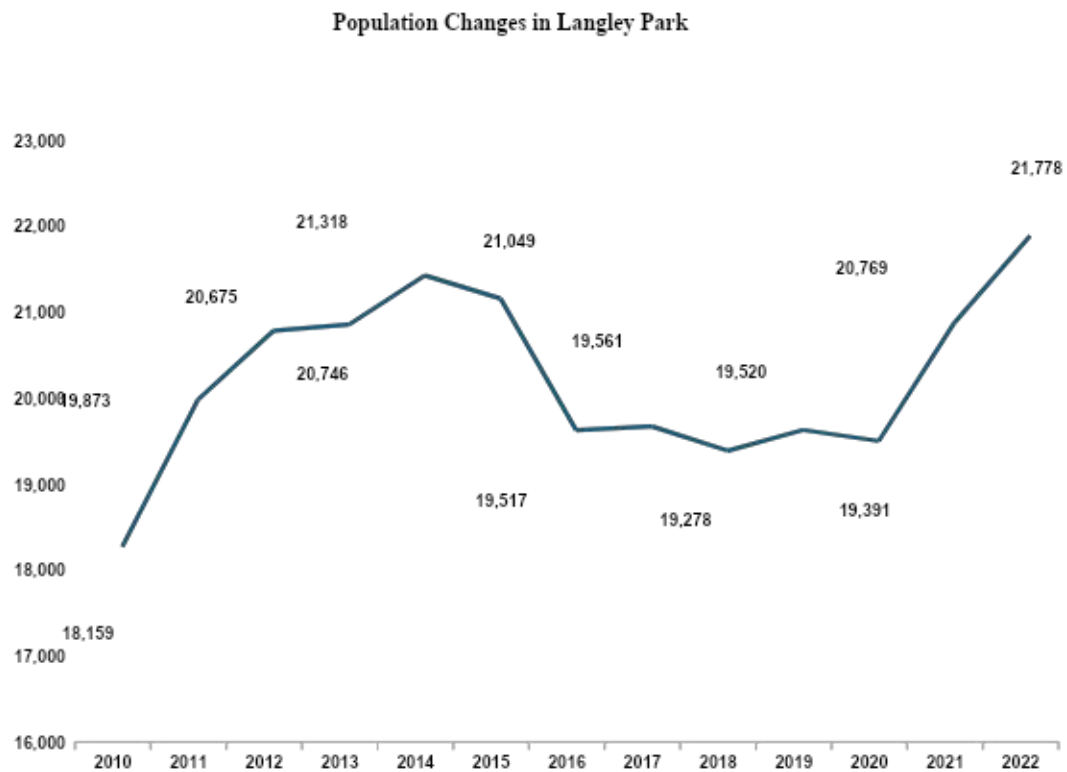


Fig. 6. Population Changes in Langley Park, American Community Survey, 2022.

The largest age group is 25-34 years **old**, comprising 18.7% of the population. 31.06% of residents are under 15 years old, indicating a significant youth population. The racial composition of Langley Park is majority Hispanic, with 34.2% of the population not speaking English. This fact highlights Langley Park's critical need for bilingual services and English language education programs. Langley Park has a much smaller percentage of White residents than the county, the state, and the country. 66.4% of adults still need to complete high school. This low educational attainment contributes to economic challenges and limits access to higher-paying jobs.

Table 1: Educational Attainment and Language Proficiency

Educational Attainment (Population 25 to 64 Years)		
Educational Level	Number of People	Percentage (%)
Less than high school	7,319	66.40%
High school graduate	2,680	24.30%
Some college/associate's	704	6.40%
Bachelor's degree or higher	326	3.00%
Total	11,029	100%
Language Proficiency		
Speak only English	681	
Speak Spanish	15,162	
- Speak English "very well"	3,085	20.3%
- Speak English "well"	2,136	14.1%
- Speak English "not well"	4,750	31.3%
- Speak English "not at all"	5,191	34.2%

American Community Survey 2022.

The median income of \$77,731 illustrates a primarily middle-income community. However, 16.1% of households earn less than \$25,000 annually. Seniors (aged 65 and over) face exceptionally high poverty rates at 28.5%. 39.6% of employment is in the construction industry, which suggests job diversification and skills training are needed to improve economic resilience.

Site Analysis

Kevin Lynch's five qualities framework in *The Image of a City* (1960) guided the studio's site analysis.



Fig. 7. Main urban elements of the city's image, Kevin Lynch, 1960.

Paths are the channels by which people move through a city. Both pedestrians and vehicles move along streets and trails as paths. Edges are boundaries or breaks in the continuity of an area. University Boulevard East and New Hampshire Avenue mark edge boundaries. The Northwest Branch of the Anacostia River is the northern edge of Langley Park. The current Purple Line construction creates a wall that hinders connectivity between areas of the community. Districts are distinct areas often formed by edges. Three districts compose Langley Park: commercial districts along major thoroughfares, multifamily housing districts, and institutional districts. Nodes are the junctions of paths. Vehicles converge at nodes at University Boulevard East, New Hampshire Avenue, and Riggs Road intersections. The Takoma Langley Transit Center serves as a transit hub for the area, another central node. Landmarks are point references. Several landmarks are in Langley Park, including the Takoma Langley Transit Center, CASA headquarters, and the Takoma Langley Crossroads Shopping Plaza.

A strengths, weaknesses, opportunities, and threats (SWOT) framework also guided the site analysis. The Langley Park community possesses many strengths and assets, particularly its numerous small businesses, CASA's organizing and advocacy network, and the Crossroads that connects Prince George's and Montgomery Counties. The community needs more public green space and adequate pedestrian infrastructure, while cars dominate transportation. The Purple Line presents the most significant opportunity for Langley Park as it can increase investment in the community, enhance local business interests, and connect residents to employment opportunities. Dangerous roads and intersections endanger pedestrians, high water and air pollution levels threaten health, and aging housing stock poses risks to residents.

Stakeholder Analysis

Our studio performed a critical stakeholder analysis to understand who makes up the Langley Park community, their relations, agendas, and influence. Throughout our studio experience, we maintained a living document that listed the institutions, organizations, businesses, collectives, and aligned interest groups we discovered through our research and community engagement. These stakeholders play an integral role in Langley Park's community dynamic through various means, including business, healthcare, housing, education, and community organizations.

We created a stakeholder log, which appears in Appendix B. We identified stakeholders by their official names and categorized them into organization

types based on their primary intention. We designed the "Who They Serve" column to represent an overview of the target populations and the potential capacity of each stakeholder.

After identifying our stakeholders and their motivations, we applied the socio-ecological model to analyze how our stakeholders' roles and power interact. Psychologist Urie Bronfenbrenner developed the socio-ecological model around the 1970s to explore how individuals relate to environmental interactions and social influences within systems (Kilanowski, 2017). Within Langley Park's scope, we aimed to conceptualize how individual residents interact with the various levels of stakeholders operating within their community. We adapted the socio-ecological model slightly from the original model, because we wanted to include the confounding factors (individual identity traits) that can contribute to one's lived experience while working within Langley Park's diverse community.

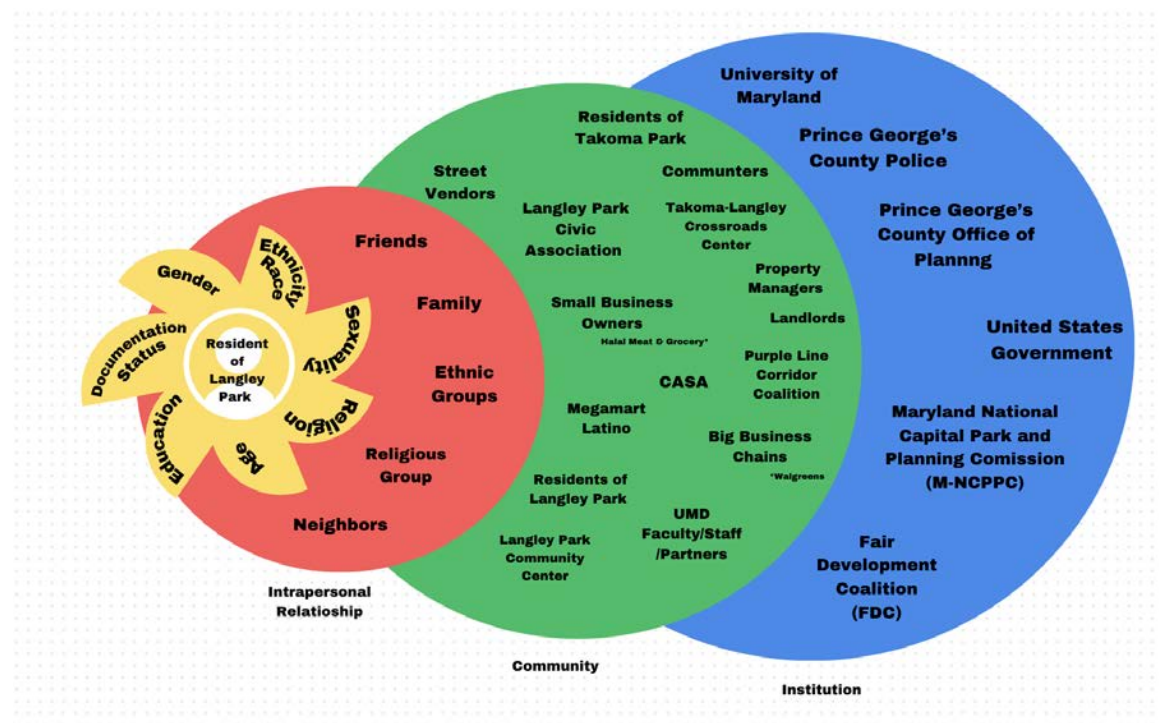


Fig. 8. Socio-ecological model of stakeholders in Langley Park. UMD Community Planning Studio, 2024.

We intend our rendition of the socio-ecological model to be read from left to right, beginning with the individual resident of Langley Park, identified in yellow. Within this model, we acknowledge that residents are not a monolith, and their lived experiences contribute to how they experience Langley Park and its institutions. Gender, documentation status, educational background,

age, religion, sexuality, and ethnicity/race are all identified as contributing factors to one's lived experience. From the resident's individual experience, we assess the relationships of other identified influences that contribute to Langley Park's physical or social environment.

From left to right, we have interpersonal relationships within the red circle. This layer includes friends, family, and neighbors. This represents the dynamic of interactions you would have daily or frequently. To the right, the green circle represents the general community. This includes local businesses, specific ethnic/religious businesses, and small organizations, which typically organize for the general community. Lastly, the largest layer represented within the blue circle is the layer of institutions that possess the greatest influence, contributing to not only Langley Park but also the state or nationally. Institutions dictate laws and rules that impact every layer of the community dynamics.

Our rendition of the socio-ecological model visually represents how the lived experience of residents is affected by the varying levels of local and institutional influence that contribute to the social climate of Langley Park. By identifying stakeholders such as business owners who operate brick-and-mortar businesses and those who operate as street vendors, we're expanding the potential for reach and intervention by inferring from a more holistic perspective in acknowledging the community's assets. By identifying both local and extra-local institutional powers, we were able to consider the unique perspective institutions play in the lives of Langley Park residents. One interesting observation that derived from our literature review and community engagement was the dynamic of police within this largely immigrant community. Our rendition of the socio-ecological model provided valuable insight to our group throughout the project process, especially when considering recommendations for a multi-level intervention effort.

Equitable Development Principles

Planning for a community's future requires critically assessing who has benefitted from previous changes and who will benefit if the proposed vision is realized. This kind of assessment is necessary because it ensures that past harms are acknowledged and that plans work to deconstruct the causes of those harms, installing in their place policies and practices that are beneficial for everyone—especially those who have experienced and are currently experiencing harm. Tying in equity as a core objective for community

planning facilitates that critical assessment of who has benefited and who will benefit from the community planning process.

The Urban Institute provides a helpful equitable development framework for assessing equitable community planning and development. It has six principles: housing and neighborhoods, environment and sustainability, community power and stewardship, equitable economic and community development, equitable transportation, and livability (PolicyLink 2016; cited in Urban Institute, 2024, 2).

The studio analyzes existing conditions in Langley Park through the lenses of equitable housing and neighborhoods, environment and sustainability, economic and community development, and transportation. We embedded the community power stewardship and livability principles into the other four equitable development principles.

Analysis of Current Conditions

Housing and Neighborhoods

Housing and Neighborhoods include access to safe, affordable, and quality housing and neighborhoods for everyone to live and thrive in. This principle allows existing residents to remain in their chosen communities while minimizing the risks of displacement and neighborhood gentrification. It further protects tenants, enables homeownership opportunities, provides quality public amenities, and supports diverse community-scale businesses.

–The Urban Land Institute on equitable housing and neighborhoods

Langley Park, located in Prince George's County, Maryland, has undergone substantial changes from its early suburban development in the mid-20th century to a densely populated, immigrant-majority community.¹ Driven by an increasing demand for affordable housing, Langley Park's housing market has shifted toward rental units. This section delves into the housing landscape, neighborhood dynamics, affordability challenges, and the anticipated impacts of the Purple Line light rail project. It highlights critical policy issues from previous studies and development strategies and analyzes where the Urban Institute's definition of equitable housing and neighborhoods fit into the real-world context of Langley Park (CNU, 2020; Lung-Amam et al., 2020).

¹ Langley Park borders Montgomery County and the lines between the unincorporated Langley Park and the surrounding communities can be blurred. For the purposes of our studio, we have focused on the Prince George's County side.

Historical Context of Development

Originally developed between the 1940s and 1960s, Langley Park was designed as a suburban enclave for middle-income families. The community has a historical background that associates it with the plantation era. The area was once part of a large estate owned by a wealthy family, the McCormick-Goodharts. However, before the development of this estate, the land had been part of a broader agricultural region that operated under the plantation system in the 18th and 19th centuries. Its past as part of a plantation landscape reflects the broader socio-economic dynamics shaped by the exploitation of enslaved labor.

This history also underscores the connections between land ownership, racial hierarchies, and the development of urban spaces, particularly when considering how the immigrant communities in Langley Park today face housing insecurity, economic marginalization, and potential displacement. We can trace these challenges to earlier eras of unequal land distribution and exploitation, which continue manifesting in the high proportion of residents renting from large multifamily apartments rather than owning their homes.

The post-war suburban ideals led to more complex socio-economic dynamics due to increased migration and housing demands (CNU, 2020). The neighborhood has since experienced a demographic transformation driven by an influx of immigrants, primarily from Central America, seeking affordable rental housing. The historical suburban ideals of single-family homeownership gave way to the current urban reality, characterized by overcrowding, aging infrastructure, a reliance on multifamily rental units to house residents, and a lack of public spaces to support the growing population (Housing Matters report, 2020). The inclusion of Langley Park in Prince George's County's Transforming Neighborhoods Initiative (TNI) in 2012 was one step the county took to address these challenges, focusing on economic development, housing code enforcement, and social services for immigrant communities (Prince George's County, 2012).

With the influx of immigrants from all over the world came the strong identity of what Langley Park is today. Defined by entrepreneurship, community-led advocacy, and a diverse representation of cultures—particularly indigenous Maya culture from Central America – in the businesses, languages, worship, and other aspects of daily life – Langley Park is a uniquely valuable community whose impact is felt across Prince George's County, the DC-metro area, the State of Maryland, and in communities around the world.

Planning for the future of Langley Park should lean on Langley Park's social and cultural capital born of the tight-knit immigrant communities. Building the future of Langley Park around these existing assets will work toward equitable housing outcomes by supporting the diverse community-scale businesses that rely on those existing local networks. It will allow residents and businesses to continue to live and thrive in their chosen community.

Housing Occupancy and Tenure

Langley Park's housing market is predominantly rental based. Thirteen apartment complexes comprise the rental market, accounting for approximately 71% of the neighborhood's housing units. In the figure below, the housing complexes are north of University Blvd and lie adjacent to the neighborhood's commercial district.



Fig. 9. Apartment Complexes in Langley Park.

Table 2: Listing of Apartment Complexes in Langley Park

Complex	Property Address	Year Built	Total Units
Villas at Langley	8100 15th Ave	1964	590
Bedford Station	1400 University Blvd	1953	488
Victoria Station	1401 Merrimac Dr	1950	101
University Gardens	1801 Jasmine Ter	1965	456
Campus Gardens	2214 Phelps Rd	1959	446
University City	2213 University Blvd	1950	400
Quebec Arms	8321 14th Ave	1955	332
Hampshire Village	1325 Merrimac Dr	1950	200
Liberty Place	1352 University Blvd E	1950	178
Langley Garden	8106 New Hampshire Dr	1972	135
Victoria Crossing	8208 14th Ave	1950	135
University Landing	1001 Merrimac Dr	1949	117
Langley Terrace	1400 Langley Way	1940	105
Total			3,683

Of 5,252 housing units, 5,198 (99%) are occupied, with 77.2% being renter-occupied. The high occupancy rate reflects the high demand for housing in Langley Park. The average household size is another indication of the high demand for housing in Langley Park. Langley Park's average household size of 4.17 is considerably larger than those of Prince George's County (2.75) and Maryland (2.60) (ACS, 2022). A significant part of this difference in household size between Langley Park, the county, and the state is that households in Langley Park often live in extended family households or shared arrangements (households of unrelated individuals or more than one family) to make the cost of rent more affordable. However, these crowded living arrangements can have a downside.

Table 3: Housing Profile.

Category	Estimate	Percent
Total Housing Units	5,252	100%
Occupied Housing Units	5,198	99%
Owner-Occupied Units	1,187	22.80%
Renter-Occupied Units	4,011	77.20%
Average Household Size (Owner)	3.51	-
Average Household Size (Renter)	4.17	-

U.S. Census Bureau, American Communities Survey, 2022.

Overcrowding can exacerbate the issues of older housing stock, as a higher concentration of residents causes appliances and hardware to deteriorate quickly, and the risk of mold growth increases with excess moisture and poor air circulation (Housing Matters Coalition, 2019). Overcrowding is well-documented in Langley Park, where 26% percent of households are overcrowded – five times the rate of the county or state, according to the Housing Matters Coalition's 2019 report. According to data from the 2022 American Communities Survey, 32.1% of households in Langley Park report housing more than 1.01 occupants per room. This is far higher than Prince George's County and the State of Maryland, in which 5.4% and 2.6% of units house over 1.01 occupants per room, respectively.

Table 4: Housing occupants, comparison to county and state.

Occupants per Room	Langley Park, MD	Prince George's County	State of Maryland
1.00 or less	67.9%	94.6%	97.4%
1.01 to 1.50	22.2%	2.9%	1.6%
1.51 or more	9.9%	2.5%	1.0%

U.S. Census Bureau, American Communities Survey, 2022.

Overcrowding in Langley Park contradicts the Urban Land Institute's definition of equitable housing and neighborhoods. The accelerated deterioration of overcrowded housing and the indication that households live in shared arrangements to make the cost of housing more manageable are evidence that the current housing conditions in Langley Park are not equitable. They do not provide "access to safe, affordable, and quality housing." Addressing the overcrowding of units by increasing the availability of 4 or 5-bedroom units to match the average household size would be one way to equitably provision housing in Langley Park, acknowledging the needs and preferences of current residents.

Housing Structure, Age, and Advocacy

The available housing types in Langley Park range from single-family detached and single-family attached dwellings to multifamily apartments and even some mobile homes. However, multifamily apartments are the primary housing type in Langley Park, with 64.6% of the housing in structures containing five or more units. The primacy of multifamily rental apartments in Langley Park's current housing supply contradicts the Urban Land Institute's equitable housing principle of enabling homeownership

opportunities. The neighborhood's urban density also reflects the high demand for housing, starkly contrasting surrounding areas of Prince George's County, where less densely developed single-family homes are more central to housing provision.

Table 5: Housing unit audit.

Units in Structure	Estimate	Percent
1-Unit, Detached	1,062	20.20%
1-Unit, Attached	296	5.60%
2 Units	72	1.40%
5 to 9 Units	1,510	28.80%
10 to 19 Units	1,140	21.70%
20 or More Units	1,440	13.70%

U.S. Census Bureau, American Communities Survey, 2022.

The dominance of multifamily apartments in the Langley Park housing market means that property owners and managers have institutional power over much of the built environment of Langley Park. Because Langley Park residents often do not own their unit, if the units requires maintenance, they have to rely on the property manager to address it. This is significant because much of Langley Park's housing stock is aging, with over half of the units built before 1970 and 30% built during the 1950s (ACS, 2022).

Table 6: Age of housing stock.

Year Structure Built	Estimate	Percent
Built 1950 to 1959	1,564	29.80%
Built 1960 to 1969	1,193	22.70%
Built 1970 to 1979	593	11.30%
Built 1990 to 1999	931	17.70%

U.S. Census Bureau, American Communities Survey, 2022.

This aging infrastructure presents challenges related to maintenance, energy efficiency, and modernizing older buildings. For instance, residents of older structures are at a higher risk of exposure to mold, asbestos, and lead paint. Older housing can also contain aging electrical and plumbing equipment. In a community where most residents own their homes, the onus would be on the residents to address these issues, but most Langley Park residents must wait for their property manager to act. When the property manager fails to act, residents are left with the choice of living in substandard conditions or violating their lease agreement to fix the issue themselves, risking termination of their lease.

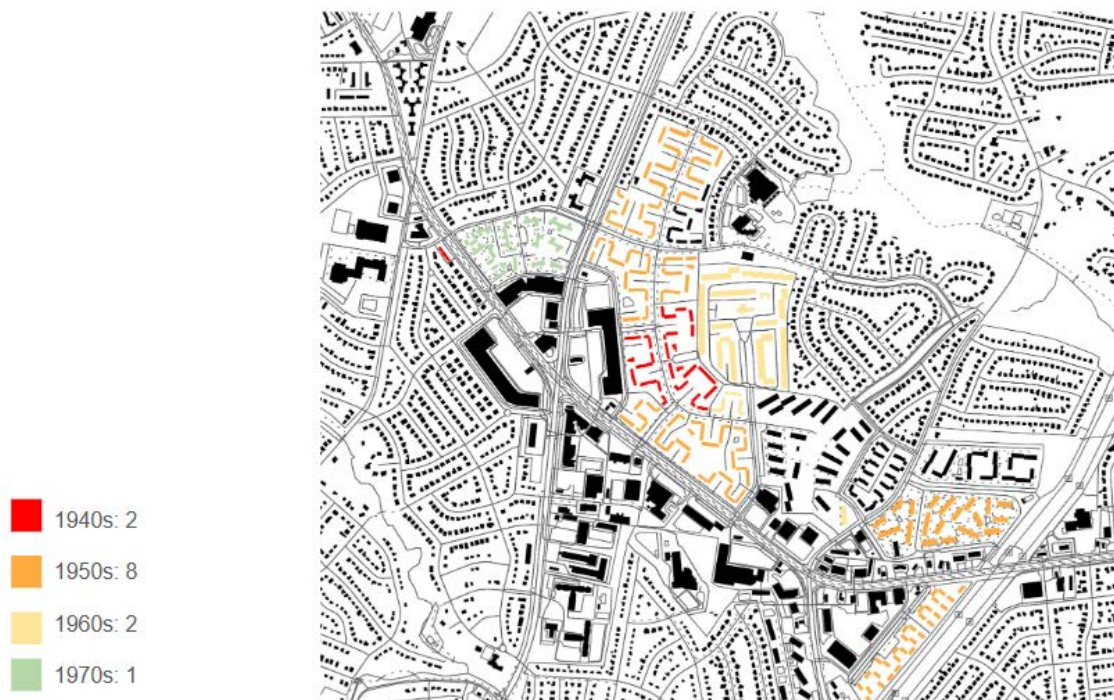


Fig. 10. Decades of Building Construction in Langley Park, UMD Community Planning Studio.

The second-largest apartment complex in Langley Park, Bedford Station, was constructed in 1953. It was recently on Prince George's County's "distressed properties" list, and hundreds of housing code violations were left unaddressed until resident-led advocacy forced the owner to sell the property. The new owners purchased the Bedford Station apartments, the Victoria Station apartments, and the Villas at Langley apartments—which together comprise 32% of the multifamily rental units in Langley Park—and agreed to address the outstanding violations ignored by the previous owner

and to keep most of the units affordable at each property. This case summarizes the challenges of maintaining the existing housing stock and highlights the capability of resident-led advocacy in Langley Park. The community's older housing stock is a key contributor to deteriorating living conditions, often exacerbated by landlords failing to conduct necessary maintenance of the housing structures (Lung-Amam et al., 2020).

The age of Bedford Station apartments led to the deterioration of living conditions for residents. The previous owner failed to address the deteriorating conditions. Residents organized with CASA, drawing attention to the poor living conditions at Bedford Station. The residents' advocacy pressured the owner to sell the property to a developer who agreed to renovate the substandard units while keeping 75% of units affordable for households earning 60% AMI or less (Sustainable Communities Renewal Application, 2023). This shows how empowering existing community networks can lead to investments that make housing in Langley Park safer and higher quality while minimizing the risk of displacement and neighborhood gentrification.

Affordability and Overcrowding

Like in many communities around the country, paying for housing is a challenge for residents in Langley Park. Both renters and homeowners are cost-burdened, spending more than 30% of their household income on housing. The Joint Center for Housing Studies (2024) reports that nationally, renters have faced rising rents that outpace income growth, further straining household budgets in areas like Langley Park.

The current housing supply in Langley Park has effectively provided affordable housing for households earning over 50% of the area's median income (AMI). According to data from the U.S. Department of Housing and Urban Development's Comprehensive Housing Affordability Strategy (CHAS), Langley Park has a surplus of units available for households earning over 50% AMI (CHAS, 2021). Households earning less than 50% AMI may struggle to find affordable housing. An affordability gap analysis of CHAS data collected between 2016 and 2020, shown below, demonstrates a deficit of affordable units for households earning less than 50% AMI. However, this deficit results from different causes for households with varying income levels. For households earning between 30% and 50% AMI, there is a surplus in housing units constructed that are affordable for their income level, as seen in column B of the table below. However, almost half of those units are occupied by households earning more than 50% AMI, as seen in column H of the table below, leaving a deficit of those affordable units available for the

households who need them most. On the other hand, there is a massive deficit of units available that are affordable for households earning less than 30% AMI, as seen in column B in the table below.

Table 7: Housing affordability gap analysis.

Housing Affordability Gap Analysis, Langley Park						
CHAS, 2016-2020						
<u>Renters</u>	<u>A</u>	<u>B</u>	<u>F</u>	<u>G</u>	<u>H=G/D</u>	<u>I=E-G</u>
	Renter HHs Within Income Limits *	Renter Occupied Units by Affordability Level *	Units Occupied by HH Within Income Limits *	Units Occupied by HH Above Income Limits *	% Units Occupied by HH Above Income Limits	Gross Surplus / Deficit
HH Income						
<= 30% AMI	975	50	30	20	40.00%	-945
> 30% AMI and <=50% AMI	944	1405	269	685	48.75%	-224
> 50% AMI and <=80% AMI	560	2030	345	545	26.85%	925

HUD, CHAS Data (2016-2020).

The table shows the surplus or deficit of affordable units in Langley Park based on household income. The analysis focused on households earning 80% AMI or less, showing that, while there are units that are "affordable" for households earning below the area median income, there are not enough affordable units for households earning 50% AMI or less. Most "affordable" units are affordable for households earning between 50% and 80% AMI, but most households that need affordable units earn 50% AMI or less. This disparity between the income level of most people needing affordable housing and the supply of affordable units at that income level indicates a realignment of affordable housing strategy is required to meet the needs of low-income households.

Based on data from the most recent American Communities survey in 2022, the median gross rent in Langley Park was \$1,627 per month, and 49.5% of renters were cost-burdened by their rent (ACS, 2022). According to the same survey, 28% of homeowners in Langley Park were cost-burdened by their mortgage payments in 2022. Among both renters and homeowners in Langley Park, the percentage of households cost-burdened by housing decreased between 2010 and 2022. That trend is projected to continue into the next decade, as 38.8% of households in Langley Park are expected to be cost-burdened by housing in 2034. However, this projection only considers

past trends. It does not consider the impact of the Purple Line light rail project on housing prices in Langley Park.

The Purple Line and Future Development

The construction of the Purple Line, expected to be completed by 2027, is poised to significantly alter Langley Park's future. The Purple Line will provide vital transit connections to the broader Washington, D.C. region, offering improved access to jobs, education, and healthcare. However, the development also raises concerns about gentrification and displacement. Studies, including those by the Congress for New Urbanism (CNU, 2020) and the Purple Line Corridor Coalition (2022), emphasize that infrastructure improvements such as the Purple Line often result in rising property values, potentially displacing long-term, low-income residents and small businesses.

Table 8: Vehicle availability.

Vehicle Availability	Estimate	Percent
No Vehicles Available	1,158	22.30%
1 Vehicle Available	2,550	49.10%
2 Vehicles Available	1,172	22.60%
3 or More Vehicles Available	306	6.00%

U.S. Census Bureau, American Communities Survey, 2022.

The Purple Line Corridor Coalition (2022) has proposed several equitable development strategies to ensure that the benefits of improved transit access do not disproportionately harm vulnerable communities. These include affordable housing preservation policies, rent stabilization measures, and transit-oriented development that prioritize community input and protect against displacement (Purple Line Corridor Coalition, 2022).

Conclusion

Langley Park is a community at a crossroads, grappling with significant challenges related to housing affordability, overcrowding, and deteriorating infrastructure. However, the neighborhood's transformation into a community of immigrants gives it a unique identity that drives the close-knit community connectivity, allowing businesses and residents to thrive and advocate for themselves. As the Purple Line introduces new transit opportunities, it will be essential to ensure equitable development that addresses the needs of the

community's long-term residents and centers them as key partners in planning for the future of Langley Park. Strategies such as affordable housing initiatives, tenant protections, and preservation policies must be prioritized to maintain livability and Langley Park's existing community identity in the face of development pressures from the Purple Line (CNU, 2020; Purple Line Corridor Coalition, 2022).

Environment, Climate, and Sustainability

Langley Park faces environmental and climate challenges as it continues urbanization and development. As climate change intensifies globally, the impacts on vulnerable communities like Langley Park become increasingly pronounced. These include heightened risks from extreme weather events, inadequate infrastructure resilience, and socio-economic disparities that compound environmental stressors.

This section aims to assess the current environmental conditions in Langley Park, explore the local impacts of climate change, and identify opportunities for sustainable development. The section will offer insights into the community's sustainability challenges and opportunities by examining air and water quality, green space availability, and energy use. It will also highlight the intersection of environmental justice and climate resilience, recognizing that a holistic approach to sustainability in Langley Park must consider ecological and social factors.

With its proximity to the Washington, DC metro area and the planned developments along the Purple Line, Langley Park is at a critical juncture where thoughtful climate and sustainability planning can enhance the quality of life for its present and future residents. This analysis seeks to comprehensively understand the environmental landscape and offer recommendations for fostering a more sustainable and climate-resilient future for the community.

Langley Park's built environment, characterized by aging infrastructure and dense housing, presents unique environmental sustainability and resilience challenges. These include issues related to air quality and the urban heat island effect. The effects of climate change — such as increasing temperatures, more frequent extreme weather events, and the risks posed by urban heat islands — threaten to strain Langley Park's resources and infrastructure further. As a predominantly low-income community, Langley Park's residents are particularly vulnerable to these climate-related stressors, making it imperative to prioritize environmental justice in any sustainability efforts.

Environmental Liabilities

There are two central environmental liabilities facing Langley Park residents:

- **Air Quality:** Langley Park's proximity to major transportation corridors can contribute to poor air quality, disproportionately affecting residents facing health disparities. In Langley Park, University Boulevard and New Hampshire Avenue had an Annual Average Daily Traffic (AADT) of 20,000 to 50,000 cars daily. This is a moderately high level of vehicular traffic. Merrimac Drive and Riggs Road also had an AADT between 5,000 and 20,000 cars per day. See Fig. 11.

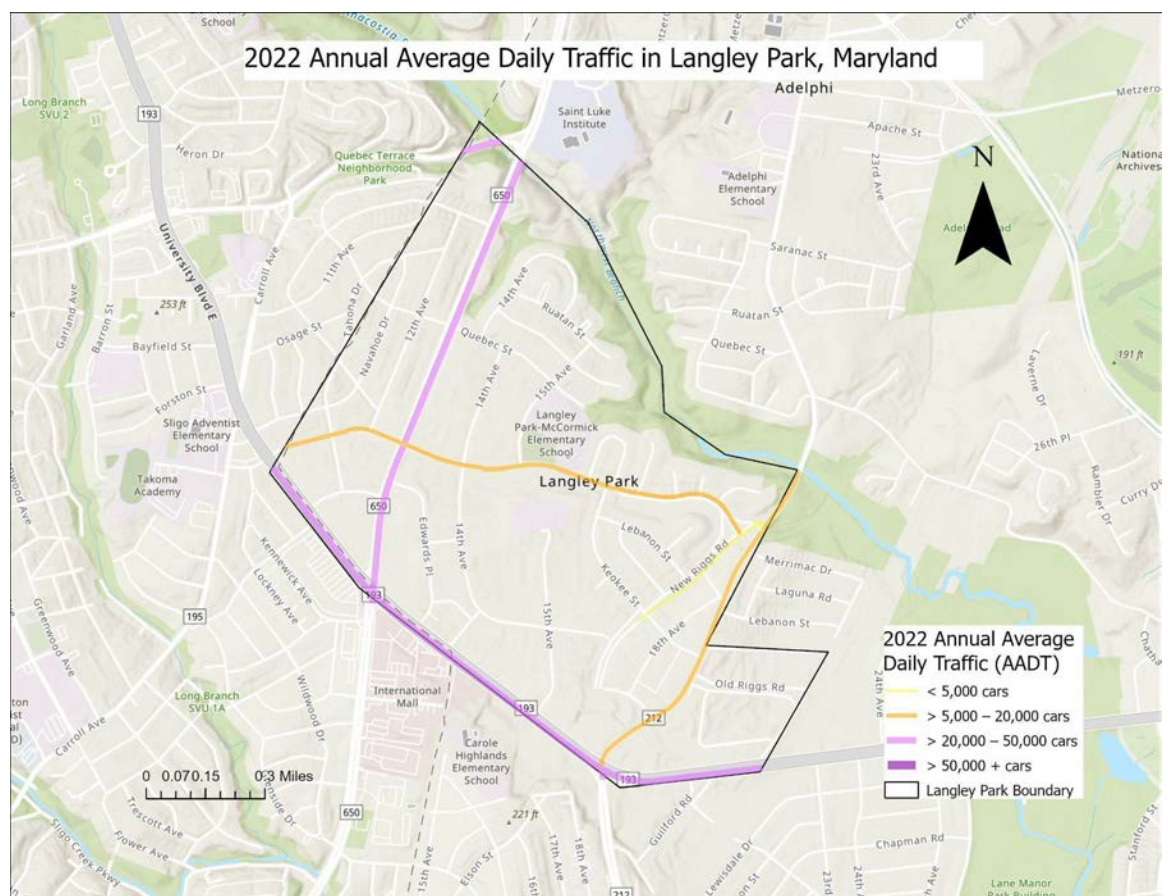


Fig. 11. 2022 Annual Average Daily Traffic (AADT) in Langley Park, Maryland. Maryland Department of Transportation (MDOT), 2022.

- **Urban Heat Island Effect:** Limited access to parks and green spaces in Langley Park reduces opportunities for recreation and cooling during heat waves. The limited tree canopy and the prevalence of concrete surfaces in the commercial corridor of Langley Park increases the

urban heat island effect, which poses significant health risks, particularly during hot summer months. Below is a map of afternoon heat in Langley Park, MD, and Takoma Park, MD, clearly demonstrating that Langley Park suffers from extreme heat compared to neighboring areas like Takoma Park. See Fig. 12.

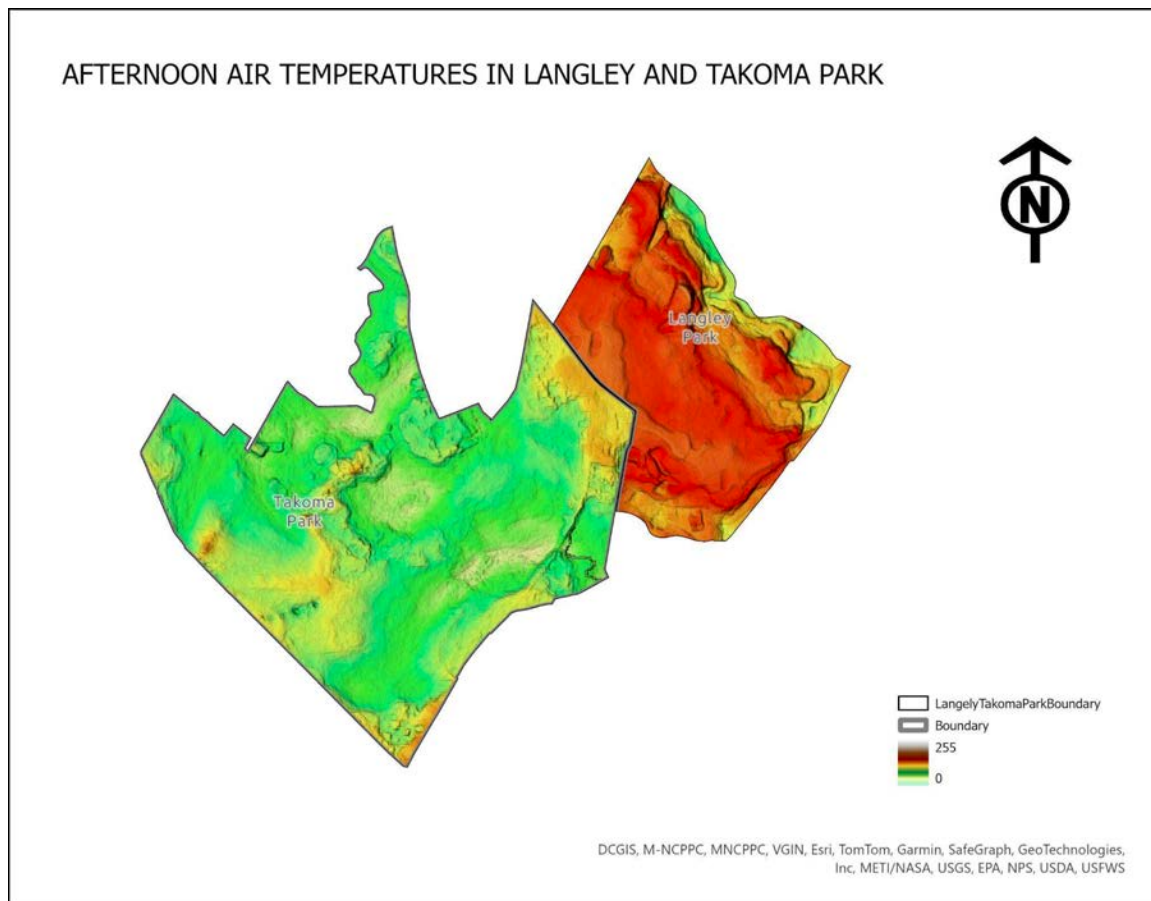


Fig. 12. Afternoon air temperature in Langley Park and Takoma Park. Data Source: Urban Heat Island Imagery layer by National Environmental Satellite, Data, and Information Service (NESDIS) NOAA/CAPA Strategies (2023).

Reducing air pollution and mitigating the urban heat island (UHI) effect in Langley Park, Maryland, aligns with objectives in the Prince George's County Climate Action Plan (CAP), the Maryland Climate Action Plan, and U.S. federal climate strategies. These efforts support greenhouse gas (GHG) reduction, climate resilience, and equity goals while addressing local health and environmental concerns.

The Prince George's County CAP prioritizes GHG reduction through energy efficiency and renewable energy, with urban greening and heat mitigation

reducing energy demand and improving public health (Prince George's County, 2022). The plan's focus on equity ensures investments benefit underserved communities like Langley Park, which can leverage tree planting and green infrastructure for environmental and social benefits.

At the state level, Maryland's Climate Action Plan aims for net-zero GHG emissions by 2045. It emphasizes urban greening to reduce energy consumption and build resilience against extreme heat (Maryland Department of the Environment [MDE], 2021).

Federal climate strategies, including the Justice40 initiative, prioritize funding for disadvantaged communities to support resilience and air quality improvements (White House, 2021). Langley Park's urban forestry and sustainable infrastructure can leverage federal programs such as the Inflation Reduction Act and the Clean Air Act to address air pollution and UHI effects.

Environmental Assets

Langley Park, Maryland, residents also benefit from a couple of environmental assets, including:

- **Northwest Branch Trail:** A trail that is accessible from Langley Park and provides opportunities for residents to explore natural beauty, engage in recreational activities, and access wildlife habitats.
- **Tree Canopy Cover:** 41% of Langley Park is covered by trees, providing urban cooling, air filtration, and stormwater management (OurTrees, 2024). However, the commercial area of Langley Park has minimal tree coverage, and most of Langley Park's trees are in the single-family residential area, causing inequitable access to this environmental asset.

Conclusion

Despite its challenges, Langley Park has several opportunities to adopt environmentally sustainable practices that can enhance its resilience to climate change, reduce energy costs, and improve the quality of life for its residents. We discuss these opportunities in Part 2 of the report. By embracing a range of green technologies and practices, the community can mitigate some environmental stressors it faces and transition toward a more sustainable future.

Economic and Community Development

The Langley Park community faces many economic and community development issues, making attaining sustainable development, especially within some of the more disenfranchised zones, a challenge. Challenges include limited economic opportunities for residents, high expenses for business owners, and limited access to community resources. Residents and business owners alike also fear the risk of displacement and gentrification due to the Purple Line development and other new related construction surrounding areas.

Two significant contributors to the greater community economic hardship is the unincorporated designation that hinders funding opportunities and the influx of low-income and unauthorized residents who struggle to meet the rising cost of living in the areas that have seen little to no improvement to the infrastructure within the residential zones. Limited housing and work opportunities for residents make providing all the necessities for families a challenge, especially when the surrounding resources are inaccessible either by fiscal barriers because of the cost or physical obstacles because they must travel to other towns to get them.

Historical Context Within Community and Economics

This section provides an analysis of Langley Park's history and challenges related to its community and economic development.

In 1955, Langley Park was "the fastest growing trade area in Metropolitan Washington," with 200,000 people within a 3-mile (4.8 km) radius. Affordable housing attracted a community consisting primarily of young couples with families. In the following decades, Langley Park became a white middle-class enclave that mainly was Jewish. During the 1970s, increasing numbers of African Americans moved into the community after desegregation. Although some established families remained, white people declined due to "white flight" to the outer suburbs. During the 1980s, the community struggled with blighted residential and commercial areas. By 1991, officials were taking note of an increase in unauthorized immigrants from Central America, and day laborers were beginning to become a common sight on area streets. The 21st century has seen a significant influx of migration to the community from Central America, specifically El Salvador and Guatemala. There are groups of Caribbean and African immigrants as well. Langley Park in 2024 represents the largest international community within the region, creating an international corridor right along University Boulevard.

Economic Profile of Langley Park

Income in Langley Park

According to U.S. census data, the employment rate in Langley Park is 67.2%, higher than in the state of Maryland. The median household income in Langley Park is \$77,732, while the median household income for the state is \$98,678. Most of the people in Langley Park are engaged in construction activities, according to the Census data of 2020.

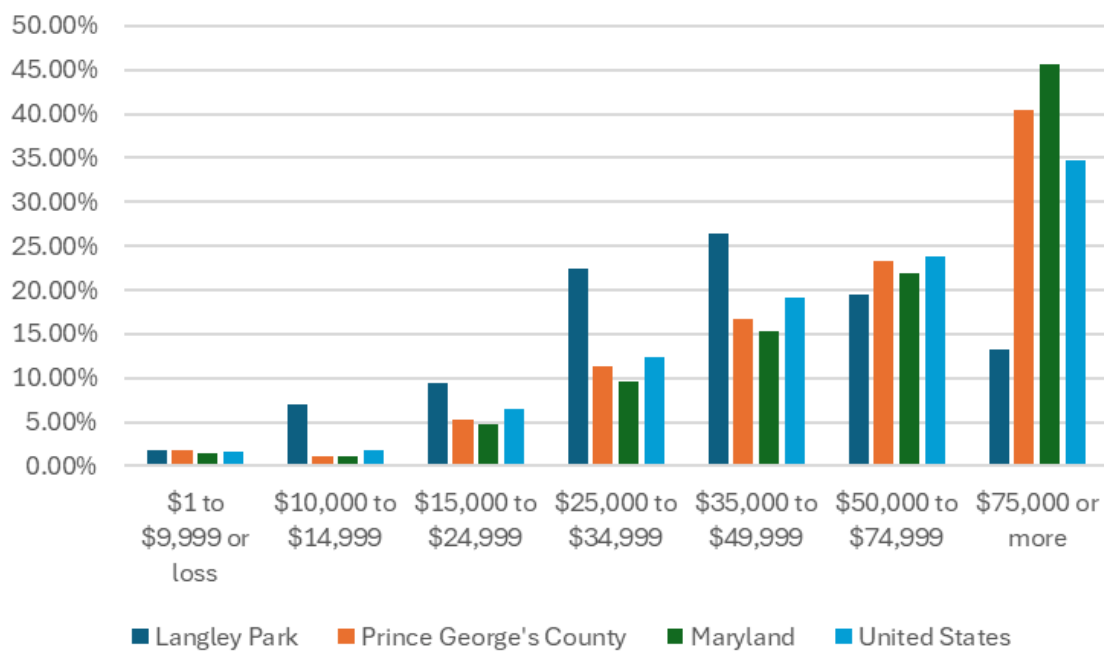


Fig. 13. Income distribution in Langley Park, Prince George's County, Maryland, and the US.

Langley Park exhibits a disproportionate share of the household income in the region, reflecting significant economic challenges associated with the community. From the above data, Langley Park's share of residents dominates in the lower household income brackets (\$1-\$49,999) and drops as the income bracket increases. This trend underscores the community's economic disparities compared to surrounding regions, reflecting limited access to higher-income opportunities. About 13.3% of Langley Park residents fall within the \$75,000.00 or more income category, whereas Prince George's County, the State of Maryland, and the United States account for 40.5%, 45.7%, and 34.7% at this level, respectively.

Due to the limited economic opportunities for the Langley Park residents, poverty is prevalent among the population. According to ACS (2022), about 26.3% of the Langley Park population is below the poverty line, 16.8% higher than the poverty level in Maryland (9.5%). From the chart below, Langley Park has the highest share of residents living below 100% of the poverty level, significantly exceeding the rates in Prince George's County, Maryland, and the United States. The pattern is consistent for the 100–199% poverty range, where Langley Park again shows a larger proportion than other regions. Conversely, Prince George's County, Maryland, and the United States have much higher proportions of residents living at or above 200% of the poverty level, with Maryland and Prince George's County leading this category at nearly 80%. Langley Park's smaller share in this upper-income category highlights a significant economic disparity. These disparities impact community growth, infrastructure, and overall quality of life.

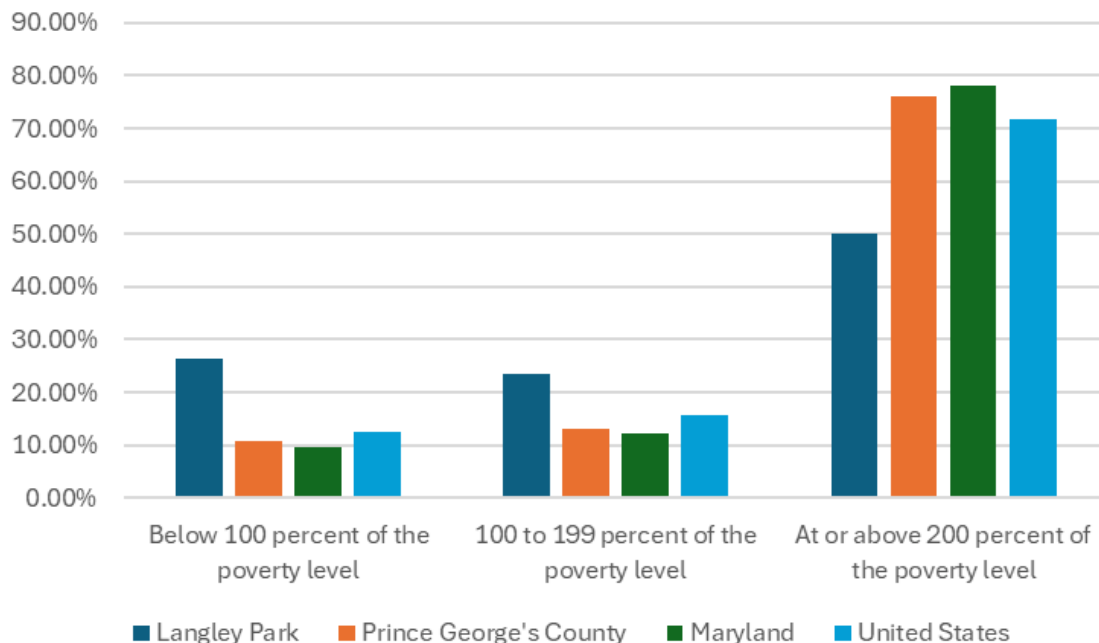


Fig. 14. Poverty Rate in Langley Park, Prince George's County, Maryland, and the U.S.

When looking at unemployment trends, Langley Park records higher unemployment rates than the State of Maryland. While Maryland's rates remained relatively stable or declined, Langley Park showed a more volatile and upward trend. This could be an intersection of factors such as the community's unincorporated nature, people's documentation issues, language barriers, and limited skills for the job market, among others. From

the figure below, Langley Park regularly demonstrated elevated rates compared to Maryland throughout most years, especially from 2019 to 2022, during which the disparity notably increased. Trend analysis shows that Langley Park's unemployment rate has fluctuated over the years using ACS data on employment rates. As a livelihood strategy, Langley Park has seen many small businesses, including street selling, in the various neighborhoods against the land use zoning in those areas. It is common to see some residents engaging in informal, small-scale trading under tents as you drive or walk around the neighborhood.

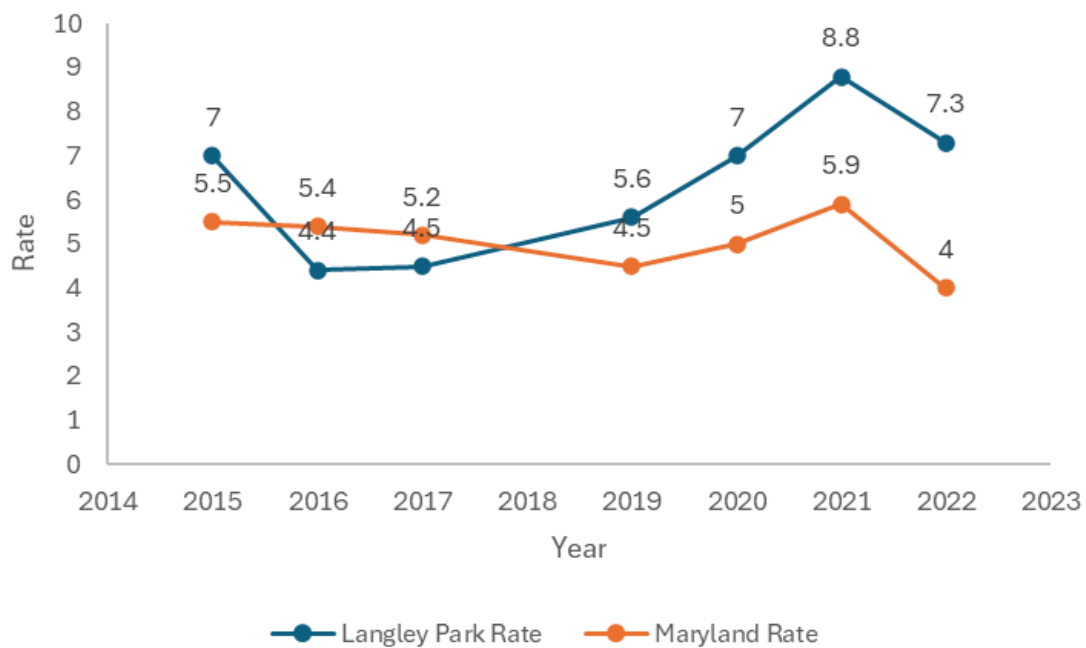


Fig. 15. Trend of unemployment in Langley Park and Maryland.

In terms of educational attainment, Langley Park has a significant percentage of its residents dropping out of school. From the table below, about 60% of Langley residents have less than a high school education. In contrast, only 12.9%, 8.6%, and 10.4%, respectively, for Prince George's County, the State of Maryland, and the United States have less than high school graduation. Langley Park has a notably low percentage of residents with a bachelor's degree, in stark contrast to the other regions where the proportion is substantially higher.

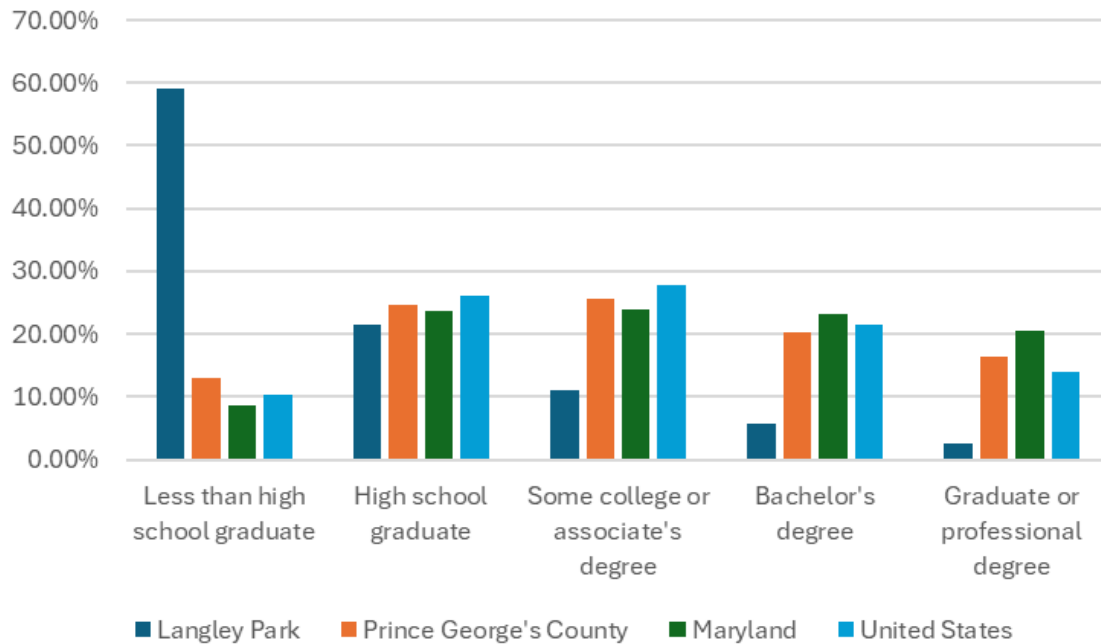


Fig. 16. Educational Level in Langley Park, Prince George's County, Maryland, and the U.S.

Blue-colored jobs are the most common type of jobs for Langley Park residents. Most of the residents are engaged in the construction industry. The significant dependence on construction employment renders the local labor force susceptible to economic fluctuations within that sector. A decline in construction activity may adversely affect employment prospects for residents. The inadequate participation in high-skilled sectors such as banking, manufacturing, and professional services indicates a necessity for workforce training initiatives to diversify employment options and enhance economic resilience.

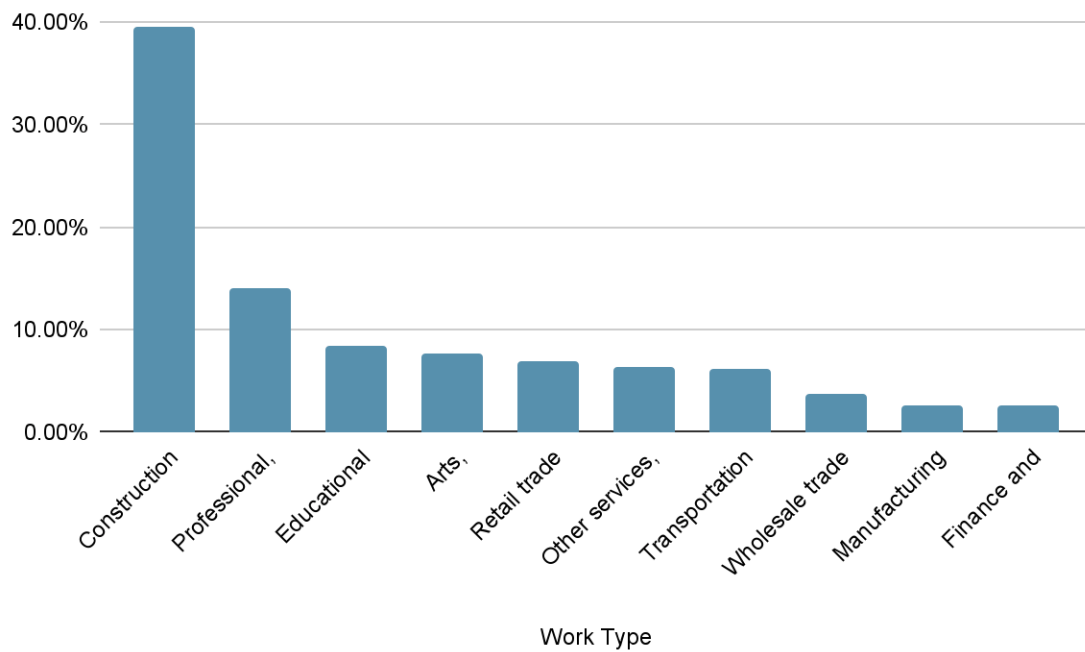


Fig. 17. Percentage of work type in Langley Park. ACS, 2023.

Distribution of Jobs in the Community

Job opportunities are unevenly distributed in Langley Park. Jobs are concentrated along the Takoma crossroad to the neglect of the periphery. The density of jobs decreases as one moves away from the center. This may imply limited access to job opportunities in the periphery. According to Esri's projection, the community has about 335 businesses and 1,967 employees.

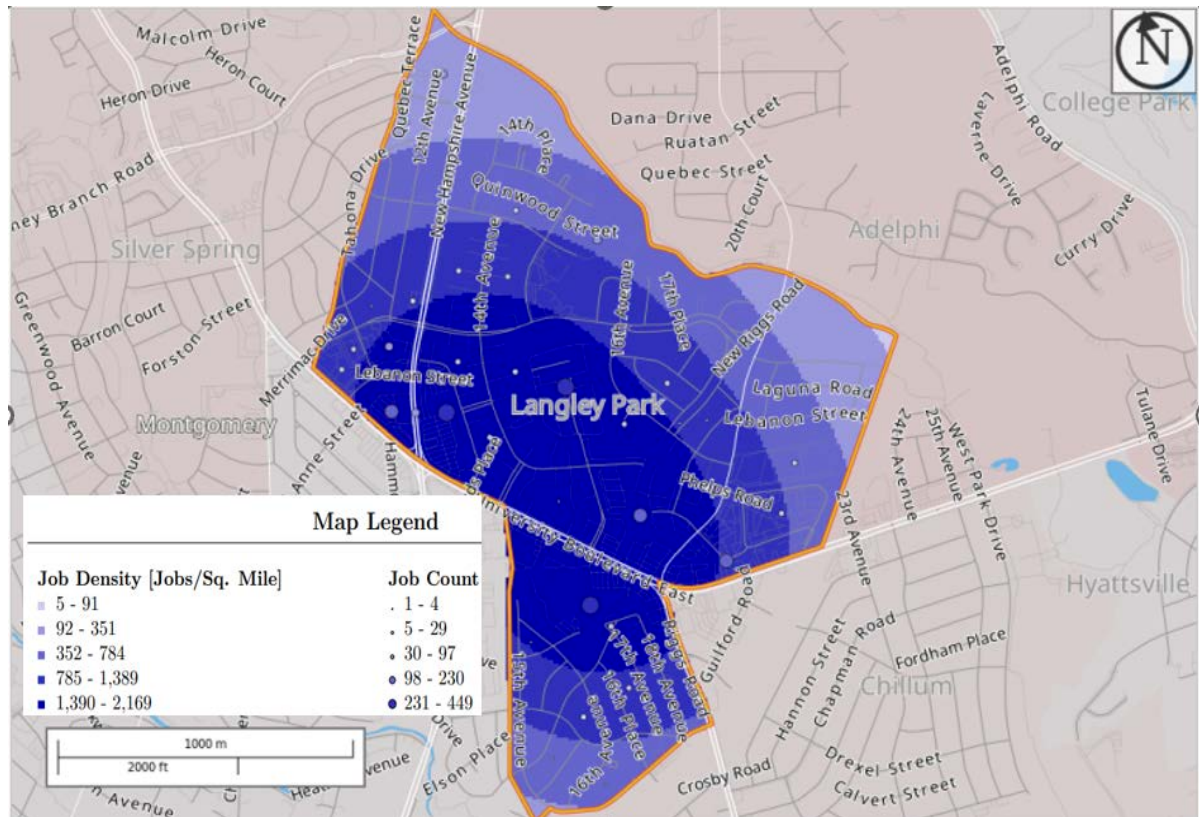


Fig. 18. Job density. U.S. Census Bureau, OnTheMap Application, 2021.

Live and Work

Most of Langley Park's residents work outside the community. From the flow map below, about 1,615 people commute to work in the community, while 3,774 people commute from the city to work outside. Only 100 people live and work in Langley Park. This implies that the community has a limited hold on economic opportunities, resulting in longer commute times.

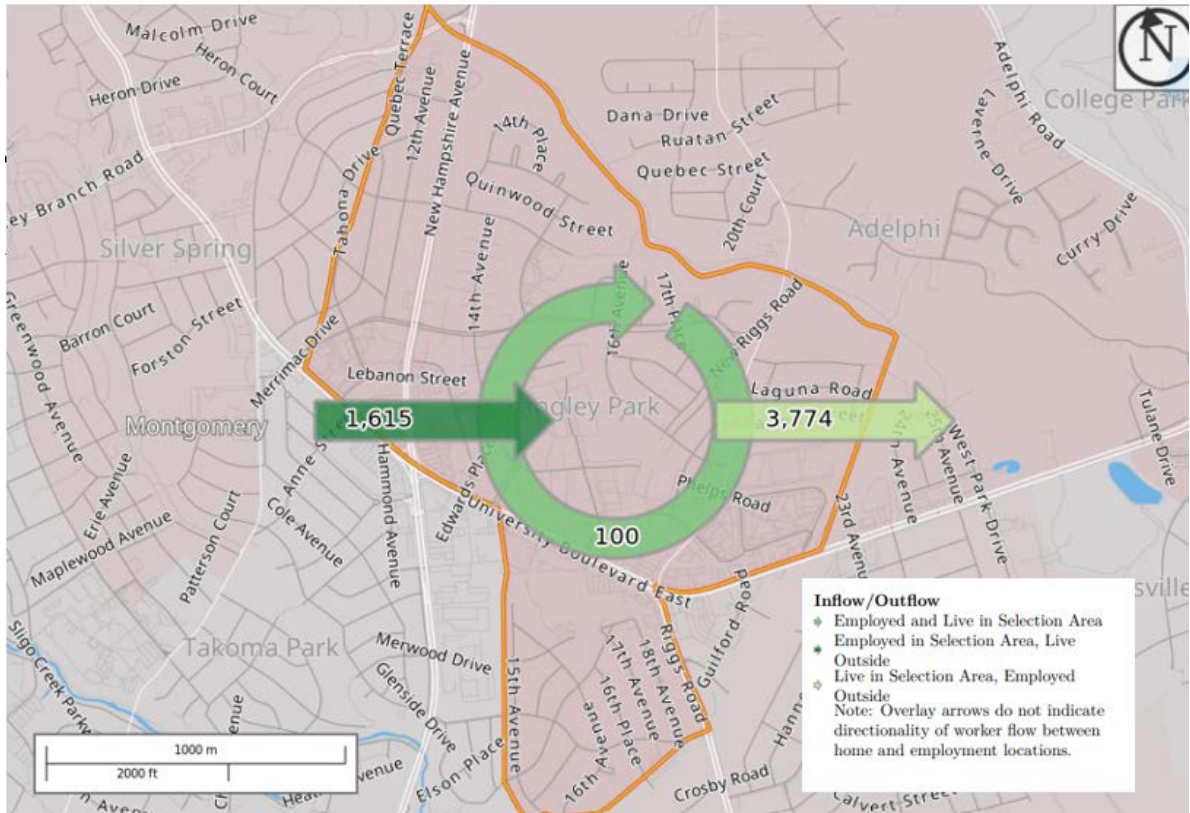


Fig. 19. Inflow/outflow of employment. U.S. Census Bureau, OnTheMap Application, 2021.

Improving Community Development

Today's Langley Park community is diverse, representing various cultures, traditions, and backgrounds. It is very family-centric and hardworking. People are very engaged in their environment. Children often play outside, and people of all ages frequently walk through the community's residential zones as much as the commercial zones, even without the supported infrastructure and safety risks.

Efforts have been made to increase community identity and placemaking, such as the Northern Gateway Community Development Corporation (NGCDC) collaborating with local Latino artists to decorate the community center to foster local pride in representation by ensuring the art and the artist were reflective of the community.



Fig 20. Left Image: Example of one of the NGCDC collaborative projects on Langley Park community center. A. Santana, 2024.

Fig 21. Right Image: The side of a residential apartment building on 15th Avenue, in front of CASA. A. Santana, 2024.

Our recommendations for improving community development aim to build on the motivations of previous efforts by facilitating community power and stewardship but from the lens of sustainability. By recommending innovative resolutions that center on sustainability, our goal is to alleviate some hardships Langley Park residents face today and plan for a sustainable future for tomorrow.

1. Expand Recreational/Social Spaces Capacity

We've heard from engagement with our interlocutors and residents that more open space for community gathering is needed, for children to play, for families to connect outside, for local organizational groups to gather, and for infrastructure to support local sports leagues.

Prioritizing areas around residential spaces like

- Housing facilities surrounding CASA
- Langley Park Community Center

2. Celebrate the Community's Diverse Cultural Identity

Community programming events bring the internal Langley Park community together within their community and bridge surrounding communities within Prince George's and Montgomery counties into the Langley Park area.

3. Environmental Education & Urban Farming Programming

Improving local agricultural education programming to restore the connection to Langley Park and the local environment **enhances** community stewardship. A necessary assessment must be conducted to gauge the potential to address issues like healthy food inaccessibility, heat/water retention, and air quality improvement through urban farming methods. Gardening programs are another type of programming that can be particularly effective for youth and elderly engagement and health.

These recommendations aim to improve community development and stewardship by affirming power in possession and usage of their community and its resources. They also foster stewardship by working with the environment through growing goods, having safe social spaces to join the community, and seeing themselves reflected in their space.

Transportation

Visitors to Langley Park notice the strong presence of arterial roads that travel through the community. Three roads stand out most notably: New Hampshire Avenue (Maryland Route 650) on the western side of the community, Riggs Road (Maryland Route 212) on the eastern side of the community, and University Boulevard (Maryland Route 193), which borders Langley Park's southern edge.

Each road features at least two travel lanes in each direction, with medians that require crosswalks and pedestrian infrastructure. Designers have built New Hampshire Avenue and University Boulevard around cars, with driveways for various malls and commercial sites interrupting the sidewalks. University Boulevard stretches nearly a mile without a crosswalk, creating a barrier for pedestrians accessing businesses south of the road. Residents and commercial patrons often cross University Boulevard and climb over the median barriers to avoid the long walk to an intersection. Community event attendees on October 15th, 2024, most identified pedestrian safety as their primary challenge.

The American Community Survey shows that from 2010-2022, workers in Langley Park have significantly reduced their use of carpooling and public transportation. Carpooling dropped from 4,650 people in 2010 to 3,027 in 2022; public transit use fell from 3,058 in 2010 to 1,370 in 2022. Meanwhile, more people now drive alone and use other transportation modes. Solo drivers increased from 3,006 in 2010 to 4,319 in 2022, and other transportation mode users grew from 594 in 2010 to 896 in 2022.

Vehicle traffic through Langley Park has decreased slightly since the COVID pandemic, with the two main north-south roads, New Hampshire Avenue and Riggs Road, showing average daily traffic values below their 2019 levels. University Boulevard and Merrimac Avenue have returned to pre-COVID levels on the two main east-west roads, suggesting that changes in traffic patterns may stem from reduced commuting into Washington D.C. and points south. University Boulevard continues to see increasing daily vehicle traffic despite Purple Line construction removing multiple lanes and reducing potential vehicular throughput.

WMATA's Metrobus, Montgomery County's RideOn, and Prince George's County's TheBus buses serve Langley Park. Table 9 details their service patterns and structures.

Table 9: Bus systems servicing Langley Park.

Service	Route	North/West Terminus	South/East Terminus	Headway
WMATA	C2	Wheaton	Greenbelt	12-24 Minutes
WMATA	C4	Twinbrook	Hyattsville Crossing	12-24 Minutes
WMATA	F8	Langley Park	Cheverly	30 - 60 Minutes
WMATA	K6	White Oak	Fort Totten	12 Minutes
WMATA	K9	FDA	Fort Totten	15 Minutes (Rush Hour Service Only)
WMATA	R1	Adelphi	Fort Totten	20 Minutes (Rush Hour Service Only)
WMATA	R2	Calverton	Fort Totten	15-36 Minutes
RideOn	15	Silver Spring	Langley Park	8-30 Minutes
RideOn	16	Silver Spring	Takoma	15-20 Minutes

RideOn	17	Silver Spring	Langley Park	30-35 Minutes
RideOn	18	Silver Spring	Langley Park	30 Minutes
RideOn	25	Takoma	Langley Park	50 Minutes (Rush Hour Service Only)
TheBus	18	Langley Park	Addison Road - Seat Pleasant	20 Minutes

The area's history largely explains the presence of the arterial roads. As a community mostly built after World War II, Langley Park never had streetcars or legacy rail systems built to serve the area. As such, many standard features of post-war suburban sprawl are evident in the sidewalk and road structures.

Access to public transit improved during the 1970s, as WMATA's Metrobus began running service to Langley Park in 1973. Montgomery County's RideOn service followed shortly thereafter in 1975, offering connective service to communities west such as Silver Spring and Wheaton. Prince George's County's TheBus service began serving Langley Park in 2002, offering connections east and south towards Hyattsville, Cheverly, and beyond.

Community Engagement Strategy

As referred above, community engagement happened throughout the studio period. As part of it, the studio held a large community engagement event at CASA on October 15, 2024. The event ran for two hours, from 6:00 p.m. to 8:00 p.m. We invited community stakeholders, including Prince George's County, to attend. We aimed primarily to make the community feel comfortable so we could build on our relationship with them. We also aimed to listen to and understand the community, as they know Langley Park better than we do.



Fig. 22. "Passports" given to all participants at the October community event. MAPP Flickr, 2024.

We started the event with a dinner that offered community favorite staples, such as pupusas, a variety of meats for tacos, dessert, and beverages. We invited a local guitarist from the community to perform live during the event.



Fig. 23. Dinner spread at an event and live guitarist Payin Moreno. MAPP Flickr, 2024.

Aaron Stiegler and Tom Suchecki, two Community Planning Studio students, followed dinner with a brief presentation. They gave an overview of who we were and our affiliations, along with what we currently understood about the community through our equitable design principles: Housing and Neighborhood, Transportation, Environment and Sustainability, and Community and Economic Development. Professor Clara Irazábal interpreted the presentation in Spanish.



Fig. 24. Presenters at the October community event: Clara Irazábal, Thomas Suchecki, and Aaron Stiegler (from left to right). MAPP Flickr, 2024.

We gave special consideration to Langley Park residents when planning the event, as we aimed to create an inclusive and engaging event with the community. We hoped to form more personal relationships with the community, gain more guidance and understanding about who makes up Langley Park, learn what the community needs, and understand how Langley Park fails to accommodate residents' daily lives. We wrote all activities, maps, and directions used at the event in the two most popular languages residents speak: Spanish and English. We did this intentionally to ensure everyone understood what we asked and to show our willingness to hear and empower the community. We encouraged students to use the Google Translate application to bridge the gap between us and existing language barriers. We tested the application's functions in the weeks leading up to the event to ensure all students could engage with and understand the community in some way.



Fig. 26. Photographing community members at the event. Student Ari Santana taking the pictures of participants who stamped their passports at all four stations. MAPP Flickr, 2024.

All four stations engaged in productive conversations during the event, informing the students about Langley Park and empowering the community to use their voices and share their experiences. The community was engaged using various graphic approaches, including maps and scales. Students also used text-based methods, asking open-ended questions to understand the highlighted issue better.



Fig. 27. Activity board engagements. University of Maryland students and faculty engaging with the Langley Park community. MAPP Flickr, 2024.

To conclude the engagement event, we held a prize raffle to show our appreciation to the community for their commitment, time, and input. All participant participated and included their name.



Fig 28. University of Maryland students Elle Provolo and Carey Thorpe handed out raffle prizes to the draw winners. MAPP Flickr, 2024.

Overall, the community was thoroughly pleased with the experience. One community member who won a prize mentioned it was the first thing they had ever won. The relationship between the community and the University of Maryland studio group was strengthened, and the students gained a more in-depth understanding of the daily lives and experiences of the Langley Park community members.



Fig. 29. University of Maryland's students and faculty dancing at the conclusion of the engagement event. UMD Community Planning Studio, 2024.

Community Feedback

Housing and Neighborhoods

Community engagement activities provided by the Housing and Neighborhood group captured insights of the lived experiences and priorities of Langley Park residents. Their feedback offered a qualitative dimension to understand the neighborhood's challenges while complementing a quantitative analysis of housing and neighborhood conditions. The responses highlighted key issues with housing quality, safety, public spaces, and affordability. There are actionable opportunities for the future development of Langley Park.

Quality of Neighborhood Spaces

One activity presented to the community was to rate the quality of various spaces throughout the community. Spaces throughout the community included parks, apartment buildings, community centers, streets, sidewalks, and commercial spaces. Based on the responses, most residents are dissatisfied with most of the spaces within their community. Many of the spaces represented in the activity received a poor rating.

Table 10: Langley Park Quality of Spaces Activity

Space Type	Poor (%)	Moderate (%)	Good (%)
Parks & Green Spaces	94	6	0
Commercial Spaces	42	33	25
Apartment Buildings	100	0	0
Community Center	57	43	0
Streets & Sidewalks	90	10	0

Langley Park has thirteen apartment complexes that account for 71% of the neighborhood's housing units. Many of those buildings are aging and facing significant challenges related to building maintenance. Unanimously, apartment buildings throughout Langley Park were rated poor by 100% of respondents, indicating widespread dissatisfaction with housing conditions. Complaints varied from inadequate maintenance, overcrowding, and even landlord neglect, which further exacerbates health issues and negatively impacts the overall quality of life.

Parks and green spaces were rated poor by 94% of respondents, reflecting a lack of outdoor recreational spaces. This deficiency limits the opportunity for

residents to participate in physical activities and host large events for community members to attend, fostering social cohesion. Access to green spaces also promotes environmental sustainability and serves as a crucial element of community health and vibrancy, which Langley Park residents lack.

Streets and sidewalks were rated poor by 90% of respondents, revealing deficiencies in pedestrian infrastructure and safety. Poor walkability and unsafe pathways limit mobility and increase risks for pedestrians, especially vulnerable populations like children and seniors.

In contrast, commercial spaces received comparatively diverse feedback, with 58 percent rating them as moderate or good, suggesting that businesses along University Boulevard are viewed as economic and cultural assets that enhance the community's identity.

Similarly, community centers, though not rated as good by any respondent, received 43 percent moderate ratings, indicating that residents perceive them as somewhat functional but needing further investment to meet their needs.

Community Priorities: Small and Big Changes

Table 11: Langley Park Community Visioning Activity

Change Type	Recurring Theme	Percent
Small Changes	Housing Maintenance	30%
	Safety and Security	24%
	Youth Recreation	15%
Large Charges	Public Spaces	20%
	Crime and Drug Control	17%
	Housing Affordability	13%

We also asked residents to suggest small and big changes to improve their neighborhood. The responses reveal recurring themes around housing conditions, safety and security, housing affordability, and recreational facilities. For minor changes suggested, housing maintenance emerged as the top priority for small-scale improvements, accounting for 30% of all responses. Residents frequently highlighted the need to address neglected housing issues, with one noting, “Mejorar las viviendas, crear lugares creativos” (Improve the housing, create creative places). Poor housing conditions, such as structural problems and inadequate repairs, significantly impact residents’ quality of life and health. These conditions also contribute to a sense of neglect within the community. Prioritizing housing improvements would foster a healthier and more dignified living environment for residents.

Safety and security were also prominent, comprising 24% of responses. Concerns about crime and a lack of safety infrastructure dominated comments, such as, “Mejorar el lugar donde vivimos—hay mucha delincuencia” (Make the place where we live better — there is a lot of delinquency). These challenges create an environment where residents feel unsafe, limiting social interactions and outdoor activities. Targeted interventions, like enhanced street lighting, community policing, and neighborhood watch programs, could help alleviate these concerns and build a stronger sense of security.

Youth recreation was a key concern for 15% of respondents, reflecting the need for activities that positively engage children and teens. A resident remarked, “Diversión para niños y jóvenes” (Entertainment for kids and teenagers). The absence of recreational spaces and structured programs leaves young people without safe and constructive outlets for their energy. Developing sports programs, summer camps, and youth centers could address this gap, fostering a greater sense of community and reducing risky behaviors.

For significant changes residents wanted, public spaces were identified as the most important large-scale improvement, representing 20% of responses. One resident’s comment, “Parque, Biblioteca” (Park, library), highlights the desire for spaces that support recreation, education, and community engagement. Well-designed parks, public libraries, and playgrounds can enhance physical and mental health while fostering social cohesion.

Investments in these areas could transform Langley Park into a more vibrant and inclusive neighborhood.

The need for crime and drug control accounted for 17% of responses, with comments like, “Control de drogas, seguridad” (Control of drugs, security). The presence of drugs and criminal activity severely undermines residents’ safety and limits the potential for community spaces to thrive. Initiatives such as anti-drug programs, improved law enforcement, and community-based intervention strategies could help address these issues and restore security.

Housing affordability concerns were raised in 13% of responses. As one resident stated, “Subida de renta” (increased rent), reflects anxieties about rising housing costs and the risk of displacement. These challenges disproportionately affect low-income households, threatening the stability of long-term residents. Efforts to preserve affordability through rent control, subsidized housing, or expanded housing assistance programs would help ensure Langley Park remains accessible to its current community.

Community Mapping: Social Hubs and Safety Concerns

Residents identified several key areas within Langley Park as the neighborhood’s social and cultural hubs. Locations such as CASA, Villas at Langley Park, Langley Gardens, and Liberty Place were frequently cited as central gathering points.

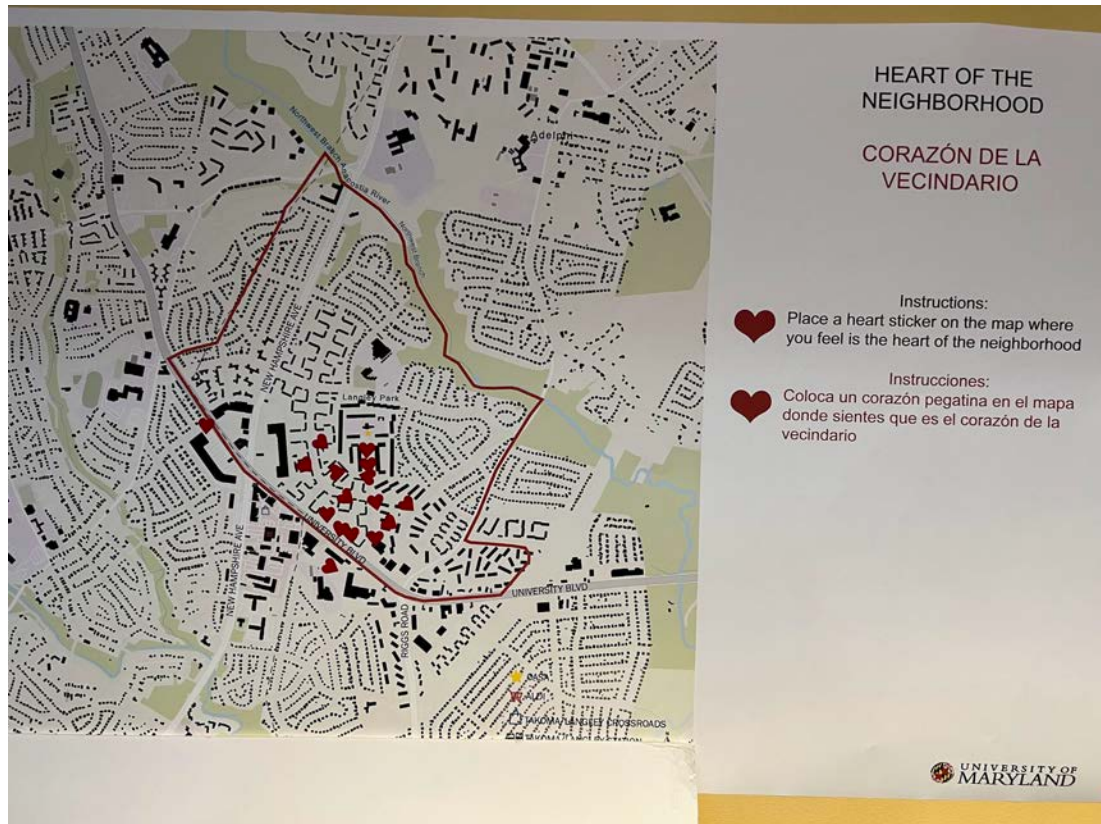


Fig. 30. Map of Residents' Perception of "Heart of the Neighborhood". UMD Community Planning Studio, 2024.

These areas, however, were also perceived as unsafe due to issues such as delinquency and substance abuse. Furthermore, areas further from Langley Park's core, such as Hampshire Village and Quebec Arms, were considered safer. The contrast between the vibrancy of the neighborhood's social hubs and concerns about safety underscores the need for targeted interventions to address security issues while preserving these spaces as focal points of community activity.

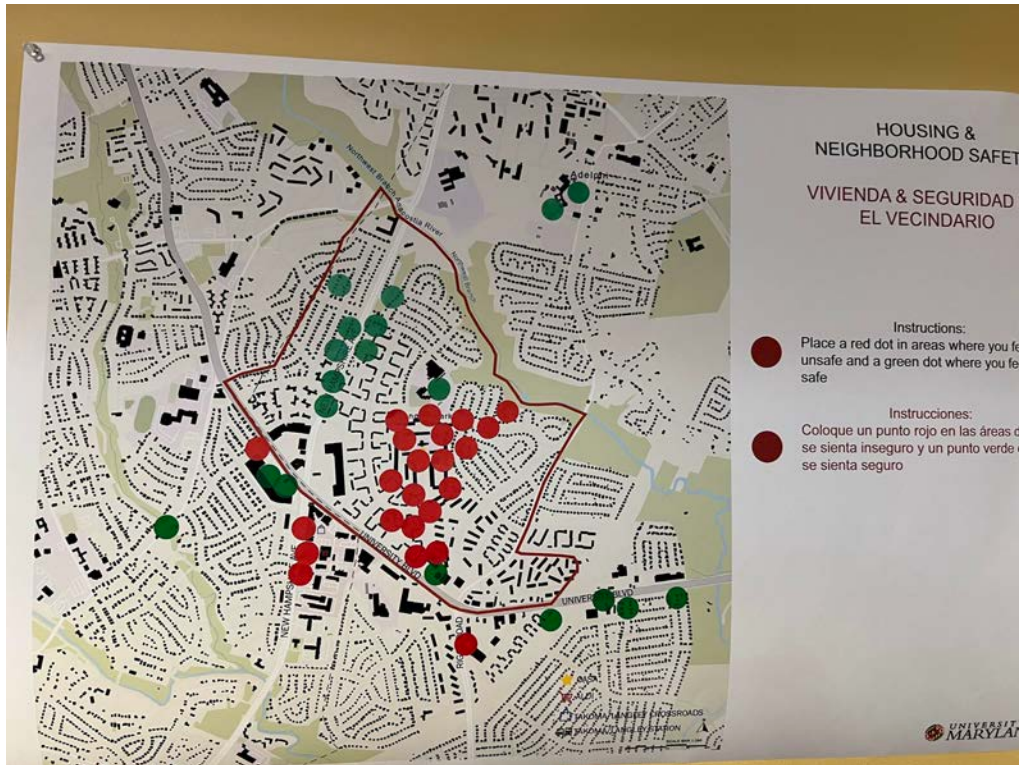


Fig. 31. Map of Resident Perceptions of Safety. UMD Community Planning Studio, 2024.



Fig. 32. Map of Resident Perceptions of Quality. UMD Community Planning Studio, 2024.

Out of the thirteen housing complexes in Langley Park, Bedford Station, Langley Terrace, and Hampshire Village, they were identified as housing that required building maintenance and improvements. Langley Terrace is one of Langley Park's oldest housing complexes, built during the 1940s. Bedford Station and Hampshire Village were two of eight housing complexes constructed during the 1950s.

Implications

The community engagement findings provide a clear mandate for action. Poor ratings for apartment buildings reflect dissatisfaction with housing conditions, necessitating initiatives to improve maintenance, enforce housing codes, and hold landlords accountable for providing high-quality housing. Public safety concerns, particularly around crime and substance abuse, highlight the urgency of anti-drug programs and increased security measures. The lack of parks and green spaces underscores a critical need for new recreational facilities to serve residents of all ages, but especially youth, families with young children, and seniors. Positive feedback on commercial spaces along University Boulevard recognizes the current businesses in the community as economic and cultural assets. Preserving and enhancing these areas and businesses currently occupying those spaces could serve as a foundation for broader neighborhood revitalization while maintaining Langley Park's unique character.

Environment, Climate, and Sustainability

The mid-term community engagement process facilitated meaningful activities that encouraged open dialogue and enabled community members to provide feedback on critical environmental, climate, and sustainability challenges facing Langley Park, including air pollution and elevated surface temperatures.

Challenges

Community members answered two questions regarding air pollution and elevated surface temperatures. The results of each question are provided below:

1. On a scale of 1 to 10, where one means "clean air" and 10 means "heavily polluted air," please rate the air quality of Langley Park.

Number of Responses	Average Rating	Median Rating	Minimum Rating	Maximum Rating
---------------------	----------------	---------------	----------------	----------------

17	9.06	10	5	10
----	------	----	---	----

Community members in Langley Park, Maryland, rated air quality as heavily polluted, with an average score of 9.06 out of 10 and a minimum score of 5 out of 10.

2. On a scale of 1 to 10, where one means “cool” and 10 means “extremely hot,” please rate how hot Langley Park feels.

Number of Responses	Average Rating	Median Rating	Minimum Rating	Maximum Rating
10	9	10	7	10

Community members in Langley Park, Maryland, rated community temperatures as extremely hot, with an average score of 9 out of 10 and a minimum score of 7 out of 10.

Community Mapping: Air Pollution and Heat

We asked community members to place a blue dot where they experience high levels of air pollution exposure and a red dot where they experience elevated surface temperatures on a Langley Park map. Both air pollution and elevated surface temperatures were primarily experienced within the commercial corridor of Langley Park, particularly along University Boulevard.



Fig. 33. Map of Community Member's perception of air pollution and elevated surface temperatures. UMD Community Planning Studio, 2024.

Implications

The community engagement event provided valuable data on the community's perceptions of air pollution and elevated surface temperatures in Langley Park, Maryland. Preliminary research indicated that air pollution and elevated surface temperatures threaten the Langley Park community. Langley Park community members corroborated these findings, suggesting that air pollution and elevated surface temperatures are significant issues for the community. This feedback reinforces the urgency of addressing air pollution and elevated surface temperatures and highlights the need for collaborative, localized interventions tailored to the community's unique challenges and priorities. It underscores the importance of integrating resident input into the planning and implementation of strategies, ensuring that solutions are equitable, effective, and sustainable for the diverse population of Langley Park.

Economic and Community Development

This section analyzes the results of the community engagement process to foster equitable community and economic development in Langley Park. The analysis explores the principal insights, apprehensions, and priorities articulated by community members at the engagement event. This section

aims to elucidate the community’s collective vision for development by analyzing the gathered feedback, identifying the challenges and opportunities residents perceive, and examining the proposed strategies and initiatives corresponding to the community’s aspirations for inclusive growth.

Reasons for choosing to live in Langley Park

Many factors motivated residents in Langley Park to choose the community. The reasons range from economic to social motivations. From the chart below, most (45.5%) of the residents choose to live in Langley Park for economic opportunities. This implies that economic opportunities in the area play a significant role in attracting people to the community. Immigrants also select Langley Park due to their familial and social connections (33.3%), as it is essential to establish a point of contact upon arrival. These extant social networks are particularly beneficial for individuals with unauthorized status, as they facilitate identifying job opportunities and cultivate a sense of community and belonging. This network provides emotional and social support to new arrivals, assisting them in overcoming the challenges of adjusting to a new environment and facilitating economic integration.

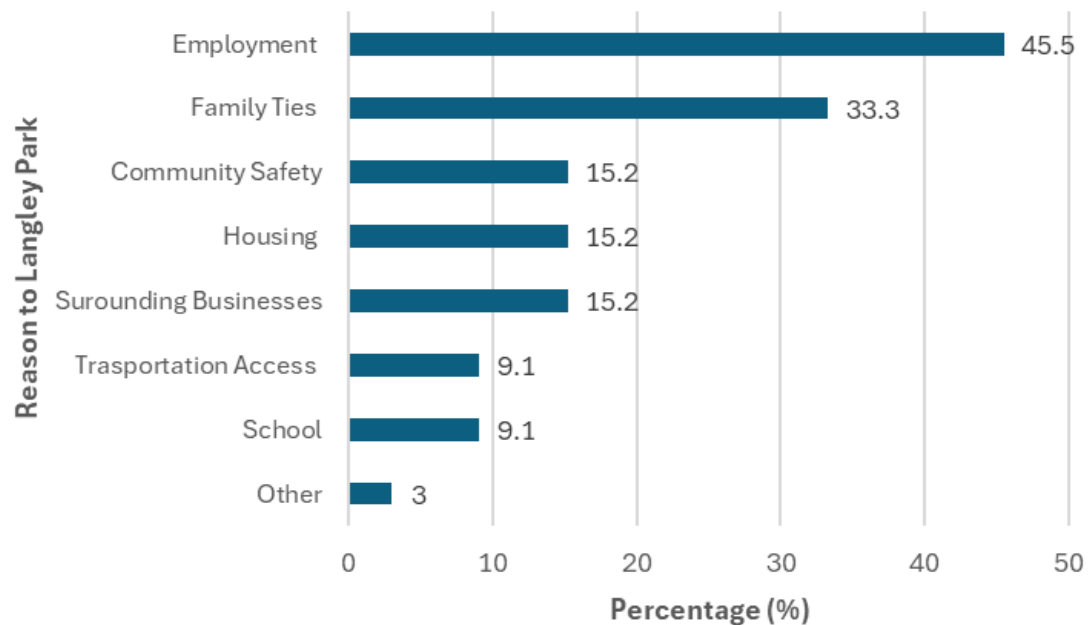


Fig 34: Reason people choose to live in Langley Park.

Employment is the principal driver for residing in Langley Park, highlighting the necessity to maintain and diversify career prospects. Workforce training initiatives can improve individuals’ access to higher-paying and stable jobs. We asked participants to identify areas where they would like to see

businesses in Langley Park. Most respondents want to see businesses in the commercial corridor as a vibrant corridor with more businesses that will meet their economic needs. Some participants indicated portions in the residential areas where they want to see small shops that will serve their immediate needs.



Fig.35. Map of where Langley Park residents want to see new businesses.

Challenges

From the community engagement, Langley Park residents identified some challenges affecting their economic development as individuals and groups. The most highlighted issue is regulatory barriers. Residents indicated that zoning and other barriers prevent them from establishing small-scale businesses. As a livelihood strategy, some residents have resorted to informal street selling and constantly clashing with police. Some residents raised concerns about access to capital for starting businesses. A participant underscored the difficulty of restricted business networks, accentuating the absence of contacts and support structures essential for entrepreneurial achievement. This constraint limits opportunities for collaboration, mentorship, and access to crucial resources, impeding the capacity of Langley Park residents to develop and maintain their enterprises. The interplay of regulatory obstacles and insufficient finance opportunities underscores the urgent necessity for focused policy measures to mitigate

barriers, assist small enterprises, and promote economic development within the community.

Transportation

We curated community engagement activities to determine the most significant challenges Langley Park residents face when traveling within the community and what residents feel about the imminent Purple Line. These activities intended to gain an understanding of the issues surrounding transportation accessibility and safety and what amenities the community hopes to enjoy in the future.

Challenges

Residents provided feedback on their experiences traveling in and outside of Langley Park. We offered a list of challenges and limitations, and the community was tasked with indicating which had the greatest impact on their travel.

Table 12: Langley Park Mobility Engagement Activity.

What are the biggest challenges you face when trying to get around?	
Time limitations	1
Financial limitations	2
Traffic Congestion	11
Walking difficulties	4
Distance to destinations	2
Safety concerns	13
Bus proximity and frequency	1
Transportation for children to school	6
Disability Accessibility	6

These results identified the main challenges residents face when traveling, as seen in the blue highlights in the above table. There is a need for improvements to walking accessibility and ease.

Opinions on the Purple Line

Community members completed the following prompt: “I feel ____ about the Purple Line because ____.” Most respondents expressed excitement about the Purple Line and eagerly anticipated its benefits. They highlighted advantages such as saving time when traveling to destinations and improved ease and accessibility for commuting to work. One resident remarked that these transportation benefits will “really make a difference in our community.” However, some participants expressed feeling “insecure,” “worried about vandalism,” and “disappointed” by the lack of policies to support small businesses. Overall, this activity effectively demonstrated the community’s enthusiasm for a more convenient transit option and underscored the link between accessible transit and economic opportunities.

Implications

The first activity underscored the community’s immediate needs, while the second activity revealed their vision for a positive transportation future in Langley Park. The findings from these activities highlight the urgent need to enhance transit accessibility and infrastructure for Langley Park residents. Improving walking conditions is essential to help residents feel safer using the streets. Addressing traffic congestion through bus travel enhancements and increasing access to micro-mobility options such as scooters and bicycles can alleviate transit challenges. Upgrading physical transit infrastructure — such as installing protected bus shelters and widening sidewalks — will also address accessibility barriers faced by the disabled community.

PART 2: RECOMMENDATIONS

Key Issues

Housing and Neighborhoods

Based on resident feedback, housing quality and affordability for low-income households, lack of outdoor community and recreation spaces, and crime are the main issues in Langley Park. Our site visits, data analysis, and literature review supported those concerns and the threat of resident and business displacement due to the impending Purple Line redevelopment. Housing quality is primarily an issue at the multifamily apartment complexes in Langley Park rather than the single-family homes. Housing affordability is an issue, especially for households earning 50% AMI and less. Residents specified that community and recreation space would be helpful, particularly

for youth, and the crime in the community largely stems from substance abuse and other anti-social behavior. The recommendations made in this report draw from these contextual specifications.

Environment, Climate, and Sustainability

The two key issues facing Langley Park community members concerning environment, climate, and sustainability are air pollution and elevated surface temperatures. Both background research and community input point to these issues as significant concerns for the Langley Park community. While there is a lack of longitudinal air pollution data in Langley Park, major roadways such as University Boulevard and New Hampshire Avenue bring heavy traffic through the community, contributing to air pollution. Langley Park community members also rated air pollution as extremely high, particularly in the commercial corridor of Langley Park. Afternoon air temperatures in Langley Park are also significantly higher than in neighboring Takoma Park. Langley Park community members rated heat levels as extremely high in the community, particularly in the commercial corridor. Both of these issues necessitate several interventions, discussed below.

Economic and Community Development

The primary issues affecting economic and community development in Langley Park include the lack of economic opportunities for residents and restrictive conditions that hinder local efforts to organize at a community level. A climate that fails to provide residents with the means to financially support themselves and their families while also lacking opportunities for collective care and engagement creates numerous challenges for community members' quality of life and well-being. Langley Park residents possess significant agency to create a better home for their community. However, the area's unincorporated status limits their institutional representation, restricting their ability to assert that agency and provide an official voice to advocate for their goals.

Transportation

Walkability in Langley Park remains limited, as walking in the area is challenging and dangerous. Safety concerns, driven by crime, heavy traffic, and a lack of accessibility, are the primary barriers to mobility. Between 2015 and 2021, motorized vehicles struck and killed 198 pedestrians in Prince George's County, with the number of incidents rising each year. Many collisions occurred at poorly lit sites during nighttime (Vision Zero Prince George's). Inadequate lighting and visibility influence pedestrians'

perceptions of street safety from traffic and crime. High traffic volumes and crosswalks spanning multiple lanes—particularly on University Boulevard and New Hampshire Avenue—further reduce walkability. Physical hazards disrupt pedestrian mobility, including poorly maintained sidewalks and construction obstacles.

Goals

Housing & Neighborhoods



**Preserve and
expand
affordable
housing**



**Enhance
housing quality**



**Create spaces
for community
activities and
events**

Environment, Climate, & Sustainability



**Reduce air
pollution**



**Reduce the heat
island effect**

Economic & Community Development



**Increase
economic
opportunities
for community
residents**



**Strengthen
community
organizing**

Transportation



**Improve
transportation
access**



**Improve the
quality of
streetscapes**



**Add bike lanes and
other multimodal
infrastructure to local
streets**

Objectives, Strategies & Action Plan

Housing and Neighborhoods

Table 13: Strategic Planning for Housing Goal #1

Goal 1: Preserve and expand affordable housing for those who need it most			
Objective	Strategies	Stakeholders	Expected Outcomes
1.1 Eliminate the deficit of affordable rental units for households earning 50% AMI or less by 2034	1.1.1 Use existing county and state resources to support construction, renovation, and preservation of affordable housing 1.1.2 Prioritize and expedite affordable housing projects in the development review process that have community support 1.1.3 Create new incentives to encourage affordability in new residential developments 1.1.4 Engage in equitable TOD to redevelop underutilized commercial space as mixed-use residential and commercial developments	1.1.1 Prince George's County Department DHCD, Takoma-Langley Crossroads Development Authority, ROFR Developers, Langley Park Small Businesses, Maryland Department of Transportation 1.1.2 Prince George's County Economic Development Corporation, Elected Officials, Housing Developers, Langley Park Civic Association, CASA, Prince George's County Planning Department, Montgomery County Planning Department 1.1.3 Langley Park Residents, Takoma-Langley Crossroads Development Authority, Prince George's County Economic Development Corporation, Langley Park Civic Association, CASA, Prince George's County Planning Department 1.1.4 Maryland DHCD, Prince George's County	If Objective 1.1 is achieved, households earning 50% AMI or less will not have to live in units that are above their affordability level.

		DHCD, Housing Co-ops, Prince George's County Economic Development Corporation, Takoma-Langley Crossroads Development Authority, Langley Park Small Businesses, Developers	
1.2 Increase the variety of housing options in which larger households can live together comfortably, preventing overcrowding and allowing the pooling of incomes to raise household earnings	1.2.1 Prince George's County Planning Department or a hired consultant conducts a market study to determine the demand for units with 3-4 bedrooms 1.2.2 Increase the number of affordable rental housing units that include 3 and 4 bedrooms to accommodate larger households 1.2.3 Prince George's County Planning Department allows a greater diversity of housing types in single-family residential zones	1.2.1 Prince George's County Planning Department, Housing Market Consultant, Housing Developers, Maryland DHCD, Prince George's County Council, Langley Park Residents 1.2.2 & 1.2.3 Langley Park Residents, Property Owners, Prince George's County Planning Department, Housing Developers	If Objective 1.2 is achieved, families of all sizes—especially large families—will have more choices of housing that can support their unique needs.
1.3 Reduce the percentage of Langley Park population burdened by housing costs (46.3%) to the current county average (37.5%) by 2030	1.3.1 Work with state and federal agencies to expand rental assistance programs, targeting households at high risk of displacement 1.3.2 Form a Community Land Trust (CLT) to secure land for affordable housing, ensuring that prices remain affordable over the long term, particularly for low-income residents 1.3.3 Decrease the percentage of affordable housing units in Langley Park that are occupied by households earning above the income level for which the unit is intended	1.3.1 Purple Line Corridor Coalition, Langley Park Civic Association, CASA, Community Land Trust, Prince George's County DHCD 1.3.2 Prince George's County DHCD, Prince George's County Planning Department, Housing Authority of Prince George's County, Property Owners, Langley Park Civic Association, CASA 1.3.3 Property Managers, Housing Authority of Prince George's County	If Objective 1.3 is achieved, fewer households of all income levels will spend more than 30% of their income on housing.

Objective 1.1 Eliminate the deficit of affordable rental units for households earning 50% AMI or less by 2034.

Strategy 1.1.1 Use existing county and state resources to support the construction, renovation, and preservation of affordable housing.

Action Step A: Prince George’s County Department of Housing and Community Development (DHCD) exercises its right of first refusal (ROFR) for naturally occurring affordable housing (NOAH) properties when they go up for sale.

Prince George’s County used its Right of First Refusal (ROFR) to preserve affordable housing in Langley Park. When residents organized to improve conditions at Bedford & Victoria Station apartments, the owner put the property up for sale along with Villas at Langley apartments. The county exercised its ROFR and agreed with the developer of both properties. The agreement required Lynch to address code violations, meet affordability standards, and implement a Resident Empowerment & Community Support Plan, which included employing local workers. These standards are part of all ROFR agreements. While this is a strong start, further improvements can be made.

The current affordability requirement for ROFR agreements in Prince George’s County mandates that 75% of units be affordable for households earning 60% AMI. However, Langley Park has a surplus of such units—as shown in the affordability gap analysis above, and more affordable housing is needed for households earning 50% AMI or less. This report recommends adjusting the affordability standard to 50% AMI. It also suggests that the Takoma-Langley Crossroads Development Authority collaborate with Langley Park businesses and the County to certify Langley Park small businesses as County-Based Small Businesses and Minority Business Enterprises eligible to be part of a Resident Empowerment & Community Support Plan. This recommendation would preserve the existing NOAH properties, introduce new units affordable for those who need them most, and empower Langley Park’s small businesses.

Action Step B: Developers, housing co-ops, and land trusts utilize Prince George’s County’s Housing Investment Trust Fund (HITF) to provide gap financing for the acquisition, new

construction, or rehabilitation of affordable multifamily rental housing.

The Prince George's County Housing Investment Trust Fund (HITF) is a helpful tool for those looking for gap financing for affordable housing projects in the County. To eliminate the deficit of affordable units in Langley Park, developers can utilize the HITF to support the construction, renovation, and preservation of affordable housing. To encourage community stewardship of the housing stock in Langley Park, housing co-ops and land trusts may be prioritized when allocating HITF funds.

Action Step C: Prince George's County Department of Planning applies for a State TOD Designation for Langley Park to become more competitive for Maryland TOD Capital Grant and Revolving Loan Fund and LIHTC.

The Maryland Department of Transportation's (MDOT) Transit Oriented Development (TOD) Designation Program promotes TOD to address affordable housing deficits, boost transit ridership, and support economic development. While 14 communities, including 5 in Prince George's County, have state TOD designations, New Carrollton is the only TOD-designated community along the Metro Purple Line. New C Park, with two future Purple Line stations and key state highway access, is a strong candidate for TOD designation. We recommend that Prince George's County Planning Department apply for a TOD designation for Langley Park to gain access to MDOT's TOD Capital Grant and Revolving Loan Fund and to improve Langley Park's prospects in the provision of Low-Income Housing Tax Credits (LIHTC), and state use of office space, thereby supporting affordable housing and economic development.

Strategy 1.1.2 Prioritize and expedite affordable housing projects in the development review process that have community support.

Action Step A: Form a community-based development review board whose approval expedites county-level approval of projects and prioritizes projects for county, state, and national funding.

Affordable housing development is often delayed and becomes more costly due to permitting, review, and public engagement delays. This report

recommends creating a community-based development review board to expedite projects that benefit the community and to provide targeted community input from stakeholders representing Langley Park residents and businesses. This board would hear project proposals from developers and decide whether to support them, expediting the county's approval processes. Projects lacking board support would follow traditional processes for county approval. This recommended action intends to support affordable housing development, but the board may also review other projects not directly related to housing. CASA, the Langley Park Civic Association, and the Takoma-Langley Crossroads Development Authority would each be offered a seat on the board. The County would compensate them for their participation.

Action Step B: Adopt a pre-approved standardized housing plan (design and construction blueprints) based on community input for developers to use to expedite the permit approval process

The County could also adopt a community-driven, pre-approved standardized housing plan. This plan would provide design and construction blueprints for developers, which are pre-approved by the County, expediting project approval. The Development Review Division of Prince George's County Planning Department or a consultant would work with Langley Park Civic Association and CASA to hold workshops with Langley Park residents to create a standardized housing plan based on community input. A pre-approved standardized housing plan would be especially beneficial for smaller or nonprofit developers, for whom delays in the approval process can hinder project completion.

Strategy 1.1.3 Create new incentives to encourage affordability in new residential developments.

Action Step A: Prince George's County Economic Development Corporation establishes tax increment financing districts around Purple Line stations in Langley Park to finance preservation and development of affordable housing.

Tax increment financing (TIF) allows local governments to fund infrastructure improvements by issuing bonds to developers, paid back through increased tax revenue from increased property value. TIF can be used in Langley Park to help finance the preservation and new construction of affordable housing units. This report recommends that the Prince George's County Economic

Development Corporation investigate the feasibility of two TIF districts around the two future Purple Line stations in Langley Park and establish them if feasible. If the TIF districts are established, the County can then use them to incentivize projects by establishing project areas and “base” years for property valuation for each project, issuing bonds to developers to fund the projects, and creating a special fund to capture increased tax revenue from property valuations greater than the “base” year.

Action Step B: Create density bonuses for projects with 30% of units affordable for households earning 50% AMI or less.

Density bonuses are common incentives jurisdictions use to encourage affordable housing construction. They allow a developer to construct more units than they otherwise would be able to under the usual development standards if the developer provides a certain percentage of affordable units in their project. This report recommends that the Prince George’s County Planning Department create a density bonus for projects with 30% of units affordable for households earning 50% AMI or less.

Strategy 1.1.4 Engage in equitable TOD to redevelop underutilized commercial space as mixed-use residential and commercial developments.

Action Step A: Identify underutilized commercial spaces within LTO zones in Langley Park.

The current zoning along the University Boulevard corridor in Langley Park is Local Transit Oriented-Core (LTO-C) and Local Transit Oriented-Edge (LTO-E). These zoning classifications allow for mixed-use and higher density development than is currently being utilized, particularly in commercial spaces with large swaths of surface parking. This report recommends that developers identify underutilized commercial spaces within LTO zones in Langley Park suitable for mixed-use, residential, and commercial redevelopment. However, we would rather that no new development occur in Langley Park than new development that would displace existing residents and businesses. Any redevelopment of underutilized spaces in Langley Park’s LTO zones that sacrifices existing residents and businesses is cost-prohibitive. That is why this report conducted its analyses and made recommendations through an equity lens. Strategy 1.1.4, Action Step A, should be accompanied by Action Steps B-D and other equity-based housing and community development actions to avoid displacing current residents and businesses.

Action Step B: Utilize the Maryland Department of Housing and Community Development's Strategic Demolition and Smart Growth Impact Fund to provide funding to Prince George's County Department of Housing and Community Development and nonprofit community development organizations for site acquisition, demolition, and development of vacant, "greyfield" properties in Langley Park into new residential units.

To implement equitable TOD, community members must be empowered to have control over the future of their community. We see an opportunity to empower the existing resident advocates and organizers network by supporting nonprofit community development organizations' acquisition and development of vacant "greyfield" properties in Langley Park. The Maryland Department of Housing and Community Development (DHCD) Strategic Demolition and Smart Growth Impact Fund can fund nonprofit community development organizations or the Prince George's County DHCD to acquire, demolish, and develop such properties into new residential units.

Action Step C: Prince George's County Economic Development Corporation creates a Legacy Business Program and maintains the Legacy Business Registry of businesses awarded that designation.

During the Community Engagement Event, residents highlighted commercial spaces as their favorite places in Langley Park. The many small, immigrant-owned businesses in these spaces provide the goods and services unique to the immigrant communities, giving Langley Park its diverse, tight-knit identity. To preserve these businesses and the community identity they enable, this report recommends the Prince George's County Economic Development Authority create a Legacy Business Program offering subsidized rent and priority for leasing new commercial spaces to businesses that contribute to a community's history or cultural identity. New mixed-use developments in LTO zones should be required to participate in this program, and the Takoma-Langley Crossroads Development Authority can assist businesses in applying for the designation.

Action Step D: Prince George's County establishes a county impact assistance fund for residents and businesses affected by Purple Line construction and subsequent development.

This report recommends Prince George's County create a county impact assistance fund to mitigate the impact of Purple Line construction and the expected development following its completion on current residents and businesses. The fund would assist residents and businesses affected by Purple Line construction and subsequent development, including offsetting short-term rental increases or the costs of temporary displacement due to building renovations.

Objective 1.2 Increase the variety of housing options in which larger households can live together comfortably, preventing overcrowding and allowing the pooling of incomes to raise household earnings.

Strategy 1.2.1 Prince George's County Planning Department or a hired consultant conducts a market study to determine the demand for units with 3-4 bedrooms.

Our data analysis and literature review showed that shared housing arrangements in Langley Park have led to overcrowding, especially in multifamily apartments. However, we do not know whether residents do this for financial need, cultural preference, or a mix of both. This report recommends that the Prince George's County Planning Department conducts a market study of the demand for 3 to 4-bedroom units or hire a consultant to conduct the market study to determine the actual demand for units with more bedrooms in Langley Park.

Strategy 1.2.2 Increase the number of affordable rental housing units that include 3 and 4 bedrooms to accommodate larger households.

If the market study determines higher demand for 3 to 4-bedroom units than is currently available, developers should capitalize on that demand by providing more units with 3 and 4 bedrooms. More units that can accommodate larger households would prevent overcrowding, improving housing quality, and allow the pooling of incomes to raise household earnings, improving housing affordability.

Strategy 1.2.3 Prince George's County Planning Department allows a greater diversity of housing types in single-family residential zones.

Action Step A: Amend the Prince George’s County Zoning Ordinance to permit accessory dwelling units (ADUs) in RSF-65 zones to support aging in place for older residents, to accommodate larger multigenerational households, or to add small-scale affordable rental units that can supplement homeowner income.

While multifamily residential is the primary housing type in Langley Park in terms of the number of units, further back from the University Boulevard corridor are large swaths of land zoned RSF-65 containing single-family homes. This report recommends that the Prince George’s County Planning Department amend the Zoning Ordinance to permit ADUs in RSF-65 zones. This change would support aging in place for older residents, accommodate larger multigenerational households, and add small-scale affordable rental units that can supplement homeowners’ income.

Action Step B: Upzone single-family residential districts (RSF-65) in Langley Park to RSF-A to allow duplex, triplex, and townhouse dwellings.

There are some single-family residential areas in Langley Park where properties zoned RSF-65 abut LTO zones. These properties may be suitable for upzoning to RSF-A to allow higher-density residential uses like duplexes, triplexes, and townhouse dwellings. This change would provide a greater variety of housing options for larger households to Langley Park residents.

Action Step C: Implement zoning laws that require new developments to include affordable units to ensure inclusive growth.

The increased private investment that will follow the completion of the two Purple Line stations in Langley Park is expected to raise property values and rents in the area. This presents the threat of gentrification and displacement for current residents. Langley Park’s immigrant and primarily Latinx population has a large portion of households with very low incomes. Those households already struggle to pay rent and cannot afford to live in Langley Park if new developments are at the market rate. These majority immigrant, working-class households give Langley Park its diverse and entrepreneurial identity. If large portions of that population are displaced, the small businesses that rely on those families as a customer base will also be forced out. Langley Park will lose what makes it such a unique community. To

protect low-income households currently living in Langley Park—and the small businesses that rely on their presence—from displacement, this report recommends that the Prince George’s County Planning Department implements ambitious inclusionary zoning laws to ensure new development is affordable for Langley Park’s current residents—especially those earning 50% AMI and less.

Objective 1.3 Reduce the percentage of Langley Park population burdened by housing costs (46.3%) to the current county average (37.5%) by 2030.

Strategy 1.3.1 Work with state and federal agencies to expand rental assistance programs, targeting households at high risk of displacement.

Action Step A: Prince George’s County should implement more affordable housing initiatives to improve the competitiveness of the Housing Authority of Prince George’s County in the allocation of HUD funds.

Direct rental assistance to low-income households can make housing more affordable for those households. The U.S. Department of Housing and Urban Development’s (HUD) Section 8 Housing Choice Vouchers are a tool for this housing assistance. Langley Park residents would benefit from lower rent and better access to different housing options if HUD increased the provision of Housing Choice Vouchers. According to the Langley Park Affordable Housing Strategies Report, the amount of HUD funding for Section 8 Housing Choice Vouchers a local housing authority receives depends on the initiatives it puts forward (Lung-Amam et al., 2017). If HUD does not increase the provision of Housing Choice Vouchers under the next presidential administration, the Housing Authority of Prince George’s County should implement more initiatives to improve the County’s competitiveness in allocating HUD funds for Housing Choice Vouchers.

Strategy 1.3.2 Form a Community Land Trust (CLT) to secure land for affordable housing, ensuring that prices remain affordable over the long term, particularly for low-income residents.

Action Step A: Collaboration between stakeholders to create the organization.

Community land trusts (CLT) enable community ownership and land stewardship, a key part of equitable housing. They are a tool many communities use to preserve and expand affordable housing because their primary goal is to serve the community's interests rather than make a profit. The Purple Line Corridor Coalition explored the idea of a CLT along the Purple Line corridor to support affordable housing. This report recommends that CASA and the Langley Park Civic Association collaborate with the Purple Line Corridor Coalition to create a CLT to preserve and expand affordable housing in Langley Park and elsewhere along the Purple Line.

Action Step B: Consult with land trusts in other nearby areas willing to offer technical assistance.

The several active land trusts in the DC metro area could offer technical assistance in creating and managing a CLT. The Douglass Community Land Trust is an affordable housing CLT in DC that can provide lessons and assistance from its experience operating as an affordable housing CLT in the DC area.

Action Step C: Utilize Prince George's County's Housing Investment Trust Fund (HITF) to provide gap financing for the acquisition, new construction, or rehabilitation of affordable multifamily rental housing.

Prince George's County's Housing Investment Trust Fund (HITF) is a resource that can be helpful to an affordable housing CLT. If an affordable housing CLT is formed in Langley Park or the Purple Line Corridor, it should utilize the HITF to provide gap financing for the acquisition, new construction, or rehabilitation of multifamily rental housing. The HITF could also support tenants looking to form housing cooperatives in Langley Park by providing funds to acquire a building. A housing cooperative is not something we heard residents discussing. Still, with enough financial support, it could be another way to increase resident power and stewardship over housing in Langley Park.

Strategy 1.3.3 Decrease the percentage of affordable housing units in Langley Park that are occupied by households earning above the income level for which the unit is intended.

Action Step A: Make affordable rental units for households earning 50% AMI or less income-restricted.

Our affordability gap analysis showed that while a surplus of built units is affordable for households earning 30-50% AMI, many are occupied by households earning over 50% AMI who could afford to live in units affordable for higher-income households. So many of these units are occupied by households above the 50% AMI income level that there is functionally a deficit of units affordable for households earning 50% AMI and less that are available. Lower-income households then have to live in units above their affordability level (spending more than 30% of income on housing), causing them to be cost-burdened. Considering that a surplus of units is available for households earning over 50% AMI, this report recommends adopting income restrictions on affordable units for households earning 50% AMI and less so they can only be leased to households within that income limit.

Table 14: Strategic Planning for Housing Goal #2.

Goal 2: Enhance current housing quality and add new, affordable, attractive housing			
Objective	Strategies	Stakeholders	Expected Outcomes
2.1 Rehabilitate aging housing stock to meet health, safety, and energy standards	2.1.1 Take advantage of existing financial incentives and create new ones to encourage landlord investments in property upgrades 2.1.2 Establish a program offering grants and low-interest loans for landlords willing to upgrade aging properties, focusing on safety and energy efficiency 2.1.3 Partner with local agencies to subsidize energy-efficient upgrades for older buildings, lowering utility costs and improving living conditions 2.1.4 Redevelop older multifamily units while maintaining affordability and existing residents		If Objective 2.1 is achieved, the housing stock in Langley Park will be newer and more energy efficient.
2.2 Decrease the number of housing code violations at the multifamily rental properties in Langley Park by 50% in the next five years	2.2.1 Provide an annual opportunity for guided (and translated) mediation between tenants and property managers to build mutual trust, transparency, and accountability for unit maintenance 2.2.2 Pass a countywide bill promoting transparency and enforcement of tenant		If Objective 2.2 is achieved, property managers will be better equipped to address maintenance

	rights in Prince George's County 2.2.3 Anticipate housing code violations and prevent them before they happen		issues and residents will have units that are safe and comfortable to live in.
2.3 Support community ownership and stewardship of land	2.3.1 Provide technical assistance in the formation of housing co-ops and tenant associations 2.3.2 Prince George's County prioritizes community-owned development entities (e.g. housing co-ops) in the allocation of HITF loans 2.3.3 When Prince George's County acquires a NOAH property via ROFR, residents of the property may establish or choose an entity to manage the property on their behalf 2.3.4 Partner with residents with plumbing, electrical, mechanical, or construction experience to source labor for building maintenance		If Objective 2.3 is achieved, Langley Park residents will have more opportunities to control the provision, maintenance, and affordability of housing

Objective 2.1 Rehabilitate aging housing stock to meet health, safety, and energy standards.

Strategy 2.1.1 Take advantage of existing financial incentives and create new ones to encourage landlord investments in property upgrades.

Action Step A: Allocate Prince George's County's Revitalization Tax Credits to multifamily property owners in Langley Park that make improvements to the property.

The county offers eligible projects relief from taxes on any incremental value they add due to making specific real property improvements through the Revitalization Tax Credits program. Residential projects are eligible for these tax credits. This report recommends that the Prince George's County Economic Development Corporation promotes this program to property managers in Langley Park and that property managers utilize these tax credits to invest in improving the energy efficiency and sustainability, as well as other improvements in building quality, of multifamily residential buildings in Langley Park.

Action Step B: Establish a Rent Escrow Program to encourage landlords to keep up with health and safety standards and provide funds to help address code violations (alternative to fines).

Issuing fines to properties violating health and safety standards may be counterproductive to solving the problem by limiting their ability to address the issue's root (Housing Matters Report, 2019). As an alternative to fines, this report recommends that the Housing Authority of Prince George's County establish a rent escrow program for properties with health and safety violations. When there is a health and safety violation in a housing development, the residents impacted by that violation pay their rent into escrow—held by the County—which can only be accessed by the property manager to pay for the repairs necessary to address the violation. Once that violation is addressed and the unit meets health and safety standards, the remaining rent in escrow is given to the property manager.

Strategy 2.1.2 Establish a program offering grants and low-interest loans for landlords willing to upgrade aging properties, focusing on safety and energy efficiency.

Grants and low-interest loans should be established for landlords to fund safety upgrades, energy efficiency, and building electrification to encourage investment in improving Langley Park's multifamily residential buildings. Existing state and county residential rehabilitation programs focus on owner-occupied single-family homes, and the Lead Hazard Reduction Grant and Loan Program is the only state initiative supporting multifamily rentals. This report recommends that the Housing Authority of Prince George's County collaborate with and utilize the resources of HUD and Maryland DHCD to create funding pools for these improvements, prioritizing properties with significant health and safety needs.

Strategy 2.1.3 Partner with local agencies to subsidize energy-efficient upgrades for older buildings, lowering utility costs and improving living conditions.

The Housing Authority of Prince George's County can partner with other local agencies like the Prince George's County Department of the Environment to pursue grant funding at the state and national levels to subsidize energy-efficient upgrades for Langley Park's older multifamily residential

buildings. Such improvements would lower utility costs, loosen the community's dependence on natural gas, and improve living conditions.

Strategy 2.1.4 Redevelop older multifamily units while maintaining affordability and existing residents.

While rehabilitating older buildings can be a helpful short-term strategy for improving housing quality in Langley Park, it will not effectively provide good quality housing in the long term. All the multifamily developments in Langley Park were built over 50 years ago, and most were built over 75 years ago. These developments were not built to last this long. Therefore, they will eventually need to be redeveloped with newer buildings. The oldest buildings should be prioritized for redevelopment first, and all redeveloped properties should be kept affordable for existing residents to prevent displacement.

Action Step A: Adopt a phasing approach to multifamily redevelopment to limit resident displacement.

In our conversations with Langley Park residents, we heard they fear being displaced by redevelopment projects. The Langley Park Affordable Housing Strategies Report (2017) recommended that owners of apartment complexes maintain a portion of existing residents on-site by creating vacancies by limiting new lease contracts while existing residents are relocated. Relocated residents then fill the expiring leases as they come up instead of giving them to new residents. Projects using funds from Community Development Block Grants, HOME, or the Section 108 program can use a portion of those funds for relocating existing residents. Prince George's County DHCD's Housing Choice Voucher program could also support Langley Park's temporarily displaced residents during redevelopment.

Objective 2.2 Decrease the number of housing code violations at the multifamily rental properties in Langley Park by 50% in the next five years.

Strategy 2.2.1 Provide an annual opportunity for guided (and translated) mediation between tenants and property managers to build mutual trust, transparency, and accountability for unit maintenance.

Our conversations with residents told us that property managers often do not treat them respectfully. When residents bring complaints, they say, "If you don't like it, leave." This was not confirmed with property managers.

However, low incomes, language barriers between residents and county officials, and residents without documentation in immigrant households create a power imbalance that allows property managers to take advantage of residents by ignoring maintenance requests and overcharging on rent. These are issues that residents brought up in our conversations and have been documented in the past in Langley Park in the Housing Matters Report (2019). The Housing Matters Report described their success in improving the responsiveness of property managers to maintenance requests and resident trust in property managers by mediating conversations between residents and property managers. However, this strategy has not been replicated. This report recommends creating an annual opportunity for these conversations between residents and property managers, mediated by a neutral stakeholder. CASA and Langley Park Civic Association would be key to organizing resident involvement in these conversations and language interpretations. Property managers of the multifamily residential developments in Langley Park would need to participate, and neutral mediators could include County officials or University of Maryland faculty or students.

Strategy 2.2.2 Pass a countywide bill promoting transparency and enforcement of tenant rights in Prince George’s County.

To prevent property managers from taking advantage of residents, this report recommends that the Prince George’s County Council pass a bill promoting the transparency and enforcement of tenant rights. Montgomery County Bill 19-15 can be used as a model. It requires a plain-language summary of tenant rights and responsibilities in the lease and requires the County DHCD to provide tenants and landlords with a standard lease and a landlord-tenant handbook upon request. Given the many Langley Park residents who speak Spanish, the lease and landlord-tenant handbook should be provided in Spanish and English.

Strategy 2.2.3 Anticipate housing code violations and prevent them.

Action Step A: Implement a landlord training program.

This report recommends implementing a landlord training program to prevent housing code violations at multifamily rental properties. Through workshops, the program would comprehensively inform landlords of housing codes, which many landlords violate – intentionally or unintentionally – and how to best comply with housing codes and prevent illegal activities on their property.

Action Step B: Establish a preventative maintenance schedule.

Developing a database that tracks the condition and maintenance history of each building can inform both property managers and county inspectors which properties and buildings may need more attention. This report recommends assessing the buildings in Langley Park built before 1960 and identifying top maintenance priorities. These assessments should be stored in a database, and regular inspections and minor repairs for structural, HVAC, plumbing, and electrical systems should be established to reduce emergency repair requests.

Objective 2.3 Support community ownership and land stewardship.

Strategy 2.3.1 Seek out technical assistance in the formation of housing co-ops and tenant associations.

In Strategy 1.3.2, Action Step C, we mentioned housing cooperatives to facilitate resident ownership and stewardship of housing in Langley Park. We are unaware of any housing co-ops in Langley Park as of the writing of this report. Still, we recommend that residents or supporting stakeholders interested in creating a housing co-op in Langley Park seek out housing co-ops and tenant associations elsewhere to learn from their experience. Lovers of Living Together is a mailing list for those interested in group houses, co-ops, intentional communities, cohousing communities, or non-nuclear/individualist living arrangements in the DC area. The Urban Homesteading Assistance Board (UHAB) is an affordable housing co-op incubator that shares expertise in limited equity housing cooperative (LEC) development and stewardship with communities nationwide. Both organizations could provide valuable lessons and guidance in forming housing co-ops and tenant associations.

Strategy 2.3.2 Prince George's County prioritizes community-owned development entities (e.g. housing co-ops) in the allocation of HITF loans.

Supporting community ownership and land stewardship in Langley Park means supporting community-owned development entities, like housing co-ops and land trusts. This report recommends that the Prince George's County DHCD prioritizes community-owned development entities in allocating HITF loans, which we previously recommended as a funding source for affordable housing in Langley Park. Prioritizing community-owned

development entities in allocating HITF loans or offering lower interest on those loans for community-owned entities would make it easier for them to exist, thrive, and provide good quality, affordable housing for Langley Park residents.

Strategy 2.3.3 Secure grants and public-private partnerships to fund community-led projects.

The Harry and Jeanette Weinberg Foundation provides funding to support community-led projects related to housing, health, jobs, education, and aging. According to its website, applicants for funding must provide services directly to low-income and vulnerable populations. CASA would be an ideal applicant for this foundation and should be involved with any community-led projects related to housing, such as housing co-ops or CLTs.

Strategy 2.3.4 When Prince George's County acquires a NOAH property via ROFR, residents of the property may establish or choose an entity to manage the property on their behalf.

Forming a CLT or housing co-op can require a lot of capital, which residents in Langley Park may not be able to raise. This report recognizes that limitation and recommends that Prince George's County add a condition to their agreement with developers when they exercise the ROFR. The additional condition is that current property residents may establish or choose an external entity to manage the property rather than the developer selecting the property manager. This change would give tenants a more significant say in who manages the property and prevent property managers from exploiting tenants.

Strategy 2.3.4 Partner with residents with plumbing, electrical, mechanical, or construction experience to source labor for building maintenance.

Many residents in Langley Park work in the construction industry and possess the skills necessary to maintain housing. This report recommends that property managers capitalize on these skills to meet maintenance needs. For example, many multifamily residential properties in New York City have residents who receive discounted rent to perform maintenance on the building. Property managers could adopt this practice in Langley Park. Alternatively, property managers could simply offer residents the resources they need to address issues themselves, if they wish, instead of making them wait for the property manager to address the problem.

Table 15: Strategic Planning for Housing Goal #3.

Goal 3: Create spaces for activities and events that foster community cohesion			
Objective	Strategies & Action Plan	Stakeholders	Expected Outcomes
3.1 Establish at least four new parks and green spaces by 2030	3.1.1 Establish small, accessible green spaces within a 5-minute walk for 90% of residents 3.1.2 Create and reactivate existing community gardens to enhance food access and community interaction 3.1.3 Secure grants and public-private partnerships to fund the creation of new parks and green spaces accessible to all residents		If Objective 3.1 is achieved, Langley Park residents will have more outdoor green spaces for recreation and community gathering.
3.2 Upgrade the Langley Park Community Center with modern facilities and new programs by 2027	3.2.1 Organize quarterly art installations or mural projects in community spaces to beautify areas and reflect local culture 3.2.2 Work with local government and nonprofits to renovate community centers, adding facilities like libraries, sports areas, and cultural spaces 3.2.3 Establish a summer camp for youth at the Langley Park Community Center		If Objective 3.2 is achieved, the Langley Park Community Center will have updated facilities and offer a wider range of programming for residents
3.3 Decrease crime and delinquency in community spaces by promoting social cohesion	3.3.1 Develop a neighborhood safety program in collaboration with local law enforcement by 2025 to improve public safety 3.3.2 Implement neighborhood watch programs and increase community policing to reduce crime, supported by the addition of lighting and surveillance in key areas 3.3.3 Utilize Crime Prevention Through Environmental Design (CPTED) principles in new developments 3.3.4 Limit substance abuse, especially by youth		If Objective 3.3 is achieved, residents will feel more comfortable and safe in community spaces.

Objective 3.1 Establish at least four new parks and green spaces by 2030.

Strategy 3.1.1 Establish small, accessible green spaces within a 5-minute walk for 90% of residents.

Residents identified parks and green space as a major weakness in Langley Park. There are many informal green spaces in Langley Park among and between the multifamily residential developments, but they are underutilized. Residents also said that delinquency in public spaces is an issue. Formalizing the green spaces with parks and athletic fields would provide recreation and social spaces for the community. It would also discourage delinquency in places by making the spaces more valued and observed by other community members.

Strategy 3.1.2 Create and reactivate existing community gardens to enhance food access and community interaction.

In addition to parks and athletic fields, the existing green spaces could be transformed into community gardens, and existing community gardens in Langley Park could be reactivated and expanded. Creating and expanding community gardens in Langley Park would improve food access, facilitate community building, and build more social networks between residents.

Strategy 3.1.3 Secure grants and public-private partnerships to fund the creation of new parks and green spaces accessible to all residents.

The creation of new parks and formal green spaces will require capital. If residents and other local stakeholders drive these projects, they must secure funding. Government grants, public-private partnerships, and philanthropic organizations can all provide capital for community-led projects. The Maryland Philanthropy Network connects and organizes philanthropic organizations to promote informed and intentional philanthropy to benefit communities across Maryland. That organization is a good place to start looking for philanthropic funding for community-led projects.

Objective 3.2 Upgrade the Langley Park Community Center with modern facilities and new programs by 2027.

Strategy 3.2.1 Organize quarterly art installations or mural projects in community spaces to beautify areas and reflect local culture.

Action Step A: Apply to Community Revitalization Fund Grants to finance such projects.

The Community Revitalization Fund, part of the Build Back Better initiative, could fund art installations or mural projects in Langley Park. This fund supports community-driven projects promoting social cohesion, sustainability, and activation of vacant land. It can also assist in funding the creation of new parks, athletic fields, and community gardens, or CLTs and housing co-ops in acquiring property or improving environmental sustainability in housing. The fund's purpose is to support community-led projects, so CASA, the Langley Park Civic Association, and the Takoma-Langley Crossroads Development Authority should lead efforts to apply for these funds and involve the community in planning projects. However, the fund's future may depend on continuing the program under the new presidential administration.

Strategy 3.2.2 Work with local government and nonprofits to renovate community centers, adding facilities like libraries, sports areas, and cultural spaces.

Residents told us at the mid-term community event that the Langley Park Community Center could be improved. Residents specifically wanted to see libraries, playgrounds, and sports fields in the community in the future. The Maryland-National Capital Park and Planning Commission owns and maintains the Langley Park Community Center. The Prince George's County Department of Parks and Recreation should lead the renovation of the community center and engage with community members through collaboration with the Langley Park Civic Association and CASA to get resident input on what they would like to see at the community center.

Strategy 3.2.3 Establish a summer camp for youth at the Langley Park Community Center.

Residents also said they would like to see a summer camp for youth. The Community Center would be ideal for a summer camp in Langley Park. The Langley Park Civic Association or the Prince George's County Department of Parks and Recreation could organize the summer camp.

Objective 3.3 Decrease crime and delinquency in community spaces by promoting social cohesion.

Strategy 3.3.1 Develop a neighborhood safety program in collaboration with local law enforcement to improve public safety.

Collaboration between Prince George's County Police Department and Langley Park residents is critical to improving public safety. Building trust and communication between these stakeholders will facilitate effective public safety programs. One barrier to this is the language barrier between the primarily Spanish-speaking Langley Park residents and the mainly English-speaking police department. There is also a fear among many immigrant communities that police will work with ICE to deport undocumented residents. However, in 2019, Prince George's County adopted a policy that would not assist in any civil deportation cases (Uliano, 2019). Raising awareness of this policy—and keeping it in place—will help build trust among residents.

Strategy 3.3.2 Implement neighborhood watch programs and increase community policing to reduce crime, supported by the addition of lighting and surveillance in key areas.

Encouraging community investment in public safety through neighborhood watch programs could help community members hold each other accountable without involving the police. Investing in lighting and surveillance in key areas where residents feel unsafe will reduce crime incidents.

Strategy 3.3.3 Utilize Crime Prevention Through Environmental Design (CPTED) principles in new developments.

Spaces in Langley Park that are somewhat secluded and less visible offer opportunities for anti-social behavior like substance abuse in public spaces. CPTED is a widely recognized way to lower crime by maximizing the visibility of spaces and investing in placemaking to make the spaces feel cared for, used, and observed. CPTED encourages community use of these spaces and therefore discourages anti-social from happening. This report recommends that CPTED principles be utilized in designing new developments and improving existing developments in Langley Park.

Strategy 3.3.4 Reduce substance abuse, especially by youth.

Action Step A: Increase community power in the alcohol licensing process.

Residents and representatives of Langley Park businesses expressed that their concerns about alcohol stores in their neighborhood were not taken seriously by the alcohol licensing boards, and they wanted the community to have a more significant say in the alcohol licensing process. We heard that many of the safety issues residents brought up revolved around substance abuse, so we thought that would be an appropriate intervention for public safety. While Langley Park is in Prince George's County, many of the commercial spaces at the Takoma-Langley Crossroads are in Montgomery County, making it necessary to consider Montgomery County's role in the daily lives of Langley Park residents. The Montgomery County Board of License Commissioners, which issues alcohol licenses, exists under – and in part appointed by – Alcohol Beverage Services. Alcohol Beverage Services also operates 27 retail alcohol stores in the county. This dual role creates a conflict of interest. To address this conflict of interest and increase community power in the alcohol licensing process, this report recommends making the board an independent, elected body.

Action Step B: Educate youth in schools about the risks of alcohol and drug consumption.

When we spoke to residents, they seemed particularly concerned with substance abuse among youth—especially young men. To address this concern, this report recommends that the Prince George's County Board of Education emphasize the risks of alcohol and drug consumption to youth in schools. Local organizations like the Langley Park Civic Association could also hold events to raise awareness of this issue.

Action Step C: Make the completion and renewal of the Prince George's County Board of License Commissioners Alcohol Awareness training mandatory for managers, owners, servers, and sellers at alcohol outlets.

Action Step A concerns Montgomery County's board of alcohol licensing, but Action Step C focuses on that of Prince George's County. The Prince George's County Board of License Commissioners Alcohol Awareness training teaches managers, owners, servers, and sellers at alcohol outlets how to avoid selling to underage youth and intoxicated patrons, but it is currently only optional. This report recommends that this training be mandatory and require an annual renewal to prevent substance abuse, particularly by youth in Langley Park.

Environment, Climate, and Sustainability

Table 16: Strategic Planning for Environmental Goal #1

Goal 1: Reduce Air Pollution			
Objective	Strategies	Stakeholders	Expected Outcomes
1.1 Set up two air quality monitoring stations in Langley Park, Maryland by 2029 to provide real-time data on air pollution levels in Langley Park	1.1.1 Form a partnership among the Takoma Langley Crossroads Development Authority and local businesses as well as the Langley Park Civic Association, and local residents to collaboratively leverage federal, state, and local programs for the installation of stationary air quality monitors in Langley Park	1.1.1 Takoma Langley Crossroads Development Authority, local businesses, Langley Park Civic Association, langley park residents	If Objective 1.1 is achieved, Langley Park Maryland will have two stationary air quality monitors to provide real-time measurement on air pollutants both near University Boulevard and within a low-traffic area in the community
1.2 Administer 37 home air quality monitoring stations and 2 mobile air quality monitoring stations to Langley Park residents by 2036 and facilitate the use of these stations between 2036 and 2034 to provide real-time data on air pollution levels throughout Langley Park	1.2.1 Form a partnership among Langley Park Civic Association, CASA, Langley Park residents and local businesses to leverage federal, state and local programs for the purchase and utilization of 37 home air quality monitoring stations and 2 mobile air quality monitoring stations for residents in Langley Park	1.2.1 Langley Park Civic Association, CASA Langley Park residents, Langley Park local businesses, Prince George's County Planning Department, the Prince George's County Department of Environment, the Maryland Department of Environment and the United States Environmental Protection Agency	If objective 1.2 is achieved, Langley Park will meet standard guidelines for the use of home and mobile air quality monitoring stations per square mile of land to provide comprehensive real-time measurement of air pollutants throughout Langley Park (EPA, 2022)
1.3 Install three 600 square foot community gardens in Langley Park, Maryland by 2030 that community members can	1.3.1 Establish a partnership between Langley Park residents, CASA, property owners, Prince George's County Planning, the Community Learning Garden (CLG) at the University of Maryland Arboretum, the University of Maryland Extension, and the Environmental Finance Center (EFC) to	1.3.1 Langley Park residents, CASA, the Community Learning Garden (CLG), the Environmental Finance Center (EFC) and Prince George's County	If Objective 1.3 is achieved, Langley Park will have suitable, evaluated and ready community

operate to support food security and sequester carbon from the atmosphere	access and evaluate recommended sites for community gardens while identifying funding opportunities. 1.3.2 Collaborate with the Environmental Finance Center and the University of Maryland Extension to provide community education on gardening and sustainable gardening practices	Planning Department. 1.3.2 CASA, Langley Park residents, the University of Maryland Extension and the Environmental Finance Center.	garden sites and stewards. If Objective 1.3.2 is achieved, Langley Park community gardens will be built, managed and sustained on well-established and data-proven methods.
---	---	---	---

Objective 1.1 Set up two air quality monitoring stations in Langley Park by 2029 to provide real-time data on air pollution levels.

Strategy 1.1.1 Form a partnership among the Takoma Langley Crossroads Development Authority, local businesses, the Langley Park Civic Association, and residents to collaboratively leverage federal, state, and local programs to install stationary air quality monitors in Langley Park.

Action Step A: Establish a partnership framework with key stakeholders.

Initiate the project by engaging key stakeholders to develop a partnership framework, a structured approach to stakeholder engagement that outlines the roles, responsibilities, and processes for collaboration between multiple stakeholders working towards a shared goal. The Takoma Langley Crossroads Development Authority (TLCDA) can partner with local businesses, and the Langley Park Civic Association (LPCA) can partner with residents to help identify the most suitable air quality monitoring devices and the types of air quality monitoring stations to purchase. Organizing initial engagement meetings provides a platform to present the project's goals and benefits, including its alignment with community priorities like public health and environmental sustainability. These meetings should emphasize how real-time air quality data can empower residents and policymakers to make informed decisions about environmental health.

Through these discussions, the roles and contributions of each stakeholder

can be defined. In addition to identifying the proper monitoring stations and monitoring station locations, the TLCDA and LPCA should also connect with the Prince George's County Planning Department, the Prince George's County Department of Environment, the Maryland Department of Environment, and the United States Environmental Protection Agency to identify and leverage funding opportunities.

Action Step B: Secure grant funding for two stationary air quality monitoring stations

The TLCDA and LPCA should pursue grant funding opportunities to secure resources for installing two stationary air quality monitoring stations. If necessary, they might consider hiring a grant writer or obtaining technical assistance to ensure their applications meet the specific requirements of funding programs. This step is crucial for acquiring the financial support to purchase and set up the monitoring equipment. Additionally, the TLCDA, LPCA, and CASA can collaborate on local advocacy efforts to identify and access federal, state, and local funding for air quality monitoring.

Potential sources of funding for these air quality monitoring stations include:

1. The Center for Community Engagement, Environmental Justice, and Health (CEEJH)

CEEJH has a strong track record of partnering with Mid-Atlantic communities to address air pollution issues. Given Langley Park's location near high-traffic roadways and its predominantly Latinx population, working with CEEJH could provide valuable tools and expertise for effective air quality monitoring (CEEJH, 2024).

2. The Prince George's County Department of Environment

The LPCA and CASA are well-equipped to advocate for funding from the Prince George's County Department of Environment to support air quality monitoring initiatives in Langley Park. By representing the community's needs, which are significantly impacted by proximity to major roadways, these organizations can push for equitable access to environmental resources. Advocacy efforts could include attending county council meetings and emphasizing the importance of monitoring air quality in underserved areas like Langley Park.

3. The Maryland Department of Environment, supported by the Federal Inflation Reduction Act via the U.S. Environmental Protection Agency

Although current funding opportunities are not listed online, in 2023, the Maryland Department of Environment allocated \$497,891 from the Inflation Reduction Act through the U.S. Environmental Protection Agency to monitor air pollution in three underserved Maryland communities. LPCA and CASA could campaign for similar funding toward Langley Park, citing its high traffic levels and economically disadvantaged population (Congressman Ruppersberger, 2023).

Action Step C: Plan for the installation of two stationary air quality monitors

Planning the installation of air quality monitoring stations requires thoughtful consideration of location and equipment needs. The TLCDA and LCPA should collaborate with local business owners and residents to identify high-traffic or pollution-prone areas and areas that may be less prone to pollution to ensure the stations will capture representative air quality data. The TLCDA and LCPA could leverage community meetings and/or mail and online surveys to identify desired locations. Two potential options for air quality monitoring site locations are identified in Figure 36 below. Engaging technical experts to assess sites and determine equipment specifications ensures the stations meet the project's goals.

Securing necessary permits and coordinating with local authorities is another crucial step in this phase. The TLCDA and/or the LCPA should apply for a permit from the Maryland Department of Environment (MDE), which oversees permitting for station installation and operation in Maryland. The Prince George's County Department of Permitting, Inspections, and Enforcement (DPIE) may also have permitting requirements. Therefore, the TLCDA and LCPA should contact the DPIE to understand if there are additional requirements for permitting aside from the MDE permit process and apply for those permits if necessary.

Purchasing sensors tailored to the identified pollutants, mainly particulate matter and ozone, ensures data accuracy. A list of three potential outdoor air quality monitors is provided below:

1. **TAPI (Teledyne API) Model T640** (~\$25,000): This stationary monitor uses advanced nephelometry to provide real-time measurements of particulate matter (PM1, PM2.5, and PM10), making it ideal for regulatory monitoring and long-term environmental studies (Teledyne, 2024).
2. **Vaisala AQT420** (~\$10,000): The AQT420 is a compact, stationary air quality transmitter capable of monitoring multiple gases (e.g., NO₂, SO₂,

CO) and particulate matter. It is designed for urban air quality networks and long-term deployments (Vaisala, 2024).

3. **Thermo Scientific 1405-DF TEOM Continuous Ambient Particulate Monitor** (~\$30,000): This advanced stationary monitor provides precise, real-time measurements of particulate matter concentrations. It is widely used in regulatory networks and research applications (Thermo Fisher Scientific, 2024).

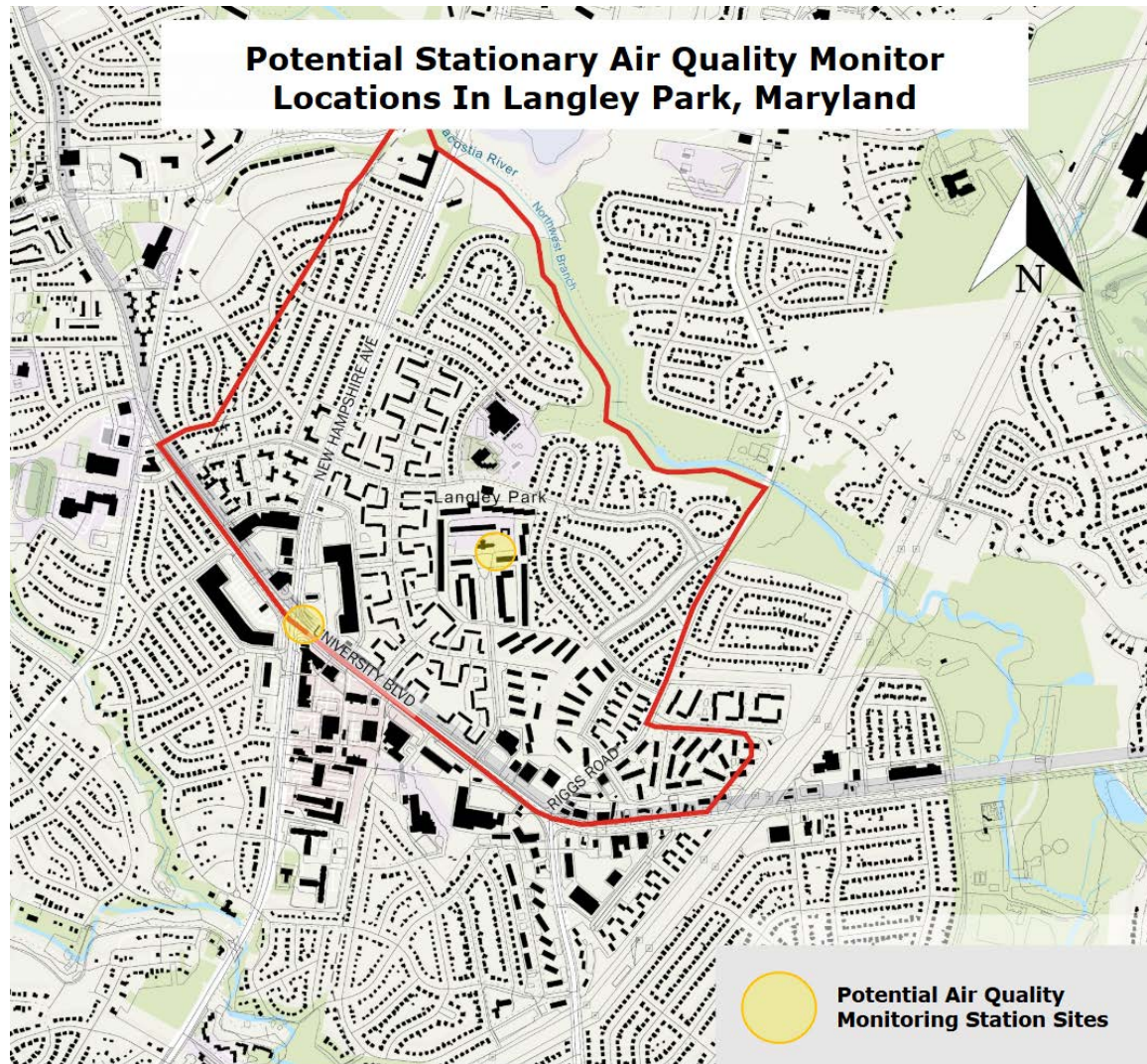


Fig. 36. Potential Stationary Air Quality Monitor Locations in Langley Park, Maryland, 2024.

Action Step D: Install and operate the two air quality monitoring stations

With the planning phase complete, the next step involves procuring and installing the two air quality monitoring stations. The TLCDA and/or LCPA should utilize secured grant funding to purchase the appropriate air quality monitors. Community input is crucial in selecting monitors that meet the specifications and address local needs. Concurrently, the TLCDA and/or LCPA should collaborate with private contractors to ensure the successful installation of the monitoring stations. For example, SCS Engineers, a local firm specializing in outdoor air monitor installations, could be considered for the project (SCS Engineers, 2015). Clear and open communication between the TLCDA, LCPA, and the community throughout the installation process will help sustain enthusiasm and support for the project.

Establishing a reliable data management system is equally critical. The TLCDA and/or LCPA should develop a user-friendly platform, such as a website or community dashboard, to provide real-time access to air quality data. Leveraging grant funding, if available, to hire a private contractor with expertise in creating data platforms would ensure the system is both functional and accessible. This approach will empower the community by keeping them informed and engaged with local air quality developments.

Action Step E: Maintain the two air quality monitoring stations, monitor and report the data output

Maintaining the air quality monitoring stations is essential to ensure their accuracy and reliability over time. The TLCDA and/or the LCPA should develop a routine maintenance schedule with private contractors to keep the sensors operational and prevent data gaps. These contractors can regularly calibrate equipment and promptly address technical issues to enhance the collected data's credibility and usefulness.

Transparency and community engagement are key to the success of this project. Real-time data should be shared with residents through online platforms, public dashboards, and community meetings. This open access empowers residents to understand local air quality trends and advocate for policy changes. Regular evaluations of the stations' performance and their impact on community awareness will provide insights for improvement. By continuously engaging stakeholders and incorporating feedback, the project can adapt to meet evolving community needs and ensure lasting success.

Objective 1.2 Administer 37 home air quality monitoring stations and two mobile air quality monitoring stations to Langley Park residents by 2036 and facilitate the use of these

stations between 2036 and 2034 to provide real-time data on air pollution levels throughout Langley Park

Strategy 1.2.1 Form a partnership among Langley Park Civic Association, CASA, Langley Park residents, and local businesses to leverage federal, state, and local programs for the purchase and utilization of 37 home air quality monitoring stations and two mobile air quality monitoring stations for residents

Action Step A: Establish a partnership framework among key stakeholders

Initiate the project by engaging key stakeholders to develop a partnership framework. Begin with a series of meetings and workshops with the LPCA and CASA, as well as residents and business owners, to outline the program's goals and identify community champions. The LPCA and CASA should also form a connection with the Prince George's County Planning Department, the Prince George's County Department of Environment, the Maryland Department of Environment, and the United States Environmental Protection Agency to identify and leverage funding opportunities. A dedicated working group will help coordinate efforts, oversee the program, and maintain accountability. This step ensures buy-in from all parties and lays the foundation for accessing funds and resources.

Action Step B: Apply for grant funding opportunities

The LPCA and/or CASA should apply for home and mobile air quality monitoring station grant opportunities. If needed, the LPCA and/or CASA could hire a grant writer or seek technical assistance to ensure the grant application aligns with funding criteria. This step is critical for obtaining the necessary resources to purchase 37 home air monitoring stations and support community engagement efforts. The LPCA and CASA could also assist with local advocacy efforts to identify and leverage federal, state, and local air quality monitoring funding to support the purchase of home air quality monitoring stations.

Potential funding opportunities for home and mobile air quality monitoring stations include:

- 1. The Center for Community Engagement, Environmental Justice, and Health (CEEJH)**

CEEJH has a history of collaborating with communities in the Mid-Atlantic

region to address air pollution challenges. Given Langley Park's proximity to heavily trafficked roads and the predominantly Latinx population, partnering with CEEJH could provide the community with the necessary tools and expertise to monitor local air quality effectively (CEEJH, 2024).

2. The Prince George's County Department of Environment

The Langley Park Civic Association (LPCA) and CASA can play a pivotal role in advocating for the Prince George's County Department of Environment to allocate funding for home air quality monitoring stations in Langley Park, Maryland. These organizations are well-positioned to represent the interests of Langley Park's diverse and underserved population, emphasizing the community's vulnerability to air pollution due to its proximity to major roadways. LPCA and CASA can attend county council meetings to highlight Langley Park's urgent need for equitable air quality monitoring.

3. Get funding from the Maryland Department of Environment, with support from the Federal Inflation Reduction Act through the U.S. Environmental Protection Agency.

While funding opportunities are not currently posted as available online, in 2023, the Maryland Department of Environment awarded \$497,891 of Inflation Reduction Act funding from the U.S. Environmental Protection Agency to monitor air pollution in three historically underserved Maryland communities. LPCA and CASA could advocate that such funding be distributed to the Langley Park community, given the high traffic levels and economically disadvantaged community living in the area (Congressman Ruppersberger, 2023).

Action Step C: Procure home air quality monitoring stations.

Select home and mobile air quality monitoring stations for local air quality champions based on their accuracy, pollutant range (PM2.5, PM10, VOCs), and ease of use. Opt for consumer-friendly, low-maintenance stations. Ensure warranties and calibration services are included in the purchase agreement. Procurement ensures that residents and/or businesses have the tools needed for real-time air quality monitoring.

Functional home air quality monitoring devices come in low-cost and higher-cost options. Low-cost options generally have a more limited pollutant range and measure fewer pollutants than higher-cost options. Below is a list of low-cost options for home air quality monitoring stations:

- **Amazon Smart Air Quality Monitor** (\$69.99): This device measures PM2.5, VOCs, temperature, and humidity. It integrates seamlessly with Alexa, provides real-time alerts, and features a minimalist design, making it an affordable choice for basic air quality monitoring (Amazon, 2024).
- **Qingping Air Monitor Lite** (\$99): This compact and user-friendly monitor provides real-time data by offering measurements for PM2.5, PM10, CO2, temperature, and humidity. Its sleek design and functionality make it ideal for everyday use (Qingping, 2024).
- **Airthings Wave Plus** (\$229): This versatile monitor tracks radon, CO2, VOCs, temperature, humidity, and air pressure. It integrates with smart home systems, features long battery life, and uses visual indicators to display air quality status (Airthings, 2024).
- **IQAir AirVisual Pro** (\$299): With precise measurements for PM2.5, CO2, temperature, and humidity, this high-accuracy monitor provides real-time data and color-coded displays, making it an excellent choice for comprehensive air quality tracking (IQAir, 2024).

Below is a list of higher-cost home air quality monitoring stations:

- **Aeroqual Series 200** (\$1,200): This modular device features interchangeable sensor heads, allowing it to measure pollutants such as ozone (O₃), nitrogen dioxide (NO₂), and carbon monoxide (CO), along with temperature and humidity. It offers high accuracy and customization for specific monitoring needs (Aeroqual, 2024).
- **Temtop Air Quality Monitor** (\$1,800): This multi-parameter monitor measures PM2.5, PM10, CO2, formaldehyde (HCHO), VOCs, temperature, and humidity. It features a large touch screen and data logging capabilities, ideal for detailed air quality assessments (Temtop, 2024).
- **Airthings View Plus** (\$2,000): This wireless monitor tracks radon, PM2.5, CO2, VOCs, temperature, humidity, and air pressure. It integrates with smart home systems and features a customizable display, offering a user-friendly option for mid-range budgets (Airthings, 2024).
- **Prana Air Sensible+** (\$2,500): Equipped to measure PM2.5, PM10, CO2, CO, NO2, SO2, and ozone (O₃), along with temperature and humidity, this high-precision monitor provides real-time data and cloud connectivity for advanced monitoring (Prana Air, 2024).

Below is a list of mobile air quality monitoring devices:

- **Temtop M10** (\$350): The Temtop M10 is a handheld air quality monitor that measures particulate matter (PM2.5, PM10), formaldehyde (HCHO), and volatile organic compounds (VOCs). It features a simple interface, a rechargeable battery, and a clear digital display, making it an affordable option for individual users and local community projects. While not as comprehensive as high-end models, the M10 provides sufficient data for general air quality monitoring (Temtop, 2024).
- **Atmotube Pro** (\$1,500): The Atmotube Pro is a compact and portable air quality monitor that tracks a wide range of pollutants, including PM1, PM2.5, PM10, volatile organic compounds (VOCs), carbon dioxide (CO₂), temperature, humidity, and barometric pressure. It is equipped with Bluetooth capabilities for real-time data syncing with mobile devices, providing users with immediate feedback on air quality. This device is helpful for both outdoor and indoor monitoring (Atmotube, 2024).
- **Aeroqual Series 3000** (\$2,000): The Aeroqual Series 300 is designed for complex air quality monitoring tasks. It can measure a range of pollutants, including particulate matter (PM2.5, PM10), ozone (O₃), and nitrogen dioxide (NO₂). This mobile station is suitable for both short-term and long-term air quality assessments. It has a sensitive sensor range and data-logging capabilities, making it ideal for environmental studies and public health applications (Aeroqual, 2024).

Action Step D: Identify residents and/or business owners that can host the air quality monitoring stations

The LCPA should identify 37 residents and/or business owners who can host and operate the home air quality monitoring stations and thus serve as community air quality monitoring champions. The LCPA should ensure a fairly equal geographic distribution of the 37 air quality monitoring station locations throughout Langley Park, Maryland. Residents or businesses located near specific points of interest, such as the Langley Park Community Center, the Langley Park commercial corridor, or Langley Park-McCormick Elementary School, should receive preference for hosting these monitoring stations.

The LCPA should also identify at least two residents who are willing and able to operate mobile air quality monitoring stations throughout Langley Park. This initiative can foster community ownership and ensure that the air quality data collected reflects the unique environmental conditions in different parts of Langley Park. By selecting residents who are already engaged in local community activities or ecological concerns, the LCPA can ensure that these

individuals have a vested interest in the success of the monitoring program. Furthermore, it allows residents to develop technical skills and become ambassadors for air quality monitoring, ensuring that the data collected is accurate, comprehensive, and accessible.

Action Step E: Train local champions on using the air quality monitoring stations

The LCPA and/or CASA should host training workshops for the 37 resident champions and two or more mobile air quality champions, during which they will provide hands-on demonstrations on how to set up, maintain, and interpret data from the monitors. Training should include troubleshooting tips and information on reporting results to the working group. This step ensures successful implementation and long-term engagement. Training workshops should be held in multiple languages, particularly Spanish and English, to ensure accessibility.

Action Step F: Deploy and monitor usage of the air quality monitoring stations.

The LCPA should distribute the 37 home air quality monitoring stations and two mobile monitoring devices to selected residents and/or businesses. The LCPA should monitor usage over time using online applications and local champion check-in meetings to ensure proper operation and consistent data collection. Regular check-ins with residents will address technical issues and build trust in the program.

Action Step G: Analyze and share air quality monitoring results with the community and county government.

The LPCA and/or CASA should compile and analyze data from the home and mobile air quality monitors to identify trends and hotspots. The LCPA should then share results with the community through accessible formats like community meetings, infographics, and digital dashboards. Engaging residents with clear, actionable data strengthens community participation and drives informed decision-making. The LPCA should also use the findings to advocate for cleaner air initiatives through the Prince George's County Planning Department, the Prince George's County Department of Environment, and the Maryland Department of Environment.

Objective 1.3 Install three 600-square-foot community gardens

in Langley Park by 2030 that community members can operate to support food security and sequester carbon from the atmosphere.

Strategy 1.3.1 Establish a partnership between Langley Park residents, CASA, property owners, Prince George's County Planning, the Community Learning Garden (CLG) at the University of Maryland Arboretum, the University of Maryland Extension, and the Environmental Finance Center (EFC) to access and evaluate recommended sites for community gardens while identifying funding opportunities.

Action Step A: Community Organizing and Canvassing

Creating a community garden is an ongoing process that requires continuous support even after its construction. Unlike other projects that can be set up and revisited periodically for evaluation and maintenance, a garden demands daily care and attention throughout each season. It is crucial to emphasize the “community” aspect of community gardens.

To kick start the process, it is recommended that CASA conducts a canvassing effort within the Langley Park community, providing basic, non-expert information on how community gardens can address multiple goals, such as increasing vegetation cover, alleviating food insecurity, fostering community cohesion, creating a “third place” for social interaction, and promoting community stewardship. As the primary beneficiaries, Langley Park residents will also play a central role in maintaining the garden.

Action Step B: Identify and Engage Other Stakeholders

Identifying key stakeholders is crucial to the success of this community garden project. The initiative has diverse requirements, including land access, soil testing, seedlings, water supply, composting systems, storage, tools and equipment, raised beds (optional), permits, signage, etc. Broadly categorized, the project will need land, gardeners, funding, and materials—each requiring the involvement of different organizations or entities.

CASA can collaborate with the Prince George's County Planning Department, which can provide support with land access and establish connections with property owners. Additionally, partnering with the University of Maryland Extension's Home and Garden Information Center could offer the community

valuable support in site evaluation, including soil testing, which is particularly necessary when repurposing a brownfield site. Other potential stakeholders include local schools and religious organizations, which can help facilitate community involvement, provide volunteers, and potentially offer resources or land for the project.

Action Step C: Identify and Leverage Funding Opportunities and Other Resources

For funding, the Prince George's County Community Gardens Mini-Grant Program is an excellent opportunity, as Langley Park meets the eligibility requirements (Chesapeake Bay Trust, 2024). Administered by the Maryland Department of Natural Resources, the Community Stewardship Grants under the Keep Maryland Beautiful Grant program offer up to \$5,000 for schools, nonprofits, and other community organizations that engage community members, especially children and young adults, in environmental education and stewardship (Maryland Department of Natural Resources, 2024). These grants also reward innovative solutions to local environmental challenges, providing a valuable resource for organizations actively involved in environmental protection. This is a great way to encourage youth participation in the community garden project. Other potential funding sources include the Community Impact Grants from Prince George's County, which provide financial assistance for community-focused projects, and the Horticultural Society of Maryland's Community Gardening Grants, which support public horticulture projects like community gardens (Prince George's County Redevelopment Authority, 2024; Horticultural Society of Maryland, 2024). By tapping into these resources, Langley Park can secure the financial support needed to bring its community garden initiative to life.

CASA, as a 501(c)(3) organization, can collaborate with the Environmental Finance Center (EFC) at the University of Maryland to secure funding for the project. The EFC specializes in helping communities access financial resources for environmental sustainability projects. By working together, CASA can leverage the EFC's expertise in identifying more grant opportunities, crafting strong funding proposals, and developing financial strategies that ensure the project's long-term sustainability.

Action Step D: Implement Community Garden Project

The community garden construction will begin with the careful selection of potential sites, followed by a thorough evaluation of each location's

suitability, health, and vitality. This will be achieved through a process known as soil testing, which is particularly important when repurposing brownfield sites to ensure that the soil is safe and conducive to plant growth. Soil testing helps assess critical factors such as soil fertility, pH levels, and the presence of any contaminants. Langley Park can leverage its established partnership with the University of Maryland Extension to explore a wide range of topics related to soil quality. This collaboration will provide access to expert guidance on improving soil health, addressing potential contamination issues, and optimizing the garden's long-term sustainability.

The Extension's Home and Garden Information Center (HGIC) provides invaluable support with science-based resources and expert guidance on gardening techniques, plant selection, soil health, and pest management. Volunteers from the HGIC's Master Gardener Program can offer training and support to strengthen community gardening efforts. Another valuable resource is the Community Learning Garden (CLG) program of the University of Maryland Arboretum and Botanical Garden. The CLG is a garden, a "living classroom that educates visitors," demonstrating practical green space usage, promoting environmental stewardship, local food production, and community involvement, making it a model for Langley Park's community garden educational goals. By working closely with these stakeholders, Langley Park can ensure that the community garden is a valuable green space and a safe and thriving environment for its residents.

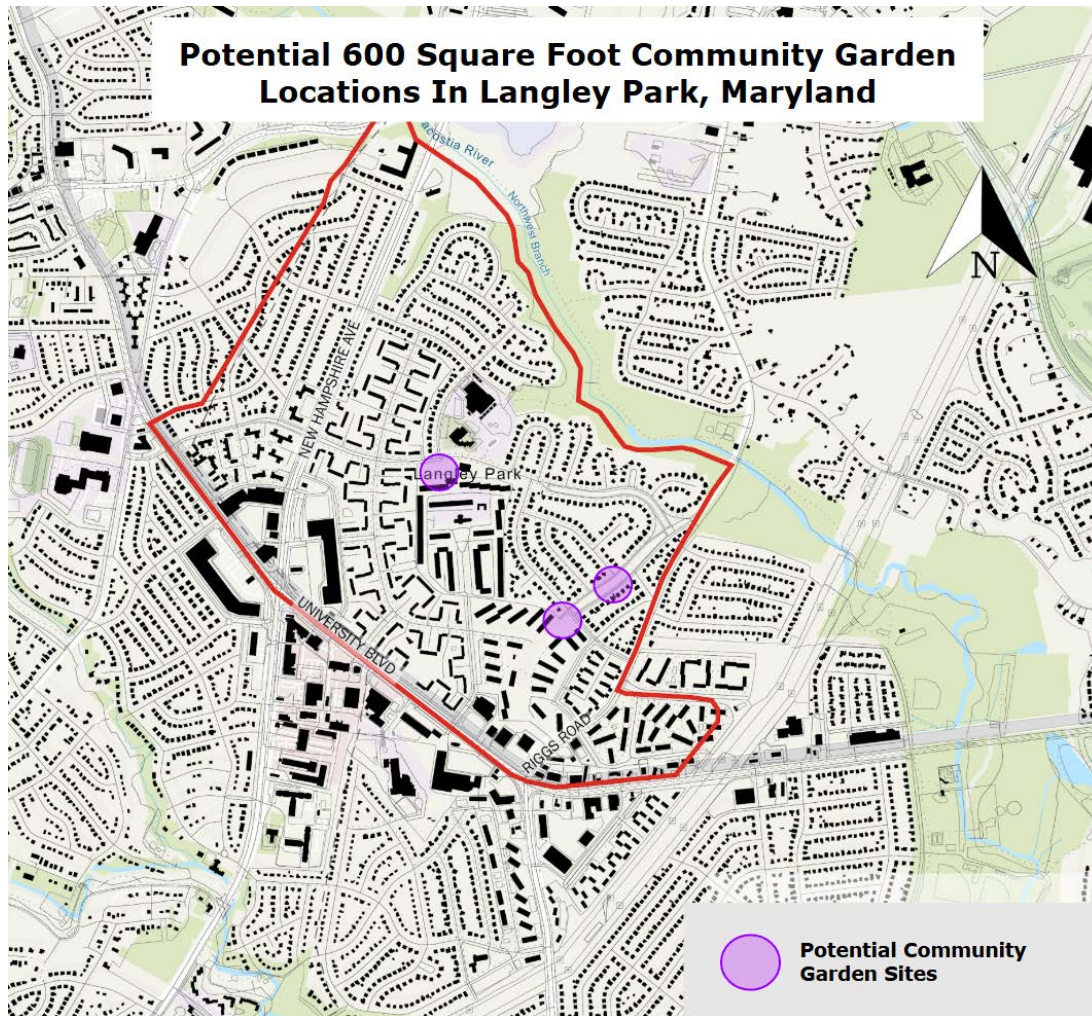


Fig. 37. Potential 600 Square Foot Community Garden Locations in Langley Park, Maryland, 2024.

Before



After



Figure 38. Before and after rendering of a community garden in the residential area of Langley Park, Maryland, 2024

Action Step E: Monitoring and Evaluation.

For monitoring and evaluation, Langley Park will establish a system to assess the community garden's progress and effectiveness regularly. This will include periodic soil testing, plant health assessments, and monitoring of the involvement of residents and volunteers. Regular feedback from stakeholders, including the University of Maryland Extension and the Home and Garden Information Center, will inform any necessary adjustments. Key performance indicators (KPIs) such as garden yield, soil health improvements, and community engagement will be tracked to ensure the long-term sustainability and success of the garden.

Strategy 1.3.2 Collaborate with the Environmental Finance Center and the University of Maryland Extension to provide community education on gardening and sustainable gardening practices.

Action Step A: CASA Organizes Initial Partnership Meeting.

Meet with all identified stakeholders to clarify the purpose of the partnership, roles, and responsibilities. It's essential to map these clearly due to overlapping resources, particularly in education and local capacity building. The EFC can provide customized training to Langley Park's environmental stewards. At the same time, the UMD Extension's HGIC offers science-based, non-formal education, which is invaluable for residents who may not have formal education. The Community Learning Garden is also a fitting resource, offering a living classroom that can be a hands-on introduction before residents begin gardening at home. Each program must be assessed to avoid redundancy to ensure Langley Park receives the most suitable support, focusing on the most relevant and adaptable resources without overwhelming the community.

ACTION STEP B: Partners develop an educational curriculum based on established methods.

Create a curriculum that reflects Langley Park's unique environmental and social context, drawing on our People & Place analysis of the community. This will include consideration of residents' lifestyles, family profiles, and work schedules, many of whom hold multiple jobs. The curriculum can incorporate practical elements, like how street vendors might monitor nearby farms and how the diverse population may include local experts and focus on sustainable gardening practices, local plant species, and resource management.

ACTION STEP C: Launch Pilot Workshop Series for Community Feedback.

Testing these processes is important, so pilot workshops are essential for evaluating the curriculum and gathering feedback. Organize and run a series of pilot workshops to assess the curriculum, collect community input, and evaluate the effectiveness of the training methods.

ACTION STEP D: Create a Community Garden Guidebook for Ongoing Education.

In collaboration with the Home and Garden Information Center (HGIC) of the University of Maryland Extension, Langley Park can create a detailed guidebook and audiovisual materials in Spanish, serving as a lifelong resource for developing and maintaining a community garden. The Extension, known for its research-based expertise in sustainable gardening practices, will provide valuable insights and evidence to support these resources. Additionally, a curriculum can be developed to be taught in schools, focusing on gardening and general environmental awareness, all in Spanish, to support long-term education and sustainability in the community.

ACTION STEP E: Establish Ongoing Community Workshops and Volunteer Opportunities.

Engage the community by offering opportunities to earn volunteer hours through garden participation. Organize regular workshops and volunteer days to promote ongoing learning, garden upkeep, and knowledge exchange.

Table 17: Strategic Planning for Environment Goal #2

Goal 2: Reduce The Urban Heat Island Effect			
Objective	Strategies	Stakeholders	Expected Outcomes
2.1 Increase tree canopy cover by 4% by 2030 and 8% by 2034 throughout Langley Park, Maryland	2.1.1 Form a partnership between Takoma Langley Crossroads Development Authority and local businesses to leverage federal, state and local tree planting grant programs for tree planting on the property of local businesses 2.1.2 Form a partnership between the Langley Park Civic Association and local residents to leverage federal, state and local tree planting grant programs to establish a	2.1.1 Takoma-Langley Crossroads Development Authority, Langley Park businesses, Prince George’s County Department of Environment, Tree Providers, Local landscaping companies, Maryland Department of Natural Resources,	If Objective 2.1 is achieved, tree canopy cover in Langley Park, Maryland will increase by 8% by 2034, providing shade and cooling the urban environment by approximately 0.11°C

	community-led Urban Forestry Program where residents can actively participate in tree planting and maintenance throughout Langley Park	Chesapeake Bay Trust, Maryland Department of Transportation, U.S. Forest Service, U.S. Environmental Protection Agency 2.1.2 Langley Park Civic Association, Langley Park residents, Prince George's County Department of Environment, Tree Providers, Maryland Department of Natural Resources, Chesapeake Bay Trust, Maryland Department of Transportation, U.S. Forest Service, U.S. Environmental Protection Agency	(Iungman, et al. 2023)
2.2 Apply cool or reflective pavements on 25% of Langley Park's public spaces by 2034	2.2.1 Identify and prioritize public spaces for cool or reflective pavement applications, focusing on high-heat zones and pedestrian-heavy areas along University Boulevard. Utilize federal and state funding programs to pilot these projects and address critical heat mitigation needs. 2.2.2 Develop and implement educational campaigns to engage community in the process of applying cool reflective pavement	2.2.1 Maryland Department of Transportation (MDOT), Prince George's County Department of Public Works and Transportation, Takoma Langley Crossroads Development Authority, Environmental Protection Agency (EPA), Contractors and Material Suppliers 2.2.2 CASA, Langley Park Civic Association, Local Residents, Environmental Nonprofits, Prince George's County Sustainability Division, Local Schools, University of Maryland	If Objective 2.2 is achieved, local surface temperatures will be reduced by 5.5–11°C, which can lower the air temperature by 0.5–1°C on average (Santamouris, 2013)
2.3 Reduce impervious surfaces	2.3.1 Enhance public paths with permeable	2.3.1 Prince George's County Department of	If Objective 2.2 is achieved,

by 10% by 2034	infrastructure 2.3.2 Develop a cost-sharing program for commercial properties along University Blvd to transform impervious surfaces into pervious surfaces	Public Works and Transportation, Maryland Department of the Environment (MDE), Federal and State Grant Programs, Community Organizations (e.g., Langley Park Civic Association, CASA, TLCDA), Residents and Pedestrians 2.3.2 Takoma Langley Crossroads Development Authority, Commercial Property Owners, Prince George's County Economic Development Corporation, Environmental Nonprofits, State and Federal Funding Agencies, Maryland Department of the Environment (MDE)	localized surface temperatures may be reduced by 1–2.2°C in affected areas. This could translate to an average ambient air temperature reduction of 0.3–0.6°C (Sailor, 1995)
----------------	---	--	---

Objective 2.1 Increase tree canopy cover by 4% by 2030 and 8% by 2034 throughout Langley Park.

Strategy 2.1.1 Form a partnership between Takoma Langley Crossroads Development Authority and local businesses to leverage federal, state, and local tree planting grant programs for tree planting on the property of local businesses.

Action Step A: Establish a partnership framework among key community stakeholders.

The Takoma Langley Crossroads Development Authority (TLDA) should liaise between local businesses and grant providers, aligning efforts with Langley Park's environmental sustainability goals. Businesses can include both commercial establishments and residential building management. Presenting the benefits of increased tree canopy—such as higher property values, better stormwater management, and improved community health—can incentivize

businesses to join the initiative. Involving representatives from grant programs ensures funding opportunities are identified early, and application requirements are clearly understood, streamlining the process of securing financial support. Potential grant representatives are identified in Action Step C below.

TLDA should formalize partnerships with local businesses with a clear framework outlining roles, responsibilities, and commitments. This includes drafting memoranda of understanding (MOUs), identifying funding opportunities, and defining the scope of tree-planting activities on business properties. TLDA can coordinate communication, oversee grant applications, and manage timelines for key activities like application deadlines, planting schedules, and progress evaluations. Local businesses might commit to providing planting sites and maintaining the trees, while grant providers supply the financial resources needed to achieve the initiative's goals.

Action Step B: Create a tree planting plan

The TLDA should develop a detailed tree-planting plan to facilitate grant application and guide tree-planting implementation. This plan should include maps of proposed planting areas, letters of support from local businesses, and evidence of community benefits. Community meetings and online surveys can serve to identify potential tree-planting locations. The TLDA should ensure trees are planted within the commercial corridor and near residences.

Achieving a 4% increase in tree canopy cover by 2030 and an 8% increase by 2034 will likely require planting approximately 1,500 to 2,000 trees, depending on species and spacing (Arbor Day Foundation, n.d.). Since Langley Park should implement a community-led urban forestry initiative concurrently (outlined in Strategy 2.1.2), the TLDA and local businesses should establish a goal of planting at least 1,000 trees on business property. Tree costs, including purchase, planting, and initial care, could range from \$150 to \$300 per tree, making grant funding vital to offset these expenses (Davey Resource Group, 2020). Trees can be sourced from local nurseries, state forestry programs, or nonprofit organizations, often providing discounted or donated trees for community projects (U.S. Forest Service, 2024). Potential tree sources include:

1. **Arbor Day Foundation:** A nonprofit organization dedicated to planting, nurturing, and celebrating trees worldwide. The foundation operates distribution programs that provide low-cost or free trees to municipalities and individuals. Their tree nursery network includes a variety of native

species suited for urban environments (Arbor Day Foundation, 2024b).

2. **Denchfield Nursery, Inc.:** Located in Hyattsville, MD, Denchfield Nursery offers a wide selection of top-quality trees and provides delivery services to nearby areas, including Langley Park (Denchfield Nursery, 2024).

Patuxent Nursery: Situated in Bowie, MD, Patuxent Nursery serves the College Park area and offers a variety of trees and plants suitable for urban environments (Patuxent Nursery, 2024).

Takoma Garden Center: Based in Takoma Park, MD, this garden center provides a range of gardening supplies, including trees, and is conveniently located near Langley Park (Takoma Garden Center, 2024).

When selecting tree species for planting in Langley Park, it is essential to consider both environmental suitability and community benefits. Langley Park's climate and urban setting require trees to be resilient to heat, stormwater, and poor soil conditions. A diverse selection of trees, including ornamental and fruit-bearing species, can enhance the local ecosystem, improve air quality, and provide food resources for residents. Fruit trees can also support local food security. Food security is vital for Langley Park because it is generally a low-income community where residents may struggle to afford food.

Below are several types of trees that are well-suited for planting in Langley Park, including fruit trees:

1. **Red Maple (*Acer rubrum*)**

Red maples are hardy, fast-growing trees that tolerate various soil types and moisture levels. They provide year-round beauty with red flowers in spring and vibrant foliage in fall. They can grow up to 40 feet tall, making them an excellent choice for increasing canopy cover (USDA, 2020).

2. **American Sweetgum (*Liquidambar styraciflua*)**

The American sweetgum is a deciduous tree known for its star-shaped leaves and striking fall color. It is also highly adaptable to various soil conditions and urban environments, providing aesthetic and environmental benefits, such as stormwater management and air quality improvement (McPherson et al., 2011).

3. **Northern Red Oak (*Quercus rubra*)**

Native to Maryland, the Northern red oak is an excellent tree for large spaces in urban areas. It tolerates various soil types and benefits wildlife, including acorns for birds and small mammals (USDA, 2020). It also has a

straight trunk that adds structural integrity to urban landscapes.

4. Black Tupelo (*Nyssa sylvatica*)

Known for its stunning fall color, the black tupelo thrives in wet soil and is adaptable to urban environments. It is also a significant tree for local wildlife, providing habitat and food sources for birds (McPherson et al., 2011)

5. Apple (*Malus domestica*)

Apple trees are a popular choice for urban fruit tree planting. They can be planted in smaller spaces and yield abundant fruit that the community can use. Dwarf apple trees are ideal for smaller spaces and urban environments (USDA, 2020).

6. Persimmon (*Diospyros virginiana*)

Native persimmon trees are highly adaptable and produce sweet, flavorful fruit that ripens in late fall. They thrive in Maryland's climate and can be an attractive addition to residential and business properties. Additionally, persimmons require minimal care once established (Lifshutz, 2020).

7. Pawpaw (*Asimina triloba*)

The pawpaw is native to Maryland and produces large, custard-like fruit. It is well-suited for the area's climate and provides a unique fruit crop that can enhance local food access. Pawpaw trees are shade-tolerant and can thrive in the under-canopy of larger trees (USDA, 2020).

8. Pear (*Pyrus spp.*)

Pear trees, particularly the hardy varieties such as Bartlett and Bosc, are well-suited for Maryland's climate. They produce high-quality fruit and are relatively low maintenance. Planting pear trees in Langley Park would increase canopy coverage and provide healthy fruit for the community (Lifshutz, 2020).

Action Step C: Apply for grant opportunities

Applying for grant funding is essential to secure the financial resources needed to achieve Langley Park's tree canopy goals. To strengthen applications, TLDA should present a clear vision, including estimated costs and the projected impact of the project. Collaborating with grant providers and technical experts ensures all application requirements are met, increasing the likelihood of success. Once funding is secured, TLDA can revise the tree planting plan by establishing a clear budget and allocating resources to different aspects of the project, such as tree purchase, labor costs, and

educational outreach.

Potential local tree planting grant programs include:

1. **Prince George's County Tree Canopy Program**

This program provides financial assistance to local governments, organizations, and Prince George's County community groups to expand tree canopies. Langley Park, located in Prince George's County, can benefit from this initiative to plant trees on public and private lands (Prince George's County Department of Environment, 2024)

2. **Prince George's County Tree ReLEAF Program**

This program is a local initiative designed to promote tree planting and increase tree canopy coverage across the county. This program provides free or discounted trees to residents, nonprofit organizations, and businesses within Prince George's County, aiming to enhance the community's environmental sustainability (Prince George's County DOE, 2024)

Potential state tree planting grant programs include:

1. **Maryland Department of Natural Resources (DNR) - Tree Planting Program**

The Maryland DNR offers various grant programs to support tree planting in urban communities. The Urban and Community Forestry Grant Program funds tree-planting projects that enhance community green spaces and improve environmental sustainability (Maryland Department of Natural Resources, 2024)

2. **Maryland's 5-Million Trees Initiative**

This statewide initiative aims to plant and maintain 5 million trees by 2031. The program supports urban and community tree-planting projects through grant funding and technical assistance. Langley Park can apply for funding to increase its urban canopy under this initiative (Maryland Department of Natural Resources, 2024).

3. **The Chesapeake Bay Trust Tree Canopy Grants**

The Chesapeake Bay Trust provides grants for tree-planting initiatives that focus on improving water quality and enhancing urban green spaces in the Chesapeake Bay watershed, which includes Langley Park. These grants support environmental education and tree-planting projects (Chesapeake Bay Trust, 2024)

4. **Maryland Department of Transportation (MDOT) Urban Tree Program**

MDOT offers grants and technical support for urban tree planting projects, focusing on environmental sustainability in urban communities (Maryland Department of Transportation, 2024)

Potential Federal tree planting grant programs include:

1. **U.S. Forest Service Urban and Community Forestry Program**

The U.S. Forest Service grants communities to plant and maintain trees in urban areas. This program is designed to improve the quality of life in cities by enhancing green infrastructure and addressing environmental challenges like stormwater runoff (U.S. Forest Service, 2024)

2. **U.S. Environmental Protection Agency (EPA) Environmental Education Grants**

The EPA offers grants that can be applied to projects incorporating tree planting as part of broader environmental education and community engagement initiatives. This program supports projects that promote sustainable practices and environmental stewardship (EPA, 2024)

Action Step D: Implement tree planting initiatives

Once the tree planting plan is developed, the next step is to implement the planting initiatives. This includes organizing tree-planting events and coordinating efforts with local businesses, volunteers, and contractors. TLCDA should work closely with businesses to schedule planting days and ensure proper preparation of planting sites. Key considerations during implementation include preparing the ground for tree installation, including digging holes, amending soil, and ensuring adequate space for each tree's growth (Arbor Day Foundation, 2024c). The project can maximize its environmental impact by focusing on priority locations, such as underutilized parking lots or business storefronts, such as reducing heat islands and improving air quality.

Action Step E: Establish and execute a maintenance protocol

To ensure the planted trees thrive and contribute to Langley Park's long-term canopy goals, it is essential to establish a maintenance protocol. This includes watering schedules, mulching, and pest management, with estimated annual maintenance costs of \$25 to \$75 per tree per year (International Society of Arboriculture, 2020). During the first few years,

trees are highly vulnerable to drought, disease, and pest infestation, so consistent care is required (Tree Care Industry Association, 2024). TLCDA should set up a maintenance schedule that includes seasonal checks, watering during dry periods, and addressing issues such as weed growth and soil compaction. This step ensures that the initial investment in planting yields long-term benefits for the community and the environment.

A successful maintenance protocol can also include collaboration with local businesses to share the responsibility for tree care. Businesses with trees on their properties can be encouraged to participate in the trees' care actively, reducing the long-term burden on TLCDA. Alternatively, TLCDA may partner with local landscaping companies or tree care professionals to provide discounted services, ensuring planted trees' ongoing health and survival. A list of local landscaping companies includes:

1. **Tree Care of Maryland**

Specializes in tree planting, care, and removal, offering services to ensure healthy and thriving trees in residential and commercial landscapes (Tree Care of Maryland, 2024)

2. **American Tree Experts**

Provides professional tree planting and maintenance services, ensuring proper species selection and placement to enhance landscape aesthetics and health (American Tree Experts, 2024).

3. **GreenTree Landscaping**

Focuses on tree planting and landscaping services that prioritize environmental sustainability and the use of native plants in urban areas (GreenTree Landscaping, 2024).

4. **Urban Forest Management**

Specializes in urban tree planting, including site evaluation, proper planting techniques, and long-term care for trees in urban and suburban areas (Urban Forest Management, 2024).

5. **Tree Solutions, LLC**

Offers comprehensive tree planting and maintenance services, focusing on improving tree canopy coverage and enhancing property value through strategic tree planting (Tree Solutions, LLC, 2024).

Action Step F: Monitor and evaluate progress toward tree planting goals

Regular monitoring and evaluation are crucial to assess whether tree planting initiatives are on track to meet Langley Park's 4% canopy cover goal by 2030 and 8% by 2034. TLCDA should develop a system for tracking progress using tools such as GIS mapping or drone surveys to measure canopy coverage over time. The monitoring process should include tracking metrics such as survival rates of planted trees and canopy coverage. This data will be essential in determining whether additional trees or the planting strategy needs adjustment.

Evaluation should also focus on stakeholder engagement and feedback, particularly from local businesses. Understanding how well businesses are adhering to maintenance protocols or if they require additional support will allow TLDA to make informed adjustments to the tree-planting strategy. To maintain transparency and accountability, annual progress reports can be shared with stakeholders, including grant providers, local businesses, and the community. Monitoring progress allows TLDA to demonstrate the initiative's success, secure continued funding, and refine the approach as needed. With consistent evaluation and data-driven adjustments, Langley Park can achieve its tree canopy cover goals and continue to reap the environmental, social, and economic benefits of an increased tree canopy.

Strategy 2.1.2 Form a partnership between the Langley Park Civic Association and residents to leverage federal, state, and local tree-planting grant programs to establish a community-led Urban Forestry Program where residents can actively participate in tree planting and maintenance throughout Langley Park

Action Step A: Establish a partnership framework among key community stakeholders

The Langley Park Civic Association (LPCA) should establish a partnership framework that brings together community residents and grant providers, aligning these efforts with Langley Park's environmental sustainability objectives. Highlighting the benefits of an expanded tree canopy—such as increased property values, improved stormwater management, and enhanced community health—can motivate residents to participate in the initiative. Involving representatives from grant programs ensures early identification of funding opportunities and a clear understanding of application requirements,

simplifying the process of securing financial support.

LPCA should formalize partnerships with community members by creating a framework that clearly defines roles, responsibilities, and commitments. This includes drafting memoranda of understanding (MOUs), identifying funding sources, and specifying the scope of tree-planting activities throughout Langley Park. LPCA should coordinate communication, oversee grant applications, and manage timelines for critical tasks, such as application deadlines, planting schedules, and progress evaluations.

Action Step B: Create a community-led Urban Forestry Program plan.

The LPCA should create an Urban Forestry Program plan to increase tree canopy cover by 4% by 2030 and 8% by 2034. This plan should incorporate feedback from the community to ensure it addresses local needs and priorities, such as selecting appropriate tree species and planting locations. A list of suitable tree species for Langley Park is provided in Strategy 2.1.1 Action Step B above.

To achieve a 4% increase by 2030 and 8% by 2034, approximately 1,500 to 2,000 trees may need to be planted, depending on species and spacing (Arbor Day Foundation, n.d.). Given the concurrent business-focused tree planting initiative outlined in Strategy 2.1.1, the LPCA and community members should aim to plant at least 1,000 trees across Langley Park. The cost of trees—including purchase, planting, and initial care—can range from \$150 to \$300 per tree, making grant funding crucial to covering these expenses (Davey Resource Group, 2020). Trees can be sourced from local nurseries, state forestry programs, or nonprofit organizations that often offer discounted or donated trees for community projects (U.S. Forest Service, 2024). A list of potential tree sources is provided in Strategy 2.1.1 Action Step B above.

The program plan should also outline strategies to engage residents in hands-on participation and long-term urban forest stewardship, focusing on education, volunteerism, and inclusivity. Workshops, informational sessions, and volunteer opportunities can help foster community involvement and raise awareness. The program should ensure that all community members, including underrepresented groups, have the chance to participate.

Action Step C: Apply for grant opportunities

Securing grant funding is crucial for obtaining the financial resources necessary to meet Langley Park's tree canopy goals. To strengthen applications, the LPCA should present a clear vision that includes estimated costs and the project's anticipated impact. Working closely with grant providers and technical experts ensures that all application requirements are fulfilled, increasing the chances of success. Once funding is obtained, LPCA can refine the tree planting plan by establishing a detailed budget and allocating resources for various aspects of the project, including tree purchase, labor costs, and educational outreach. Potential local, state, and federal tree planting grant programs are listed in Strategy 2.1.1 Action Step C above.

Action Step D: Implement the community-led Urban Forestry Program.

Once the community-led Urban Forestry program plan is in place, the next step is implementing the tree-planting initiatives. This involves organizing tree-planting events and coordinating efforts with community members. The LPCA should collaborate with residents to schedule planting days and ensure that planting sites are adequately prepared. Key tasks during implementation include preparing the ground for tree installation, such as digging holes, amending the soil, and ensuring sufficient space for each tree to grow (Arbor Day Foundation, 2024c). The project can maximize its environmental impact by focusing on priority locations like residential areas and parks.

Before



After



Figure 39. Before and after rendering of trees lining University Boulevard in the commercial corridor of Langley Park, Maryland, 2024

Action Step E: Establish and execute a maintenance protocol.

To ensure that the planted trees thrive and contribute to Langley Park's long-term canopy goals, it is crucial to establish a maintenance protocol. This should include watering schedules, mulching, and pest management, with estimated annual maintenance costs ranging from \$25 to \$75 per tree (International Society of Arboriculture, 2020). In the early years, trees are particularly vulnerable to drought, disease, and pest infestations, so consistent care is essential (Tree Care Industry Association, 2024). The LPCA should create a maintenance schedule in collaboration with participating community members, which includes seasonal checks, watering during dry spells, and addressing issues like weed growth and soil compaction. This approach ensures that the initial investment in planting results in long-term benefits for the community and the environment.

Action Step F: Monitor and evaluate progress toward tree planting goals.

Regular monitoring and evaluation are essential to determine whether the tree planting initiatives are progressing toward Langley Park's goal of achieving 4% canopy cover by 2030 and 8% by 2034. The LPCA should establish a system for tracking progress, utilizing tools like GIS mapping or

drone surveys to measure changes in canopy coverage over time. The monitoring process should include tracking key metrics, such as tree survival rates and canopy expansion. This data will help determine if additional trees are needed or if adjustments to the planting strategy are necessary.

Evaluation should also consider stakeholder engagement and feedback, especially from community members. Understanding how well community members are following maintenance protocols or if they need further support will enable LPCA to make informed adjustments to the tree planting strategy. To ensure transparency and accountability, annual progress reports should be shared with stakeholders, including grant providers and the community. By monitoring progress, the LPCA can demonstrate the initiative's success, secure continued funding, and refine the approach as needed. With consistent evaluation and data-driven adjustments, Langley Park will be able to meet its tree canopy goals and continue to enjoy the environmental, social, and economic benefits of a greater tree canopy.

Objective 2.2 Apply cool or reflective pavements on 25% of Langley Park's public spaces by 2034.

A comparison of heat maps with neighboring Takoma Park reveals significant temperature fluctuations, with Langley Park experiencing intense heat island effects, particularly along University Boulevard, where many commercial properties are located. During site visits, the studio observed that walking along University Boulevard is notably exhausting due to extreme heat. This issue was echoed by residents during community engagement sessions, with many identifying University Boulevard as a high-heat area. In focus group discussions at the end of the semester, residents expressed interest in cool pavements as a potential solution to mitigate high temperatures. However, they did not clearly understand what cool pavements are. Given that most Langley Park residents rely on walking rather than private vehicles, this concern is heightened, especially with the ongoing Purple Line construction, which has closed many crosswalks and forced longer pedestrian detours. These conditions affect residents relying heavily on local businesses and shops along this corridor.

Strategy 2.2.1: Identify and prioritize public spaces for cool or reflective pavement applications, focusing on high-heat zones and pedestrian-heavy areas along University Boulevard. Utilize federal and state funding programs to pilot these projects and address critical heat mitigation needs.

Action Step A. Identify priority areas for cool or reflective pavement and conduct a feasibility study.

MDOT and the Prince George's County Department of Public Works can collaborate to identify high-heat zones and pedestrian-heavy corridors in Langley Park, such as University Boulevard, using heat mapping data and community feedback. The Takoma Langley Crossroads Development Authority should also engage with local businesses to gather input and prioritize areas for cool pavement applications. Forming partnerships with cool pavement material suppliers and contractors should be involved in conducting feasibility assessments and providing cost estimates for implementing reflective pavement technologies, ensuring the solutions are practical, effective, and aligned with community needs.

Action Step B. Develop funding applications and secure grants through local and state collaboration.

MDOT and the Prince George's County Department of Public Works can collaborate to prepare funding applications for federal and state grant programs, such as the EPA's Heat Island Mitigation Program or Maryland's Climate Solutions Grant. To strengthen these applications, the Takoma Langley Crossroads Development Authority can highlight community and business partnerships, demonstrating broad local support and the potential for impact.

Action Step C. Pilot cool pavement projects in priority areas.

MDOT and the Prince George's County Department of Public Works implement a cool pavement pilot project in priority areas like sidewalks and public squares to reduce the urban heat island effect. Following EPA technical guidance will ensure the best material selection, installation, and maintenance practices, promoting environmental and social benefits.

Action Step D. Monitor, evaluate, and expand implementation.

MDOT and the County Department of Public Works should oversee the monitoring and evaluation of the cool pavement pilot projects to assess their effectiveness in reducing surface temperatures and improving walkability. The Takoma Langley Crossroads Development Authority should gather feedback from local businesses and residents to inform the project further. Based on these results, the program should be expanded to additional areas, incorporating lessons learned from the pilot phase to enhance its impact and reach.

Strategy 2.2.2 Develop and implement educational campaigns to engage the community in applying cool reflective pavement.

Engage with the CASA and Langley Park Civic Association, community organizations, and residents to create an educational campaign about the benefits of cool pavements. Incorporate resident feedback on high-priority areas for improvement and establish a community oversight program to ensure proper implementation and maintenance of reflective surfaces in public spaces.

Action Step A. Develop a partnership framework among community organizations, local schools, and UMD.

Develop an educational campaign with the Langley Park Civic Association, CASA, and environmental nonprofits. This campaign should use data from the Prince George's County Sustainability Division to create informative materials about the benefits of cool pavements. At the same time, local youth from schools and UMD should engage students in creating interactive workshops and multimedia content to raise awareness, especially targeting the diverse international community and its values.

Action Step B. Conduct community outreach to collect community feedback.

The second step is to conduct community outreach and gather feedback. Workshops, town hall meetings, and surveys should be held to educate residents about cool pavements and collect input on priority areas for improvement. Citizen science projects like heat mapping or pavement temperature monitoring should encourage student participation and gather valuable data on local needs.

Action Step C. Establish a community stewardship and maintenance program.

Establish a community oversight and maintenance program - a committee composed of community members, local organizations, and environmental experts should be formed to monitor the implementation and long-term maintenance of cool pavements. With UMD's assistance, volunteers and students should be trained as citizen scientists to maintain reflective pavements, and an online portal should allow residents to report issues and track updates. This should encourage ownership and stewardship of the community. The program's effectiveness should be evaluated and used to expand the initiative to additional areas in Langley Park.

Precedents of Cool Pavement Program:

1. **City of Davis, California – Cool Pavement Project:** The City of Davis secured a \$24 million federal grant to implement its Cool Pavement Project. This initiative aims to install cool pavement technologies and rehabilitate roadways to combat extreme heat.
2. **Montgomery County, Maryland – Cool Streets Guidelines:** Montgomery County developed the "Cool Streets Guidelines" to explore design strategies that improve outdoor thermal comfort in Downtown Silver Spring. The analysis tested various surface materials to assess their effectiveness in reducing heat stress.
3. **Federal Funding Opportunities for Smart Surfaces:** The National League of Cities highlights federal grants that support resilient infrastructure, including cool pavements. Programs like the Climate Pollution Reduction Grant and the Environmental and Climate Justice Community Change Grant provide funding for such initiatives. The Environmental Protection Agency (EPA) also offers information on using cool pavement technologies to reduce heat islands and manage stormwater.

Exploring these examples and funding opportunities can provide valuable insights and potential financial support for implementing cool pavement strategies in Langley Park.

Objective 2.3 Reduce impervious surfaces by 10% by 2034 in the Commercial Corridor of Langley Park.

In Langley Park, block groups around University Boulevard, characterized by a high concentration of commercial properties, exhibit approximately 45% impervious surface coverage. These impervious materials contribute to heat retention, intensifying the urban heat island effect. Implementing targeted development strategies to reduce impervious surfaces in these areas can significantly mitigate heat and enhance the local microclimate.

Impervious Surface in Langley Park Census Block Groups

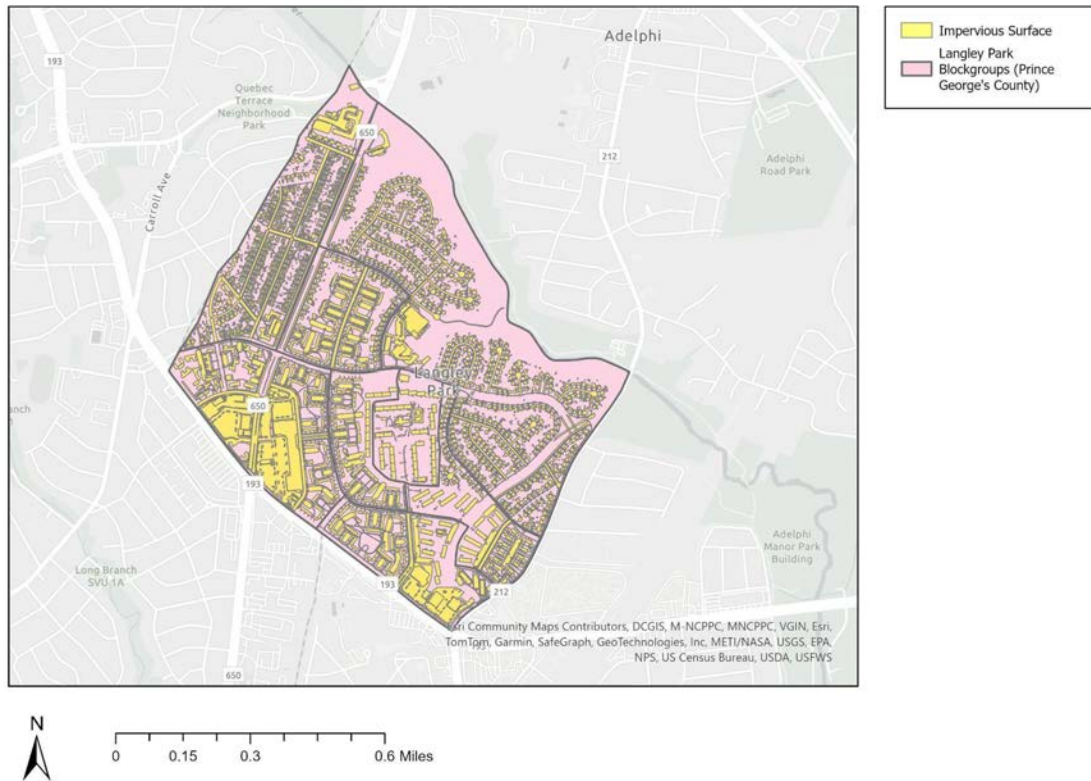


Fig. 40. Langley Park's impervious surface area map shows the dense development along University Blvd and the high level of imperviousness in those census block groups.

Strategy 2.3.1 Enhance public paths with permeable infrastructure.

Collaborate with the Prince George's County Department of Public Works and Transportation to replace impervious sidewalks and vegetation strips along public paths with permeable pavements and green infrastructure. Prioritize areas prone to flooding or those near stormwater drainage systems, leveraging federal and state grants to fund the retrofitting projects.

Action Step A. Utilize community organizations to prioritize locations to implement permeable infrastructure.

The first step to implementing the permeable infrastructure retrofitting program is identifying and prioritizing target areas by surveying public paths prone to flooding and consulting with community organizations like Langley Park Civic Association and CASA for local insights. This should also help

residents learn about permeable pavers and encourage community stewardship by providing best practices for maintaining permeable pavements. The Maryland Department of the Environment (MDE) should provide technical assistance in analyzing areas with high stormwater runoff and heat island effects.

Action Step B. Develop funding applications and secure grants through local government and community organization partnership.

Secure funding with community partnership that shows the community's need by preparing grant applications with the support of the Prince George's County Department of Public Works and Transportation (DPW&T) and MDE, targeting federal and state programs such as the EPA's Green Infrastructure Grant. Advocacy efforts should highlight permeable paths' environmental, social, and economic benefits to attract funding.

Action Step C. Design, implement, and maintain permeable paths through community organizations.

Design, implement, and maintain the retrofitting projects where DPWT should oversee the construction of permeable paths, integrating community feedback into the design. After installation, a maintenance plan should be established with DPWT to ensure the infrastructure is regularly inspected and repaired. At the same time, community organizations like CASA, Langley Park Civic Association, and Takoma Langley Crossroads Development Authority collaborate with community members to monitor and maintain the infrastructure, including training residents to report issues. Successful projects should guide the expansion of permeable infrastructure to additional locations.

Strategy 2.3.2 Develop a cost-sharing program for commercial properties along University Blvd to incentivize pervious surfaces.

Develop a cost-sharing funding program in partnership with Takoma Langley Crossroads Development Authority to help strip mall and commercial property owners retrofit impervious parking lots and pavements with permeable alternatives or green infrastructure, such as bioswales and rain gardens. To encourage participation, offer financial incentives, such as tax credits or matching grants.

Action Step A. Facilitate partnerships with Takoma Langley Crossroads Development Authority to secure funding.

The Takoma Langley Crossroads Development Authority should lead efforts to establish partnerships between commercial property owners, businesses, and the government to ensure a path to previous pavement implementation. It should work to secure funding through county incentives, ensuring businesses are supported throughout the retrofitting process.

Action Step B. Provide financial incentives to local business and commercial property owners to install pervious surfaces.

The Prince George's County Economic Development Corporation should offer targeted financial incentives to small businesses and commercial property owners, making retrofitting more manageable and encouraging their participation in the program with the help of the Takoma Langley Crossroads Development Authority.

Action Step C. Offer technical assistance and expertise.

Maryland Department of the Environment (MDE) and Environmental nonprofits should provide expertise and technical assistance for implementing green infrastructure, ensuring the successful installation of sustainable solutions while helping business owners navigate the complexities of the transformation. State and federal agencies should also support the program with grants and matching funds to offset costs.

Economic and Community Development

Table 18: Strategic Planning for Economic and Community Development Goal #1.

Goal 1: Improve Economic Opportunity			
Objective	Strategies	Stakeholders	Expected Outcomes
1.1 Prepare 2000 people for gainful employment by 2034	1.1.1 Regularly offer job training workshops to develop the skills and potentials of residents to prepare them for the job market. 1.1.2 Establish a local employment agency	1.1.1 Community residents of Langley Park, CASA, Takoma Langley Crossroads Development Authority,	If this objective is achieved, Langley Park will have a lot of skilled workers

Goal 1: Improve Economic Opportunity

	or career center that provides personalized job/career placement and guidance services.	Langley Park Civic Association, Prince George's County Thriving Communities Network and their collaborators, National Center for Construction Education and Research (NCCER), North American Board of Certified Energy Practitioners (NABCEP), American Society for Healthcare Engineering (ASHE). 1.1.2 Community residents of Langley Park, CASA, Takoma Langley Crossroads Development Authority, Langley Park Civic Association.	that meet the needs of the job market placed in various job positions.
1.2 Increase access to small business loans to 200 business owner before 2034	1.2.1 Collaborate with banks, credit unions, and Community Development Financial Institutions (CDFIs) to create tailored loan products for small businesses. 1.2.2 Provide personal counseling and mentorship to guide business owners through the loan application process and improve their creditworthiness 1.2.3 Set up a business incubator or co-working space to offer shared resources and mentorship for startups 1.2.4 Leverage on the Maryland Small Business Development Financing Authority Program to directly finance minority businesses in Langley Park.	1.2.1 Maryland Department of Commerce, Maryland Small Business Development Center (SBDC), Prince George's County Economic Development Corporation (EDC), U.S. Small Business Administration (SBA) – Maryland District Office, Residents of Langley Park, Local Entrepreneurs, Community residents of Langley Park, CASA, Takoma Langley Crossroads Development Authority, Langley Park Civic Association.	If this goal is achieved, small and minority businesses will thrive and will not be displaced, yielding economic benefits to residents.

Goal 1: Improve Economic Opportunity

		1.2.2 Maryland Department of Commerce, Maryland Small Business Development Center (SBDC), Prince George's County Economic Development Corporation (EDC), Maryland District Office, Residents of Langley Park, Local Entrepreneurs, Community residents of Langley Park, CASA, Takoma Langley Crossroads Development Authority, Langley Park Civic Association. 1.2.3 Maryland Department of Commerce, Maryland Small Business Development Center (SBDC), Prince George's County Economic Development Corporation (EDC), Maryland District Office, Residents of Langley Park, Local Entrepreneurs, Community residents of Langley Park, CASA, Takoma Langley Crossroads Development Authority, Langley Park Civic Association. 1.2.4 Latino Economic Development Center (LEDC), University of Maryland Small Business Development Center,	
--	--	---	--

Goal 1: Improve Economic Opportunity			
		Maryland Hispanic Chamber of Commerce, Maryland Department of Commerce, Local Minority-Owned Businesses, Local Minority-Owned Businesses, Community residents of Langley Park, CASA, Takoma Langley Crossroads Development Authority, Langley Park Civic Association, Maryland Small Business Development Financing Authority (MSBDFA).	
1.3 Increase access to education by 10% by 2034	1.3.1 Create partnerships with local schools, community centers, and nonprofit organizations to offer free or low-cost adult education and GED programs	Local Libraries, Latino Economic Development Center (LEDC), CASA, Prince George's County Public Schools (PGCPS), Takoma Langley Crossroads Development Authority, Langley Park Civic Association, Directory of Maryland Adult Education Programs.	If this objective is achieved, residents of Langley Park will improve their literacy level, reduce the language barrier and further prepare them for the job market.

Goal 1: Improve Economic Opportunity.

Objective 1.1 Prepare 2000 people for gainful employment by 2034.

Strategy 1.1.1 Regularly offer job training workshops to develop the skills and potentials of residents to prepare them for the job market.

Action Step A: Apply and secure funding from the Workforce Innovation and Opportunity Act (WIOA).

Administered by the U.S. Department of Labor, WIOA funds workforce development programs, including job training workshops.

Action Step B: Design a comprehensive curriculum that meets the skills Langley Park Residents need.

This action seeks to adopt and design a comprehensive curriculum tailored to the needs of Langley Park residents. The North American Board of Certified Energy Practitioners (NABCEP) certification requirements can guide solar energy training. NABCEP offers the industry's highest certification program, which was developed by solar professionals for solar professionals. Regarding schedule, most sections will be held later in the day for convenience.

Action Step C: Advertise and recruit participants for solar energy, IT, and home care skills training programs.

To enhance participation in the skills training program, it is essential to use the established trust and relationships fostered by CASA and the Langley Park Civic Association within the community. These groups function as reliable mediators and possess extensive relationships with local inhabitants, rendering them optimal partners for promoting the program and enlisting participants. CASA and Langley Park Civic Association will promote the skills training program at various organized community events. Flyers, posters, and digital content will be jointly branded with CASA and the Langley Park Civic Association to augment credibility and foster community engagement. All advertisements will be bilingual.

Action Step D: Conduct a pilot skill training program.

Before the comprehensive implementation of the skills training program, a pilot initiative will be executed to evaluate its efficacy, enhance the curriculum, and resolve any logistical or operational issues. The pilot program will function as a proof of concept, confirming that the training satisfies participant requirements and aligns with the program's objectives.

Action Step E: Deliver training at accessible libraries, schools, and community centers.

Capitalize on community libraries, local schools, CASA auditorium, and community center to provide training sections for the participants. Classrooms will be set up to accommodate both group activities and individual work. Training will be held multiple times (morning, evening, and weekend) to accommodate diverse schedules, especially for working participants or parents.

Action Step F: Provide childcare centers around training areas.

A childcare facility will be created as an integral component of the training program to facilitate the involvement of mothers and caregivers. This project seeks to eliminate obstacles to enrollment and guarantee that participants can fully participate in the training sessions without worries regarding childcare obligations. The program fosters inclusivity and equitable access for all community members by providing a secure, accessible, and supportive environment for children.

Goal 1: Improve Economic Opportunity.

Objective 1.1 Prepare 2000 people for gainful employment by 2034.

Strategy 1.1.2 Establish a local employment agency or career center that provides personalized job/career placement and guidance services.

Strategy 1.2.1 Provide personal counseling and mentorship to guide business owners through the loan application process and improve their creditworthiness.

Action Step A: Offering personal counseling and mentorship to assist business owners.

Offering personal counseling and mentorship to assist business owners in navigating the loan application procedure and enhancing their creditworthiness is essential to empower entrepreneurs and stimulate economic growth. This assistance commences with tailored financial evaluations to pinpoint specific obstacles, including poor credit ratings, inadequate documents, or a lack of comprehension regarding loan prerequisites. Counselors and mentors work with participants to build customized action plans that tackle these obstacles, providing systematic help on enhancing financial management, devising thorough business strategies, and understanding lender requirements. Participants.

Goal 1: Improve Economic Opportunity.

Objective 1.1 Increase access to small business loans to 200 business owners before 2034.

Strategy 1.2.3 Set up a business incubator or co-working space to offer shared resources and mentorship for startups.

Action Step A: Identify a community space for local business discussions and incubation.

This will provide platforms where local small businesses can meet for business discussions, share business ideas, and provide solutions to local business challenges. Regarding physical space, CASA, Langley Park Association, and the Takoma Langley Crossroads Development Authority will identify a space where minority businesses and prospective entrepreneurs will be for business discussions. Virtual platforms will also be created where business owners can have unlimited business interactions and share local business opportunities.

Action Step B: Offer bi-annual workshops on business development in Langley Park.

Partnerships will be built with universities (University of Maryland) and other economic resource institutions (Maryland Hispanic Chamber of Commerce and the Latino Economic Development Center (LEDC)) to host sessions on business planning and development, fundraising, marketing, Step-by-step guides to writing effective business plans, financial projections, competitive analysis, scaling businesses, managing resources, navigating operational challenges and technology adoption. This will help small businesses and startups grow in Langley Park.

Action Step C: Offer direct business management support to failing businesses.

Providing direct business management assistance to enterprises experiencing difficulties ensures that these businesses can stabilize their operations, enhance their profitability, and contribute to the local economy. A combination of hands-on mentoring, financial help, and operational restructuring are all components of this action, and they are designed to address the specific issues these firms are currently facing.

Goal 1: Improve Economic Opportunity.

Objective 1.1 Increase access to small business loans to 200 business owners before 2034.

Strategy 1.2.3 Leverage on the Maryland Small Business Development Financing Authority Program to directly finance minority businesses in Langley Park.

Apply for the State Small Business Credit Initiative (SSBCI) loan through the

Maryland Small Business Development Financing Authority (MSBDFA) to finance small businesses in Langley Park. This program offers funding for all businesses in Maryland, focusing on businesses owned by economically and socially disadvantaged groups and individuals. MSBDFA's clients include all small businesses unable to access loans for their business on reasonable terms through the standard financing terms. The SSBCI supports businesses in expanding and rehabilitating owner-occupied spaces as well as manufacturing, services, and retail businesses.

Action Step A: Create new or organize existing small business owners and prepare them for the loans.

Takoma Langley Crossroads Development Authority and Latino Economic Development Center (LEDC) will partner to organize minority business owners and entrepreneurs who could benefit from the financing. This will create awareness about the financing initiatives among minority business owners and start the preparation for the loan application. The preparation will include preparing business documents (registration and tax documents), credit history, and financial statements. The outreach will consist of personal visits to business owners, fliers, brochures, social media posts, and snowballing (tell one to tell another).

Action Step B: Organize workshops to educate small business owners about the program and application process.

Takoma Langley Crossroads Development Authority and Latino Economic Development Center (LEDC) will capitalize on community trust to organize business owners and offer them in-depth education about the financing initiative, including but not limited to enrollment requirements/eligibility, application processes, and the various terms and conditions. This education will be multilingual.

Action Step C: Offer one-on-one assistance to business owners to help them apply for the initiative.

Establishing a help desk or local office in Langley Park is essential to provide business owners with immediate, practical assistance in navigating the Maryland Small Business Development Financing Authority (MSBDFA) program application process. Trained experts who help business owners apply for loans will provide real-time technical assistance. This will occur at a local library, government building, or a shared space within a community organization like CASA. There will also be the opportunity to review completed applications before submission.

Table 19: Strategic Planning for Economic and Community Economic and Community Development Goal #2.

Goal 2: Strengthen Community Organizing			
Objective	Strategies	Stakeholders	Expected Outcomes
2.1 Identify 4 opportunities for Langley Park to strengthen community organization potential within the next 5 years	2.1.1 Leverage state and federal connections for networking and funding 2.1.2 Improve capacity of local community stronghold organizations and community leaders through education and collaboration. 2.1.3 Explore the potential of a sister city agreement to establish a collaborative development relationship to improve capacity for community building, grant potential and collaborative programming.	2.1.1 Community residents of Langley Park, CASA, Langley Park Civic Association, Prince George's County Thriving Communities Network and their collaborators, Prince George's County, State of Maryland, Department of Transportation, Environmental Protection Agency, Department of Housing and Urban Development 2.1.2 Community members of Langley Park, CASA, Takoma Langley Crossroads Development Authority, Langley Park Civic Association, Prince George's County Public Schools 2.1.3 Community designated 501(c) 3 to be the representative body of the residents of Langley Park, High publicly elected official of a Town/City with official designation status	If Objective 2.1 is achieved, Langley Park would be a more activated space to live, with residents taking advantage of community space for socialization and business, and a greater sense of community cohesion.
2.2 Increase the amount of programming within Langley Park for children and	2.2.1 Conduct a more in depth community asset analysis on the existing organizations that design and facilitate programming within the areas surrounding Langley Park, specifically with children and	2.2.1 Community members of Langley Park, CASA, Langley Park Civic Association, Takoma Langley	If Objective 2.2 is achieved, there would be more engaging opportunities

Goal 2: Strengthen Community Organizing			
families by 15%	youth for potential modeling or collaboration. 2.2.2 Conduct program evaluations on the existing programs offered at the Langley Park Community Center 2.2.3: Organize a community sports club	Crossroads Development Authority, Prince George's County Parks and Recreation Department, Prince George's County Public Schools, Latin American Youth Center, Boys and Girls Club	through regular planning of programming and activities for the youth and families of Langley Park to socialize within their community.
2.3 Identify 3 outdoor spaces for designation, build, or rehabilitation within a 5 mile radius of CASA	2.3.1 Conduct of land survey around the official boundaries of the Langley Park area to identify sites of abandonment or mis-use	2.3.1 Community Members of Langley Park, Prince George's County Planning Department, University of Maryland School of Urban Studies and Planning, landlords, and private property owners.	If Objective 2.3 is achieved, the dense community which is located around the CASA building would have more opportunities for space activation within their community.

Goal 2: Strengthen Community Organizing.

Objective 2.1: Identify 4 opportunities for Langley Park to Strengthen community organization potential within the next 5 years.

Strategy 2.1.1: Leverage state and federal connections for networking and funding.

Action Step A: Identify a 501(c)3 organization to represent the community and be responsible for community-level initiatives to improve the quality of life for residents.

The typical procedure for grant applications for community-level initiatives requires the applicant to be a designated organization or local government-appointed body to sponsor the application. The representative body would represent community application and collaboration upon acceptance with participating parties within the network or confines of the grant required. A unified body to represent the community residents of

Langley Park be consistently dedicated to specific efforts and work within the motivation of the community.

Action Step B: Establish a representative to identify opportunities available within state and federal government.

An example of a federal partnership opportunity includes the *Thriving Communities Network program (TCN)*. The TCN is a multi-level federal agency initiative under the Department of Transportation (DOT) and the Environmental Protection Agency (EPA), which establishes networks to support marginalized communities in achieving restorative justice efforts and community development through collaboration and initiatives.

- Thriving Communities Network (TCN) information is available through the Department of Transportation website (<https://www.transportation.gov/thriving-communities-network-tcn>).

An opportunity for state-level collaboration within the State of Maryland can include the *Sustainable Communities* initiative, available throughout the Department of Housing and Community Development (DHCD). Maryland's DHCD program is a place-based opportunity to aid in designing holistic packages, including a framework for promoting efforts in responsible growth and development of communities.

- Sustainable Communities initiative information is available through the Department of Housing and Community Development website (<https://dhcd.maryland.gov/Communities/Pages/dn/default.asp>).

Action Step C: Allocate efforts to identify and collaborate with aligning community organizations.

This would create a position whose primary responsibility would be to stay up to date and actively communicate with local partners within the region to seek guidance and collaboration to improve the lived reality of those living in Langley Park.

Strategy 2.1.2: Improve capacity of local community stronghold organizations and community leaders through education and collaboration.

Action Step A: Community residents, business owners, and community organizations within Langley Park should organize to identify and promote existing efforts for intervention.

Organizations such as CASA or the Langley Park Civic Association, which act to promote positive community development but struggle with funding and capacity issues, can benefit from external intervention and collaboration with supportive partners. Volunteer efforts can aid in administrative duties that sustain the organization's operations, or intellectual and physical asset sharing to support programming efforts can positively impact the community.

Through our community engagement efforts, we learned that a community member teaches writing and reading in English to their building neighbors in their spare time. Collaborating with CASA or the Langley Park Community Center could support that generous community member in providing a space or adding another date to the CASA schedule, as they also offer English educational programming.

Action Step B: Community residents and supportive affiliated organizations should organize to identify and promote individuals within the community who could benefit from educational opportunities or funding to aid in elevating their efforts in community health and wellness.

The Chesapeake Bay Trust offers a *Community Engagement and Restoration Mentorship Program* to help improve community organizing through mentorship and educational opportunities to foster skills like grant writing and project management.

- Information about the Chesapeake Bay Trust mentorships program and other offered opportunities is available on their official website (<https://cbtrust.org/grants/community-engagement/mentorship-program/>)

Strategy 2.1.3: Explore the potential of a sister city agreement to establish a collaborative development relationship to improve capacity for community building, grant potential, and collaborative programming.

Action Step A: A unified community representative body should explore the potential of a Sister City agreement with a city or town that shares aligning community principles and the potential for healthy partnerships.

The City of Takoma Park offers a prime opportunity for potential exploration into this agreement. They're conveniently located directly adjacent to Langley Park and share conjoined assets such as the Takoma Langley Crossroads

commercial district and the Takoma Langley Crossroads Development Authority. Any future development in either location will likely experience spillover on the other side due to their small size and geographic location. A Sister City relationship can help to empower the collective in mutual positive development and cultural exchange as Langley Park represents a sizeable immigrant population that has lived in the area for generations.

Action Step B: Upon identifying a potential city or town for a sister city agreement, engage with the mayor's office of the area,

The only official requirement for establishing a Sister City agreement is mayoral approval from the proposed party. Though Sister City agreements are typically between two officially recognized towns or cities, that is not a requirement. One of the collaborating bodies can be represented by a designated 501(c) 3 organization, a clause that favors Langley Park, as it is considered an unincorporated area. This designation hinders the community's efforts in their capacity to apply for funding and development opportunities, and a sister city agreement with an acknowledged designation could aid in those efforts.

Action Step C: Create a mutually beneficial agreement contract outlining the boundaries and commitments of two participating community bodies.

Sister Cities International is a globally recognized membership body that facilitates sister-city relationships and promotes the power of cultural, educational, and information exchange to enable prosperity, peace, and community development. This established organization can aid in creating an official agreement, though it is not required to establish an official relationship. Agreements are meant to be motivated by the unique relationship between the two parties to help foster a collaborative relationship with mutual benefit.

- More information on Sister City relationships is available on the SisterCities official website (<https://sistercities.org/about-us/our-mission/>).

Objective 2.2: Increase the amount of programming within Langley Park for children and families by 15%.

Strategy 2.2.1: Conduct a more in-depth community asset analysis of the existing organizations that design and facilitate

programming within the areas surrounding Langley Park, specifically with children and youth, for potential modeling or collaboration.

Action Step A: Interested organizations or individuals should analyze the existing programs accessible to residents of Langley Park.

In a holistic effort, which would include the official boundary of Langley Park and the surrounding areas, a greater understanding of the available resources and what's needed within the area can be determined. Expanding the search efforts outside the official boundaries of Langley Park would provide better insight into what can be brought to the Langley Park area specifically. The smaller geographical boundary and the extent of pre-existing development do not support all the social activity of the Langley Park community. Through our community engagement events, we could briefly hear directly from residents. Suggestions included programs that teach how to apply for college and start your own business. More engagement time centered explicitly around this topic would help to inquire on more recommendations and provide insight into identifying why residents of Langley Park may be influenced to leave to support what needs to be supplied more locally.

Strategy 2.2.2: Conduct program evaluations on the existing Langley Park Community Center programs.

Action Step A: Through participatory community engagement methods, engage with the community living in the residential buildings surrounding the Langley Park Community Center on their opinions of its efforts and how it could be improved to promote engagement.

Evaluating the history and existing programs allows one to note what's popular, what didn't work, and what is constrained by participation capacity. In understanding the dynamics of existing programs and the community's attitude towards them, hindsight ensures a greater probability of success in future programming efforts. It also creates an opportunity to identify what programs residents want available. Direct feedback from residents at both community engagement events supports a lack of awareness of the community center, its purpose, and available resources, as well as a desire for more programs for children and youth after school.

Strategy 2.2.3: Organize a community sports club.

Action Step A: Community residents and interested organizations can engage with interested soccer players within the community to assemble teams and schedule interested members across the community to organize games and tournaments.



Fig 41. Illustrated is an aerial map image of 15th Ave and Kanawha St. Layered on top is a logo developed by student Ari Santana and the outline of a soccer field. The collective image was shared at our final community engagement event. (2024)

The image above is to visualize possible recommended community program ideas. Nearly every participant expressed a need for a similar initiative, some with urgency. Community members described this as a method they were confident could aid in preventing delinquency among youth and foster pride in the community, as soccer is seen as more than just a sport but a cultural practice for many. Soccer programs have also been proven to be a positive method of establishing healthy socialization and promoting exercise to improve community health (Office of Citizen, 2019).

Objective 2.3: Identify three outdoor spaces for designation, build, or rehabilitation within a 5-mile radius of CASA.

Strategy 2.3.1: Conduct a land survey around the official boundaries of the Langley Park area to identify sites of abandonment or misuse around a 5-mile radius of CASA.

Action Step A: An interested party should collaborate with the Prince George’s County Office of Planning and, if applicable, private landowners to identify, design, and develop available green spaces within residential buildings and around Langley Park to promote space activation.

CASA is a community-based organization conveniently encircled by a residential area housing its target population. The area comprises most apartment buildings that house hundreds of Langley Park residents. Utilizing CASA as a focal point and expanding outward encompasses many Langley Park residents, highlighting the numerous pocket green spaces between the buildings. The spaces are currently used as walk-through spaces, for community vendors, or for groups of youth and adults to socialize during the day. Intervention efforts would help to improve activation by building a pavilion or establishing seating. The intervention could also include rehabilitation efforts for the area, such as repairing cracked sidewalks or securing housing wires to improve community safety.

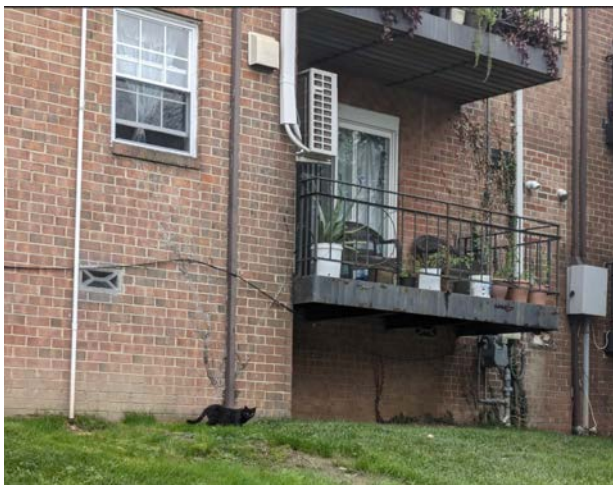


Fig 42: Green space behind a residential building around CASA. (2024)

The loose wiring attached to the building creates a hazard for animals and small children playing or, out of curiosity, who can become entangled, hurt, or even obstruct residential building operations. Engaging with AEP Energy, Baltimore Gas & Electric (BGE), and Potomac Electric Power (PEPCO) can help in securing the conditions of wiring, and engaging in landscaping efforts are smaller intermediate steps that the community can take to ensure the green spaces around their buildings are safe.

Action Step B: Utilizing participatory engagement methods, community members should be surveyed on the use designation and design of their outdoor spaces to improve or facilitate community engagement.

Residents are the most knowledgeable resource as they regularly engage with their built environment, making them experts on Langley Park. Utilizing participating engagement methodology, inquiring about their perspective provides a unique interpretation of the area from the lens of a community resident. Taking advantage of this resource in gathering conditions and desires within the creating process aids in ensuring a successful planning intervention with all parties within the development process happy with the work done.

Transportation

Table 20: Strategic Planning for Transportation Goal #1.

Goal 1: Improve Transportation Access			
Objective	Strategies	Stakeholders	Expected Outcomes
1.1 Improve public transit infrastructure in Langley Park	1.1.1 Conduct an audit on currently existing transit stops in the community to fully understand the current conditions and what needs replacing and upgrading. 1.1.2 Improve bus stop conditions on local streets, such as adding shelters, benches, wayfinding, sidewalk widening, and arrival screens 1.1.3 Improve air quality and the rider experience at Takoma Langley Transit Center by building barriers to protect the transit center from the noise and air pollution from University Blvd and New Hampshire Ave and by reducing the number of non-clean air buses idling and laying over at the transit center. 1.1.4 Install bus lanes on New Hampshire Ave to give community members a more reliable north-south transportation corridor	1.1.1 Prince George's County Planning Department, Prince George's County Department of Public Works & Transportation, Maryland Department of Transportation - State Highways Administration, WMATA, PEPCO, Langley Park Residents, Workers, and Business Owners 1.1.2 WMATA, Prince George's County Department of Public Works & Transportation, Prince George's County Planning Department 1.1.3 WMATA, Maryland Department of Transportation -	If Objective 1.1 is achieved, transit users in Langley Park will have much higher quality infrastructure to use when waiting for and taking transit within and through Langley Park.

		Maryland Transit Administration, Maryland Department of Transportation - State Highway Administration, Prince George's County Department of Public Works & Transportation, Montgomery County Department of Transportation 1.1.4 Maryland Department of Transportation - State Highway Administration, Maryland Department of Transportation - Maryland Transit Administration, WMATA, Prince George's County Department of Public Works & Transportation, Montgomery County Department of Transportation	
1.2 Enhance first/last mile transportation options	1.2.1 Add additional micromobility options to Langley Park	1.2.1 Capital Bikeshare, VEO, Prince George's County Department of Public Works & Transportation, Prince George's County Planning Department	If objective 1.2 is achieved, residents of Langley Park will have convenient, and low cost non-driving modes of transportation to use when traveling within the community.
1.3 Expand programs to provide eligible community members with more cost-efficient access to	1.3.1 Collaborate with local transit agencies to expand access to free/reduced ride programs 1.3.2 Work with CASA or the Langley Park Civic Association to formalize the carpooling system that community members use to	1.3.1 WMATA, Prince George's County Department of Public Works & Transportation, Montgomery County Department of	If objective 1.3 is achieved, residents of Langley Park will be more affordably able to use public

transportation options	commute 1.3.3 Invite local micro-mobility advocacy groups to give instructional bicycle lessons to community members.	Transportation, Maryland Department of Transportation, Maryland Transit Administration 1.3.2 CASA, Langley Park Civic Association, Community members 1.3.3 WABA (Washington Area Bicyclist Association), PHASE Cycling, American League of Bicyclists	transit to travel within and outside of Langley Park.
------------------------	--	---	---

Goal 1: Improve Transportation Access.

Objective 1.1: Improve Public Transit Infrastructure in Langley Park.

Strategy 1.1.1: Conduct an audit on currently existing transit stops in the community to fully understand the current conditions and what needs replacing and upgrading.

Action Step A: Use digital assessment (GIS) and on-the-ground surveying to determine conditions, ADA compliance, and connectivity.

An audit must be conducted to fully grasp what needs to be improved in terms of public transit infrastructure. A variety of walk audits can be completed with participation from community members that provide an overall rating system for the current conditions. A walk audit would be beneficial because it would provide information on how residents access transit stops and the surrounding environment. A scoring system would prioritize improvements and recognize where conditions are lacking. Maryland Department of Transportation (MDOT) also has GIS maps of ADA compliance of pedestrian signaling and facilities (see References).



Fig 43. Prince George's County Planning Department used evaluation metrics for a pedestrian safety and accessibility study, Prince George's County Planning Department, 2022.

Action Step B: Partner with MDOT SHA, PGDPW&T, and PG Planning to conduct a pedestrian safety and accessibility study.

Prince George's County Planning Department has conducted a pedestrian safety and access study for the Prince George's Plaza Metro Station Area, which sets a helpful precedent for what can be done in Langley Park. This study highlighted poor conditions in terms of lighting, wayfinding, connectivity, and accessibility. Recommendations were prioritized based on time – short-term, mid-term, long-term – and the extent of funding needed. Such prioritization would be incredibly valuable to Langley Park because it would determine who is responsible for what action and how long the community should expect to see the improvements implemented. See References for the full report by the County Planning Department.

Action Step C: Work with PEPCO and MDOT-SHA to investigate the location and routing of utility wires to determine whether they could be moved to improve visibility and increase open air.

Rerouting utility wires can improve community aesthetics with the lack of unsightly cables, improve pedestrian mobility and visibility, and allow for greater tree canopy cover, providing beneficial shade to pedestrians. One idea is to use underground utility lines to improve sidewalk conditions,

beautify the streetscape, and, in turn, increase pedestrian access (Berkeley Public Works, 2018). Currently, utility wires cause obstructions to pedestrian traffic, so Langley Park would benefit from a feasibility analysis of how the lines could be undergrounded or rerouted.

Strategy 1.1.2 Improve bus stop conditions on local streets, such as adding shelters, benches, wayfinding, sidewalk widening, and arrival screens.



Fig 44. Complete, sheltered bus stop in D.C., Greater Greater Washington, 2024.

Action Step A: Construct complete bus stops, including shelters, benches, and arrival screens at all local bus stops.

Sheltered bus stops with on-demand information should be a universal necessity in Langley Park. A complete bus stop will have on-demand information on bus arrival times on electronic screens, informative bus route maps, ADA-compliant benches, shelter from the elements on three sides, and a roof. Complete bus stops improve conditions for those waiting for public transit and, in turn, help retain bus users and encourage others to ride the bus. The sheltered aspect is beneficial in the Langley Park context because this has proven to be an effective method of sun protection in urban heat islands (Greater Greater Washington, 2024). Due to crowded sidewalk conditions, this idea must be retrofitted for the specific conditions in Langley Park and coincide with action steps to improve sidewalks.

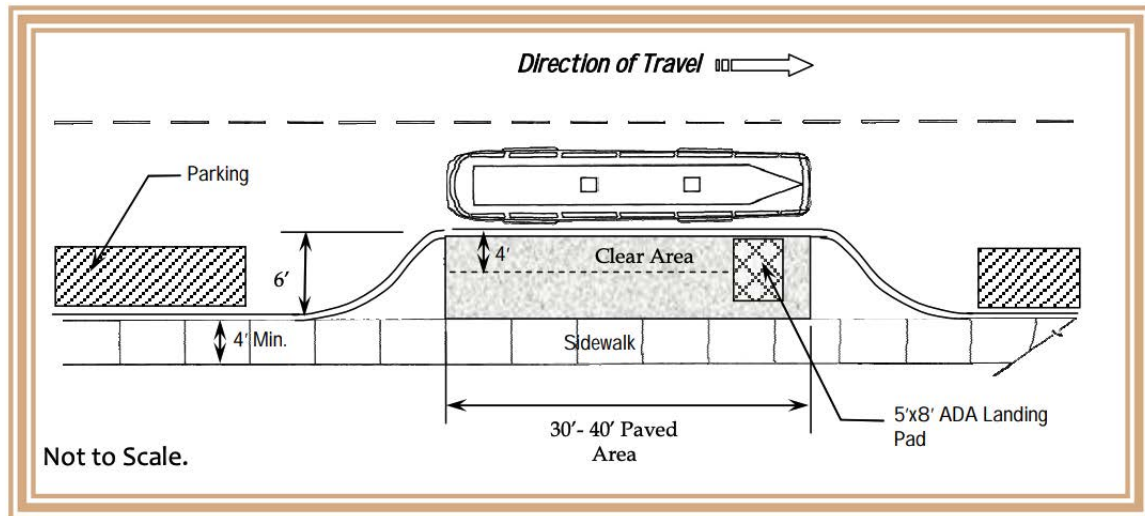


Fig 45. Guidelines for the design and placement of transit stops, WMATA, 2009.

Action Step B: Work with PGDPW&T to build sidewalk connections to the curb at bus stops that do not currently have continuous sidewalks.

An accessible bus stop is partially defined by having adequate sidewalk conditions (WMATA, 2009). This pedestrian infrastructure determines ease of use and affects the experience of using public transit. A sidewalk extension will allow pedestrians safe access to the bus by providing more connectivity between the bus travel lane and the curb. In general, the key to accessibility at bus stops is to have unobstructed sidewalks that fully connect to the curbs, as well as bus stops, for ease of pedestrian flow. Sidewalks should have continuous paved access as well. PGDPW&T can implement these improvements to the Langley Park context in response to the pedestrian accessibility study and transit conditions audit suggested above.

Strategy 1.1.3 Improve air quality and the rider experience at Takoma Langley Transit Center.



Fig 46. Example of zero emissions, fully electric bus in Prince George's County, WTOP News, 2023.

Action Step A: Improve air quality at Takoma Langley Crossroads Transit Center by having WMATA prioritize using electric and hybrid buses on routes that terminate and dwell at the Takoma Langley Crossroads Transit Center.

Prince George's County intends to transition approximately 70% of the current bus fleet to zero-emissions buses by 2035 and 100% by 2040. These buses will help contribute to cleaner air and a more pleasant experience for Langley Park residents at the Takoma Langley Crossroads Transit Center. To achieve this goal, infrastructure and facilities will need to be improved in tandem with the acquisition of the electric fleet. This action step will have lasting benefits and help achieve environmental and sustainability objectives.

Action Step B: Build a see-through barrier around the exterior of the transit center to reduce particulate emissions, pollutants, and noise pollution from the traffic on University Blvd and New Hampshire Ave.

Open-air transit stations such as the Takoma Langley Crossroads Transit Center expose Langley Park transit passengers to high air and noise pollution levels. There is an increased risk for adverse health impacts with transit centers near thoroughfares like University Boulevard and New Hampshire Avenue. Community members detailed how they do not own a car and rely on public transportation, indicating a significant amount of time spent waiting for the bus in the abovementioned conditions. Enclosing the station will help prevent exposure to air and noise pollution. Still, more research and feasibility studies are needed to understand how it would positively affect human health.

Strategy 1.1.4 Install bus lanes on New Hampshire Ave to give community members a more reliable north-south transportation corridor



Fig 47. Rendering of a bus-only lane in Philadelphia. 5th Square, 2022.

Action Step A: Work with MDOT SHA, PGDPW&T, and WMATA to install bus lanes on New Hampshire Ave to improve travel times and north/south connections from Langley Park.

Buses can be given priority on the road through bus-only lanes that would provide Langley Park transit users with a quicker, more reliable travel experience. Buses servicing Langley Park could avoid traffic congestion through designated lanes, usually painted red. Bus-only lanes have proven to reduce travel time for commuters; this improved reliability incentivizes more people to use public transit. Community members expressed frustration that

bus trips take too long, especially for their high school-aged children. Bus-only lanes would help alleviate some of the traffic delays Langley Park residents have been experiencing. The lanes are only designated for buses during peak hours, so they should not disrupt traffic patterns.

Action Step B: Work with MDOT SHA and MDOT-MTA to establish signal priority for the buses using the bus lane infrastructure on New Hampshire Ave.

Signal priority for buses involves creating a system that detects the presence of a bus and modifies traffic signal timing accordingly. This is a beneficial action step, primarily when implemented alongside bus-only lanes. On busy corridors like New Hampshire Avenue that may have long signal cycles, transit signal prioritization can improve transit reliability and allow for quicker, more efficient travel experiences. One factor to consider is whether this implementation will affect waiting times for pedestrians at highly trafficked intersections.

Action Step C: Have MDOT-SHA redesign University Blvd and New Hampshire Ave to reduce the conflict points between the bus and turning lanes for private vehicles.

This action step is the culmination of the two previous ones because the success of a bus lane strategy is contingent on coordination with private vehicles. Bus-only lanes are often curbside, so vehicles taking right turns at intersections can prevent the bus from moving forward, affecting the transit service's speed and efficiency. Buses could bypass a line of right-turning vehicles if the bus stops are relocated to the far side of the intersection (Federal Transit Administration, 2016). Traffic congestion may increase if a bus-only lane reduces travel lanes for vehicle traffic, so the retrofitting of University Boulevard and New Hampshire Avenue to account for more vehicles turning is necessary to ensure the ease and convenience of bus-only lanes is achieved.

Strategy 1.1.5 Improve bus service on Riggs Road to better allow teenagers in Riggs Road to attend their currently zoned high school, High Point High School in Beltsville.

Objective 1.2: Enhance first/last mile transportation options.

Strategy 1.2.1: Add additional micromobility options to Langley Park.

Action Step A: Work with PGDPW&T and Capital Bikeshare to install new bike-share docks in Langley Park with a corresponding number of new bikes.

New Capital Bikeshare docks in Langley Park would allow residents to reduce first/last mile distances in their commutes. First/last mile distance is defined by the distance between the residence and the public transport or between the public transport and the destination. Community members expressed that the Capital Bikeshare e-bikes would be incredibly useful when it is raining or when they rush to the bus stop or transit station. This would be particularly helpful for high school students disenchanted from attending school because of the travel inconvenience, as we learned in the community engagement event. Community members or a proxy organization, such as CASA, can begin the process by proposing a new location for a Capital Bikeshare station and submitting corresponding feedback at <https://cabistationrequest.dc.gov/>.

Action Step B: Expand VEO scooter and e-bike service to Langley Park to complement additional bike-share options.

The Langley Park community could benefit from VEO scooters, another micro-mobility option. These electric scooters would provide the same advantages to commuters, as they also reduce first/last mile distances. Scooters present less of a learning curve than bicycles, as well. This opportunity for a public-private partnership would be advantageous and key to successful micro-mobility integration in Langley Park. However, more research is needed to understand how Langley Park could enter such a partnership if it is not an incorporated city.

Objective 1.3: Expand programs to provide eligible community members with more cost-efficient access to transportation options.

Strategy 1.3.1: Collaborate with local transit agencies to expand access to free/reduced ride programs

Action Step A: Collaborate with Montgomery County's RideOn service to allow Langley Park residents to access reduced fare services and for students in Langley Park to gain access to the Youth Cruiser SmarTrip program.

Langley Park residents would significantly benefit from reduced fare programs that currently serve Montgomery County residents. The Youth

Cruiser SmarTrip program, which allows school-aged children to access free bus rides, would help incentivize students in Langley Park to attend school. Improving the ease, efficiency, and convenience of bus transit in Langley Park would help increase ridership, especially for students who would rather be truant than deal with the unpleasant bus system.

Action Step B: Work with WMATA to make it easier and simpler for Langley Park residents who cannot prove their citizenship to become a part of the Metro Lift income-qualified program.

The Metro Lift program was established in 2023 by WMATA to ensure transit equity and affordability for bus and rail passengers. Metro Lift is an income-qualified reduced fare program that requires applicants to have an active SNAP card and some form of government-issued photo identification. This can prove a barrier to Langley Park residents, who cannot fulfill these requirements because they do not have citizenship status. WMATA should develop a system that eases these restrictions for immigrants who regularly use MetroBus and MetroRail transit.

Strategy 1.3.2: Work with CASA or Langley Park Civic Association to formalize the carpooling system that community members use to commute.

At the final community engagement event, we learned that many male laborers commute to work through a carpooling system in which one person with a car is paid a certain amount of money per workday to drive others. This is a system that CASA can facilitate to ensure workers safely and efficiently access their places of work. Although our general goal is to improve the existing transportation systems that Prince George's County and WMATA provide, we must recognize other processes by which Langley Park residents travel and commute. CASA or the Langley Park Civic Association can act as meeting points for carpooling and organizing the grouping of workers based on destination.

Strategy 1.3.3: Invite local micromobility advocacy groups to give instructional bicycle lessons to community members.

When discussing alternative modes of transportation with community members at our engagement event, several people mentioned that the reason that they do not bike in the community is because they don't know how to or haven't in a long time and are scared to do so in a community that isn't friendly to non-motorized vehicles.

Providing the community with workshops and lessons on how to use and maintain bicycles and other micro-mobility devices could be highly beneficial in getting more people in the community comfortable riding. The best way to host a workshop would be to partner with an advocacy group such as WABA (Washington Area Bicyclist Association), PHASE Cycling, or the League of American Bicyclists, which have a history of running workshops and bringing cycling to communities in the Washington D.C. area.

Table 21: Strategic Planning for Goal #2.

Goal 2: Make the streets in Langley Park more pedestrian friendly			
Objective	Strategies	Stakeholders	Expected Outcomes
2.1 Transform the main corridors in Langley Park into complete streets by 2034	2.1.1 Improve physical infrastructure to increase pedestrian safety at Langley Park's main intersections (University Blvd & New Hampshire Ave and University Blvd & Riggs Road) 2.1.2 Fill in gaps in the sidewalk and crosswalk network on University Blvd and Riggs Road 2.1.3 Reduce traffic speeds on the main arterial roads in Langley Park 2.1.4 Make commercial centers more accessible to all travelers in the community	2.1.1 Maryland Department of Transportation - State Highway Administration, Maryland Department of Transportation - Maryland Transit Administration, United States Department of Transportation, Prince George's County Department of Public Works & Transportation, Prince George's County Planning Department 2.1.2 Maryland Department of Transportation - State Highway Administration, Maryland Department of Transportation - Maryland Transit Administration, Prince George's County Department of Public Works & Transportation, Prince George's County Parks Department, Prince George's County Planning Department, Prince George's County Public Schools,	If Objective 2.1 is achieved, the streetscapes on University Blvd, New Hampshire Ave, and Riggs Road will be safer, calmer, and more welcoming.

		Community Members 2.1.3 Maryland Department of Transportation - State Highway Administration, Maryland Department of Transportation - Maryland Transit Administration, Community Members 2.1.4 Maryland Department of Transportation - State Highway Administration, Prince George's County Department of Public Works, Local Business Owners, Local Commercial Landlords, Community Members	
2.2 Address the lighting issues in Langley Park	2.2.1 Increase the quality and quantity of street lights in Langley Park.	2.2.1 Maryland Department of Transportation - State Highway Administration, Prince George's County Department of Public Works & Transportation, PEPCO Maryland Department of Transportation - State Highway Administration, Prince George's County Department of Public Works and Transportation, Prince George's County Planning Department, United States Department of Transportation, other community groups	If Objective 2.2 is achieved, the streets in Langley Park will be brighter and safer to travel outside of daylight hours.

Goal 2: Make the streets in Langley Park more pedestrian-friendly.

Objective 2.1: Transform the main corridors in Langley Park into complete streets by 2034.

The main corridors, University Blvd and New Hampshire Ave, are the lifeblood of Langley Park. University Blvd is the primary location of most small and large businesses that serve the Langley Park Community, notably La Union Mall, but many others. New Hampshire Ave is also where most residents shop and patronize the businesses and places on University Blvd.

Despite their heavy use and importance, University Blvd and New Hampshire Ave are highly unfriendly to anyone traveling outside of a car, no matter whether they're pedestrians, bicyclists, or people using mobility devices.

For the past few years and the next few years, University Blvd also has the additional challenge of heavy construction for the Purple Line light rail, which is scheduled to be completed in 2027. This construction makes the road even more complicated, dangerous, and challenging. But even before the start of the Purple Line construction, the corridors were not great places in the community.

We aim to transform University Blvd and New Hampshire Ave into complete streets that better serve everyone traveling in the community. University Blvd would look like the rendering below, with wide sidewalks a safe distance from the street, bike lanes separated from traffic by physical infrastructure, and safe crossings at the Purple Line stations. Ideal complete streets would reduce the number of curb cuts and points where pedestrians and vehicles could conflict.

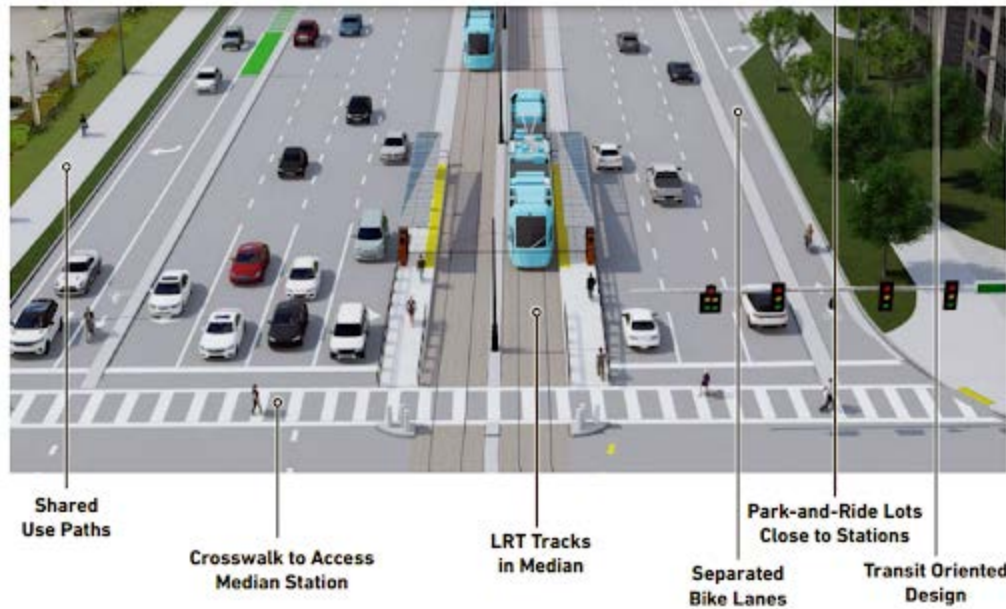


Fig 48. A rendering of a complete street from West Palm Beach, Florida's proposed light rail line.

Strategy 2.1.1: Improve physical infrastructure to increase pedestrian safety at Langley Park's main intersections (University Blvd & New Hampshire Ave and University Blvd & Riggs Road).

The community identified two areas as being the most dangerous in Langley Park: the two main intersections. Not only are they the most traveled areas of the community, but they also have very little infrastructure to protect pedestrians, as seen in the images below.

Action Step A: Widen sidewalks on University Blvd leading up to the main intersections.



Fig 49. The narrow sidewalk on the south side of University Blvd faces east from the New Hampshire Avenue intersection.

Most sidewalks on University Blvd are six feet wide, the narrowest allowable sidewalk width by the Maryland State Highway Administration. The narrow width of the sidewalk makes it dangerous for pedestrians to travel on the sidewalks in any kind of numbers. Additionally, the narrow sidewalks restrict the ability of Langley Park street vendors to sell their goods on some of the most traveled corridors of the community. Widening the sidewalk to ten feet where possible would give pedestrians much more room to travel and increase the feeling of safety for non-motorists on University Blvd.

Action Step B: Remove the un-sigaled slip lanes at the main intersections in Langley Park and prevent cars from turning on red lights.

The two main intersections in Langley Park at University Blvd and New Hampshire Ave and University Blvd at Riggs Road both have un-sigaled slip lanes for right turns, in which cars do not have to follow the primary traffic signal at an intersection. These turning lanes are hazardous for pedestrians because the visibility for both drivers and pedestrians can be limited. With cars traveling at free traffic flow speeds, it can be challenging for drivers to slow down if they see a pedestrian too late.



Fig 50. A car speeds through the southbound slip lane at the University Blvd and Riggs Road intersection.

The community and traffic accident data have identified the University Blvd corridor as the most dangerous place to walk in the community, and the traffic flow ensures that every car has to be fully aware and prepared to stop at the two main intersections.



Fig 51. The intersection of University Blvd and New Hampshire Ave with slip lanes circled.

University Blvd and New Hampshire Ave intersection has four separate un-signalized right-turn slip lanes. The roads are not perpendicular as University Blvd goes from Southeast to Northwest while New Hampshire Ave is almost entirely north-south — the tight turns for travelers turning right from New Hampshire Ave. Southbound to University Blvd west and New Hampshire Ave northbound to University Blvd east prevents the complete removal of the slip lanes, as otherwise, the right turn would be too tight for larger vehicles to complete. Separate traffic signals should be installed for those right-turn slip lanes. The other two turns are unnecessary for drivers going west on University Blvd to turn north on New Hampshire Ave and drivers going east on University Blvd to turn south on New Hampshire Ave, as the turns are fully capable of being made without the slip lanes being in place. Another benefit of removing those two slip lanes would be narrowing the crosswalks at that intersection, which are currently about 215 feet long.

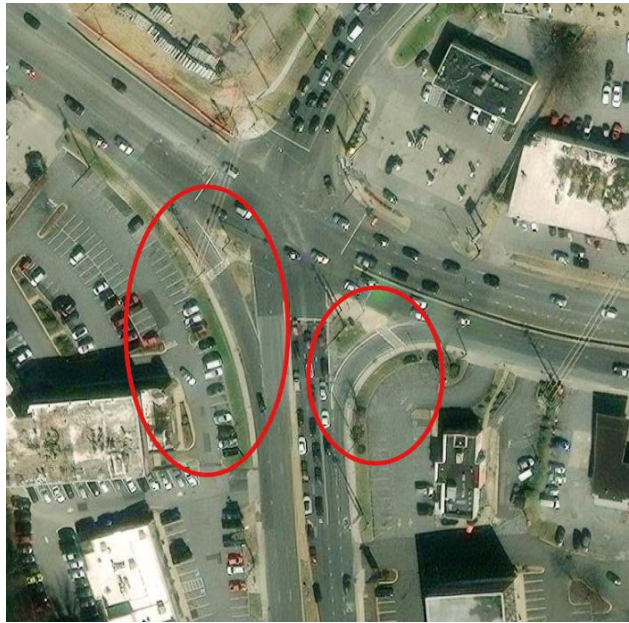


Fig 52. The intersection of University Blvd and Riggs Road with slip lanes circled.

Only two slip lanes are present at University Blvd and Riggs Road intersect. Riggs Road is a significant thoroughfare south of University Blvd heading towards Washington D.C. North of University Blvd. Riggs Road turns into less of an arterial road, with one travel lane in each direction and less mixed-use development along the corridor. This intersection only has two slip lanes, both aimed at improving traffic flow to and from the south. This intersection is also closer to a perpendicular intersection than University Blvd and New Hampshire Ave. Therefore, vehicles don't have to turn in the slip lanes from any direction. As such, removing the slip lanes would help pedestrian flow in

this intersection without adding difficulty for motor vehicles to navigate through the intersection.

Action Step C: Construct pedestrian footbridges at the intersections of University Blvd and New Hampshire Ave and University Blvd and Riggs Road that connect to the Purple Line stations to give pedestrians a conflict-free route to the Purple Line Stations.

The two main intersections on University Blvd, New Hampshire Ave, and Riggs Road crossings create tremendous pedestrian issues. The current intersection width at New Hampshire Ave is 215 feet, which can be very difficult for pedestrians to cross in one light cycle. The opening of the Purple Line will only make the intersection more complicated, and the presence of the trains could incentivize people to cross against the light or make more risky crossings to catch a train.

An installed footbridge across University Blvd at those locations would make it safer, more pleasant, and faster for pedestrians to access the Purple Line stations from the outer sidewalks of University Blvd. Additionally, an installed footbridge at the Takoma-Langley Station at the New Hampshire Ave intersection would give transit users an unobstructed connection between the Takoma-Langley Transit Center buses and the Purple Line platforms.

Similar footbridges to the one proposed have been constructed in Prince George's County, notably across MD-410 (East-West Highway) in Hyattsville, connecting the Hyattsville Crossing Metrorail station on the south side of the right of way to the Mall at Prince George's on the north side. WMATA funded this footbridge, but the expertise and knowledge are present in the county and Washington D.C. Metropolitan area.



Fig 53. Pedestrian footbridge over MD-410 (East-West Highway) in Hyattsville.

Other less prominent footbridges are present in less urbanized parts of the county, such as the footbridge over MD-5 (Branch Ave) in Camp Springs, as seen below in Figure 54. The Maryland State Highway Administration funded and constructed this footbridge to better connect the Temple Hills residential community to the southwest of Branch Avenue to the retail options to the northeast of Branch Avenue and the Branch Avenue Metrorail station.



Fig 54. Pedestrian Bridge over MD-5 Southbound in Camp Springs.

Strategy 2.1.2: Fill in gaps in the sidewalk and crosswalk network on the main streets.

The main corridors generally have sidewalks on both sides of the road, but the width and quality of the sidewalks are lacking in places. However, there is a notable lack of crosswalks and safe places for pedestrians to cross in places, notably on University Blvd between the New Hampshire Ave and Riggs Road intersections.

Action Step A: Work with MDOT SHA and PGDPW&T to install full traffic signals and continental crosswalks at the intersections of 14th Avenue and University Blvd as well as 15th Avenue and University Blvd upon completing the Purple Line.

Currently, the University Blvd corridor lacks opportunities for pedestrians to cross the street outside the Riggs Road and New Hampshire Avenue intersections. While the Purple Line construction makes crossing the street even more perilous, the intersections at 14th Avenue and 15th Avenue did not have pedestrian signals or painted crosswalks before construction began.

During site visits in Langley Park, it is not infrequent to see community members run across University Blvd and climb over the median and

construction barriers to get across the road. While these actions are dangerous at any time, the previously present traffic lights are no longer operational, meaning that cars do not slow down at all on this section of University Blvd. This section of University Blvd is even more dangerous at night when it is harder to see pedestrians.

Community members at the community engagement event lamented that the distance from 14th and 15th Avenues to either of the current intersections is so far that they'll often choose not to cross the street to avoid the time, energy, and risks of crossing University Blvd. The walking detour due to the inability to walk across University Blvd at 14th Avenue is 0.4 miles, roughly an eight-minute walk for a non-disabled adult. At 15th Avenue, that distance is 0.35 miles, approximately a seven-minute walk for a non-disabled adult. Those time estimates do not account for when someone would have to wait at the complex intersections at Riggs Road and New Hampshire Avenue.

For many community members who would be making this trip with their children or while carrying items that they bought, this trip becomes prohibitively long and inaccessible, hurting both residents on the north side of University Blvd and the businesses on the south side, including but not limited to those located inside La Union Mall.

Action Step B: Construct a sidewalk on Riggs Road to connect the 0.2-mile gap in sidewalks between the intersection of Merrimac Road and Riggs Road in Langley Park on the south to the driveway for the Adelphi Mill Recreation Center in Adelphi on the north.

Although not entirely in Langley Park, the gap in sidewalk coverage on the section of Riggs Road that crosses over the Northwest Branch of the Anacostia River was mentioned as a very hazardous stretch for pedestrians. The community members expressed concern that their children had to walk through this stretch to reach Sonia Sotomayor Middle School, the zoned middle school for much of Langley Park. A sidewalk construction project alongside Riggs Road, a Maryland state highway, could be designed, funded, and constructed by either the Maryland State Highway Administration or the Prince George's Department of Public Works & Transportation.



Fig 55. Riggs Road faces north from the Merrimac Drive intersection.

Action Step C: Reconnect the sidewalks closed or blocked due to Purple Line construction.



Fig 56. There is a gap in the sidewalk on the north side of University Blvd approaching the New Hampshire Ave intersection due to Purple Line construction.

Even before construction of the Purple Line began, the sidewalk infrastructure in Langley Park left a lot to be desired. However, since the construction began, several key parts of Langley Park's sidewalk network have been blocked or missing, especially closer to the main intersections where the stations are being built. As seen in the images above in Figure 55 and below in Figure 56, some of the approaches to the main intersections have had their sidewalks removed or blocked off, making already hazardous conditions even more dangerous.



Fig 57. There is a gap in the sidewalk on the north side of University Blvd to the west of the Riggs Road intersection.

Although the construction and equipment blocking some of the sidewalks will be removed following the opening of the Purple Line, it is crucial to ensure that the sidewalks are returned to the state they were in before the construction began.

Strategy 2.1.3: Reduce traffic speeds on the main arterial roads in Langley Park.

A constant concern of the community during the community engagement events was the speed and behavior of vehicles on University Blvd and New Hampshire Ave. We have incorporated several techniques used in other places into our action plans to help manage traffic in Langley Park.

Action Step A: Work with MDOT SHA to reduce the lane widths on University Blvd and New Hampshire Ave slow traffic speeds.

One of the most proven ways to reduce vehicular traffic speed on a road is to reduce the lane widths. University Blvd and New Hampshire Ave have lane widths of 12 feet. Reducing that to 10 feet would make drivers more careful and aware when driving through Langley Park and give pedestrians more of the right of way and other multimodal uses. Funding from MDOT-MVA's Maryland Highway Safety Office Grant could be used to help with this action step (See Strategy 3.1.1 Action Step B for more details on the program).

Action Step B: Work with the Prince George's County Police Department to add traffic cameras to manage speeding and red light infractions.

Some community members at our events mentioned that erratic drivers add extra danger to the roads. Although the data for traffic fatalities doesn't

specify whether drivers were driving illegally, measures to monitor and correct driver behavior would be helpful in the Langley Park area. Adding traffic cameras would be especially beneficial as new traffic lights are added to the community, and drivers will proceed more slowly.

Strategy 2.1.4: Make commercial centers more accessible to all travelers in the community.

In our community events, many people we spoke to brought up that it is difficult for people without cars to access businesses on University Blvd and New Hampshire Ave because of how the properties are laid out or the challenges of traveling to and through the commercial center

Action Step A: Collaborate with local shopping centers and mall owners to reduce the number of curb cuts on University Blvd and New Hampshire Ave and increase the accessibility to retail locations on these corridors.

Due to their status as car-centric arterial roads, University Blvd and New Hampshire Ave have many businesses oriented toward drivers and car users who travel down the corridor. Many of the lots on University Blvd are owned and operated by different owners, who tend to have separate driveways and curb cuts for their individual properties. These curb cuts create additional potential conflict points between pedestrians and motor vehicles, increasing the number of times a pedestrian has to slow down when walking and decreasing a pedestrian's sense of safety. Community members raised this feeling of danger during our engagement events, and they strongly desired to reduce the number of curb cuts and consolidate parking lots to lessen the conflict points on the sidewalks.

Action Step B: Reduce parking minimums in Langley Park.

Community members also explained that they would favor adjustments to the layouts of commercial centers so they would be closer to the sidewalks or paths pedestrians walk on. Currently, most commercial establishments on the main corridors are surrounded by parking lots, many of which never fill up. By reducing the parking minimums, shopping centers could restructure the open lots to move the stores closer to the main roads or add public places to the parking lots to help attract customers.

Strategy 2.1.5: Improve street light functionality in Langley Park.

One of the biggest concerns community members shared about traveling in Langley Park was that it was unsafe to be outside after dark. While the community members identified several causes of the lack of safety, a major

one was the lack of light in public spaces at night, which makes it hard for pedestrians to feel that they can see everything that is going on and adds to a sense of vulnerability.

Action Step A: Perform a photometric analysis of the streetlights on the main corridors and local streets.

The lack of consistent lighting in public spaces is noticeable when traveling throughout Langley Park and was brought up by community members when discussing their safety concerns. Purple Line construction has interfered with utilities and the streetlights on University Blvd, making the corridor dark and unfriendly at night. The local streets in the community are often lit with just one streetlight that hovers over the center of the street, leaving the sidewalks darker than the road.

An extensive and detailed photometric analysis of the lighting conditions would be instrumental in determining what parts of Langley Park receive insufficient lighting from the current infrastructure and whether the different types of lights in the community contribute to varying levels of darkness and visibility in certain areas.

Action Step B: Enhance visibility in the community through neighborhood-wide installation of pedestrian-scaled lighting.

Several governmental agencies have programs to help municipalities and communities improve street lighting in Prince George's County and throughout the state. There are three types of roads in Langley Park, all of which could use enhanced lighting. The three types are state maintained roadways, local streets, and private streets.

To improve lighting on the state-maintained roads, University Blvd (MD-193), New Hampshire Ave (MD-650), and Riggs Road (MD-212), funding would have to be obtained from the Maryland State Highway Administration. According to the MDOT-SHA Traffic Control Devices Design Manual, all three state highways in Langley Park would be considered high-volume pedestrian corridors, with over 100 pedestrians per hour. As such, special consideration should be given to lights covering the roadways and sidewalks. Examples of these types of lights were installed by the Baltimore Department of Transportation as part of its BMORE Bright Program, as seen below in Figure 58.



Fig 58. Dual light streetlights were installed during the BMORE Bright program.

For the local streets that are publicly maintained by the county, the Traffic Signal Design, Construction, and Street Lighting Section of the Prince George's County Department of Public Works and Transportation's Traffic Engineering & Safety Division would need to install streetlights that better provide light for the streetscapes in Langley Park.

For private roads, which in Langley Park are generally the streets and parking lots within apartment complexes, agreements would need to be made with the property owners and managers to fund and construct better lighting in those complexes.

Table 22: Strategic Planning for Transportation Goal #3.

Goal 3: Add bike lanes and other mixed-use transportation infrastructure to the local streets			
Objective	Strategies & Action Plan	Stakeholders	Expected Outcomes
3.1 Identify funding sources and build capacity to identify and apply for multimodal transportation related grants for the installation of additional bike	3.1.1 Identify funding sources at all levels of government 3.1.2 Identify governmental agencies and community groups that would be able to apply for grants to build multimodal transportation projects	3.1.1 Prince George's County Department of Public Works & Transportation, Prince George's County Parks Department, Prince George's County Planning Department, Metropolitan	If Objective 3.1 is achieved, the Langley Park community and relevant stakeholders will have a roadmap to be able to more

lanes and mixed-use paths in Langley Park		Washington Council of Governments, Maryland Department of Transportation - State Highway Administration, United States Department of Transportation,	easily and effectively apply and get awarded transportation infrastructure grants.
3.2 Install an interconnected bike lane network on the local streets of Langley Park	3.2.1 Track the completion of projects already in progress 3.2.2 Identify the most useful and connected local streets corridors in Langley Park that could hold future bike lanes	3.2.1 Prince George's County Department of Public Works & Transportation, Prince George's County Parks Department, Metropolitan Washington Council of Governments 3.2.2 Prince George's County Department of Public Works & Transportation, Prince George's County Planning Department, Prince George's County Parks Department, CASA, Langley Park Civic Association, Community organizations, Community members	If Objective 3.2 is achieved, Langley Park will have a comprehensive network of bike lanes that will allow bicyclists and other non-motorists to travel through the community while avoiding travelling on the main arterial roads.
3.3 Add off-street mixed-use paths to make non-vehicular travel more efficient in Langley Park	3.3.1 Convert informal desire paths in Langley Park to official mixed-use paths 3.3.2 Construct mixed-use paths on rights-of-way with large unused medians	3.3.1 Prince George's County Department of Public Works & Transportation, Prince George's County Planning Department, Metropolitan Washington Council of Governments, CASA, Community Organizations, Community Members 3.3.2 Prince George's County Department of Public Works & Transportation, Prince George's County Planning Department, Prince George's County Parks Department, Metropolitan	If Objective 3.3 is achieved, Langley Park will have a network of mixed-use off streets paths that all members of the community can use to travel and recreate on.

		Washington Council of Governments,	
--	--	------------------------------------	--

Goal 3: Add bike lanes and other mixed-use transportation infrastructure to the local streets.

Objective 3.1: Identify funding sources and build capacity to identify and apply for multimodal transportation-related grants to install further bike lanes and mixed-use paths in Langley Park.

Being awarded governmental funding for infrastructure projects is a complicated process that typically requires a local organization or government agency to apply for grant programs from a higher level of government, either the state or federal government. Upon being awarded funding, the local government or organization must be able to use the funds to construct the infrastructure. Our studio sought to identify local and regional governmental agencies and local organizations that would be able to serve in these roles for Langley Park projects.

Strategy 3.1.1: Identify funding sources to plan, design, and build local transportation infrastructure.

To successfully plan, design, and build localized infrastructure, it is vital to understand and identify possible funding sources to make these projects happen. The action steps below address a variety of potential sources of funding that can be used for these projects.

Action Step A: Identify local funding sources.

Various resources are available through local governmental organizations in Prince George’s County and the Washington D.C. Metropolitan area. On the Prince George’s County side, resources relating to transportation infrastructure are available from multiple agencies, chiefly the Prince George’s County Department of Public Works & Transportation (PGDPW&T), the Prince George’s County Planning Department, the Prince George’s County Parks Department, and the Prince George’s County Council.

The primary role of the Prince George’s County Department of Public Works & Transportation is to execute the projects approved and funded through the County Council, Planning Department, or other state or federal agencies. The Department of Public Works & Transportation receives funding from the state directly, often through one of the programs highlighted in Action Step B. For example, in 2022, the department received a \$4.6 million grant to install

pedestrian safety infrastructure on a half-mile stretch of New Hampshire Avenue just north of Langley Park.

The County Department of Public Works and Transportation also implements projects funded at the federal level. Federal funds are routed to the Department from the Metropolitan Washington Council of Governments (MWCOG), the metropolitan planning organization for the Washington D.C. metro area. The grants themselves are administered by MWCOG, which also does much of the planning, design, and community outreach. In contrast, the County Department of Public Works & Transportation does the engineering and installation.

The Prince George's County Planning Department is also used similarly to MWCOG to help plan, design, and do community outreach for transportation programs. The Planning Department has several programs to assist municipalities and communities with designing projects in their communities. In 2021, the Prince George's County Planning Department released a Langley Park Bicycle Boulevards study through one of these programs, which has proven tremendously helpful as a resource for planning multimodal infrastructure in Langley Park.

The Prince George's County Parks Department has the authority to design, plan, and construct multimodal infrastructure on its land. The Northwest Branch Trail on the northern border of Langley Park is an example of a trail under the control of the Prince George's Parks Department. The Parks Department can apply for external state and federal funds, but it also has an infrastructure budget dedicated to it by the Prince George's County Council. The Prince George's County Council also has funding discretion to fund projects that it deems necessary on public rights of way that can be constructed or installed by the Prince George's County Department of Public Works & Transportation.

Action Step B: Identify state funding sources.

The state of Maryland has a variety of grants to fund bicycle and pedestrian projects. The programs require a local applicant who can represent the community where the project would be built. The pedestrian elements of these programs can be used to fund many of the outlined projects in Goal 2, especially those relating to pedestrian projects on Langley Park's main corridors of University Blvd (MD-193), New Hampshire Ave (MD-650), and Riggs Road (MD-212).

Below is a table outlining the state funding programs with more information on the relevant types of projects for Langley Park. The italicized programs on

the bottom two rows only apply to projects on the Maryland State Highway system: University Blvd, New Hampshire Ave, and Riggs Road.

Table 23: State funding programs for transportation projects.

Program	Description	Eligible Grantees	Eligible Project Types
Transportation Alternatives Program (MDOT SHA)	The program provides funds for projects that enhance the intermodal transportation system within communities	- Metropolitan Planning Organizations - Local/County jurisdictions - Transit Agencies - Local/County School Districts	- Planning and design of Bike/Pedestrian facilities and safe routes for non-drivers - Construction of bike/pedestrian facilities and safe routes for non-drivers
Maryland Bikeways Program (MDOT)	The program supports projects that maximize bike access and fill missing links in the state's bicycle system, focusing on shared-use paths and road, and improving last-mile connections to work, school shopping, and transit stations	- State Agencies - Metropolitan Planning Organizations - Local/County jurisdictions - Transit Agencies	- Feasibility assessments, design, and engineering - Construction of shared use paths, cycle tracks, and bicycle lanes - Bicycle route signage and wayfinding - Bicycle capital equipment (e.g. parking) - Retrofits to support bicycle routes - Educational materials to support bikeway projects
Safe Routes to School (MDOT SHA)	A program providing funding for education and infrastructure improvements in the vicinity of public K-8 educations that promote walking and cycling to school	- Local/County jurisdictions - Local/County School District - Transportation Safety Non-Profits	- Bike/Pedestrian safety classes for students - Traffic education and enforcement near schools - Public awareness campaigns for press and community

			leaders - Sidewalk Improvements (within 2.0 miles of school) - Traffic calming and speed reduction improvements - Bike/Pedestrian Crossing Improvements - On- and Off-Street Bike/Pedestrian Improvements - Bicycle Parking - Traffic diversion, education and enforcement funds
Maryland Highway Safety Office Grant (MDOT MVA)	These grants aim to reduce the number of motor vehicle-related crashes, injuries, and fatalities on Maryland roadways.	- State Agencies - Local/County jurisdictions - Law Enforcement Agencies - Non-Profit Organizations	- Identifying pedestrian and bicycle safety issues and locations of concern - Promoting safe road user behavior through education and enforcement initiatives - Create and improve safer roadways environments through road dieting, engineering treatments, and nearby land use planning - Promote bicycle safety culture through training - Develop approaches to better prevent and reduce the severity of collisions involving non-motorists - Promote safe driving

			and behavior for all motorists at the scene of emergency events
<i>Sidewalk Reconstruction for Pedestrian Access (MDOT Fund 33)</i>	<i>The fund is for upgrading existing pedestrian facilities to meet Americans with Disabilities Act accessibility guidelines along State Highways</i>	<i>- Local communities can identify and request projects for MDOT SHA evaluation</i>	- Sidewalk ramps - Sidewalk levelling - Accessible crosswalks
<i>Bicycle Retrofit (MDOT Fund 88)</i>	<i>The main purpose of this fund is to improve bicycle facilities along the state highway system to improve connectivity and safety</i>	<i>- Local communities can identify and request projects for MDOT SHA evaluation</i>	- On road marked bicycle lanes - On road share used lanes - Off road shared use paths

Action Step C: Identify federal transportation funding sources.

Communities can use various sources and programs to improve pedestrian and multimodal infrastructure. Our studio project cannot identify specific projects and federal funding sources that could be used in Langley Park. However, below is a simplified table of which federal programs provide funding for what purposes. The federal operating administrations that provide funding are the Federal Highway Administration (FHWA), the Office of Federal Lands Highway, the Office of the Secretary of Transportation (OST), the Federal Transit Administration (FTA), and the National Highway Traffic Safety Administration (NHTSA). All information is taken from the United States Department of Transportation website (https://www.fhwa.dot.gov/environment/bicycle_pedestrian/funding/funding_opportunities.pdf)

Strategy 3.1.2: Identify governmental agencies and community groups that would be able to apply for grants to build multimodal transportation projects.

Many grants available to communities require a local governmental agency or community group to apply for the grants. While the granting agency can often provide technical assistance, identifying local entities that can complete the steps to apply for the grants is necessary.

Action Step A: Do an inventory of local governmental agencies that would be able to serve as grantees for transportation projects.

Several local, county, and state governmental agencies can serve as conduits to apply for the transportation grants discussed in Strategy 3.1.1. The main ones are:

- Prince George's County Department of Public Works & Transportation
- Prince George's County Planning Department
- Prince George's County Parks Department
- Prince George's County Public Schools
- Prince George's County Police Department
- Metropolitan Washington Council of Governments
- WMATA
- Maryland Department of Transportation - Maryland Transit Administration
- Maryland Department of Transportation - State Highway Administration

Action Step B: Identify non-governmental organizations and community groups that could successfully partner with local governmental organizations to apply for grants.

Several local community groups, organizations, and outside non-governmental entities can serve as conduits to apply for the grants addressed in Strategy 3.1.1. These organizations include but are not limited to:

- CASA
- Langley Park Civic Association
- Takoma Langley Crossroads Development Authority
- Purple Line Corridor Coalition
- University of Maryland
- Washington Area Bicyclist Association
- Other Small Business Associations
- Other Community Members

Objective 3.2: Install an interconnected bike lane network on the local streets.

During our engagement process, community members repeatedly stressed the difficulty they and their families had with getting around Langley Park. Most people who attended our engagement events had no car; even if their household did, it needed to be shared among several household members.

Many community members were receptive to our suggestions for alternative transportation, notably bike lanes.

Although many individuals we talked to did not currently bike around the community, their reasons for not doing so were more related to the perceived danger of biking on streets not designed for non-motorized vehicles. Although the adults we talked to generally do not bike on the roads, several said their children do and would likely bike even more if there were safer ways.

Not only would the installation of a community-wide bicycle network make it safer to bike for people in the community who are already biking, but it would also eliminate some of the perceived danger for people who are currently hesitant to do so. A comprehensive bike network would more efficiently connect the residential parts of the community to the commercial areas on the New Hampshire Ave and University Blvd corridors while reducing danger by minimizing conflict with motor vehicles and improving general road conditions.

Strategy 3.2.1: Track completion of projects already in progress.

Before beginning to plan and fund new bike lane projects, it is vital to understand the projects in the pipeline; the only official bike lane project is the one currently under construction by the Prince George's County Department of Public Works & Transportation. More information about that project is below in Action Step A.

Action Step A: Track the completion of PGDPW&T's proposed bike lane.

In 2023, The Prince George's County Department of Public Works & Transportation was awarded \$21 million in grant funding from the United States Federal Highway Administration as part of the Safe Streets and Roadways for All (SS4A) program. The budget was allotted and administered through the Metropolitan Washington Council of Governments, and seven projects will be constructed in the county. One of the projects is the Langley Park Pedestrian-Bike Access Project. This mile-long bike lane will serve as a key route for pedestrians and cyclists to travel from the main attractions on University Blvd on the southern edge of the community north to the entrance to the Northwest Branch Trail toward the community's northern edge.

Currently In Progress Bike Lane

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 59. The alignment of the pedestrian-bike access trail currently being constructed by PGDPW&T.

The trail will begin at 15th Avenue and University Blvd at the southern edge of Langley Park before continuing 0.18 miles north to the intersection of 15th Avenue and Kanawha Street. At that intersection, the trail will follow Kanawha Street 0.14 miles west to the intersection where Kanawha Street merges with 14th Avenue. From that intersection, the trail will follow 14th Avenue on its curvy path 0.54 miles north to the intersection of 14th Avenue and Quebec Street, where it will follow Quebec Street 0.2 miles east to the entrance to the Northwest Branch Trail.

Strategy 3.2.2: Identify the most useful and connected local street corridors in Langley Park that could hold future bike lanes.

Our studio course identified three corridors where adding on-street bicycle lanes would benefit the community the most. These proposed bicycle lanes complement the already-in-progress bicycle lanes constructed by the Prince George's County's Department of Public Works & Transportation.

Aside from the two italicized programs in Action Step B, the proposed bicycle lanes could be funded by any programs and mechanisms addressed in Strategy 3.1.1, as those programs are intended solely for use on Maryland state highways, which these local streets are not.

Action Step A: Construct an east-west bike lane on Merrimac Drive from University Blvd to 16th Avenue.

Proposed Merrimac Drive Bike Lane

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 60. The proposed alignment of a bicycle lane on Merrimac Drive.

To accompany the Prince George's County Department of Public Works & Transportation's north-south trail already in progress, an east-west bicycle lane should be installed on the 0.7-mile stretch of Merrimac Drive from University Blvd on the West to the intersection of Merrimac Drive and 16th Avenue to the east. While the in-progress pedestrian-bike access trail is an alternative to New Hampshire Avenue for non-motorist travelers, there is a lack of a safe alternative to University Blvd for people traveling from east to west or vice versa.

Over the 0.7 miles on Merrimac Drive in which the bike lane would be installed, the road exists in two different forms. On the 0.12 miles from the intersection of University Blvd and Merrimac Drive on the westernmost segment to the intersection of Merrimac Drive and Tahona Drive, and the 0.28 miles from the intersection of 14th Ave and Merrimac Drive at the west to the intersection and Keokee Street and Merrimac Drive to the east, Merrimac Drive has a 60 foot right of way, as seen below in Figure 61.



Fig. 61. Merrimac Drive facing west between Tahona Drive and University Blvd.

As part of the Prince George's County Planning Department's Langley Park Bicycle Boulevards Study, community members distributed a survey to address their preferences about streetscapes on right-of-ways of varying widths. Although the specific streets addressed were ones in more southeastern parts of Langley Park, the community preferred the option below, with sidewalks on both sides of the street, 5-foot wide bicycle lanes with a two-foot separation between the travel lanes, which consist of one 10.5 foot lane in each direction, as seen below in Figure 62. The community's preferred option also contained no on-street parking.

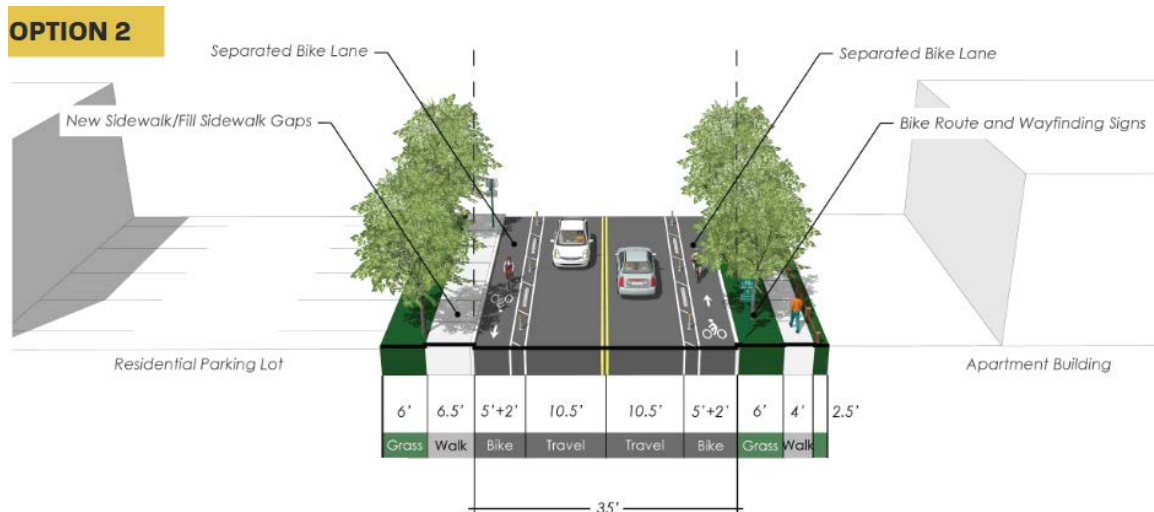


Fig 62. Community preferred option for the layout of a 60-foot right-of-way.

The remaining 0.3 miles of Merrimac Drive feature a wider right of way, with one travel lane and one parking lane in each direction, separated by a

planted median, as shown in Figure 63 below.



Fig 63. Merrimac Drive faces east from the intersection of New Hampshire Ave and Merrimac Drive and New Hampshire Ave.

On this stretch of Merrimac Drive, a painted bike line would be sufficient, as the lanes are wide enough that the travel lane could be narrowed to accommodate a bike lane while still being wide enough for cars to drive unimpeded.

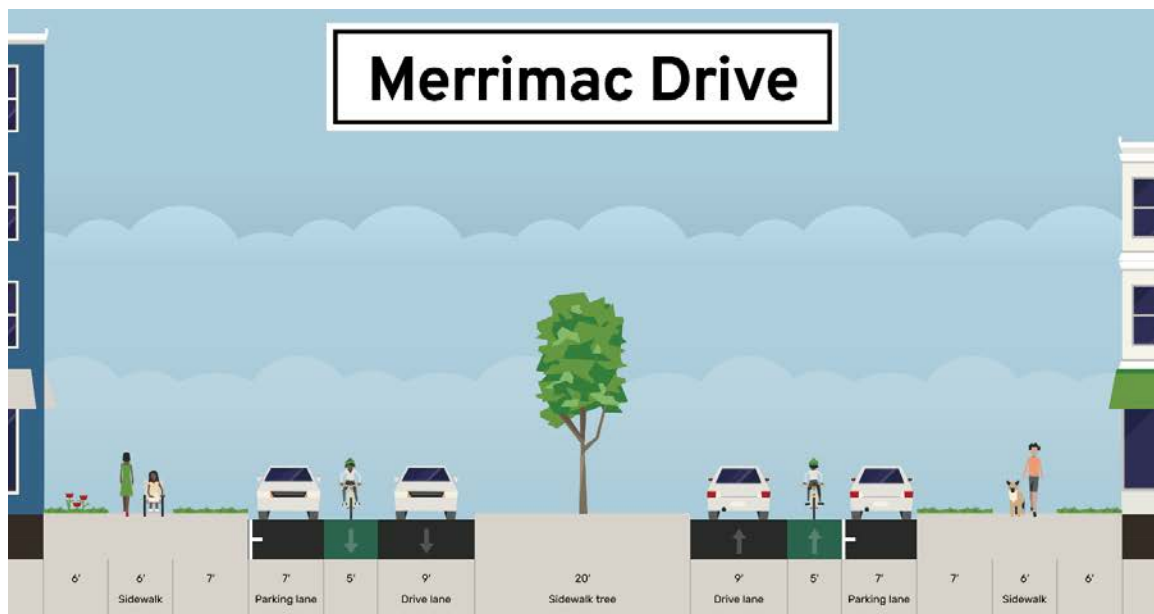


Fig 64. The proposed dimensions for the street layout on Merrimac Drive. Created using Streetmix, 2024.

As seen in the diagram in Figure 64, with the 25-foot wide curb-to-curb distance, there is sufficient room for a 7-foot parking lane, a 5-foot bicycle

lane, and a 9-foot travel lane. Narrowing the 20-foot planted median would create more space on the road but would significantly raise the project's cost.

Action Step B: Construct a bike lane on Keokee Street from Merrimac Drive to Riggs Road.

Proposed Keokee Street Bike Lane

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 65. The proposed alignment of a bicycle lane on Keokee Street.

To create a comprehensive network of bicycle lanes that would serve Langley Park as effectively as possible, a connecting bike lane along Keokee Street from its intersection with Merrimac Drive in the northwest to its intersection with Riggs Road in the southeast should be constructed. By linking with the eastern end of the bicycle lane on Merrimac Drive, Langley Park residents and community members could get from the western border to the eastern border without having to exit the bicycle network and avoid traveling on University Blvd.



Fig 66. Keokee Street facing northwest from the Riggs Road intersection.

Keokee Street is narrower than Merrimac Drive and the other streets in the community that will have bicycle lanes, including 14th Ave, 15th Ave, Kanawha Street, and Quebec Street, as Keokee Street's right-of-way is just 50 feet, of which the curb-to-curb distance is just 25 feet. The 25 feet is just enough room for two parking lanes and a bidirectional travel lane in the middle of the road.

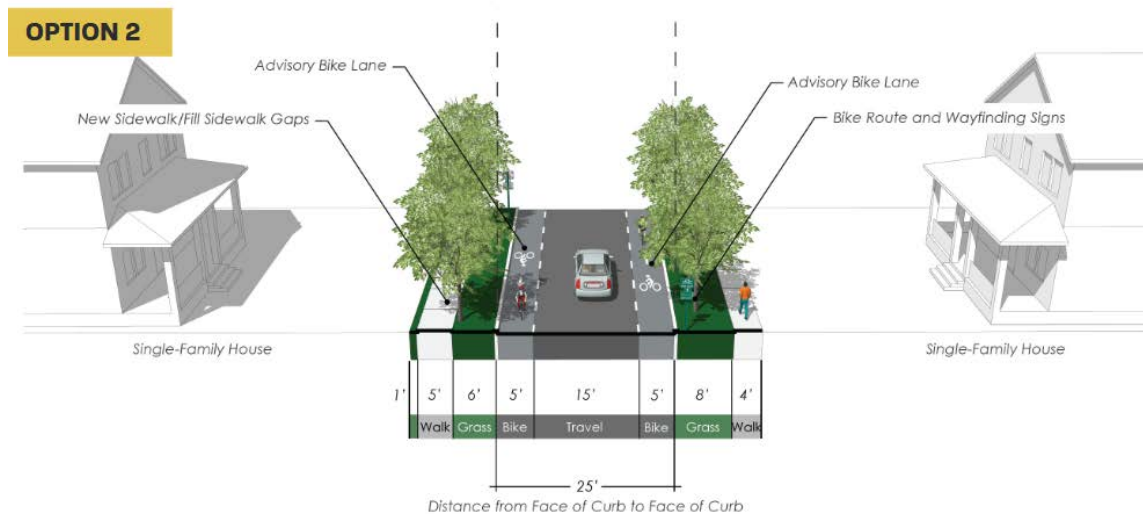


Fig 67. The community preferred the option of a bicycle lane on Keokee Street.

Keokee Street was one of the options considered in the Prince George's County Planning Department's Bicycle Boulevards study, and the community

avored the option shown above in Figure 67, where the two parking lanes were replaced by two five-foot-wide painted bicycle lanes, along with a wider 15-foot bidirectional travel lane. Furthermore, the wider bidirectional travel lane will make it easier for cars to pass each other by temporarily using the bicycle lanes.

Action Step C: Install an east-west bike lane on Quebec Street.

Proposed Quebec Street Bike Lane

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 68. Proposed alignment of the proposed bicycle lane on Quebec Street.

Another corridor that would benefit from installing a bicycle lane would be the section of Quebec Street West, where the in-progress Prince George's County Department of Public Works & Transportation pedestrian/bike access trail will be installed. This bike lane would be a 0.24-mile lane going from the intersection of 14th Avenue and Quebec Street to the east to the junction of Navahoe Drive and Quebec Street just short of the border between Prince George's County and Montgomery County.



Figure 69. Quebec Street facing east from the intersection of Quebec Street and 12th Avenue.

Like the 60-foot right-of-way on Merrimac Drive, the Prince George's County Planning Department's Langley Park Bicycle Boulevards Study's community survey can highlight the community's streetscape preference. The community prefers the option below, as seen in Figure 70, with sidewalks on both sides of the street, 5-foot wide bicycle lanes with a two-foot separation between the travel lanes, consisting of one 10.5-foot lane in each direction, and no on-street parking.

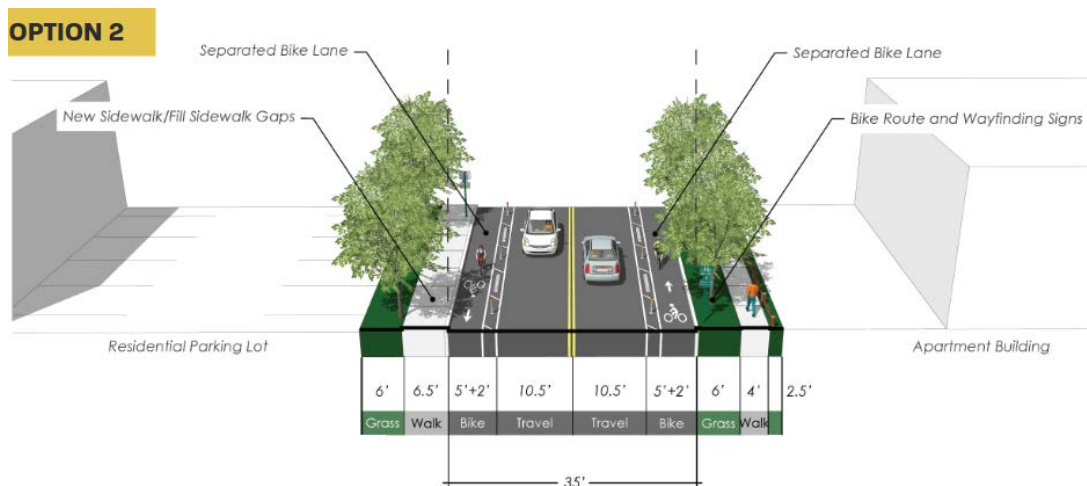


Figure 70. Community preferred option for the layout of a 60-foot right-of-way.

Objective 3.3: Add off-street mixed-use paths to make non-vehicular travel more efficient in Langley Park.

At our community engagement event, community members expressed that the layout of the street network was not conducive to walking around the community, as the streets aren't linear and don't take people to where they

need to go most efficiently. With our objective to create effective off-street mixed-use paths, we aimed to develop a network that allows people to travel more efficiently and quickly within Langley Park. To decide which paths to pursue, we combined existing open spaces with the community's input on places they would like to be better connected.

Strategy 3.3.1: Convert informal desire paths in Langley Park to official mixed-use paths.

To decide which paths to pursue, we asked for the community's input on places within Langley Park that they would like to be better connected, which included CASA and the Villages at Langley Apartment Complexes, the Langley Park Community Center, playground, and recreational areas, the Langley Park - McCormick Elementary School, and the Northwest Branch Trail. There are undoubtedly more paths and places that the community would find helpful to be better connected, but that will require more time and community engagements outside our capabilities.

Action Step A: Construct a mixed-use path connecting CASA to the Northwest Branch Trail.

Proposed Mixed-Use Path Connecting CASA and the Northwest Branch Trail

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 71. The proposed alignment of a mixed-use trail going from CASA in the Villas at Langley Apartments to the Northwest Branch Trail.

Some of the most cited places in the Langley Park community are very close proximally to each other but do not have a formal, reliable connection. The proposed trail that connects the Villas at Langley and CASA to the Langley

Park Community Center would connect multiple important places within the community.



Fig 72. The current informal path from the Villas at Langley Apartments to Merrimac Drive.

Currently, there is a partially paved path, seen above, from the northern series of buildings in the Villas at Langley apartment complex that connects to the Boys and Girls Club of Langley Park and Merrimac Drive. At the boundary of the property, there is a fence, seen below in Figure 73, that the property managers of the Villas at Langley complex can close and lock. When that fence is closed, and the path is blocked, a short couple-minute walk turns into a 20+ minute mile-long walk out the southern entrance to the apartment complex and west on Kanawha Street and north on 14th Avenue.

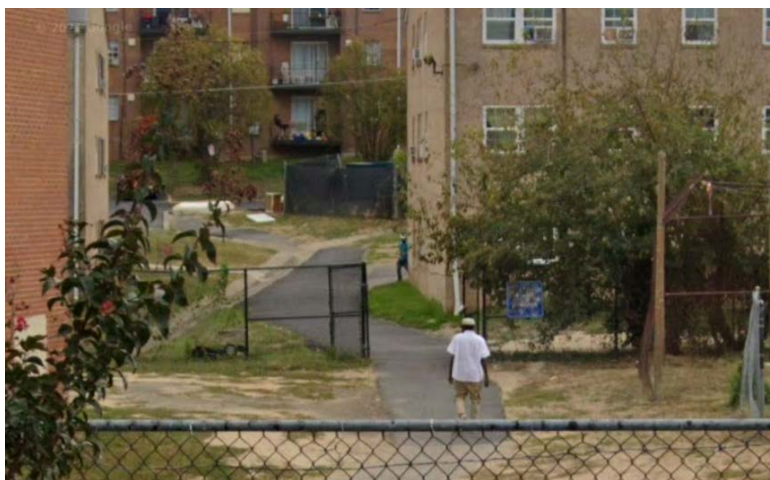


Fig 73. The lockable gate at the northern boundary of the Villas at Langley apartment complex.

By formalizing that pedestrian connection by converting it into an official mixed-use path, or at least having publicly known hours of operation, the community will have reliable access to a way to make their travels within the community more convenient and expedient.



Fig 74. The view north from Merrimac Drive onto the Langley Park Community Center property.

Across the street from where that path connects to Merrimac Drive, the proposed mixed-use path would continue on the far eastern portion of the Langley Park Community Center Property, to the right of the stairs in the image seen above in Figure 74 and on the far eastern edge of the Langley Park - McCormick Elementary School property, until the path reaches the Langley Hampshire Neighborhood Park, which is directly adjacent to the entrance to the Northwest Branch Trail. The total length of the new trail on the north side of Merrimac Drive is 0.15 miles and could resemble other parts of the Northwest Branch Trail, as seen below in Figure 75.



Fig 75. Northwest Branch Trail.

Action Step B: Consult with the community to identify other informal paths in Langley Park.

Through our community engagement process, we identified one corridor that a mixed-use path would be good to serve. More community engagement is necessary to identify other potential corridors and understand commuting and travel patterns within Langley Park. Engagement events should be held with the Prince George's County Planning Department and the Prince George's County Department of Public Works & Transportation to connect the entities making planning decisions with the community.

Strategy 3.3.2: Construct mixed-use paths on rights-of-way with large unused medians.

Several right-of-ways in Langley Park have vast (50+ foot) medians. Throughout the community outreach portion of the Langley Park Boulevard Study conducted by the Prince George's County Planning Department and in the community engagement events held during our studio course, community members expressed a desire for these medians to be made into public spaces with trails that would be pleasant to travel on and uninterrupted by intersections and curb cuts. Two streets in Langley Park have these wide medians: the eastern section of Merrimac Drive from the intersection with Keokee Street at the west to the intersection with New Riggs Road on the east and the section of New Riggs Road from Merrimac Drive on the North to the intersection with Jasmine Terrace at the south. Because these two rights of way intersect, the mixed-use paths could form a functionally continuous arc through the eastern section of Langley Park.

Action Step A: Construct a mixed-use path on New Riggs Road from the intersection with Riggs Road in the north to the intersection of Jasmine Terrace and New Riggs Road in the south.

Proposed New Riggs Road Mixed-Use Path

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 76. The proposed alignment of a mixed-use off-street path on the New Riggs Road median.

The first proposed mixed-use path in Langley Park would be along the right of way on New Riggs Road. The New Riggs Road right-of-way has two different typologies. The southern section is a 0.2-mile right-of-way 100 feet wide and has sidewalks that cross through, but no vehicular traffic outside of a 385-foot-long parking lot on the west side of the right-of-way circled in the image to the left.



Fig 77. An aerial view of the southern portion of the New Riggs Road right-of-way.



Fig 78. The southern section of the New Riggs Road right-of-way, facing north from the Jasmine Terrace area.

The Prince George's County Planning Department's Langley Park Bicycle Boulevard Study developed several design options for mixed-use trails. It surveyed the community on what their preferred design would be. The community chose the design seen in Figure 79 below, as the curvy layout makes for an appealing path with open space, trees, and a pavilion alongside the path.



Fig 79. The community preferred option for a mixed-use path on the southern section of the New Riggs Road right-of-way.

The northern section between Merrimac Drive on the north and Keokee Street on the south is about 0.25 miles and has a right-of-way of 150 feet, with each side having a 19-foot vehicular street with one travel lane and one parking lane as well as a 7-foot wide grass strip and 5-foot wide sidewalk. The median between the two vehicular streets is 90 feet wide.



Fig 80. The northern section of the New Riggs Road right-of-way, facing north from the Keokee Street intersection.

Based on the community's preference for the southern segment of the New Riggs Road mixed-use path, an alternative layout like the one below in Figure 81 for the northern section of New Riggs Road should be considered. The new design maintains the width of the vehicular right-of-way, grass strips, and sidewalks, adding a wider mixed-use path in the median.



Fig 81. Proposed dimensions for the street layout of the northern section of New Riggs Road. Created using Streetmix, 2024.

Action Step B: Construct a mixed-use path on Merrimac Drive between 16th Avenue and Riggs Road.

Proposed Merrimac Drive Mixed-Use Path

-  Capital Bikeshare Docks
-  Purple Line Stations
-  Purple Line Route
-  Arterial Complete Streets
-  Planned Bike Lanes
-  Proposed Bike Lanes
-  Proposed Mixed-Use Paths



Fig 82. The proposed alignment of a mixed-use path in the median of Merrimac Drive.

Another mixed-use path that would serve as a transportation corridor and a public recreation space is the eastern portion of Merrimac Road, from the intersection with 16th Avenue in the west to New Riggs Road in the east. The mixed-use path would be about 0.25 miles long. Merrimac Drive has the same right-of-way for the entire stretch, with five-foot wide sidewalks, seven-foot wide grass strips, and eighteen-foot wide roadways, with one parking and one moving lane on each side of a sixty-foot median.



Fig 83. Merrimac Drive facing east.

The proposed Merrimac Drive mixed-use path would resemble the mixed-use path on the northern section of New Riggs Road, although the path would

need to be less windy due to the narrower median. The layout could look like Figure 84, as seen below.

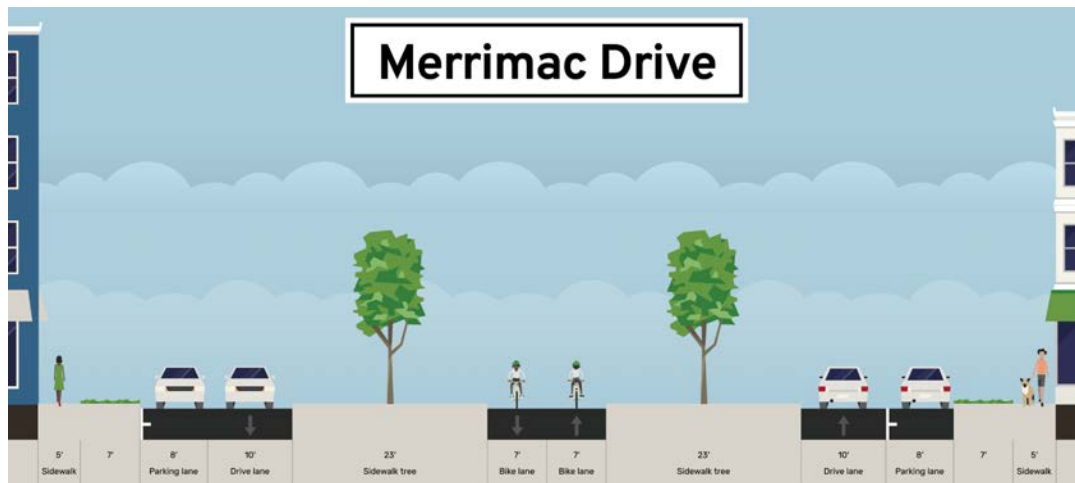


Fig 84. The proposed dimensions for the street layout of the Merrimac Drive mixed-use path. Created using Streetmix, 2024.

Limitations

A complete comprehension of the Langley Park community and its needs is limited due to the confines of a single academic semester. This report is only a small contribution to the more extensive work that our interlocutors and Langley Park residents have conducted and will continue after the culmination of this studio.

We acknowledge that our work is bound by limited experience and expertise in community engagement, equitable development principles, and strategic planning, as well as time constraints and attention to other academic and work commitments.

The report's visions, objectives, and strategies are built on community feedback from our midterm event and other community meetings. We understand that these views don't represent the opinion of all Langley Park residents and are limited to those who attended the events.

Conclusion

By 2034, Langley Park will have the opportunity to become a thriving, inclusive community where residents have **equitable access to safe housing, reliable transportation, sustainable green infrastructure, and robust economic opportunities**. However, progress may be hindered by funding uncertainties, rising costs, and the effects of federal, state, and

local policies. Through strategic planning, meaningful community engagement, and focused investments, Langley Park can overcome these challenges, **cultivating a vibrant and sustainable future that honors its cultural diversity while advancing equity, economic vitality, and environmental resilience.**

Langley Park's journey toward a sustainable and equitable future underscores the resilience and diversity of its community. The unique identity of this immigrant-majority area, coupled with its strategic location within Prince George's and Montgomery Counties, offers a robust foundation for inclusive urban development. Through a comprehensive analysis of housing, transportation, environmental sustainability, and community and economic development, this report has outlined actionable strategies to address Langley Park's most pressing challenges. Prioritizing the voices of its residents, equitable development principles remain central to preserving Langley Park's cultural richness while improving its infrastructure.

The proposals presented in this report leverage community strengths such as grassroots advocacy, small business entrepreneurship, and active civic engagement. Recommendations for addressing overcrowded housing, promoting green infrastructure, and enhancing pedestrian safety aim to balance environmental sustainability with economic growth. Additionally, the integration of equitable transit-oriented development with the upcoming Purple Line can significantly improve connectivity and access to opportunities for Langley Park's residents if carefully implemented with strong anti-displacement measures.

Achieving these aspirations will require a concerted effort among stakeholders, including government agencies, local organizations, and residents. Collaboration and strategic planning must be sustained over time to address barriers such as income disparities, infrastructure deficits, and the uncertainties posed by broader economic and political challenges. Only through continuous engagement and adaptability can Langley Park chart a path to becoming a vibrant, thriving community.

References

- (2018). (rep.). *CONCEPTUAL STUDY TO UNDERGROUND UTILITY WIRES IN BERKELEY* (pp. 7–219). Berkeley, CA.
- Active transit signal priority. National Association of City Transportation Officials. (2016, May 5).
<https://nacto.org/publication/transit-street-design-guide/intersections/signals-operations/active-transit-signal-priority/>
- Aeroqual. (2024). *Series 200 portable air quality monitor*. Aeroqual. Retrieved from <https://www.aeroqual.com/product/series-200>
- Aeroqual. (2024). *Series 300 portable air quality monitor*. Retrieved from <https://www.aeroqual.com/product/series-300>
- Airthings. (2024). *Wave Plus and View Plus air quality monitors*. Airthings. Retrieved from <https://www.airthings.com>
- Amazon. (2024). *Smart air quality monitor*. Retrieved from <https://www.amazon.com>
- American Community Survey (ACS). (2022). American Community Survey (ACS) Data for 2022. *United States Census Bureau*. Retrieved from [https://data.census.gov/table?t=Owner/Renter%20\(Householder\)%20Characteristics:Vacancy:Year%20Structure%20Built&g=040XX00US24_050XX00US24033_160XX00US2445525](https://data.census.gov/table?t=Owner/Renter%20(Householder)%20Characteristics:Vacancy:Year%20Structure%20Built&g=040XX00US24_050XX00US24033_160XX00US2445525)
- American Tree Experts. (2024). *American Tree Experts*. Retrieved from <https://www.americantreeexperts.com>
- Arbor Day Foundation. (2024a). *Tree planting cost estimates*. Retrieved from <https://www.arborday.org>
- Arbor Day Foundation. (2024b). *Tree Nurseries*. Retrieved from <https://www.arborday.org/trees/nurseries/>
- Arbor Day Foundation. (2024c). *Tree planting guide*. Retrieved from <https://www.arborday.org/trees/planting/>
- Atmotube. (2024). *Atmotube Pro portable air quality monitor*. Retrieved from <https://atmotube.com/products/atmotube-pro>
- Better Bus: Bus Lanes*. WMATA. (n.d.).
<https://www.wmata.com/initiatives/strategic-plans/Bus-Lanes/index.cfm>
- Boneville Power Administration (2016). *Residential Weatherization Best Practices Field Guide*.
<https://www.bpa.gov/-/media/Aep/energy-efficiency/residential/residential-weatherization-essentials/wx-2016-best-practices-field-guide.pdf>
- Casey Trees. (2018). *Tree species selection for urban landscapes*.
<https://www.caseytrees.org>
- Center for Community Engagement, Environmental Justice, and Health. (2024). *Air Quality*. Retrieved from <https://www.ceejh.center/air-quality>
- Chesapeake Bay Trust. (2024). *Tree canopy grants*.
<https://cbtrust.org/grants/tree-canopy-grants/>
- Chesapeake Bay Trust. (n.d.). Prince George's County community gardens mini grant.
<https://cbtrust.org/wp-content/uploads/Prince-Georges-County-Community-Gardens-Mini-Grant-FY24-RFP.pdf>
- Clements, A., R. Duvall, D. Greene, AND T. Dye (2022). *The Enhanced Air Sensor Guidebook*. U.S. Environmental Protection Agency.
https://cfpub.epa.gov/si/si_public_record_report.cfm?Lab=CEMM&dirEntryId=356426

Comprehensive Housing Affordability Strategy (CHAS) Data. (2016-2020). Consolidated Planning/CHAS Data. *United States Department of Housing and Community Development*. Retrieved from <https://www.huduser.gov/portal/datasets/cp.html#2000>

Congress for the New Urbanism (CNU). (2020). Preventing displacement from a new transit line. [d-guide.pdf](#)

Congressman Ruppertsberger (2023). *Maryland Department of the environment receiving nearly half million to improve air quality and environmental justice in three communities*. <https://ruppersberger.house.gov/news-room/press-releases/maryland-department-environment-receiving-nearly-half-million-improve-air>

Davey Resource Group. (2020). *Urban tree planting guidelines*. <https://www.davey.com/resource-group>

DC Department of Energy and Environment (2024). Rain Gardens - A How-To Manual for Homeowners. [https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Rain gardenHow2HomeownerUWExtension.pdf](https://doee.dc.gov/sites/default/files/dc/sites/ddoe/publication/attachments/Rain%20gardenHow2HomeownerUWExtension.pdf)

Denchfield Nursery, Inc. (2024). *Denchfield Nursery, Inc.* <https://denchfieldnursery.com/>

Department of Energy (2023). *Making the Switch to Induction Stoves or Cooktops*. <https://www.energy.gov/articles/making-switch-induction-stoves-or-cooktops#:~:text=Better%20for%20You%2C%20Better%20for,ve%20left%20the%20stove%20on>

Energy Saver (2024). *Heat Pump Systems*. <https://www.energy.gov/energysaver/heat-pump-systems>

Federal Transit Administration. (2016). (rep.). *Issues in Bus Rapid Transit*.

Freemark, Y. (2024, July 18). *Transit stations along highways expose riders to pollution and limit development opportunities*. Urban Institute. <https://www.urban.org/urban-wire/transit-stations-along-highways-expose-riders-pollution-and-limit-development>

GreenTree Landscaping. (2024). *GreenTree Landscaping*. <https://www.greentreelandscapingmd.com>

Guidelines for the Design and Placement of Transit Stops (2009). Retrieved from [https://www.wmata.com/about/board/meetings/board-pdfs/upload/020212_Transit StopGuidelinesAttachmentA.pdf](https://www.wmata.com/about/board/meetings/board-pdfs/upload/020212_TransitStopGuidelinesAttachmentA.pdf).

Hanna, W. J. (2003). Mobility and the Children of Langley Park's immigrant families. *The Journal of Negro Education*, 72(1), 63. <https://doi.org/10.2307/3211291>

Horticulture Society of Maryland (2024). Community Gardening Grants. <https://mdhorticulture.org/community-gardening-grants/>

International Society of Arboriculture. (2020). *Tree maintenance best practices*. <https://www.treesaregood.org>

IQAir. (2024). *AirVisual Pro: Smart air quality monitor*. IQAir. <https://www.iqair.com>

Iungman, T., Cirach, M., Marando, F., Pereira Barboza, E., Khomenko, S., Masselot, P., Quijal-Zamorano, M., Mueller, N., Gasparrini, A., Urquiza, J., Heris, M., Thondoo, M., & Nieuwenhuijsen, M. (2023). Cooling cities through urban green infrastructure: A health impact assessment of European cities. *The Lancet*, 401(10376), 577–589. [https://doi.org/10.1016/s0140-6736\(22\)02585-5](https://doi.org/10.1016/s0140-6736(22)02585-5)

Joint Center for Housing Studies of Harvard University. (2024). The State of the Nation's Housing 2024. Harvard Graduate School of Design.

Kilanowski, J. F. (2017, August). *Full article: Breadth of the socio-ecological model*. Taylor & Francis. <https://www.tandfonline.com/doi/full/10.1080/1059924X.2017.1358971>

- Lakatos, S. (2024, June 18). *How DC's bus shelters can better serve riders who need them most*. Greater Greater Washington.
<https://ggwash.org/view/93844/how-can-dcs-bus-shelters-better-serve-riders-who-need-them-the-most>.
- Lifshutz, G. (2020). *The best fruit trees for small spaces: A guide to growing fruit in small gardens*. Timber Press.
- Lung-Amam, W. & Dawkins, C. (2019). The power of participatory story mapping: Advancing Equitable Development in disadvantaged neighborhoods. *Community Development Journal*, 55(3), 473–495. <https://doi.org/10.1093/cdj/bsy064>
- Lung-Amam, W. S., Sandoval, J. S. O., & Todoran, C. (2020). Housing Matters: Ensuring Quality, Safe, and Healthy Housing in Langley Park, Maryland. *University of Maryland*.
- Lung-Amam, W., Alvarez, N., & Green, R. (2022). We make us safe: Alternatives to policing in a Latinx immigrant inner-ring suburb. *Journal of Urban Affairs*, 46(8), 1682–1706. <https://doi.org/10.1080/07352166.2022.2130072>
- Lung-Amam, W., Alvarez, N., & Green, R. (2023). Beyond community policing: centering community development in efforts to improve safety in Latinx immigrant communities. In *Beyond Lip Service* (1st ed.). Routledge.
- Lung-Amam, W., Dawkins, C., Moreira-Smith, Z., Knaap, G. J., & Washington, A. (2017). Preparing for the Purple Line: Affordable Housing Strategies for Langley Park. *National Center for Smart Growth Research and Education Center*.
- Lung-Amam, W., Pendall, R., & Knaap, E. (2019). Mi Casa no es Su Casa: The fight for equitable transit-oriented development in an inner-ring suburb. *Journal of Planning Education and Research*, 39(4), 442–455.
<https://doi.org/10.1177/0739456x19878248>
- Lung-Amam, W., Pendall, R., & Knaap, E. (2019). The Promise and Challenge of Equitable Transit-Oriented Development in Diverse Suburbia. In *The Metropolis of Public Transport: Paris – Washington Cross-visions*. essay.
- Lung-Amam, W., Wong, B., Carpenter, M., Washington, A., & Murillo-Khadjibaeva, J. (2019). (rep.). *Housing Matters: Ensuring Quality, Safe, and Healthy Housing in Langley Park, Maryland*.
- Lynch, K. (1977). *The image of the city*. MIT Press.
- Maryland Department of Environment (2024). *MDE EJ Screening Tool Version 2.0 Beta*. <https://mdewin64.mde.state.md.us/EJ/>
- Maryland Department of Natural Resources. (2024). *5 million trees initiative*. <https://dnr.maryland.gov/forests/Pages/5-million-trees.aspx>
- Maryland Department of Natural Resources. (2024). Community Stewardship Grants https://dnr.maryland.gov/met/Pages/grant_programs.aspx
- Maryland Department of Natural Resources. (2024). *Urban and community forestry grant program*. <https://dnr.maryland.gov/forests/Pages/grants.aspx>
- Maryland Department of Transportation (DOT) (2024). *Pedestrian Facilities/Bikeways*. <https://www.montgomerycountymd.gov/OMB/Resources/Files/omb/pdfs/fy21/ciprec/PedestrianFacilitiesBikeways.pdf>
- Maryland Department of Transportation. (2022). MDOT SHA Annual average daily traffic (AADT).
<https://data.imap.maryland.gov/maps/77010abe7558425997b4fcdab02e2b64/about>
- Maryland Department of Transportation. (2024)
<https://www.arcgis.com/home/item.html?id=a687ced8a6fb43f9b37fd3f463a38aac>
- Maryland Department of Transportation. (2024). *MDOT Urban Tree Program Grant Application*.
<https://onestop.md.gov/forms/mdot-urban-tree-program-grant-application-63ff92c6c101100001b061b5>

- McPherson, E. G., Nowak, D. J., & Heisler, G. M. (2011). Quantifying urban forest structure, function, and value: The Chicago urban forest ecosystem study. *Urban Forestry & Urban Greening*, 10(1), 49-56.
<https://doi.org/10.1016/j.ufug.2010.09.001>
- McPherson, E. G., Simpson, J. R., Peper, P. J., & Xiao, Q. (2016). Urban tree planting costs and benefits. *Environmental Research Letters*, 11(2), 1-8.
<https://doi.org/10.1088/1748-9326/11/2/024013>
- Office of Citizen. (2019, March 21). *From the playground to the soccer field: Engaging youth is key to Community Health*. Medium.
<https://medium.com/office-of-citizen/from-the-playground-to-the-soccer-field-engaging-youth-is-key-to-community-health-ed0a978538c7>
- Office of Energy Efficiency and Renewable Energy (2024a). *Community Solar Basics*.
<https://www.energy.gov/eere/solar/community-solar-basics>
- Office of Energy Efficiency and Renewable Energy (2024b). *How Does Solar Work?*.
<https://www.energy.gov/eere/solar/how-does-solar-work>
- Office of Policy Development and Research. (2021). Comprehensive Housing Affordability Strategy data, 2016-2020. *United States Department of Housing and Urban Development*. Retrieved from
<https://www.huduser.gov/portal/datasets/cp.html>
- OurTrees (2024). *OurTrees Benefits: Trees in Langley Park, MD*.
<https://ourtrees.itreetools.org/#/report?longitude=-76.97960443288648&latitude=38.989166711337276>
- Prana Air. (2024). *Sensible+ air quality monitor*. Prana Air. Retrieved from
<https://www.pranaair.com>
- Prince George's County (2012). Transforming Neighborhoods Initiative (TNI).
- Prince George's County (2024). *Air Quality Services*.
<https://www.princegeorgescountymd.gov/departments-offices/health/environmental-health/policy-permits-complaints/air-quality-services>
- Prince George's County (2024). *Prince George's County Community Gardens Mini-Grant Program*.
<https://cbtrust.org/wp-content/uploads/Prince-Georges-County-Community-Gardens-Mini-Grant-FY24-RFP.pdf>
- Prince George's County Advances Commitment to Zero Emissions with \$25.4 Million USDOT Grant. (2024). *Prince George's County MD*. Retrieved from
<https://www.princegeorgescountymd.gov/departments-offices/news-events/news/prince-georges-county-advances-commitment-zero-emissions-254-million-usdot-grant-0>
- Prince George's County Department of the Environment. (2024). *Tree ReLEAF program*. <https://www.princegeorgescountymd.gov/3567/Tree-ReLEAF-Program>
- Prince George's County Department of the Environment. (2024). *Tree canopy program*. <https://www.princegeorgescountymd.gov/3501/Tree-Canopy-Program>
- Prince George's County Redevelopment Authority (2024). Community Impact Grants.
<https://www.princegeorgescountymd.gov/departments-offices/redevelopment-authority/grants/community-impact-grants>
- Prince George's County, Maryland (2023). *Urban Trees Program*.
<https://cbtrust.org/wp-content/uploads/26-Prince-Georges-County-Maryland.pdf>
- Prince George's Plaza Metro Station Area Pedestrian Safety and Access Study (2019). Retrieved from
https://www.pgplanning.org/wp-content/uploads/2024/04/PGPSPAS_Report.pdf
- Project overview: Purple line MD*. Purple Line. (n.d.).
<https://www.purplelinemd.com/overview/>
- Purple Line Corridor Coalition. (2019-2022). Housing Action Plan.

Purple Line Corridor Coalition. (2022). Equitable development strategies for the Purple Line corridor. University of Maryland.

Qingping. (2024). *Qingping Air Monitor Lite*. Qingping. Retrieved from <https://www.qingping.co>

Sailor, D. J. (1995). Simulated urban climate response to modifications in surface albedo and vegetative cover. *Journal of Applied Meteorology*, 34(7), 1694–1704. [https://doi.org/10.1175/1520-0450\(1995\)034<1694:SUCRTM>2.0.CO;2](https://doi.org/10.1175/1520-0450(1995)034<1694:SUCRTM>2.0.CO;2)

Santamouris, M. (2013). Using cool pavements as a mitigation strategy to fight urban heat island—A review of the actual developments. *Renewable and Sustainable Energy Reviews*, 26, 224–240. <https://doi.org/10.1016/j.rser.2013.05.047>

SCS Engineers (2015). *Ambient Air Monitoring - Los Angeles World Airports (lawa), Los Angeles, California*. <https://www.scsengineers.com/scs-project-case-stu/ambient-air-monitoring-los-angeles-world-airports-lawa-los-angeles-california/>

Takoma Garden Center. (2024). *Old Takoma Ace Hardware & Garden*. <https://acehardwaredc.com/pages/takoma-garden-center>

Teledyne API. (2024). *Model T640 particulate monitor*. Retrieved from <https://www.teledyne-api.com>

Temtop. (2024). *Air quality monitors*. Temtop. Retrieved from <https://www.temtop.com>

The White House. (n.d.). Fact Sheet: Community Revitalization Fund Would Invest in Nation's Civic Infrastructure. Retrieved from <https://www.whitehouse.gov/wp-content/uploads/2021/07/WH-Fact-Sheet-Community-Revitalization-Fund.pdf>

Thermo Fisher Scientific. (2024). *1405-DF TEOM continuous ambient particulate monitor*. Retrieved from <https://www.thermofisher.com>

Transit-Oriented development. Transit-Oriented Development. (n.d.). <https://www.transit.dot.gov/TOD>

Tree Care Industry Association. (2024). *Tree care tips: How to care for newly planted trees*. <https://www.treecaretips.org>

Tree Care of Maryland. (2024). *Tree Care of Maryland*. <https://www.treecareofmaryland.com>

Tree Equity Score (2024). *Tree Equity Score National Explorer*. <https://www.treeequityscore.org/map#12.86/38.99702/-76.98518/-44.9>

Tree Solutions, LLC. (2024). *Tree Solutions, LLC*. <https://www.treesolutionsllc.com>

U.S. Forest Service. (2024). *Community forest and open space conservation program*. <https://www.fs.usda.gov>

U.S. Forest Service. (2024). *Urban and community forestry program*. <https://www.fs.usda.gov/managing-land/urban-and-community-forests>

Uliano, D. (2019). Prince George's County sets limits on cooperating with ICE. *WTOPNews*. Retrieved from <https://wtop.com/prince-georges-county/2019/06/prince-georges-county-sets-limit-s-on-cooperating-with-ice/>

US Census Bureau (2024) *QuickFacts Langley Park CDP, Maryland*. <https://www.census.gov/quickfacts/table/PST045215/2445525>

US Department of Agriculture [USDA]. (2020). *Forest Service Tree Identification Guide*. <https://www.fs.fed.us>

US Environmental Protection Agency (2024). *A Guide to Siting and Installing Air Sensors*. <https://www.epa.gov/air-sensor-toolbox/guide-siting-and-installing-air-sensors#:~:text=Install%20about%203%2D6%20ft,where%20a%20person%20might%20breathe>

US Environmental Protection Agency (2024). *Air Monitoring and Air Quality Sensors Grants under the Inflation Reduction Act*.
<https://www.epa.gov/grants/air-monitoring-and-air-quality-sensors-grants-under-inflation-reduction-act#:~:text=EPA%20is%20announcing%20the%20availability,o%20upgrade%20existing%20ambient%20air>

US Environmental Protection Agency (2024). *Using Green Roofs to Reduce Heat Islands*. <https://www.epa.gov/heatislands/using-green-roofs-reduce-heat-islands>

US Environmental Protection Agency [EPA]. (2024). *Environmental education grants*.
<https://www.epa.gov/education/environmental-education-ee-grants>

Vaisala. (2024). *AQT420 air quality transmitter*. Retrieved from
<https://www.vaisala.com>

Vision Zero Prince George's. (n.d.). <https://visionzero-princegeorges.hub.arcgis.com/>

Appendix A - Final Community Engagement Results

The studio conducted a final community engagement event at CASA headquarters in Langley Park on December 12, 2024, that was organized around receiving feedback for strategic plans on the four overarching themes: housing and neighborhoods, transportation, environment, climate and sustainability, and community and economic development.

Housing and Neighborhood

The housing and neighborhood group presented their three goals as transformed spaces within the community: 1) twenty-seven new townhomes behind the Villas at Langley Park, 2) a new community soccer field, and 3) a reactivated community garden at the Villas at Langley Park. To visually guide community members in locating the interventions, we provided a marker pointing to the areas of interest.

Members of the community appreciated the proposed soccer field because it would provide a space where children in the community could come and play. Ruby, a sixteen-year resident of Langley, suggested moving the soccer field to a different location and received the support of other members of the community.

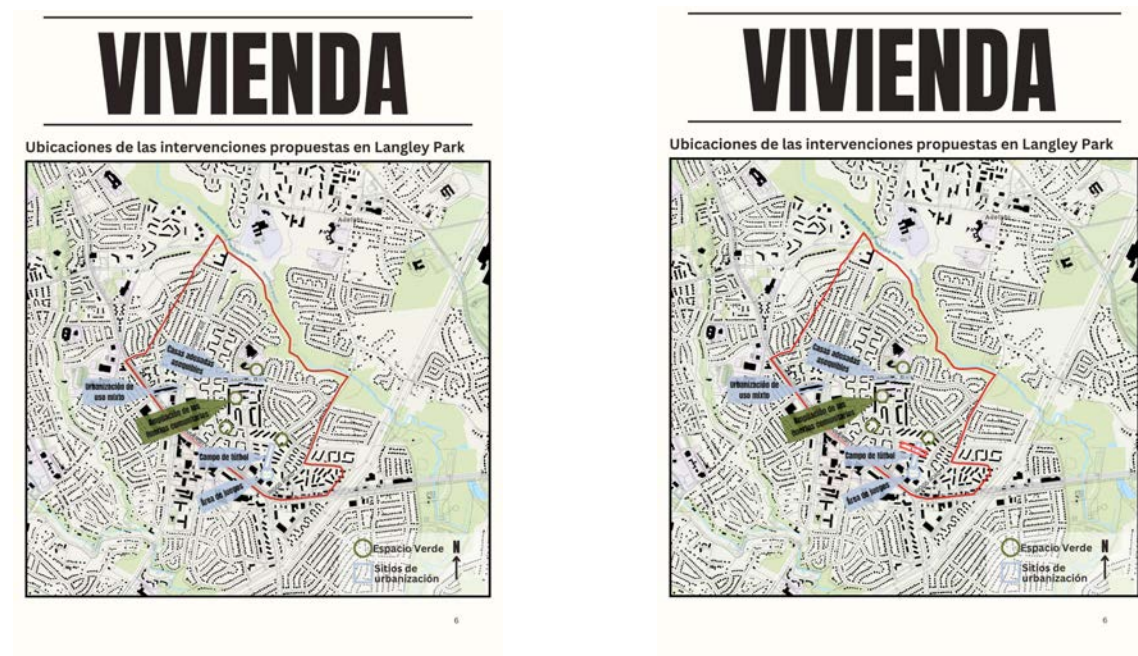


Figure A1. Proposed areas of intervention by UMD Community Planning Studio vs Proposed adjustment by the community.

Although the conversation about what residents liked shifted at each table, many used the community engagement event to voice their concerns and

share their experiences of living in Langley Park. These concerns painted a picture of the living conditions within the housing units and the public realm. Key concerns included 1) safety and crime, 2) housing affordability and accessibility in future development, 3) property management issues, and 4) fears of losing community identity.

A few residents felt comfortable sharing their personal experiences, hoping their stories would raise awareness about the need for improved safety measures for community members. Many residents agreed that, as of 2022, Langley Park was beginning to feel like a “safe” community. However, this sense of safety does not extend to nighttime, as many assaults occur in poorly lit areas or locations without proper surveillance. Despite some subtle improvements in crime prevention, residents urged caution, advising others to avoid trouble-prone areas at certain times.

Housing affordability also emerged as a significant concern when residents saw the potential transformation of the green space behind the Villas at Langley Park. The housing and neighborhood group also presented an example of a mixed-use building to gather residents’ feedback. Many residents expressed fears of displacement if mixed-use or new townhome developments were constructed in the neighborhood. The topic of gentrification also arose, with concerns about how the Purple Line may impact the community.

Property management was the residents’ most significant grievance. There is a lack of respect shown to Langley Park residents who are renters. Property management has used intimidation tactics, particularly before COVID-19. Recently, residents have been forced to switch their rent payment methods, creating additional challenges. One resident shared her experience of making a rent payment at a 7-Eleven store. She requested a receipt but noticed the ink was faint and hard to read. When she asked for another receipt, she was told it would be recorded in the management’s system. Weeks later, property management claimed she had not paid her rent. This incident highlights a disconnect between the community and property management, which should be addressed as dignified housing is integral to fair and equitable housing.

Both the feedback and input from community members will be carefully considered during the final development of the report.

Environment, Climate & Sustainability

The Environment, Climate & Sustainability team presented three proposed solutions to reduce air pollution in Langley Park, Maryland: air quality monitoring stations, community gardens and bike lanes. The team also

presented three proposed solutions to reduce the heat island effect in Langley Park, Maryland: planting fruit trees, applying cool reflective pavement and installing pervious surfaces. The team further provided proposed locations for the air quality monitoring stations and the community gardens to gather community feedback. Community members were generally supportive of all the proposed environmental projects. However, there was a particular interest in tree planting initiatives and community gardens. Many community members were interested in federal, state and local grant programs to fund these initiatives, stating that the community itself did not have the financial resources to do so. In addition, some community members stated that crime reduction initiatives took precedence for them over environmental projects.

The posters we shared with the community are provided below:

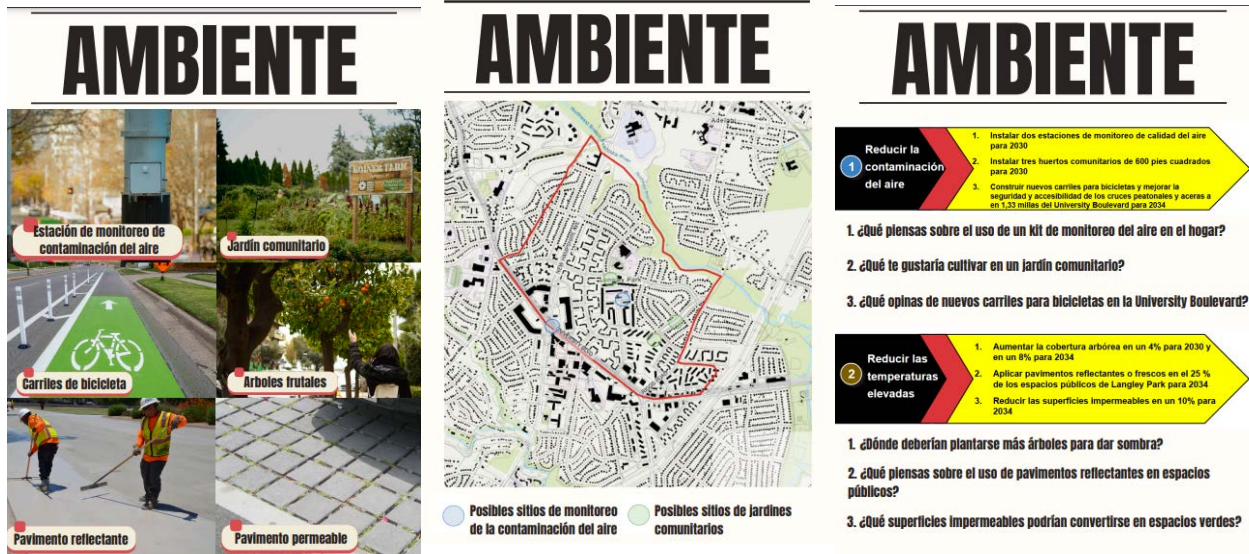


Figure A2: *Community Development (Environment, Climate and Sustainability)* Posters shared at final community engagement event. (2024).

Community and Economic Development

The Community and Economic Development team presented on our specific goals related to improving economic opportunities and efforts to strengthen community organizing potential. Our group differed in comparison to other groups as our proposed solutions were more focused on empowering the capacity of residents themselves, beyond the restriction of space. Our solutions pertaining to economic growth include creating opportunities to bridge accessibility of work skills training for high demand industries such as solar and construction and opportunities for small business loans. Our

solutions pertaining to community development include more programming for children and families, opportunity to empower local community organizers, and the build or rehabilitation of outdoor spaces to promote community cohesion. Community residents were quite supportive of the solutions shared and provided valuable insight which supported the needs for our proposed resolutions.



Fig A3. Community Development (Community and Economic Development) Posters shared at final community engagement event. (2024).

Transportation

At the Transportation station, community members were presented with proposed solutions and visualizations in response to concerns expressed during the midterm community engagement event. We proposed Capital Bikeshare stations; sheltered, complete bus stops; Complete Streets design on University Boulevard where the Purple Line will be; bus-only lanes; bike lanes; and a rendering of what the Riggs Road Purple Line station will look like. Community members shared their opinions on these visualizations, indicating excitement for such transformations and a belief that Langley Park residents deserve safer, improved transportation systems. Many of the community members rely on public transit to get around and are frustrated with Purple Line construction preventing full mobility. In general, community members were pleased with the proposed solutions and had high expectations for what these would look like in the Langley Park context.

The posters we shared with community are provided below:



Fig A4. Community Development (Transportation) Posters shared at final community engagement event. (2024).

Table A1: Housing Feedback Analysis

Proposed Solution	Description of Solution	Comments on Solution

Table A2: Environment and Sustainability Feedback Analysis

Proposed Solution	Description of Solution	Comments on Solution
Air quality monitoring stations	Set up two air quality monitoring stations, one along University Boulevard where there is heavy traffic and another near CASA where there is light traffic by 2030	• Community members liked the idea of having one air pollution monitor in a high traffic area and one in a low traffic area to make comparisons in air quality based on car traffic • Community members noted that there a lot of cars that emit smoke that drive through Langley Park, Maryland on a regular basis
Community gardens	Install three 600 square foot community gardens in Langley Park, Maryland by 2030	• Community members identified community gardens as one of the highest priorities of the proposed environmental projects • Many community members were interested in planting small garden plots on their residential property, but states that building management would not allow this to happen • Some community members wanted a community garden next to the community center • Many community members

		expressed interest in growing vegetables without chemicals and pesticides
Bicycle lanes	Construct 1.33 miles of new bike lanes along University Boulevard in Langley Park, Maryland by 2034	Community members generally thought installing bike lanes along University Boulevard would be beneficial. However, they expressed concern about there being enough space for cars
Fruit trees	Plant fruit trees, particularly in the commercial corridor, to increase tree canopy cover by 8% by 2034 in Langley Park, Maryland	- Most community members identified tree planting as a high priority for Langley Park, Maryland - Many community members said they would be willing to participate in tree planting events - Community members wanted trees planted both in the commercial corridor and near their apartment complexes - Some community members commented that there were a lot of trees removed from Langley Park recently, and they were not replaced
Cool reflective pavement	Apply cool, reflective pavement on 25% of Langley Park's public spaces by 2034	Community members generally thought that applying reflective pavement was a good strategy to reduce the excessive heat
Pervious surfaces	Reduce impervious surfaces by 10% by 2034	Community members generally supported the installation of pervious surfaces. However, it was identified as a lower priority compared to trees and community gardens

Table A3: Community and Economic Development Feedback Analysis

Proposed Solution	Description of Solution	Comments on Solution
Work skills training	An opportunity to organize courses that educate on high in demand skills training around civic and community labor to help residents have greater chances for good work within the area. With the rush of development projects across the region and the transition to adopting more sustainable energy methods, the need for skilled laborers in solar energy installation and constructions are in high demand of the State of Maryland and private interests.	• Community members generally supported the concept of bridging knowledge through organized courses. • Multiple community members supported the options of solar installation and constructions. • Other residents offered alternative course options such as coding and other computer related skills, as well as business management. • One resident suggested a course on childcare management after she expressed how childcare for her cohort of the community is done communally at homes, where one or two women watch the bulk of children. They explained how they'd be interested in training so that they could start a daycare center for the community. • Several women at the table enthusiastically agreed
Small business loans	An opportunity to recommend that efforts to help the community progress economically, occur through a more equitable distribution for small business loans. Langley Park is home to a collective of small business types including street vendors, home businesses, and the Takoma Langley Crossroads commercial district. By providing opportunities to elevate small businesses, it can in	Not much feedback was given in terms of this proposal other than agreement.

	turn improve the socioeconomic conditions of residents and business owners within the area.	
Child & Family Programming	The proposal included the creation of more opportunities for children and youth, adults, and families to collectively have positive, fun, and educational programming after school, work, and on the weekends. The establishment of a soccer club or art classes were provided as examples.	• While the proposition included programs for adults and families, community members were very vocal on the urgent need for local children and teens. • Multiple residents experienced how the youth need something to keep them staying out of trouble and away from drugs. • One woman specifically expressed how she is very active in trying to find opportunities for her son but even when advertised the programs aren't falling through, cancelling the programs, only able to support a small group of children, or they're not as accessible to residents of Langley Park due to distance • Another woman gave an exact address of a space where she knows teens go to hang out and asked if something can be done to fix the area for them, hoping it would promote positive behaviors. The identified address was 1420 University Blvd. Hyattsville, MD 20783 • Nearly every community participant favored the idea of establishing a soccer club • One resident mother explained how it would be good for the players and the families, as they enjoy the sport together. • Another resident followed up with expressing the

		importance of soccer or known to them as “fútbol” for the Latino community. • Some residents also expressed a desire for art clubs for youth and adults, with one explicitly mentioning outdoor painting
Community Organization	To potentially address issues related to the unincorporated status of Langley Park, which leaves community residents without a official unified body to advocate on their behalf, similar to how designated town/cities posses an official governance, the designation of 501©3 to act as a form of representation for Langley Park is recommended. The designated organization would operate as a representative body with the purpose to pursue positive development and promote community wellness within the official boundaries of Langley Park.	• Community residents seem to highly favor this solution, with both oral and written communication expressing support for the need. • Community members also expressed frustration with feeling voiceless and not having a method or knowing how to go about asking for assistance with services and issues pertaining to their built environment.
Outdoor space renovation and activation	To promote community use of their surrounding environment and community cohesion, we recommended the need for efforts to activate the green spaces amongst dense concentrations of housing located around the organization CASA, including hundreds of residents of all ages. Examples provided included potential designation of a soccer field but applying chalk	• Community residents were excited about the possibility of development close to their homes. Multiple residents also appreciated the visualization of a pavilion as they recognized the need for a similar structure but identified with the concept as a “community patio” • One resident connected the idea directly to a need for social space outside of the home. She also informed us of how she was receiving

	lines to an unused green space and the building of a community pavilion.	English lessons from a neighbor and they could benefit from something like this • Another resident highlighted the opportunity for music, dancing, and other cultural events to occur in the space
--	--	---

Table A4: Transportation Feedback Analysis

Proposed Solution	Description of Solution	Comments on Solution
Capital Bikeshare stations	To increase first/last mile connectivity, community members can use micro-mobility options such as Capital Bikeshare bikes to travel to bus stops more quickly. Provides the option to not have to walk.	• Would be helpful for middle and high school students who miss the bus or cannot get on the bus when it is full • Would give young people the opportunity to exercise • Most people don't know how to ride a bike, but would use this if they were taught how • Is this realistic for the community? - Financial concerns of needing a bank account • Must adapt this to the conditions of the community
Sheltered bus stops	Improved bus stops with shelter from the elements; on-demand information on the buses on electronic display; ADA-compliant benches; and bus route maps.	• Thinks this is a great idea, should be universal across the community • Appreciates protection from the elements • What kind of retrofitting would be needed to adapt this idea to Langley Park?
Complete Streets	Transformation of University Boulevard and Riggs Road into Complete Streets would enable safe mobility for everyone, including pedestrians, bicyclists, and transit users. Design will be unique and respond to the community context.	• Appreciates the prioritization of pedestrian safety • Great expectations for this type of transformation • How can this be adapted to the community? Is there space for this transformation? • Pedestrian signaling would do away with challenge of crossing the street • More fluid movement in the

		community • Make sure every street has a sidewalk, especially for kids walking to and from school
Bus-only lanes	Lanes designated for the use of public transit and school buses during specific peak hours. Enables buses to bypass traffic.	• Helpful for those without a car who rely on the bus system • Would alleviate traffic congestion when on the bus • Wants to see improved transit lines for high school students due to truancy problem • Will this take a lane away from cars?
Bike lanes	Lanes designated for use by bicyclists.	
Light rail stations	The Purple Line is slated to open in 2027, where Langley Park will have two stations: Takoma-Langley Crossroads Transit Center and Riggs Road. Construction has caused a lot of distress to residents and disruptions to mobility.	• Excited for the possibility to access Purple Line stations without accidents • Majority are frustrated with the construction, difficult to walk around and pollution worries • Will get places faster without having to use a car • Will feel safer using Purple Line than taxi at night and will be cheaper than having to rely on a taxi • Not entirely convinced that pedestrians will be able to access stations safely • Concerned the Purple Line will create more traffic, especially because people will have to learn new traffic patterns

Appendix B - Stakeholder Log

Organization Name	Organization Type	Who They Serve
Maryland National Capital Park and Planning Commission (M-NCPPC)	Local government agency	Residents of Montgomery County. They manage land use planning and park services and focus on creating recreational spaces, infrastructure development, and sustainable growth.
Purple Line Corridor Coalition (PLCC)	Advocacy coalition	Communities along the Purple Line transit corridor, including Langley Park. The coalition focuses on equitable development, affordable housing, job creation, and minimizing displacement for residents and businesses along the Purple Line light rail project's route.
Fair Development Coalition (FDC)	Grassroots advocacy organization	Low-income communities and residents at risk of displacement, particularly those impacted by development projects like the Purple Line. They advocate for fair housing, anti-gentrification measures, and equitable community development.
Langley Park Civic Association	Local community organization	Residents of Langley Park, particularly focusing on advocacy for community improvements and public safety and ensuring that the voices of Langley Park's diverse population

		are represented in local planning efforts.
Small Business Owners	Private sector / Local businesses	Local consumers are often residents of Langley Park and the surrounding areas. Many businesses are immigrant-owned and provide culturally relevant services and products to the community.
CASA (Interlocutor)	Non-profit, advocacy, and service organization	Immigrants, particularly Latino and low-income communities. CASA provides various services, including legal assistance, health services, employment resources, and advocacy for immigrant rights.
Takoma-Langley Crossroads Development Authority (Interlocutor)	Business Improvement District (BID) / Non-profit	Local business and property owners in the Takoma-Langley Crossroads area, including small businesses, particularly those owned by immigrants. They work on community development, safety initiatives, and economic growth.
Community Center (Interlocutor)	Public facility / Local government service	Langley Park residents, families, youth, and seniors. The center provides recreational activities, youth programs, and community events to foster community engagement and wellness.
Langley Park Branch Library	Public library	The public, with a focus on children, families, and immigrant populations. They offer educational

		programs, English language learning resources, computer access, and community information services.
Prince George's County Planning Department	Local government agency	Prince George's County residents and businesses, including in Langley Park. They are responsible for land use planning, development regulations, and ensuring equitable growth throughout the county.
Street Vendors	Informal business sector / Small entrepreneurs	Residents, workers, and passersby. Street vendors, many of whom are immigrants, provide affordable food, goods, and services to residents, workers, and passersby. They are vital to the local economy but often operate with limited formal protections and are affected by local ordinances, public space regulations, and law enforcement actions.
Landlords	Private sector / Property owners	Tenants, particularly renters in Langley Park. Landlords own residential properties, often renting to low-income and immigrant families. They also own commercial properties and lease the space to many local businesses in Langley Park. Improvements to residential and commercial structures can only be made with the landlords' permission.
Residents (Renters)	Community members / Tenants	Themselves and their families. Renters in Langley Park, often

		low-income or immigrants, rely on affordable housing and access to social services. They are affected by housing policies, rent increases, and potential displacement due to gentrification or development projects such as the Purple Line.
Residents (Owners)	Private homeowners	Themselves, their families, and often renters in secondary units. Homeowners in Langley Park, although fewer compared to renters, play a significant role in the stability and long-term investment in the community. They are impacted by property taxes, housing values, and local development policies.