



# Westmoreland County Age-Friendly Community Index

**PREPARED BY**

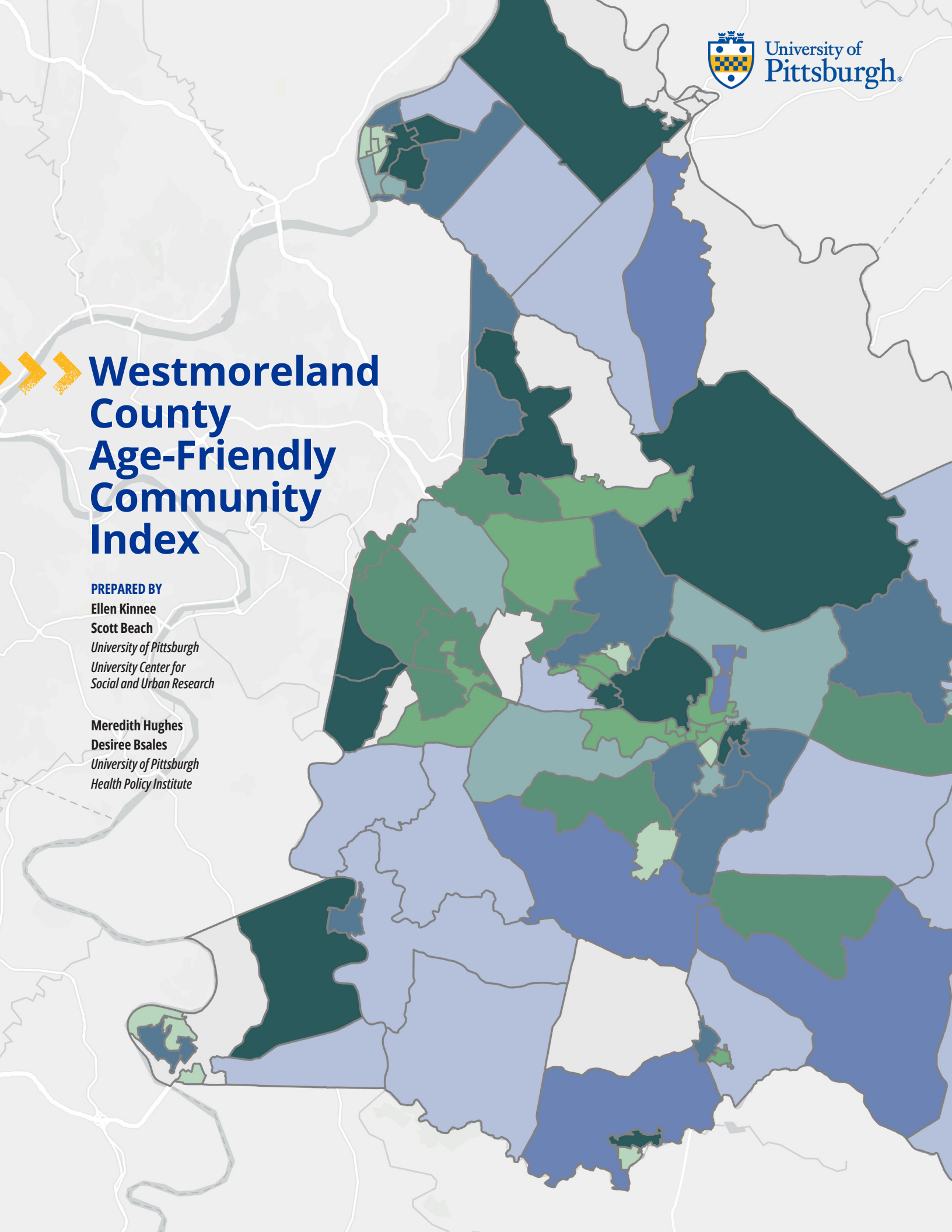
Ellen Kinnee  
Scott Beach

*University of Pittsburgh  
University Center for  
Social and Urban Research*

**Meredith Hughes**

**Desiree Bsales**

*University of Pittsburgh  
Health Policy Institute*



# Age-Friendly Community Index for Westmoreland County, PA

## Background

The World Health Organization (WHO) recognizes that “Health and well-being are determined not only by our genes and personal characteristics but also by the physical and social environments in which we live our lives.” Neighborhood environment plays a significant role in determining physical and mental capacity across a person’s life course and into older age, particularly how well an individual can adjust to loss of function and other forms of adversity in later years.

In the past decade, Age-Friendly Communities (AFC) have been recognized as places where older adults are supported with necessary infrastructure and services, including affordable housing, safe neighborhoods, transportation options, opportunities for community participation, and accessibility to health services (Jeste, 2016; Meeks, 2022). The WHO Age-friendly Cities is a framework developed in the Global Age-friendly Cities Guide (WHO, 2007), which introduced eight interconnected domains to help identify and address barriers to the well-being and participation of older people in the community. Expansion of this concept to the Age-Friendly Community construct has condensed the original framework into more precise categories within five domains (Kim et al., 2022).

Geographic Information Systems (GIS) and spatial data are frequently used to characterize the neighborhood environment and have been associated with social vulnerability and health effects in senior citizens. These include accessibility to food and medical care and aspects of the physical environment related to mobility and availability of community services (Yamashita, 2012; Hames, 2017; Beach, 2019). Spatial data measures related to Age-Friendly Communities can be used to produce a quantitative assessment of age-friendliness by drawing on indicators that are specifically relevant to the values, preferences, and needs of older adults.

## Methodology

### AGE-FRIENDLY COMMUNITY FRAMEWORK

As part of the current project, the University Center for Social and Urban Research (UCSUR) has developed a database of spatial Age-Friendly Community indicator variables and an Age-Friendly Community Index for every Census Tract in Westmoreland County. Census Tracts are small statistical subdivisions of a county defined by the U.S. Census and average about 4,000 inhabitants. These areas are commonly used as a surrogate for the neighborhood environment in studies of health and environmental exposure. While they provide a relatively precise level of geographic detail, most people do not know what Census Tract they reside in. Because each Census Tract can be associated with a specific neighborhood or municipality, all maps and tables include both the Census Tract and the associated neighborhood/municipality.

The data are organized using a framework of five Domains, including: 1) Physical Environment; 2) Transport; 3) Housing; 4) Social Engagement; and 5) Community Services. Each Domain is first characterized using a percentile ranking of spatial indicator variables as shown in Figure 1. Individual indicator rankings are summed to get Domain rankings which are then merged to generate an overall Age-Friendly Community Index. Index and Domain calculations are outlined in the section below. The resulting set of tiered measures is designed to allow direct comparison of Census Tracts for each

individual AFC indicator, Domain, and Age-Friendly Community Index across the county. This enables the user to assess not just overall age-friendliness but also the relative contribution of each indicator and Domain to the AFC Index, identifying areas of strength and weakness regardless of AFC status. We hope that users of the data, including policymakers, service providers, community members, and other stakeholders will utilize these rankings to focus on policy, services, and other interventions designed to improve not only the age-friendliness of their communities, but the quality of life of all residents.

AGE FRIENDLY COMMUNITY INDEX				
Physical Environment Domain	Transport Domain	Housing Domain	Community Services Domain	Social Participation Domain
Pedestrian Friendly	Public Transit Service	Housing Burden	Emergency Care Access	Recreation Access
Safe Streets	Transportation Burden	Housing Stability	Primary Care Access	Broadband Service
Open Space Access	Walkability	Age of Housing	Food Environment	Workforce Participation

### AGE-FRIENDLY COMMUNITY INDICATORS

Spatial data variables are used within each Domain to represent individual aspects of age-friendly communities and characterize the local lived environment, here represented by Census Tracts. Potential variables were first identified using the spatial indicators framework developed by Davern et al. (2020) as a guide. The Davern framework proposes a foundational set of objective spatial AFC indicators, which can be applied in any location and are directly relevant to policy intervention. We evaluated potential indicators based on the following criteria:

- Indicator should effectively measure the element of age-friendliness it represents.
- Combined indicators for each Domain should provide a good representation of the overall dimension.
- Indicator data is available for the entire county at the Census Tract level. The 100 Census Tracts in Westmoreland County are used to represent the neighborhood environment.
- Data is collected at the finest geographic scale and determined to be:
  - **Complete:** available for every tract
  - **Accurate:** spatial patterns matching local knowledge
  - **Temporally current:** contemporaneous with the 2023 State of Aging survey

Using these criteria, multiple sources of spatial data were identified to support indicator development. We drew on national-level data from the U.S. Environmental Protection Agency (EPA), the Department of Housing and Urban Development (HUD), and the U.S. Census Bureau (Census) among others, as well as local data sources available through the Southwestern Pennsylvania Commission. A list of age-friendly community indicators and related metrics is shown in Table 1. Links to data source websites are given at the end of the AFC section.

AGE FRIENDLY COMMUNITY INDICATOR VARIABLES		
Domain	Indicator	Metric*
Physical Environment	Pedestrian intersection density	Pedestrian accessibility
	Total pedestrian crashes per street mile	Street safety
	Park acres per square mile	Access to public open space
Transport	Aggregate frequency public transit service (all) per square mile	Transit accessibility
	Transit costs (all) as a percent of income	Transportation burden
	National Walkability Index	Streets walkable to work and recreation destination
Housing	Housing costs (all) as a percent of income	Housing burden
	Median year householder moved into unit (renter/owner)	Housing stability
	Percent of housing below median housing age in Westmoreland County	Availability of newer housing
Community Services	Emergency care facilities within a 15-minute drive	Proximity of emergency care
	Primary care physicians' offices within a 15-minute drive	Healthcare availability
	Grocery stores within a 15-minute drive	Food environment
Social Participation	Senior Centers, libraries, and recreation facilities within a 15-minute drive	Access to senior support and recreation
	Households with internet access	Broadband connectivity
	Percent over age 65 actively employed	Workforce participation

**\*Note:** Some source variables are inverted to generate a value representing a "positive" aspect of the Age-Friendly Community.

## CALCULATION OF THE AGE-FRIENDLY COMMUNITY INDEX

The methods used to calculate the UCSUR Age-Friendly Community Index are adapted from the Centers for Disease Control (CDC) Social Vulnerability Index 2018 (CDC SVI 2018). This method uses summed percentile rankings of spatial indicator variables in each census tract to calculate Domain percentile rank. Domain percentile ranks are then summed to calculate the Age-Friendly Community Index.

## PERCENTILE RANKING OF AGE-FRIENDLY INDICATORS AND DOMAINS

The percentile rank is calculated by sorting variables from low to high and then assigning a percentile value. The percentile is the percentage of ranked items that appear either at or below that variable. Higher percentile ranks indicate higher age-friendliness and vice versa. For example, if a Census Tract has a walkability score of 80, that means 80% of Census Tracts have a lower walkability.

- We generated a percentile rank for each Census Tract among all the Census Tract in Westmoreland County for:
  - 1) The fifteen individual indicator variables
  - 2) The five Age-Friendly Community Domains
  - 3) The Age-Friendly Community Index

The PERCENTRANK function in Excel was used to calculate the rank of indicator values as a percentage of the total dataset. Every indicator value is ranked as a percentile from 0 to 100. This percentile ranking shows how a Census Tract compares to other tracts in Westmoreland County for that indicator. Note that the PERCENTRANK function returns a percentile rank of zero for the smallest value in the dataset and a percentile rank of one for the largest value in the dataset. Census Tracts with an indicator score of zero are assigned a percentile rank of zero for that indicator when zero is a legitimate value; for example, Transit Use per Square Mile is zero where there is no public transit.

The indicator percentile rankings are summed with the others from the same Domain and used to calculate a Domain Score. For example, the Housing Domain Score for each tract is computed by summing the percentile rankings for Housing stability, Housing burden, and Age of housing. A Domain Rank is calculated by taking the percentile rank of the Domain Score.

## AGE-FRIENDLY COMMUNITY INDEX

Domain Ranks are summed to calculate the total Age-Friendly Community Score for each Census Tract.

Percentile rankings are calculated from the Age-Friendly Community Scores to obtain the overall percentile ranking, which we call the Age-Friendly Community Index.

## Results

### Maps

Maps of the Age-Friendly Community Index and Domain Rankings are used to visualize results. The Age-Friendly Community Index and upper/lower 10th percentile rankings are shown in Figures 2 and 3 (below). The five individual Domain rankings and percentiles are included in additional maps in Figure 4.

## How to read and interpret the Age-Friendly Community maps

All values are mapped as percentile rank. Percentile rank refers to the percentage of scores that are equal to or less than a given score. It is a measure of how a tract compares to other Census Tracts for that indicator, Domain, or the Age-Friendly Community Index. For example, if an indicator has a percentile of 60, this means that this Census Tract ranks 60 out the 100 populated Census Tracts. This is interpreted as meaning that this Census Tract is higher than 60% of all the other Census Tracts in Westmoreland County for that indicator. Percentile ranks are used here simply as a statistical measure of where each Census Tract stands compared to other tracts within the county.

The indicators used to calculate the AFC index come from diverse sources and have varying underlying distributions. Percentile rank calculations provide a useful way to describe data without making any assumptions about those distributions. It is worth noting that a percentile does not describe the magnitude of difference between tracts; for example, a tract ranked in the 75th percentile is not three times higher than a tract ranked in the 25th percentile.

When a tract has no indicator value (for example, the Census Tract has no public transit stops), it is excluded from the percentile calculation and assigned a score of zero for that indicator. Thus, the percentile ranking can be thought of as a comparison of tracts where the age-friendly community characteristic is present.

## Interpretation of Spatial Patterns

### AGE-FRIENDLY COMMUNITY INDEX

The Age-Friendly Community Index is computed from the percentile ranks of the AFC Domains. Domain contributions are weighted equally with each of the five domains contributing 20% toward the final index. Each Domain is characterized by three spatial indicators, each contributing one-third to the Domain total.

The AFC Index shows a pattern of high age-friendliness around the western edge of the County adjacent to Allegheny County as well as in populated areas. This reflects the overall availability of public transportation, medical care, and opportunities for social participation in these areas. Some semi-rural and rural areas have better options for newer housing and score higher for street safety, but this is not enough to offset the comparative lack of public transportation options and access to services needed by senior citizens.

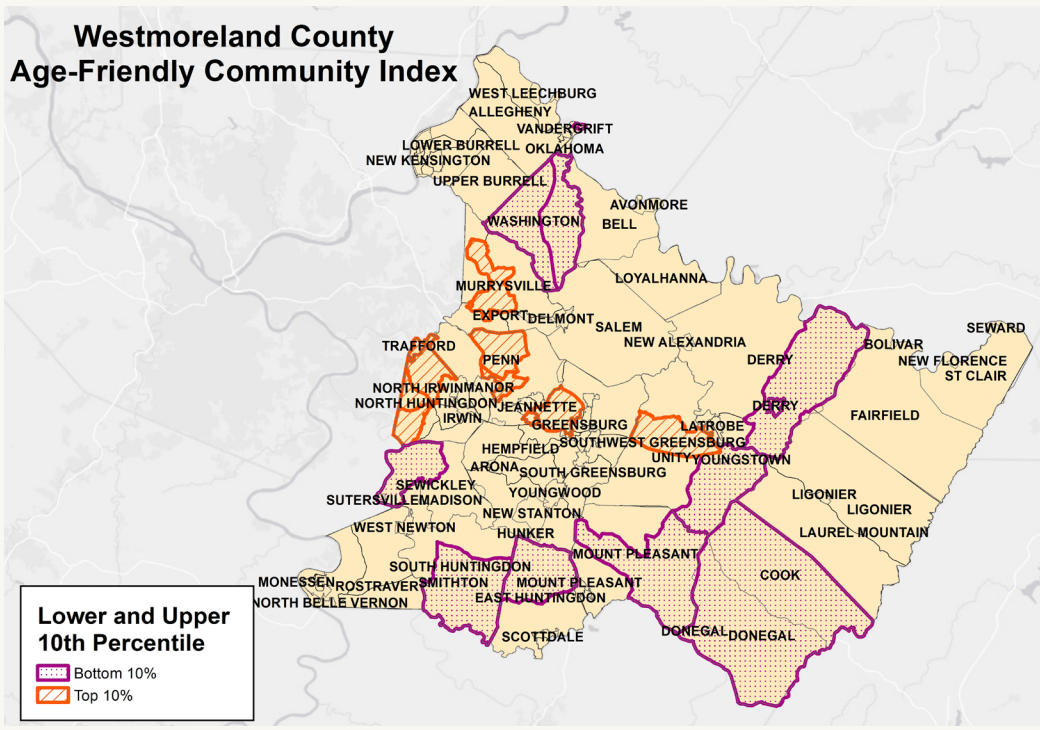
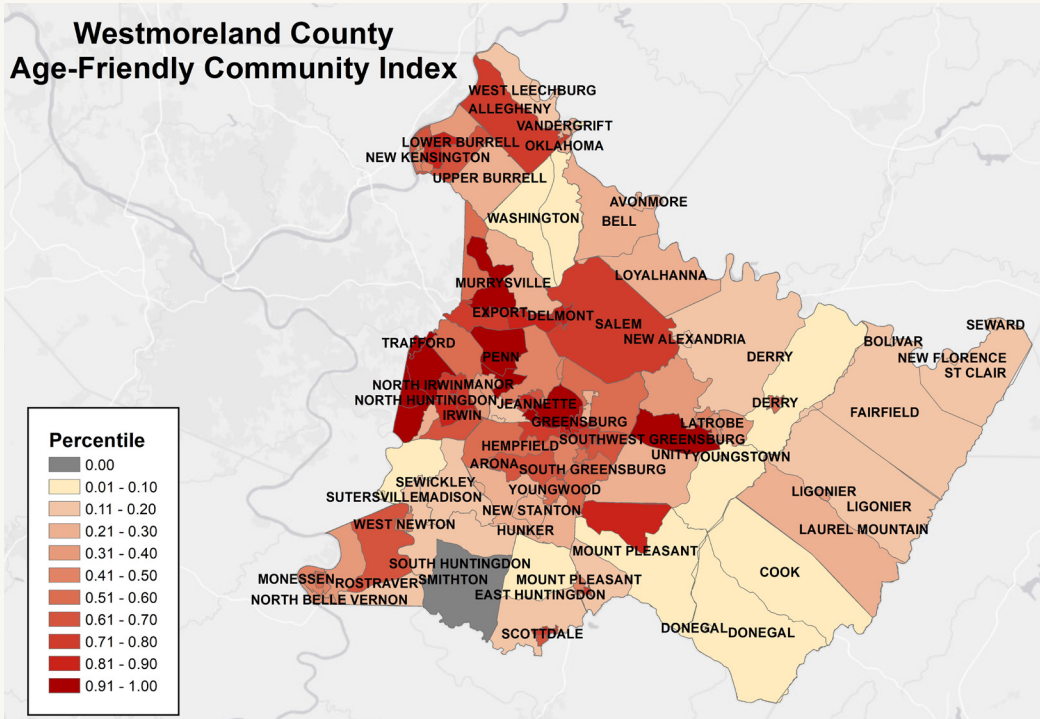
## AGE-FRIENDLY COMMUNITY DOMAINS

Spatial patterns of individual Domain rankings reflect the combined influence of their respective spatial indicator metrics (shown in Table 1).

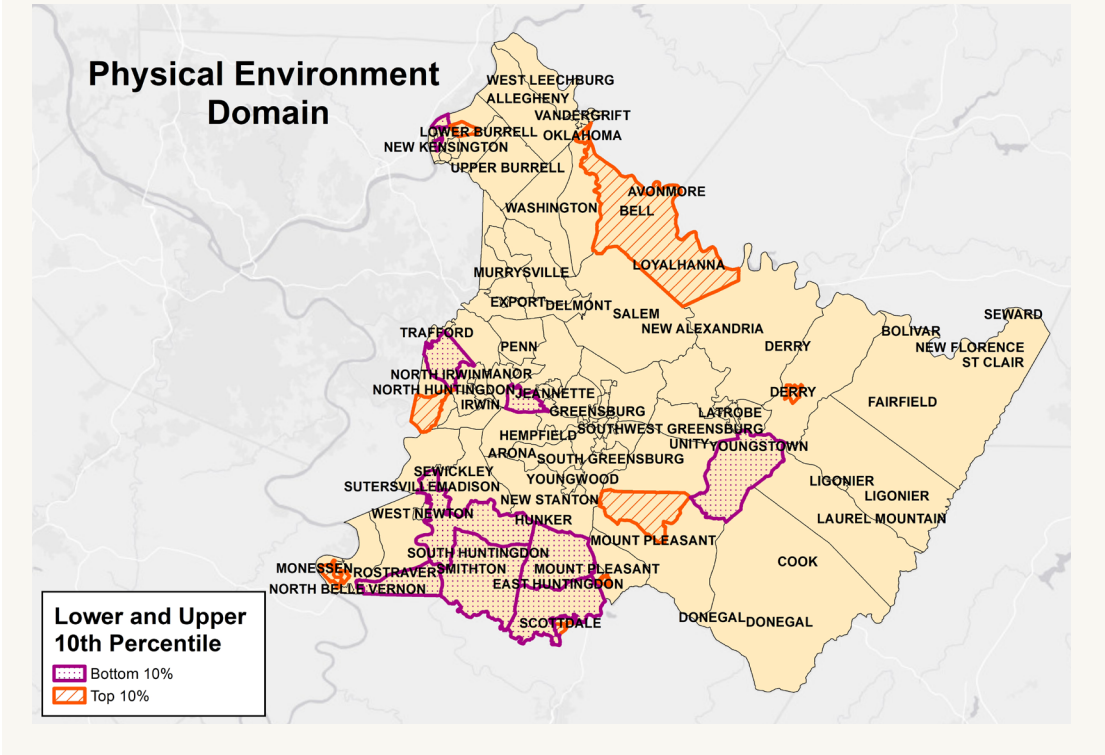
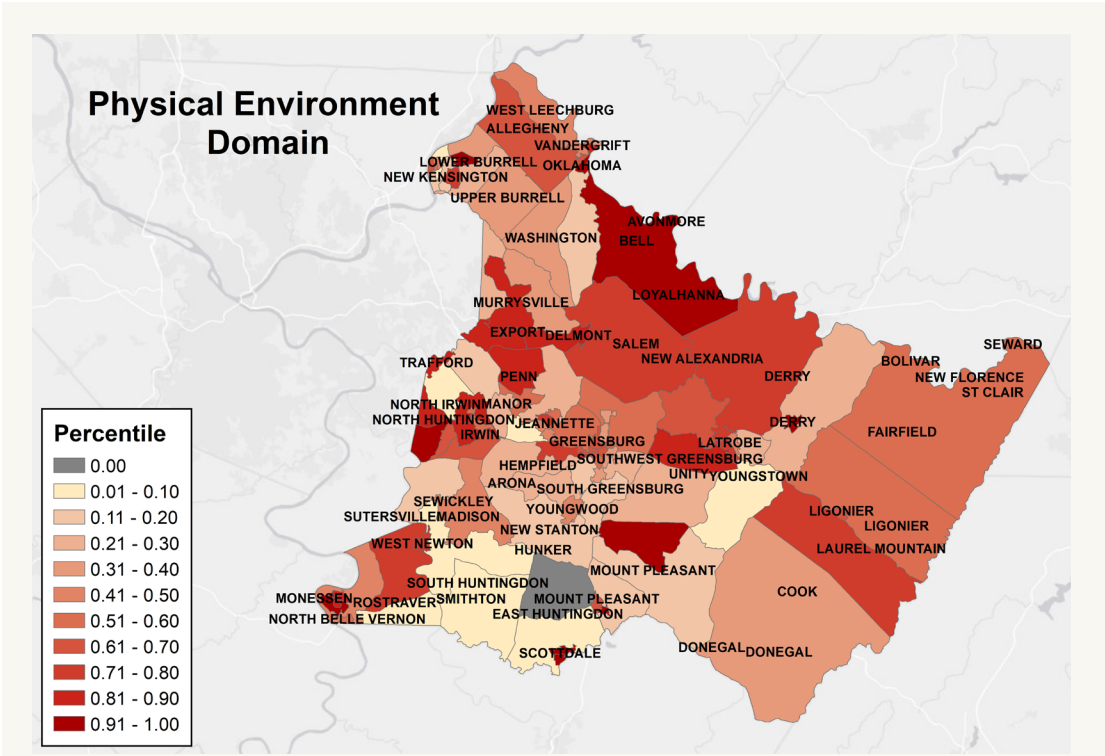
- **Physical Environment** – The Physical Environment Domain is geographically mixed with high and low rankings across urban, suburban, and rural tracts. This reflects the variety of the indicator measures, including access to parks and street safety rates, which are distributed unevenly across the county. Pedestrian intersections are concentrated in urban and suburban areas.
- **Transport** – Higher transport percentiles are heavily concentrated in the most densely populated areas with lower percentiles along the outer edges. This pattern is strongly driven by the lack of public transportation in rural tracts as well as lower walkability in less densely populated areas.
- **Housing** – The patterns in the Housing Domain heavily favor suburban and rural locations. New construction is concentrated just outside of the population centers. Housing takes up less of a percentage of income and people tend to live in one location for a longer period in these areas as well, lending stability to the community.
- **Community Services** – This Domain has higher percentiles concentrated tightly around the populated areas and lower rankings around the county fringe. Community service metrics focus on access to health care, and availability of food and emergency care. The density of health services and food options in and near the cities is a key factor in this pattern.

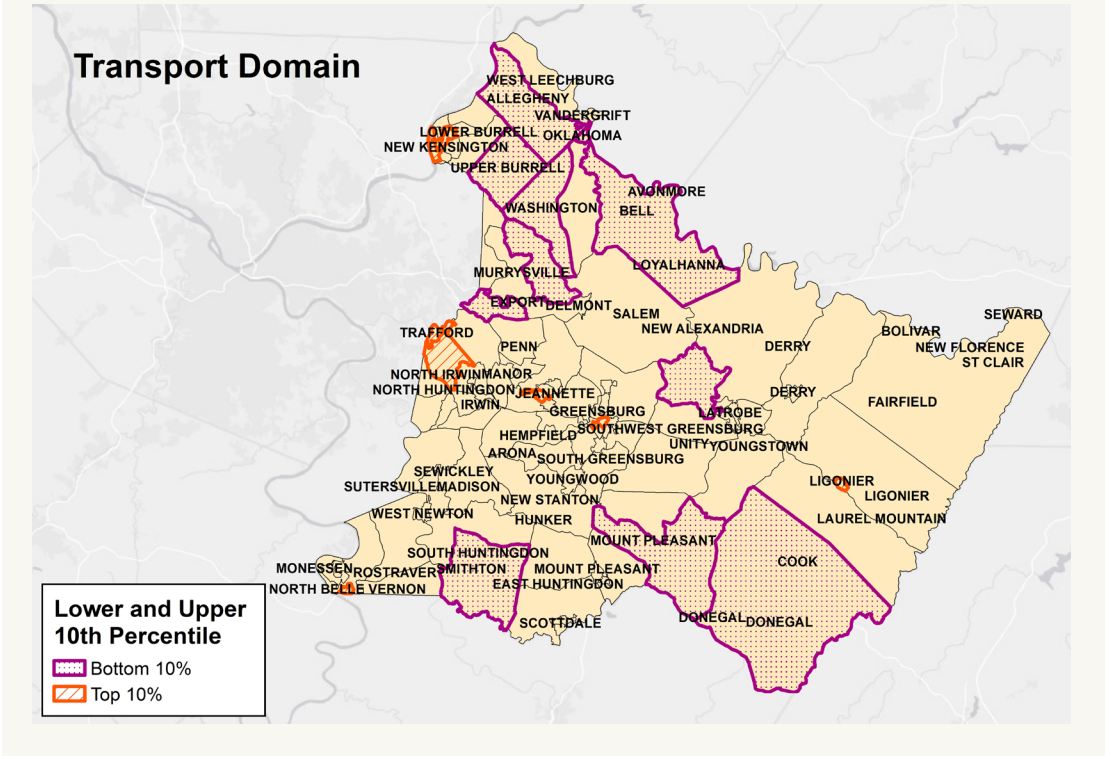
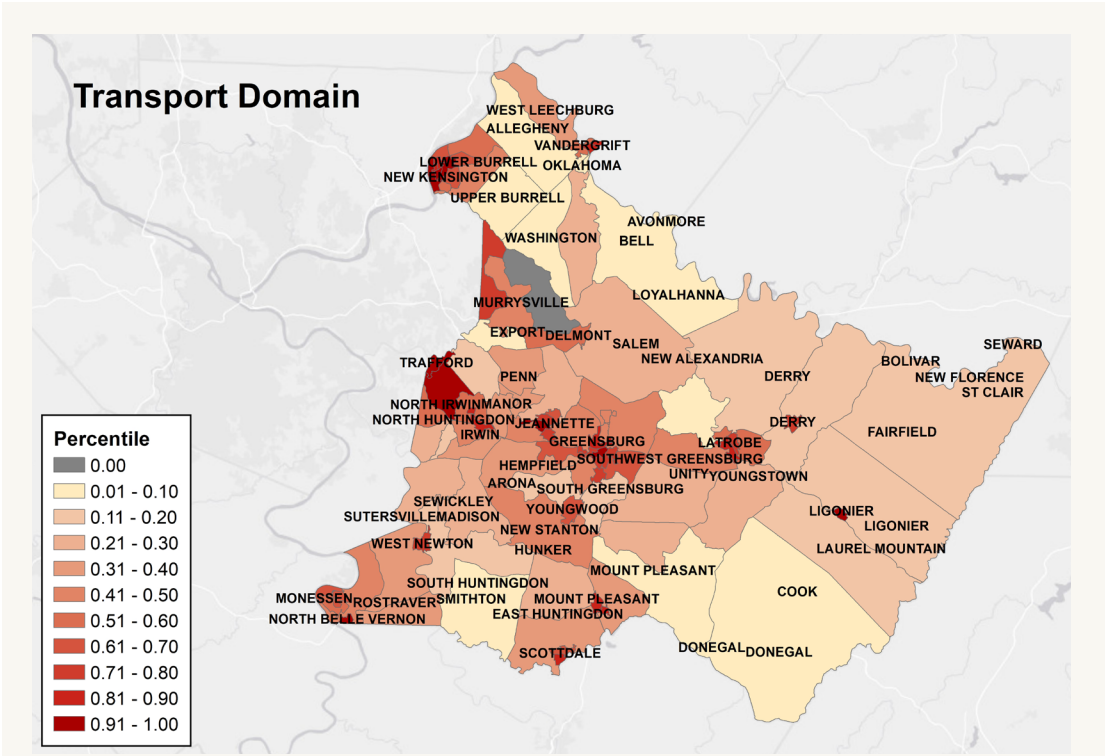
**NOTE:** *All access measures based on drive time, such as the availability of emergency care or senior services, are calculated based on the 15-minute drive-time area around each tract centroid. These can include facilities that are located outside of Westmoreland County. This ensures that these measures are not biased against tracts on the edge of the county where resources in other counties may be in closer proximity.*

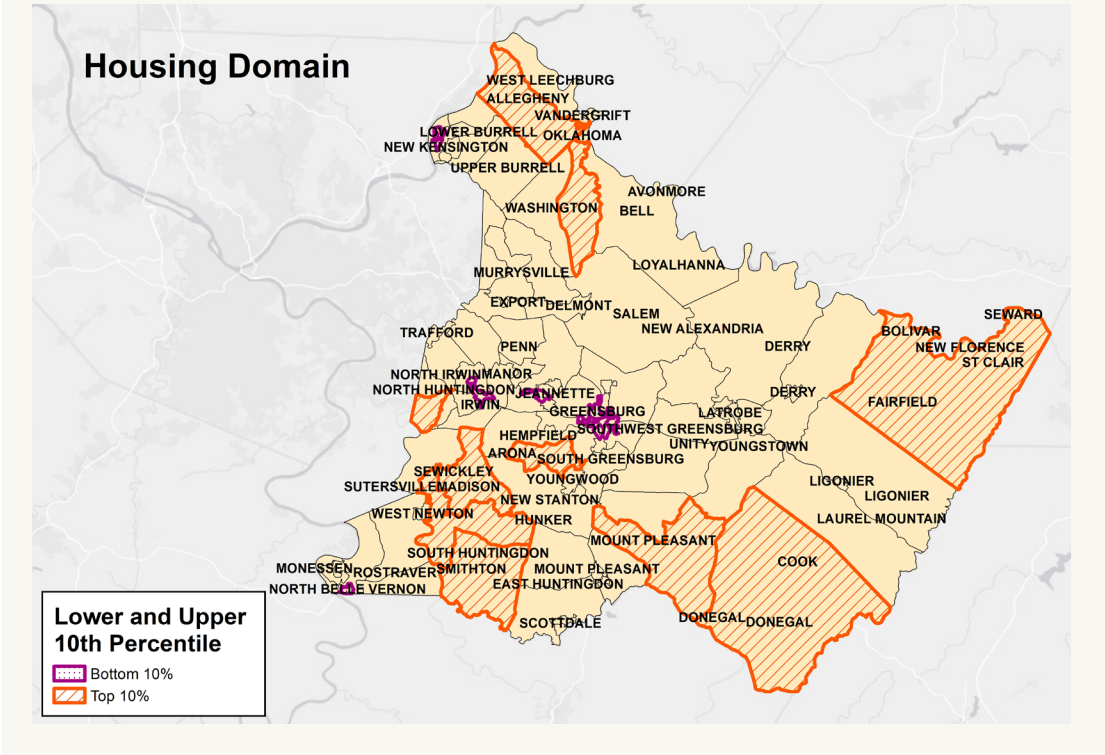
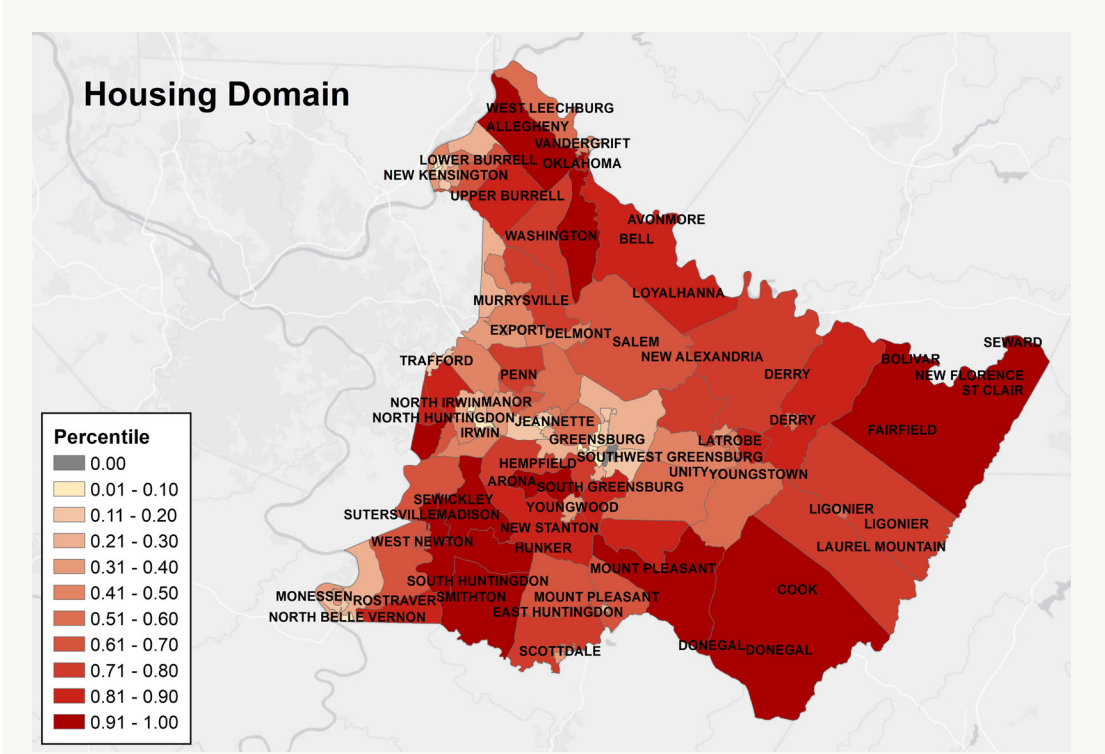
- **Social Participation** – This Domain has the strongest spatial pattern with the highest percentiles concentrated close to the border with Allegheny County. Social participation requires the availability of social resources and recreational opportunities including senior centers, libraries, and recreational facilities. These are all more concentrated in urban and suburban tracts. Lower rates of internet access and employed seniors in the eastern part of the county contribute to low percentile rankings for this Domain.



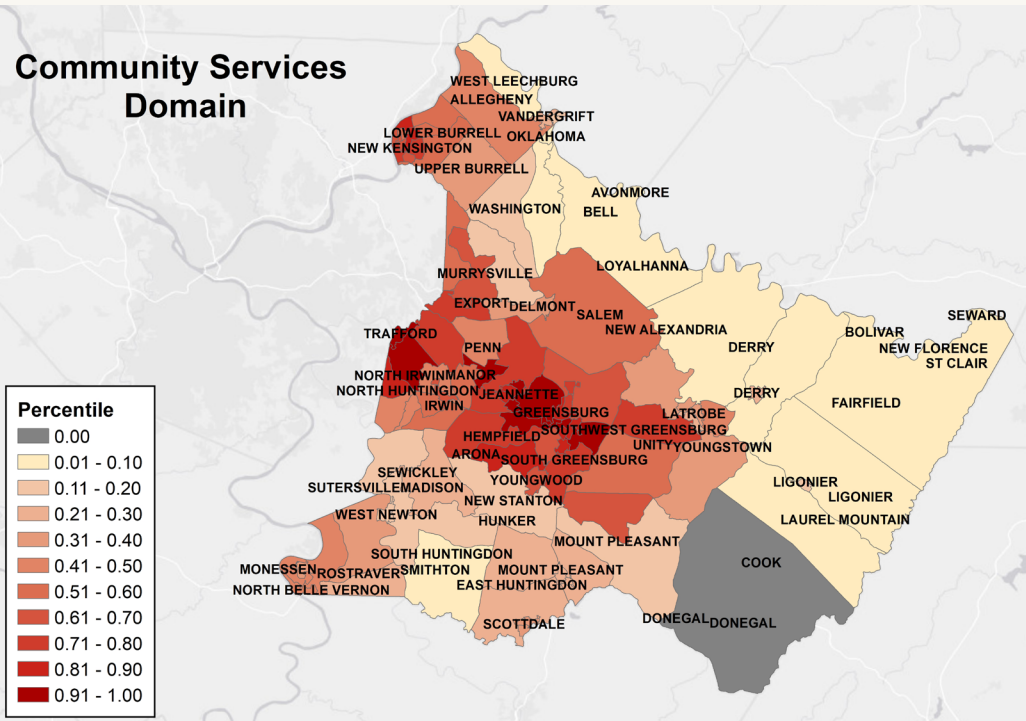




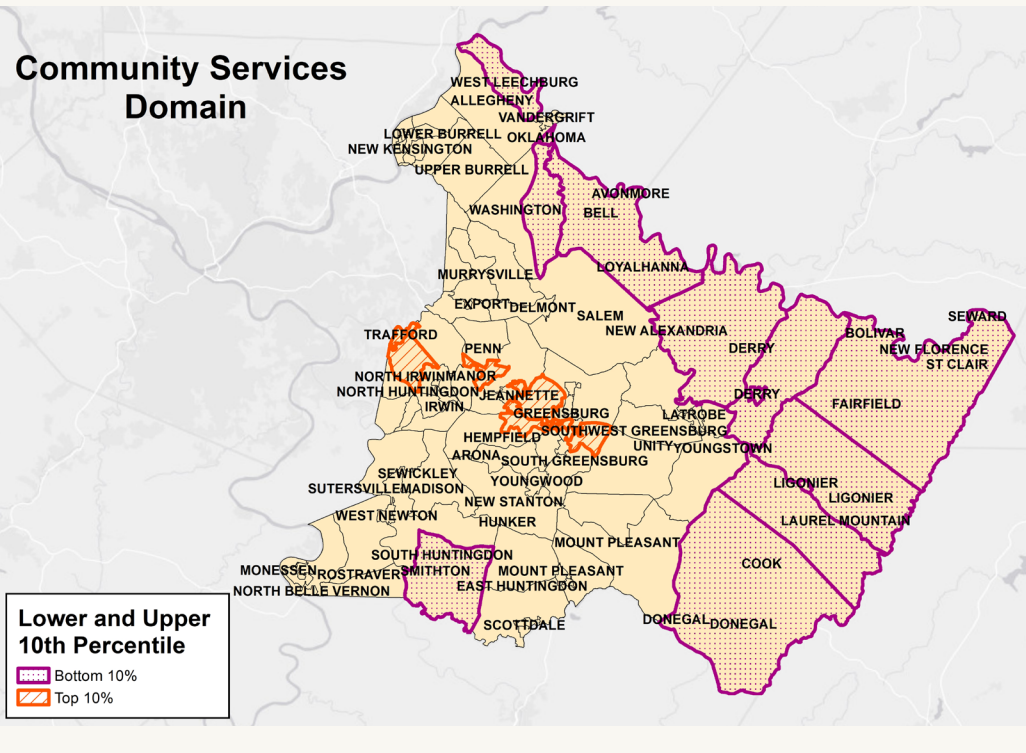




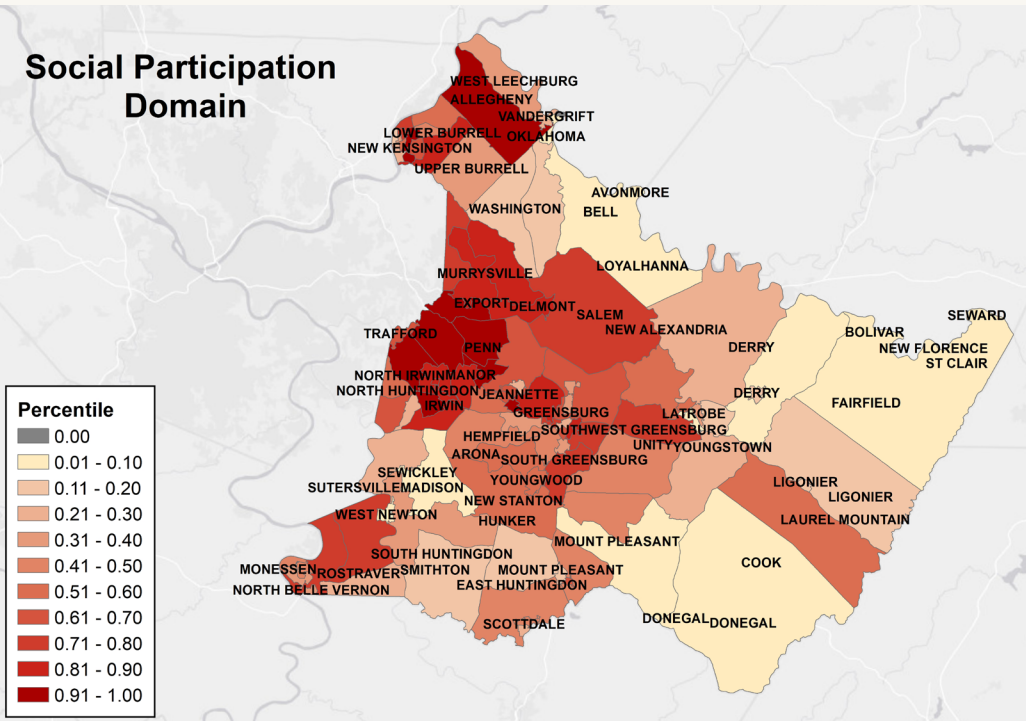
### Community Services Domain



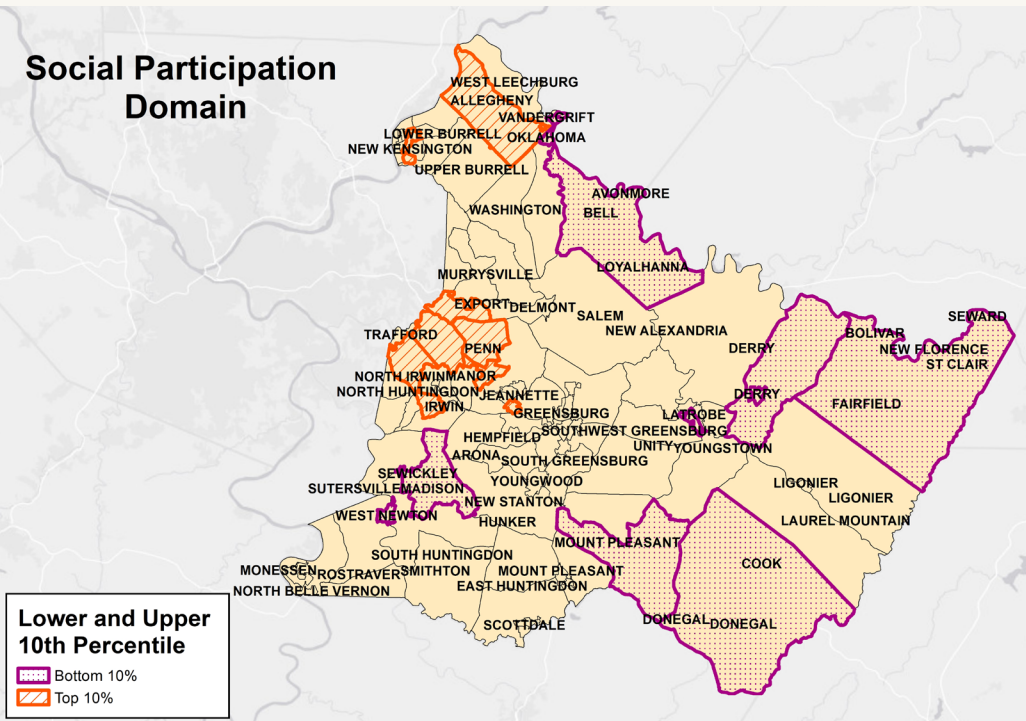
### Community Services Domain



### Social Participation Domain

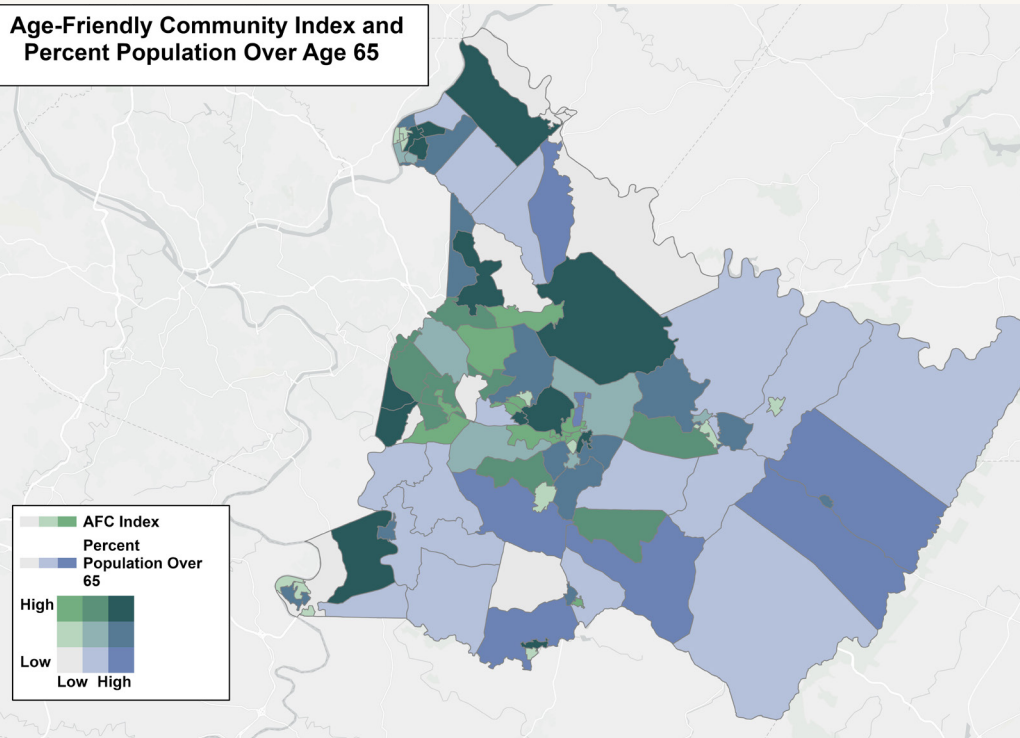


### Social Participation Domain



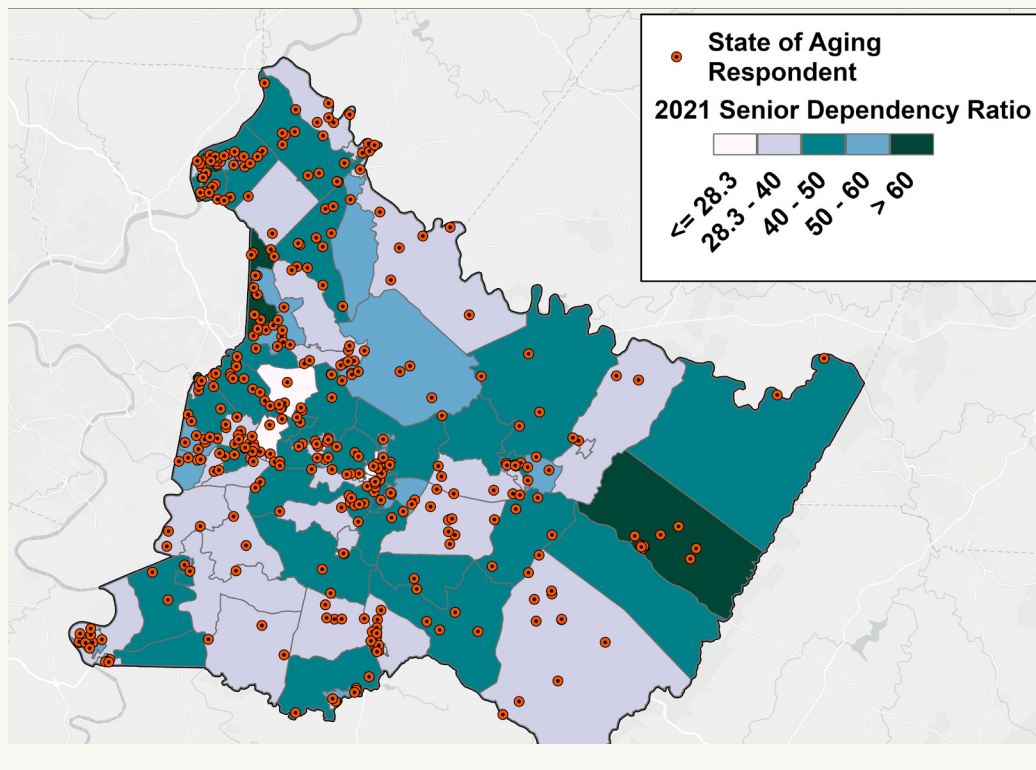
## AGE-FRIENDLY COMMUNITY INDEX AND POPULATION OVER AGE 65

The bivariate color scheme is the product of the two variables – each with three discrete classes – which creates a square grid of nine unique colors. On this map, tracts shaded dark green have both a high AFC Index and a higher percentage of the population over age 65. Those shaded white have low values for both. Tracts shaded medium green have a high AFC Index but a low over-age-65 population. Dark blue tracts have a low AFC Index and a high percentage of the population over age 65, making them the areas of highest concern.



## SENIOR DEPENDENCY RATIO

The Senior Dependency Ratio (SDR) is the population aged 65 and older divided by the working-age population (aged 18 to 64). Higher ratios indicate concentrations of older adults with fewer working-age people to support them. The lightest color tracts are at or below the U.S. SDR of 28.3, while all other tracts are above the national SDR.



## Summary Findings

This Age-Friendly Community Index report is intended to identify geographic areas in Westmoreland County where aging populations may face unmet needs and to help with the appropriate targeting of resources and interventions. The map above crosswalks the location of older adults in the County against the age-friendliness ranking of the geographic subdivision. As noted above, areas shaded in dark blue have a high population of seniors and a low AFC ranking, indicating the need to address potential shortfalls in the physical environment, housing, transportation, community services, and social participation for older adults.

Westmoreland County contains a mix of suburban, rural, and urban areas, which offer both advantages and disadvantages to aging adults across the range of age-friendliness dimensions. The urban and suburban areas adjacent to Allegheny County tended to have better walkability and access to public transportation, as well as better access to opportunities for social participation, such as libraries and senior centers. Areas with higher population concentration also had greater access to resources such as medical care and grocery stores. Increased access to transportation could help to improve access to these resources in less populated counties. Rural areas were less likely to have broadband connectivity. However, rural areas also showcased some important strengths in supporting age-friendliness, with lower housing costs supporting housing stability. Areas outside of population centers were also more likely to have newer construction.

## Asset Mapping Inventory of Existing Programs and Supports

The practice of asset mapping involves identifying resources within a community that can be utilized to support certain goals. Asset mapping has been leveraged in a variety of contexts to support public health and social service research and interventions, including violence prevention, maternal and child health, access to food, and healthy aging. Rather than focusing on needs, deficiencies, and gaps, asset mapping emphasizes the strengths, resources, and capacities of communities, providing a foundation for community members, policymakers, and other stakeholders to consider the ways in which these existing resources can help to achieve community goals. Assets can be broadly defined and may include individual skills and capabilities, community associations (such as religious and peer support groups), and local institutions (such as libraries, schools, and hospitals).

The maps in this Age-Friendly Community Index illustrate both challenges and strengths faced by various geographic subdivisions within Westmoreland County. In alignment with the philosophy of asset mapping, this section of the report will inventory and discuss existing programs within Westmoreland County, highlighting the role these programs play as strengths that can be utilized to support healthy aging and meet the needs of individuals with disabilities and family caregivers within the county.

## Housing

### **Housing Assistance and Improvement Programs**

The Westmoreland County Housing Authority (WCHA) Weatherization Program provides rehabilitation assistance to low-income residents to improve energy efficiency. Weatherization improvements include: installation of attic and crawlspace insulation, heating system modification, minor repairs, and client education. The WCHA Weatherization Program and Westmoreland County Department of Planning and Development offer a joint program to support qualifying roof or furnace replacements for low-income homeowners, which provides an interest-free loan of up to \$20,000. The Westmoreland County Rehab Program will provide a one-time grant of \$5,000 to homeowners for roof or furnace replacements, excluding residents of Arnold, Jeanette, Monessen, New Kensington, and Scottdale.

Westmoreland County also offers a number of programs for residents experiencing housing insecurity or who are at risk of homelessness. The Homeowner's Emergency Mortgage Assistance Program (HEMAP) provides loans for mortgage payment assistance, and the Rapid Re-Housing Program and Homeless Prevention Program, funded by the federal Emergency Solutions Grants (ESG), provide assistance with rental payments. Westmoreland County also offers federal Department of Housing and Urban Development (HUD) programs for housing assistance, including Public Housing, Tenant-Based Rental Assistance Coupons, and Section 8 Housing Choice vouchers.

### **Housing Assistance for Seniors**

Currently, the Westmoreland County Housing Authority offers over 40 locations for subsidized housing for seniors and individuals with disabilities. To qualify for a senior high-rise, individuals must be at least 62 years old, and pay approximately 30% of their household adjusted gross income in rent. Senior high-rise units include appliances and utilities, except for phone and cable service. The Pennsylvania Department of Revenue administers the Property Tax/Rent



Rebate Program, which is available to adults age 65 and older, widow(er)s age 50 and older, and individuals with disabilities age 18 and older. Qualifying homeowners with incomes up to \$35,000 and renters with incomes up to \$15,000 are eligible for rebates on a sliding scale, with a maximum rebate of \$650. In FY 2021-22, the Property Tax/Rent Rebate Program provided \$8,055,247 in assistance to Westmoreland County residents.

### **Home Accessibility**

Older adults and individuals with physical disabilities who require home modifications have several options for assistance within Westmoreland County. Individuals who are eligible for Medicaid may be able to access modifications through the Home Accessibility Durable Medical Equipment benefit or through the Community HealthChoices (CHC) waiver for home adaptation services. Older adults who are ineligible for Medicaid may be served by the OPTIONS program, as discussed below. The Redevelopment Authority of the County of Westmoreland (RACW) also has funding available to support older adults and individuals with disabilities in need of home modifications, such as ramps or stairlifts, via the Accessible Housing Program (AHP). To qualify for AHP, individuals must have a doctor's letter documenting permanent physical disability and provide financial information. Low-income homeowners in rural areas of Westmoreland County may also qualify for a grant or loan from the federal Department of Agriculture Section 504 Home Repair Program to fund the removal of safety hazards from the home or to make the home accessible to individuals with disabilities. Grants are available to individuals age 62 and older who cannot afford to repay a loan.

## **Transportation**

### **Public Transportation**

Westmoreland County provides free public bus transportation for adults aged 65 and older through the Senior Free Fare Program. The Reduced Fare Program provides a discount on public bus transportation for individuals with disabilities. To qualify, individuals must have a health care provider certify their need or show proof of Medicare enrollment.

### **Medical Transportation**

Westmoreland County residents eligible for Medicaid have access to the Medical Assistance Transportation Program (MATP), which provides transportation to medical appointments for Medicaid-covered services, as well as dental or pharmacy visits. Each county has a designated MATP provider. GO Westmoreland is the MATP provider for Westmoreland County. GO Westmoreland MATP services cover medical transportation via public bus routes, shared-ride paratransit, and direct mileage reimbursement. While MATP is only available for medical transportation, enrollees in Medicaid CHC or LIFE may have access to additional non-medical transportation to support social engagement or other needs pursuant to a personalized service plan.

### **Paratransit and Shared Ride Services**

The Senior Shared-Ride Transportation Program is funded by PennDOT and available to Westmoreland County residents aged 65 and older. After completing the application for the program, eligible seniors may call as far in advance as two weeks or as close as one business day prior to schedule a ride. Shared-Ride services cover all of Westmoreland County and certain areas outside of the county. Riders pay 15% of the total cost of the trip. An additional Shared-Ride discount is available via the Priority Transportation Program, which is supported by the Westmoreland County Area Agency on Aging (AAA), the PA Department of Aging, and the Westmoreland County Board of Commissioners. For individuals aged 65 and older, Priority Transportation will cover an additional

10% of the Shared-Ride fare for five priority destinations: medical appointments not eligible for MATP, local senior centers, senior center- based shopping, AAA Adult Day Care, or AAA Vision Center.

The Americans with Disabilities (ADA) Complementary Service for individuals with disabilities in Westmoreland County provides a paratransit service that follows the same routes as public buses. The Persons with Disabilities Program (PWD) provides paratransit for individuals with disabilities aged 18 to 64 who live in areas that are not served by public bus transportation. Bus alternatives offered by these paratransit services include taxis and wheelchair-accessible vans, and transportation can be undertaken for any purpose.

## Long-Term Care

### **OPTIONS In-Home Assistance**

The Westmoreland County Area Agency on Aging (AAA) administers several programs designed to support healthy aging. The OPTIONS program serves adults aged 60 and older who are experiencing some degree of frailty that impacts daily functioning. OPTIONS provides services to individuals who are financially or clinically ineligible for Medicaid long-term services and supports (LTSS). Older adults with significant functional needs in Westmoreland County who are eligible for Medicaid LTSS are required to receive services through the Community HealthChoices (CHC) program or the Living Independence for the Elderly (LIFE) program, known nationally as the Program of All-Inclusive Care for the Elderly (PACE).

Some OPTIONS services are required, including care management, in-home meals, and personal care services, while others are offered at the discretion of the local AAA. Through the Westmoreland County OPTIONS Care Management program, qualifying older adults can receive personal care services to assist with daily activities such as bathing, eating, and dressing, as well as laundry and shopping. Currently, the limited availability of direct care providers has created a waiting list for OPTIONS in-home services in Westmoreland County.

### **Caregiver Support**

The Pennsylvania Caregiver Support Program (CSP) provides resources and support for adult caregivers of older adults, as well as older adults caring for minor children. Eligible caregiving relationships include: adults providing support to dependent adults who are over age 60 or have Alzheimer’s Disease or a related disorder; grandparents (age 55 or older) providing primary support to minor children; and older adult caregivers (age 55 or above) supporting a relative (aged 18-59) with a non-dementia disability. CSP provides information and assistance to connect caregivers to available local resources, training, respite care, and other supplemental services.

In Westmoreland County, CSP services include: assessment of caregiver needs; counseling to help caregivers develop coping skills; financial assistance with the purchase of caregiving services and supplies (such as disposable briefs or adult day care) and home adaptations; and benefits counseling, including assistance with completing insurance forms. Though participation in the caregiver support program is not means tested, the amount of financial assistance available is determined based on income. Up to \$200 per month is available to assist with the purchase of services and supplies, and one-time assistance of up to \$2,000 is available for home adaptations, such as the installation of a stair glide or ramp. The Westmoreland County AAA also offers in-person monthly Caregiver Support Group meetings in Greensburg. The Westmoreland County AAA coordinates a Friendly Visitor Program, which allows volunteers to provide companionship to homebound seniors.

**Nursing Facility Alternatives**

Another community-based care option for older adults is Domiciliary Care homes (Dom Care), which are certified by AAAs and provide supervised living for up to three older adults. Dom Care homes serve older adults who have significant functional needs but do not meet the required level of care for a nursing facility.

**Protective Services**

The Westmoreland County AAA is also responsible for administering Older Adult Protective Services (OAPS). OAPS protects adults aged 60 and older who are at risk of abuse, neglect, exploitation, or abandonment through activities such as detection, investigation, and correction. The Westmoreland County AAA also provides legal services for seniors, to assist older adults who are victims of abuse, neglect, financial exploitation, or loss of shelter.

**Senior Centers**

Westmoreland County also has 13 senior centers, or Centers for Active Adults, located in Avonmore, East Vandergrift, Herminie, Jeannette, Latrobe, Greensburg, Monessen, Mt. Pleasant, New Alexandria, New Florence, New Kensington, Ligonier, and West Newton. These centers offer opportunities for meals, social activities, and informational programs. Over a dozen additional “satellite” centers in Westmoreland County offer similar services on a more limited basis.



# Appendix

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University of  
**Pittsburgh**

University Center for  
Social and Urban Research

3343 Forbes Ave.  
Pittsburgh, PA 15260

412-624-5442  
[ucsur@pitt.edu](mailto:ucsur@pitt.edu)