

CHAPTER 4





SUPPLEMENTAL DOCUMENTS

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▶ SECTION 4.1 GLOSSARY OF TERMS

Comprehensive Plan (“Plan”)

A Comprehensive Plan is a required policy document that is updated roughly every ten years and serves to capture existing conditions and provide clear direction about how-when-where the community will develop and grow as it adjusts to changing economic, environmental, and social conditions and trends. Typically, a Comprehensive Plan describes a community’s preferences for the future, its distribution of land uses; management of community infrastructure; and the preferred character, form, and intensity of new development.

Section 8A

In West Virginia, Comprehensive Plans are developed through a collaborative process with the community, officials, and government entities - and are reviewed and adopted by both the Planning and County Commissions to ensure they meet the state requirements. West Virginia provides specific directions for Comprehensive Plans in Chapter 8A: Land Use Planning of the state code.

Planning Process

The planning process is comprised of the community outreach process which included a kick-off meeting, steering committee, collaboration with other project teams, a community workshop, community workshop survey, big ideas survey, and a draft plan open house. Results of these efforts are included in Chapter 1 - Introduction.

Planning Playbook

The planning playbook (Chapter 2) contains all of the major components of the Plan and can be used as an executive summary to review the goals, objectives, and strategies resulting from the Planning Process.

Goals and Objectives

Comprehensive Plans are traditionally required to promote the health, safety, morals, order, prosperity and general well-being of the inhabitants of the County in an efficient and economic manner. To accomplish this, an analysis was conducted to develop actionable land development goals and objectives that both preserve and enhance the quality of life within the County, and ensure that development within the County is compatible with its present and future needs and desires.

Strategic Framework

The Plan’s strategic framework is based upon four key concepts that inform the Future Land Use Map and policy recommendation “areas”. These concepts aim to provide balance to preserving community character and development.

Future Land Use Map

The future land use map is used to illustrate land uses within the County and highlight preferred future development patterns and strategies for the future. Strategies and preferred development patterns are derived from existing conditions, development constraints, and the planning process. The Future Land Use Map is NOT a zoning map.

Planning Buffer Areas

Planning buffer areas are being proposed as one of the land use management control strategies to create more seamless transitions from development and neighborhoods in the municipalities. These areas, demarcated by a 1/2 mile and 1-mile boundary line, will incentivize development within existing or adjacent to planned service areas.

Targeted Investment Areas

Through the planning process, several areas were identified for targeted investments in the future - these areas are highlighted on the future land use map.

Rural Stewardship

The majority of land in the County is comprised of rural lands, rural communities, open and green spaces, farms, and undeveloped land. Rural stewardship is a concept being recommended, as a land use management strategy for the future land use map, to preserve the rural character of the County while placing an emphasis on targeted areas (planning buffer areas and targeted investment areas) for future development.

Recommendations

Policies and recommendations are included throughout the Plan. These recommendations provide guidelines, targets, and priorities for shaping future growth and development in the community. These Recommendations encapsulate the objectives and strategies required by the state for comprehensive plan updates and are thematically grouped to reflect the concepts of the FLUM.

Planning Toolkit

The Plan includes a toolkit for future developments to reference which includes core planning principles for design, place type guidelines, and site plan concepts. These three tools can be used by property owners and a developers to better understand the design principles being promoted by the Plan and how they might apply to properties being considered for development and redevelopment.

Core Planning Principles

The core planning principles provide an overview of design principles that should be taken into consideration in future development, infill development and redevelopment in all areas of the County. They include affordability, equity, quality design, accessibility, intensity, mixed-use, connections, and walkability.

Place Type Guidelines

The guidelines provide descriptions of existing land potential and uses and provide recommendations for development and redevelopment as it occurs, and as hoped for, in areas across the County. These recommendations apply to a range of development - rural open spaces, residential neighborhoods, and targeted investment areas and/or activity centers.

Site Plan Concepts

Key 'tools' from the toolkit include templates for suggested development pattern. The site plan concepts are illustrative in nature and are not meant to represent specific locations in Monongalia County, but rather best practice standards for larger developments such as subdivisions or activity centers and investment areas. They illustrate parcel sizes, road patterns, community amenities such as parks or squares, and connectivity.

Renewal and Redevelopment

Section 8A of the West Virginia state code requires that County lands be assessed for 'renewal and redevelopment', or more specifically, monitoring areas of the County that may be experiencing a higher rate of socio-economic or built environment challenges and creating policies that respond to changing needs of existing neighborhoods and activity centers.

Small Area Plans

As part of the recommendations and strategies included in the Plan for the future land use are the development and implementation of small area plans. These plans will be utilized by the County to guide development and redevelopment in the areas identified for targeted investments.

THE PLANNING PROCESS

▶ SECTION 4.2 COMMUNITY ENGAGEMENT SUMMARY

Between June 2021 and June 2022, Monongalia County engaged a wide spectrum of community stakeholders through its website, social media, email list, and public involvement activities. An emphasis on coordinating efforts between concurrent regional projects resulted in a collaborative process, synchronized schedule, team data-sharing, and aligned engagement efforts that directly informed the development of policies in the Plan.

Regional Coordination

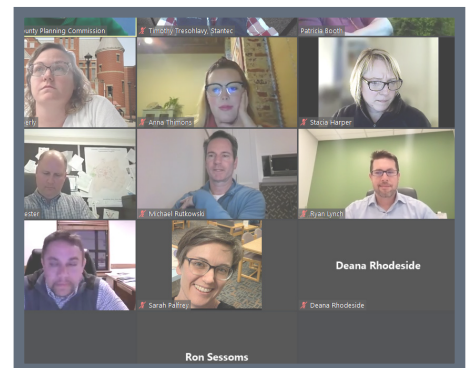
As required by Section 8A, Monongalia County began updating its Comprehensive Plan in the summer of 2021, alongside the Metropolitan Transportation Plan (MTP) and Morgantown Comprehensive Plan updates. Project teams hosted monthly coordination meetings to phase planning processes, and maximize community input opportunities. Teams presented across different project events and continually shared data and key findings to highlight policy opportunities across all jurisdictions.

Comprehensive Plan updates also occurred in Star City, Westover and Granville and the projects were timed to coincide with the release of the drafts from the Monongalia County, MTP and Morgantown teams.



Stakeholder Interviews

Key project stakeholders were identified and interviewed to gather information on existing conditions and community services.



Steering Committee

A project steering committee was convened to review project materials, policy directions, and key findings. The steering committee was comprised of several members representing local planning professionals, former County board members, and leadership from coordinating project teams (MTP and Morgantown).

Community Workshop

On February 10th, 2022, Monongalia County hosted its first community workshop to introduce some of the early data and research findings on trends and projects for future growth in the County. This workshop, held in partnership with the MPO team (who is updating the Metropolitan Transportation Plan, detailed the requirements for a Comprehensive Plan, what is required to be included in the Plan (Section 8.A Article 3 - West Virginia state legislation), introduced the planning area, key data points, place types, demographic projections and infrastructure needs.





Community Workshop Survey

As part of the team’s initial community engagement efforts, a community survey - complementing the materials and topics in the Community Workshop - was launched on January 24th and was open until February 24th, 2022. The survey took a deep dive into community vision, values and thresholds for future development and growth.

The Community Workshop Survey was utilized as an engagement tool to gather data and information from residents, workers, and visitors to Monongalia County. The results from this survey have informed the Community Vision for the update to the Comprehensive Plan and initial policy development

Big Ideas Survey

Building upon the efforts from the Community Workshop Survey, a second survey was developed to further refine the Big Ideas to emerge from initial discussions with the community. The results from this survey, directly informed the objectives and strategies included in this Plan.

Facebook

Facebook was utilized throughout the project to share information with the community about the project, project schedule, engagement opportunities - including the Community Workshop Survey and Big Ideas Survey.

Project Website

Utilizing the Monongalia County website, a project page was created to share project updates, background information, requirements for the comprehensive plan, and to share links to project surveys and additional resources.

Data Analysis and Future Growth Projections

Parallel to the Monongalia County Comprehensive Plan engagement efforts, research on existing conditions in Monongalia County was conducted focusing on current types of land uses, employment, population, transportation and future growth in the County. Coordination with the MTP and Morgantown Comprehensive Plan project teams focused on transportation opportunities (roads, pedestrian and bicycle trails, transit, and potential policy updates) and areas of overlap between County jurisdictions.

The results from community engagement efforts including the Community Workshop, Community Workshop Survey and the data analysis and future growth projections provided a direct link between community members and the aspirations they have for the future of the County.

Comprehensive Plan Fair

A collaborative Comprehensive Plan Fair was hosted with the project teams from the City of Morgantown, Star City, Westover and Granville on Thursday September 8th, 2022 to present the draft Plan. Over 50 community members attended.

▶ SECTION 4.2-1 COMMUNITY WORKSHOP PARTICIPANTS

There were 97 community members who participated in the Community Workshop Survey, the majority of which live and work in Monongalia County. Of those who indicated they were residents of Monongalia County, 68% lived in Morgantown and 24.5% lived in unincorporated with the remaining participants living in Star City, Blacksville, Granville, or Westover. When asked why Monongalia County was special, participants stated that they felt drawn to the small-town feel, a strong sense of community and culture, access to nature, recreational opportunities, economic opportunities, quality schools and healthcare. A large number of participants had family ties to the area with many participants' family having resided in Monongalia County for generations.

The project team asked participants why they had chosen to work, live and or study in Monongalia County over other areas. The majority of responses noted strong connections to the area whether it be through the University, growing up in the area, having family nearby, or through work opportunities. Most participants were excited for Monongalia County to continue to expand outdoor recreational offerings, improve community infrastructure, continue to develop along the Monongahela River in Morgantown, revitalization downtowns, and focus on economic and workforce opportunities.



▶ SECTION 4.2-1 COMMUNITY WORKSHOP PARTICIPANT PREFERENCES

Preferences for Future Growth

When asked where new residential and commercial growth should occur in the County, participants had mixed opinions. Generally speaking, participants identified municipalities (Morgantown, Westover, Granville, and Cheat Lake) as the most appropriate for future growth. Some participants noted that future growth should focus on improving existing development, improving quality of roads and connections, and protect rural character. The majority of participants want to see growth occur when or where infrastructure (roads, utilities, and broadband) exists to support it.

When asked what the County should take into consideration for improving the quality of future housing developments, many participants expressed a need for road improvements, traffic management, increased walkability and transit options, environmental protections to reduce stormwater runoff and water quality, consideration of residential and commercial design guidelines, broadband, improvements to- and maintenance of existing community infrastructure, subdivision regulations, and prioritizing development of affordable housing typologies and diversifying the overall housing mix.

Future Housing Needs

Among the choices, participants were most interested in seeing senior living units (incorporating universal design), accessible units, live-work units, apartments and townhomes prioritized as housing types in order to accommodate existing and future resident needs. Specifically, participants noted that it was important to locate these types of developments near community amenities such as shopping centers, transit stops, healthcare, and recreational opportunities and focus on quality design. One participant noted the importance of removing existing legislative barriers to developing these housing types and the potential for incentives for developers.

61%

Interested in seeing growth in the County when infrastructure can support it.

Municipalities

Participants cited municipalities as the most appropriate areas for future growth.

21%

Of the options provided, participants were most interested in seeing more senior living units in the future.

Housing Mix

Participants wanted more housing options that focus on quality-design, affordability, and diversity catering to different residents needs.

▶ SECTION 4.2-1 COMMUNITY WORKSHOP PARTICIPANT PREFERENCES

How Participants Travel

Participants predominantly travel by car in and throughout Monongalia County, with some choosing their mode of transportation (car, transit, bicycle, or walking) depending on their destination. Many participants were interested in walking or biking more but have concerns over safety.

73%

Travel predominantly by car.



Roads

Participants wanted upgraded roads throughout the County for safety reasons and to create better connections and opportunities for multi-modal travel.

Employment Opportunities

Participants expressed an interest in the County exploring Cheat Lake, Cassville, Blacksville, West Run, and Stewartstown as primary candidates for future employment centers. When asked their opinions about how the County can attract and retain businesses, participants provided a spectrum of solutions including improving roads and connections, maintaining and expanding community infrastructure, availability of well-designed affordable housing options, thoughtful planning and zoning, removal of legislative barriers for new industries and businesses, long-term investment strategies.

Participants were generally supportive of the County exploring increasing the amount of retail, office, or industrial development in targeted areas in order to diversify the County's overall tax base to create additional funding streams for community infrastructure, community amenities, and investments in new employment centers but wanted additional information to understand how this policy could be implemented.

17%

Of the options provided, participants identified Cheat Lake as the most appropriate area for future investments in employment.

Employment Centers

Participants highlighted Cassville and Blacksville as additional locations to be explored for future employment centers.

▶ SECTION 4.2-1 COMMUNITY WORKSHOP PARTICIPANT PREFERENCES

Community Facilities

When asked about what types of community facilities or recreation spaces should be prioritized in the County, participants were most interested in trails, open spaces and conservation areas, parks/dog parks, and community pools.

Recreation

Trails, open spaces, parks, and community pools were the highest priority for future community investments.

38%

Balancing Priorities

Of the options provided, participants were most interested in prioritizing infrastructure, design, housing mix, and employment centers equally.

Community Priorities

The majority of participants felt that investments in community infrastructure (ex. utilities, broadband, road connections), emphasis on high quality design for new developments (housing, commercial, and industrial), exploration of additional housing typologies to respond to future residents needs and address affordability concerns, and targeting specific areas in the County for new employment centers should be equally prioritized as the County looks to the future. A large group of participants felt that the County should primarily focus on investments in community infrastructure alone.

Rural Character and Community

While participants at-large appreciated the rural character of the County, they also expressed an interest in updating the quality of roads throughout unincorporated areas. Participants were also interested in seeing additional amenities referenced the expansion of broadband, increased connections and transit opportunities, shopping, community facilities and amenities, delivery of utilities, recreation opportunities.

Culture

Participants were very interested in bolstering existing and new educational facilities, libraries and art centers.

▶ SECTION 4.2-2 BIG IDEAS SURVEY PARTICIPANTS

There were over **180 community members** who filled out the Big Ideas Survey questions between May and July 2022. Residents were asked to weigh in on a series of questions related to how the Comprehensive Plan should approach the economy, focus areas, housing, environment, land use, and infrastructure.

The project team asked participants how the County should prioritize different initiatives for building a healthy stable economy, what 'focus areas' should be prioritized, how the County can address increasing the supply of affordable housing types, what land use management controls are most appropriate in the County, and whether developments should be incentivized to provide community infrastructure at a site-specific level.

Preferences for A Healthy, Stable Economy

When asked how the County 'should bolster a healthy, stable, and balanced economy that provides for a variety of employment opportunities, goods and services for the greater-community', and given a series of options - encouraging attracting industries that focus on sustainable environmental practices, new businesses to Monongalia County that provide job opportunities for the County's labor force, establish and expand businesses that add stability and have the potential to broaden the County's tax base, targeting County investments into specific areas, or supporting ongoing efforts to coordinate economic development throughout the municipalities and unincorporated County areas - participants were most interested in supporting ongoing coordination.

On-Going Coordination

Participants were most interested supporting ongoing efforts to coordinate economic development throughout the municipalities and unincorporated County areas.

Focus Areas

When asked 'if there were finite resources and funding, what areas of the County should be considered for future investments' and if there was a specific area that should be prioritized over others, participants were most interested in seeing investment in Blacksville and Cassville areas.

Blacksville *Cassville*

Selected as priority investment areas.

▶ SECTION 4.2-2 BIG IDEAS SURVEY PARTICIPANT PREFERENCES

Land Use Management Controls

When asked, on a scale of 1-5 (1-very comfortable, 3- moderately comfortable, 5-not comfortable), whether 'the Comprehensive Plan can respond to community needs through the creation of land use management goals that would allow for the implementation of policies that would incentivize the community's development preferences' the majority of participants were comfortable or moderately comfortable with the County setting land use management goals to better incentivize better development outcomes.

Comfortable

Most of participants were comfortable with the County setting goals for future land use management in the Plan.

Housing

When asked about 'whether the County should explore planning tools that incentivize specific housing types (senior living units, townhomes, and apartments) along existing transportation corridors and, where possible, in proximity to community amenities such as shopping, retail, and employment opportunities' the majority of participants said yes. More specifically, participants were interested in the potential for incentives, assessing and removing barriers for the construction of desired housing types, and working to better understand specific needs of populations in the County and areas that will best serve development of these housing types.

Participants felt that the County should explore collaborations with developers, different incentives, and explore working with partners to assess successful strategies in similar communities.

74%

Agreed that the County should explore planning tools that incentivize specific housing types in areas with existing infrastructure.

Balanced

Participants wanted a balanced approach to setting goals for community infrastructure focusing on both near and long-term projects and improvements.

Community Infrastructure

When asked how the County should best focus its efforts and funding to accomplish both maintaining existing and improving community assets and infrastructure, participants overwhelmingly felt that the County should take 'a balanced approach to setting goals that focuses both on a targeted number of near-term projects and long- term implementation of improvements across unincorporated County areas.'

▶ SECTION 4.2-2 BIG IDEAS SURVEY PARTICIPANT PREFERENCES

Environment and Climate Change

When asked whether the County should set goals to implement environmental regulations over time - including land use conservation, open space and environmental protections, increased stormwater infrastructure measures, and expanded water quality controls - participants overwhelmingly agreed.

Participants listed stormwater management, water quality improvements, and preservation of open and green spaces as tools of interest for the County to explore.

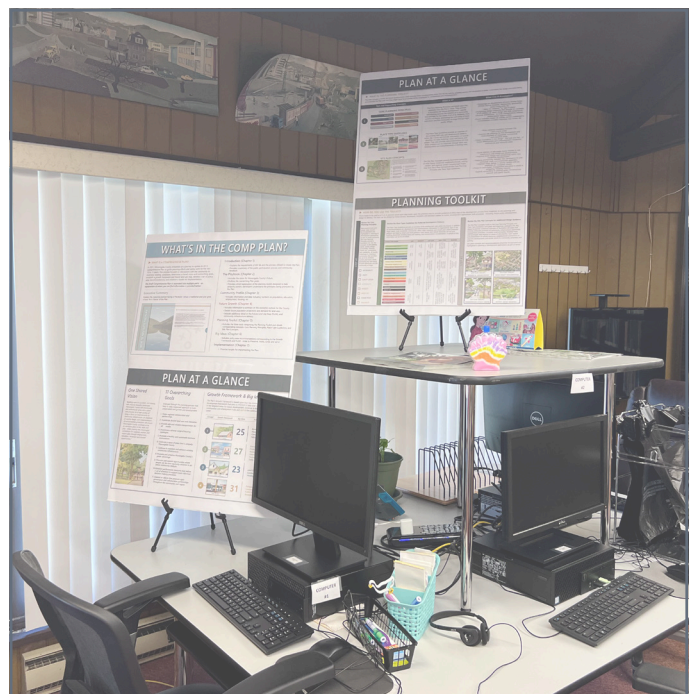
In order for the County to best prepare itself for future climate change events, participants were interested in updating community infrastructure, balancing growth and development with the preservation of open and green spaces and explore funding opportunities and partnerships for program and policy development.

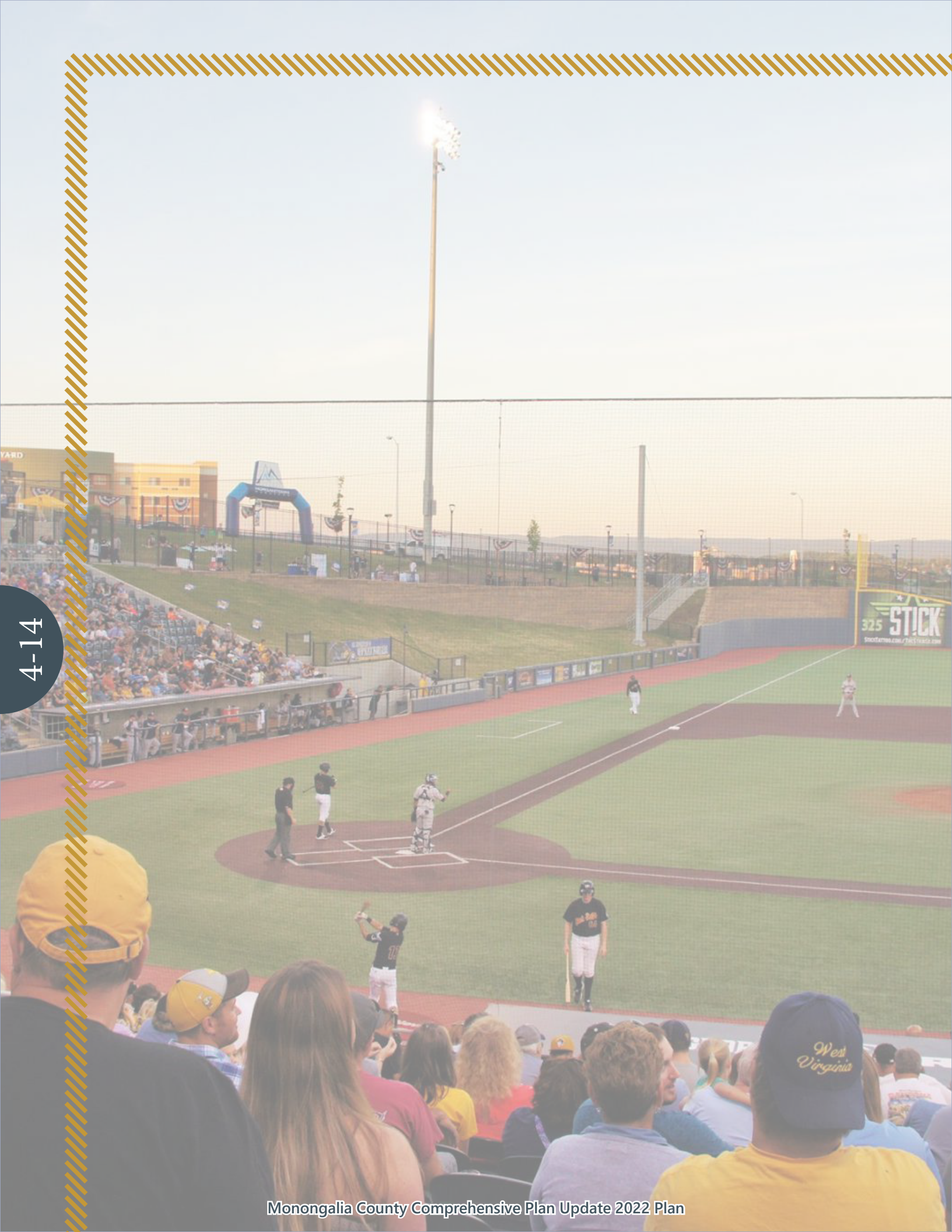
77%
*Agreed
to setting
environmental
goals*



▶ SECTION 4.2-3 COMPREHENSIVE PLAN FAIR

On September 8th, 2022 the project team hosted a collaborative event with the City of Morgantown, Star City, Westover and Granville to present information on the County and Cities comprehensive planning processes, schedules, key findings and recommendations, and adoption hearing timelines. The County presented detailed information on the draft plan to community members in attendance. Additionally the project team set up a Draft Plan installation at the Blacksville Library to ensure that rural communities in the County had access to project information.





SUPPLEMENTAL

► SECTION 4.3 COMMUNITY PROFILE (THE COUNTY-AT-LARGE)

Monongalia County, with an area of approximately 360 square miles, has remained a relatively rural area with pocketed areas of development within the five incorporated cities and towns - Morgantown, Westover, Star City, Granville, and Blacksville, historic unincorporated communities, and some areas within the Planning Districts defined in the 2013 Comprehensive Plan.

The average household size (2016-2020) in the County is larger compared to the State of West Virginia (2.5 in the County vs. 2.4 in West Virginia).

Median household income (\$54,198) for the County is higher compared to West Virginia (\$48,037), but the overall percentage of residents living at poverty levels is comparable at approximately 15.2% of residents.

The distribution of residents living in Monongalia County is comprised largely of adults age 18 to 64 (83.7%) and youth age 0 to 17 (21.2%).

The senior population in Monongalia County, 65 and over, comprises 12.7% of the resident population.

The distribution of people among these age groups will influence how the County addresses some of its priorities and future investments; especially in terms of parks, transportation, and senior services. Anecdotally, there is an aging population in the County that will require special attention specific to housing and access to

community amenities such as shopping.

Attracting a more distributed demographic profile for the County in terms of age, race, income, household size, material status, etc. will result in a more well-rounded community. Groups underrepresented in Monongalia County will be attracted to new housing, neighborhoods, shopping, and entertainment options provided for in the Plan.

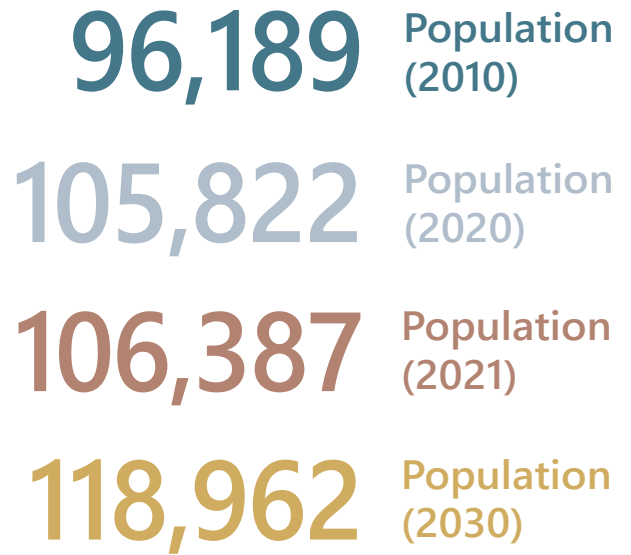
New residents, and especially families, are attracted to the area because of job opportunities, the natural environment and outdoor recreation, educational facilities, a "small-town charm", and generational or familial ties.

The following community profile has been derived from data available in the 2020 Census - and includes key datapoints from population, income, housing, education employment, and economy figures. All data is reported for the most current year available.

Population Summary:

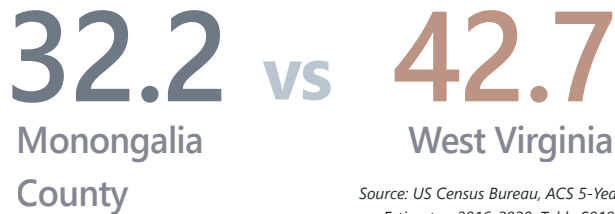
Monongalia County is expected to see 10.5% growth by the year 2030, and will eventually reach a population of near 150,000 by 2050. The majority of residents are male (51.4%). Approximately 84% of residents are between the ages of 18-64, with a median age of ~32 years old. Families have an annual median income of \$83,577, where families comprised of married couples earn around \$103,614 a year. While the household size in Monongalia County (2.5) is slighter higher than the average across the state of West Virginia (2.4), this likely is influenced by the student population at West Virginia University. Approximately, 7.5% of households speak languages other than English at home.

Population Over Time



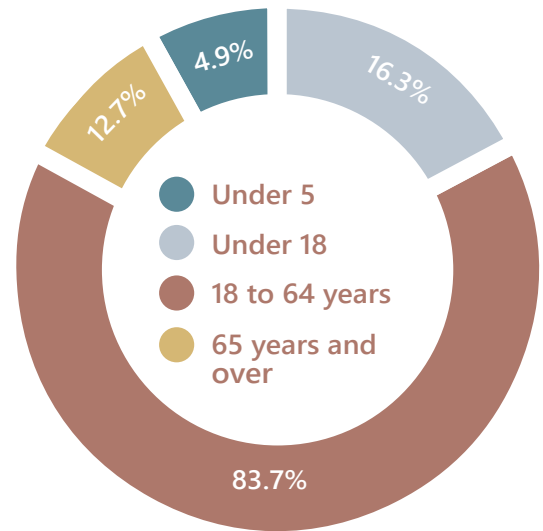
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Median Age



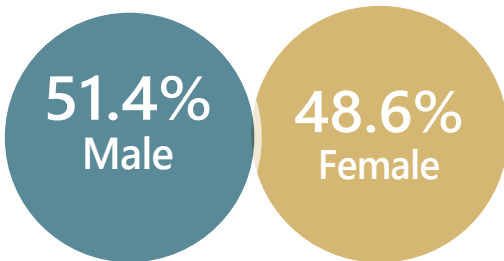
Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S0101

Population Age Breakdown



Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020

Population Gender Breakdown



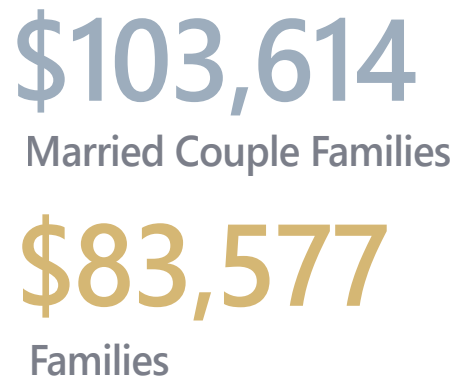
Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S0101

Average Household Size



Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020

Median Income



Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Subject Tables

Residents in Poverty

20.4%
Monongalia
County

VS

17.1%
West Virginia

Source: US Census Bureau, ACS 5-Year
Estimates, 2016-2020, Table S01701

Language other
Than English
Spoken At Home

7.5%
Households

Source: US Census Bureau, ACS 5-Year
Estimates, 2016-2020, Table S1601

Household Median Income

\$54,198
Household in Monongalia

VS

\$48,037
West Virginia

Source: US Census Bureau, ACS
5-Year Estimates, 2016-2020, Subject Tables

Resident Mobility

11.9% Moved within
the County

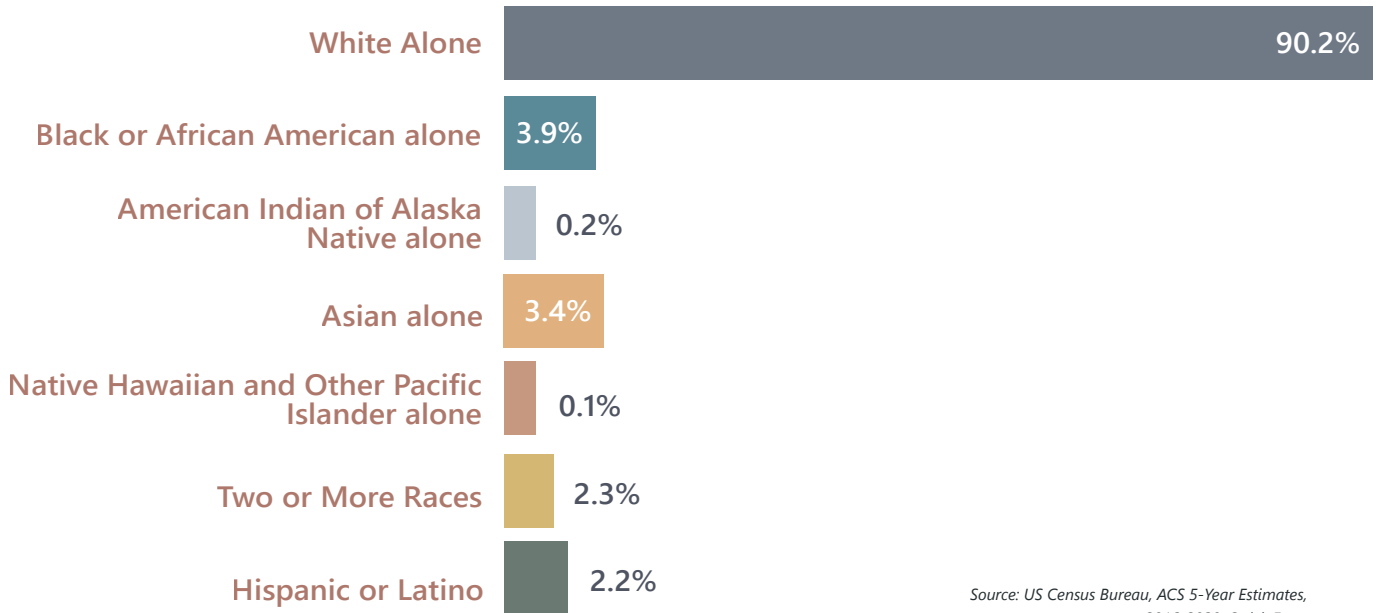
5.0% Moved from
another County

6.3% Moved from
another state

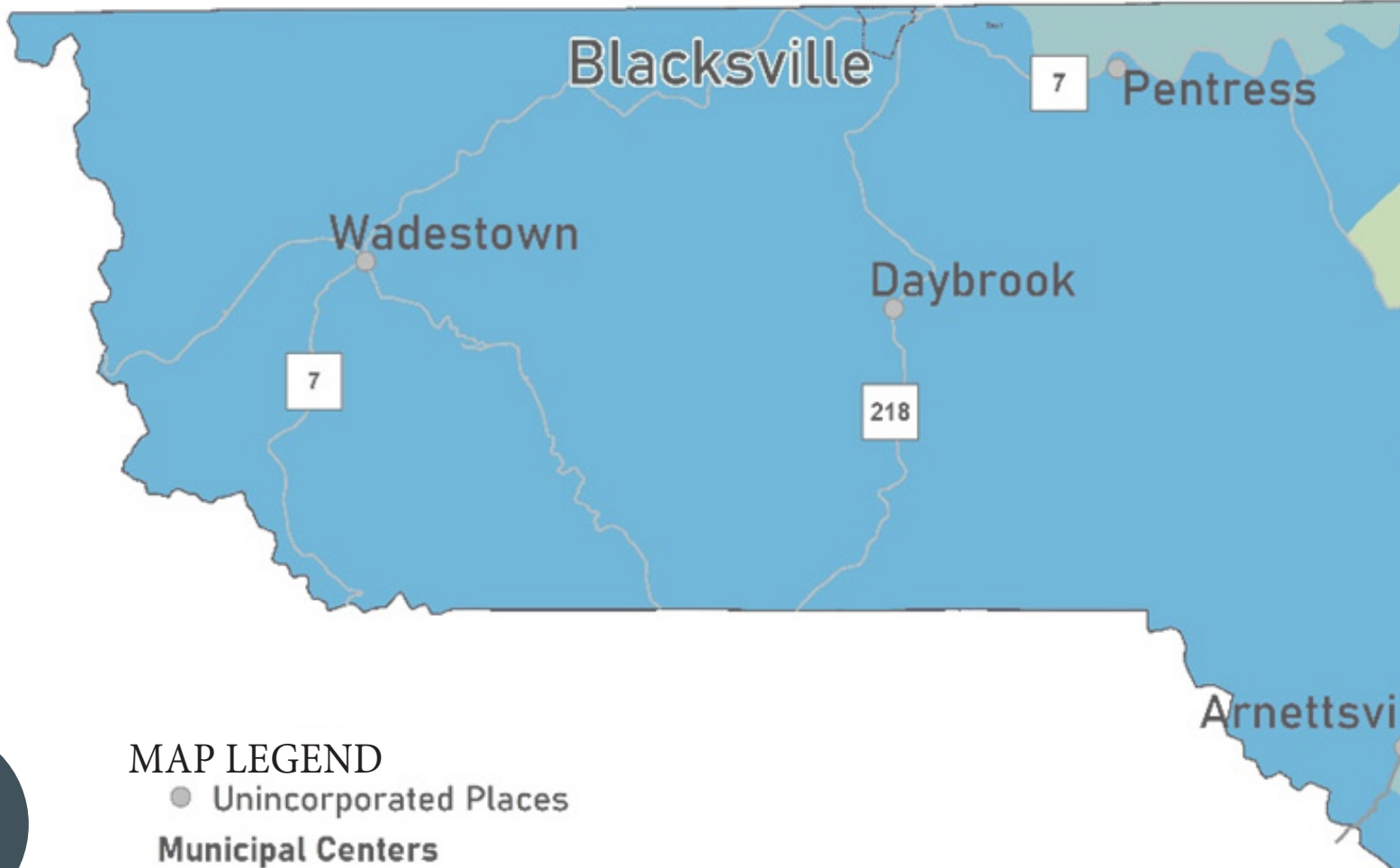
Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Subject Tables

4-17

Race and Hispanic Origin



Source: US Census Bureau, ACS 5-Year Estimates,
2016-2020, Quick Facts



MAP LEGEND

● Unincorporated Places

□ Municipal Centers

□ Municipal Centers

Population / Acre

0.0 - 0.2

0.3 - 0.5

0.6 - 1.0

1.1 - 2.0

2.1 - 5.0

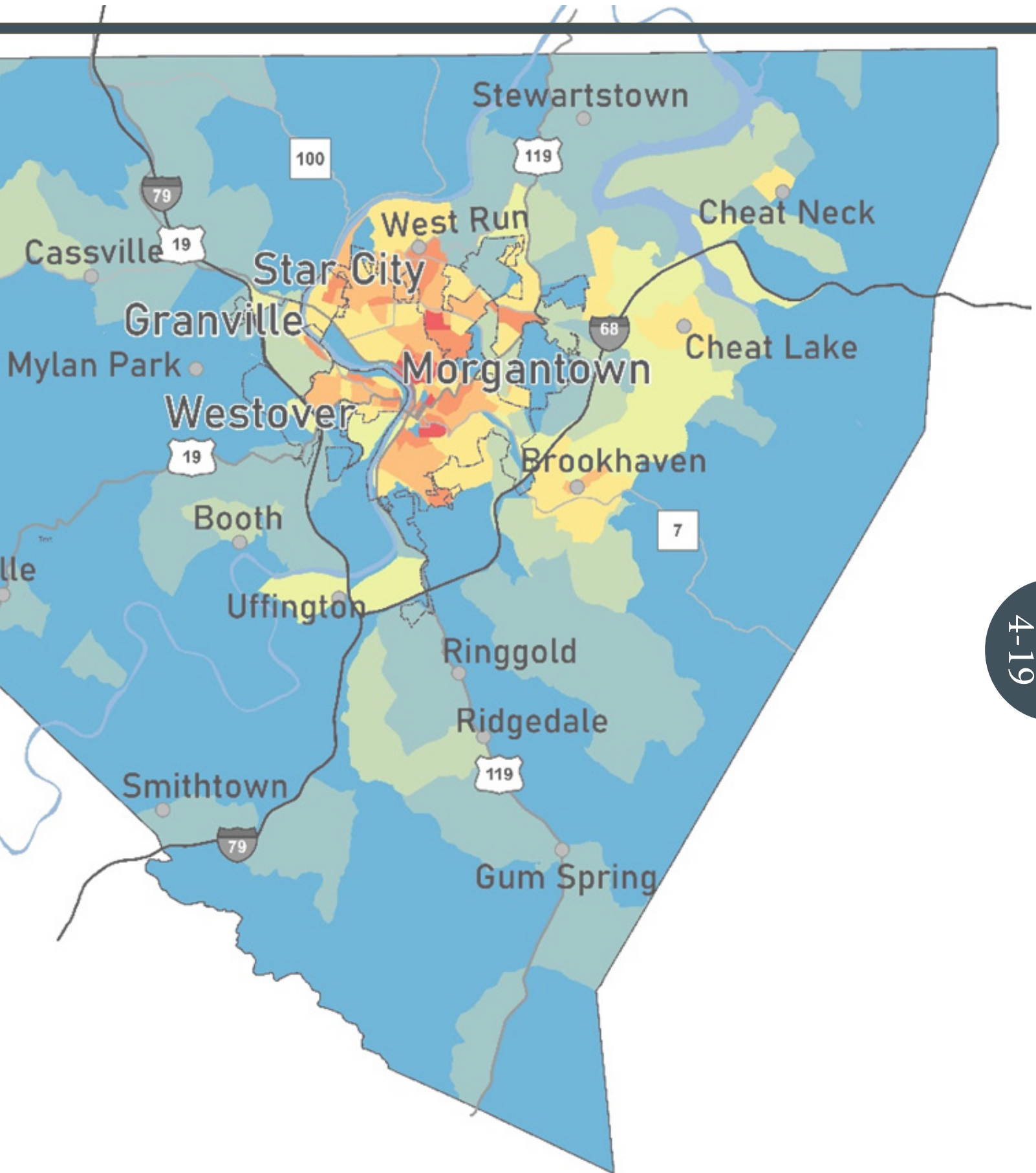
5.1 - 10.0

10.1 - 20.0

20.1 - 73.1



4-18



Education Summary:

Approximately 50.5% of adults in Monongalia County have some type of college degree: Associate Degree, Bachelor Degree, or Graduate Degree. Residents work in a wide variety of disciplines, but the majority are employed by private companies (59.8%) or by local, state or federal government entities (23.3%). There are 19 schools and educational facilities in the County with approximately 11,470 students enrolled in 2022.

School Enrollment

33.4%

Kindergarten to 12th Grade, Monongalia County

69.2%

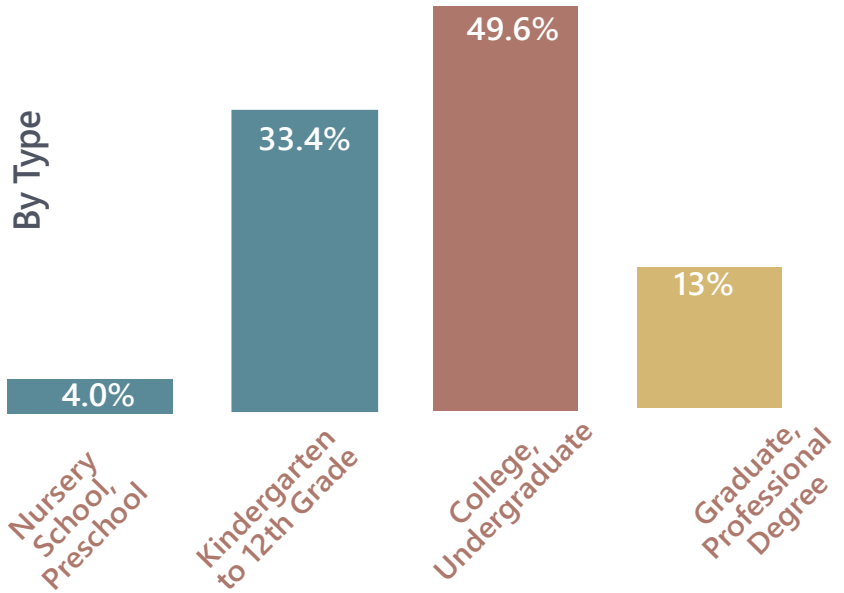
Kindergarten to 12th Grade, West Virginia

VS

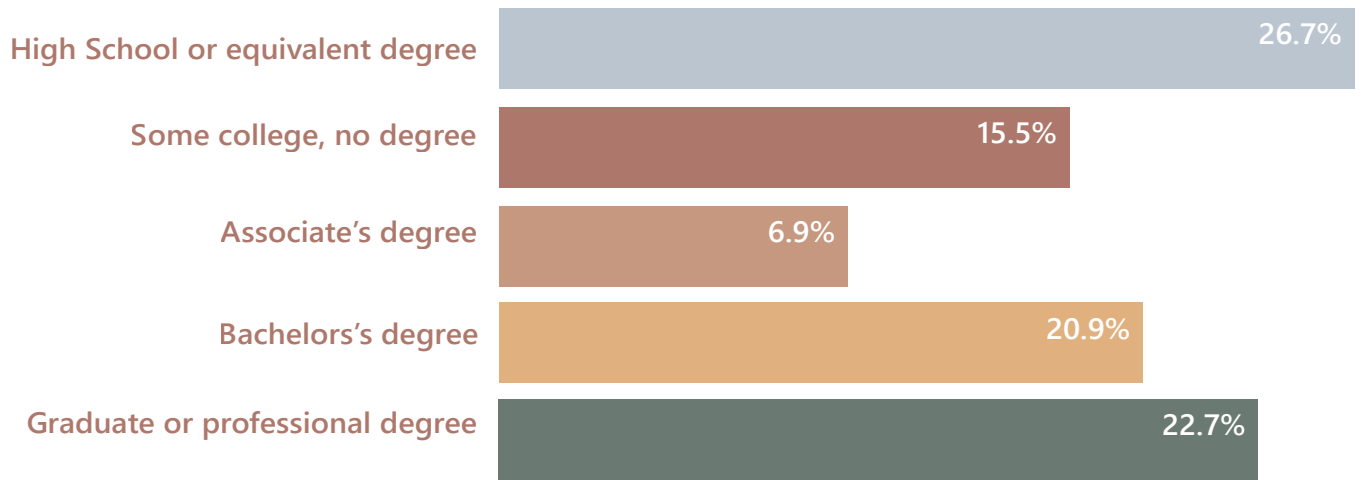
Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S1401

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S1401

School Enrollment

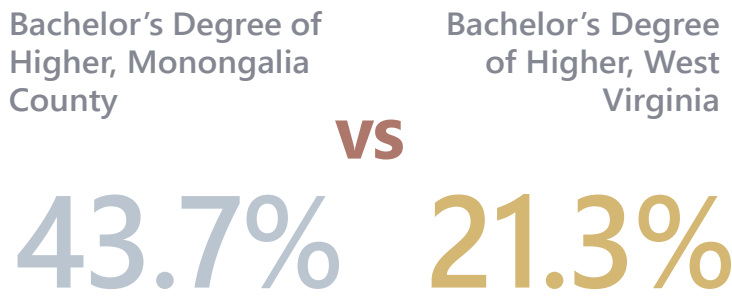


Educational Attainment



Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S1501

Degrees Attained



Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S1501

19

Schools and Educational Facilities in Monongalia County

Source: <https://boe.mono.k12.wv.us/>

11,470

Enrolled students in the Monongalia County School District

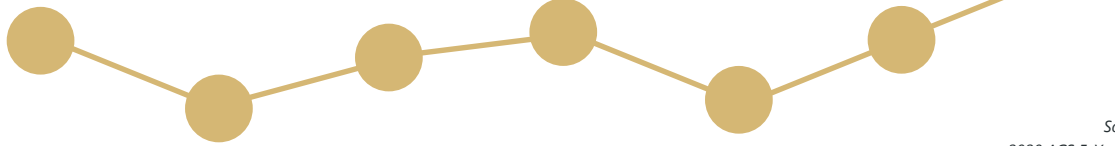
Source: <https://boe.mono.k12.wv.us/>

4-21

SECTION 4.3-3 EMPLOYMENT

Employment Rate

56.2%
2014



58.3%
2020

Source: US Census Bureau, 2020 ACS 5-Year Estimates Data Profiles

Source: US Census Bureau, 2020 ACS 5-Year Estimates Subject Tables

Classes of Worker

59.8%

Employees of Private Company

2.6%

Self-Employed in Own Inc. Business

11.0%

Private Not-For-Profit Wage & Salary

23.3%

Local, state, and federal government workers

3.3%

Self-Employed in Non-Inc. Business

4-22

Occupation For Civilian Employed Population

Management, business, science, and arts occupations



25,259

Service occupations

9,930

Sales and office occupations

10,097

Natural resources, construction, and maintenance occupations

3,683

Production, transportation, and material moving occupations

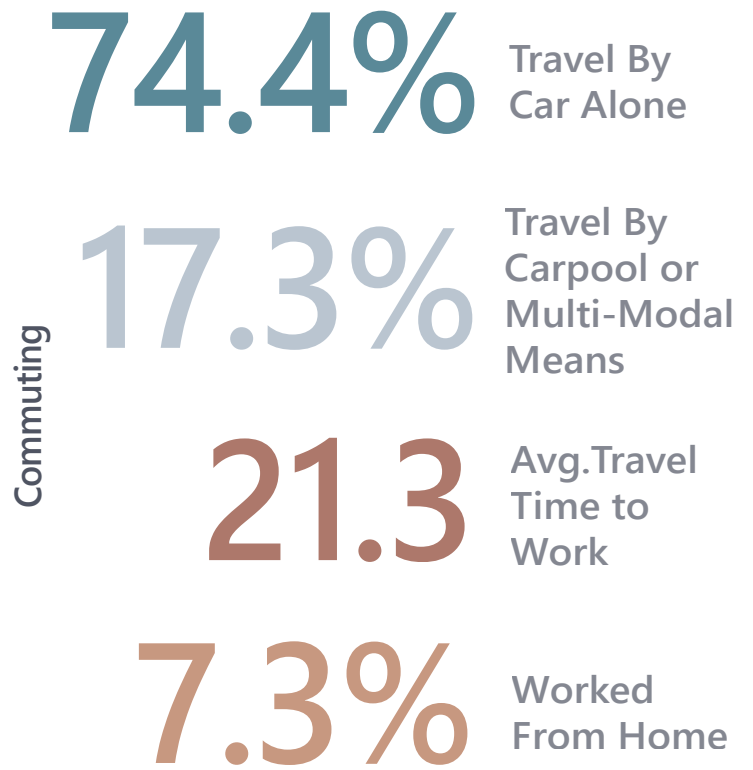
4,015

Source: US Census Bureau, 2020 ACS 5-Year Estimates Subject Tables

Commuter and Employment Summary:

The majority of residents travel alone by car to work, with an approximate travel time of 21.3 minutes. However, approximately, 17% travel by carpool or multi-modal means which is significant. Individuals who worked from home comprised 7.3% of the residential population of the County.

Since 2014, employment rates have remained relatively steady between 56.2% and 58.3% (2020). Of those employed in the County, the majority, approximately 25,259 residents, work in management, business, science, and arts occupations.



Source: US Census Bureau, 2020 ACS 5-Year Estimates Data Profiles

Housing Summary:

There are 49,881 housing units in Monongalia County consisting of predominantly single-family homes, apartments or dorms, mobile homes and townhomes. Of those residents renting, a majority (58.7%) pay between \$500-999 monthly in rent. The median rent in the County is \$845 compared to a state median of \$732.

Approximately 58% of residents own their homes, which is lower than the average state home-ownership rate of 73.7%. Likely this can be attributed to the volume of university students residing in the County.

The majority of homes in Monongalia County were valued between \$150,000 and \$499,000, with 28% of total homes falling between \$200,000-299,999. Housing vacancy rates have seen a steady decline since 2014, falling from 16.1% to 10.7% in 2020.

Based upon the decline of vacancy rates and high median rent values as compared to the rest of West Virginia, Monongalia County is experiencing an increase in demand for housing for both renters and owners.

4-24

Housing Units in Monongalia County

49,881

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table H1

Housing Units in West Virginia

855,645

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table H1

Home Ownership in Monongalia County

58.2%

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table DP04

Home Ownership in West Virginia

73.7%

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table DP04

Housing Units with Four or More Bedrooms

19.4%

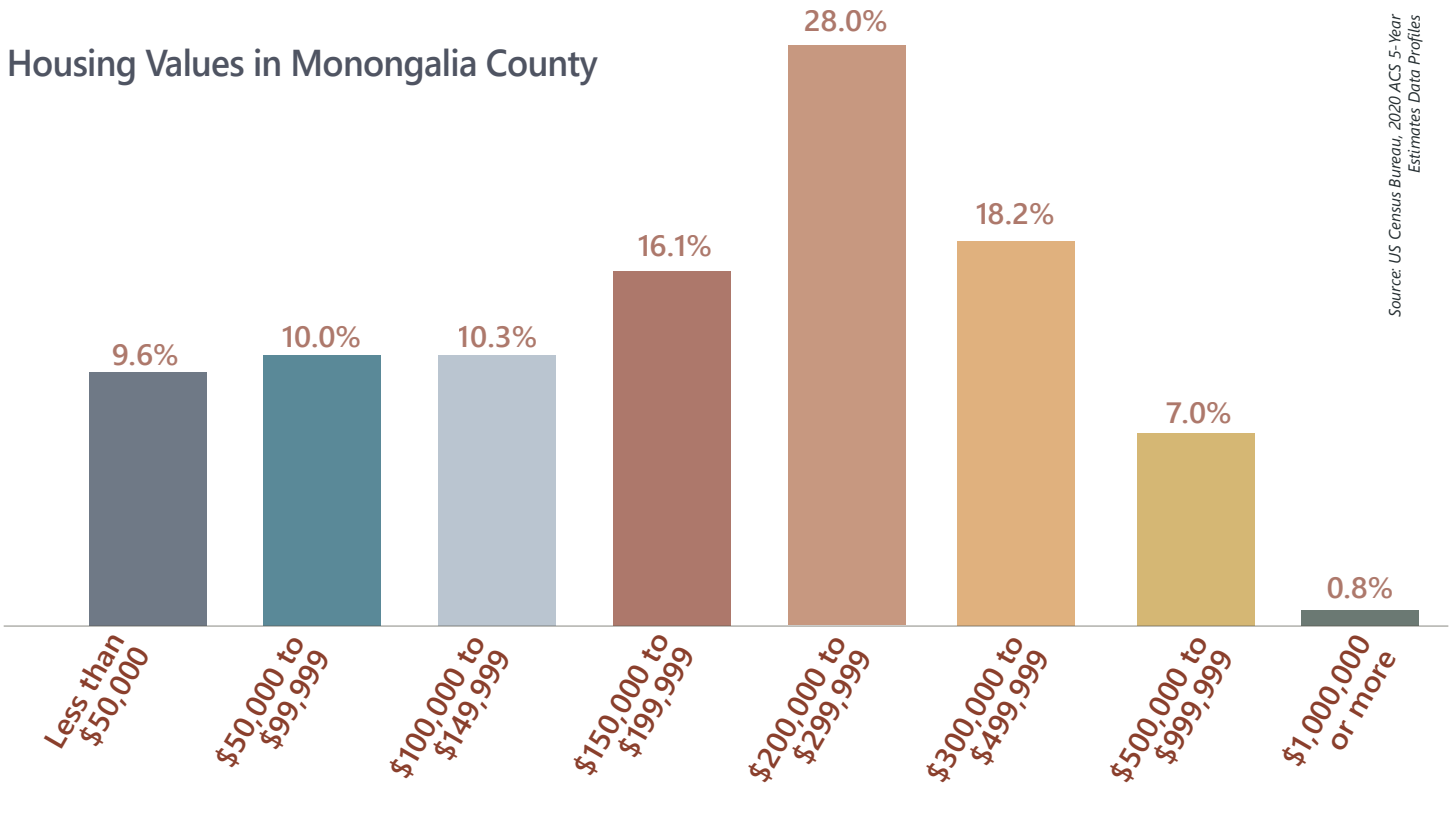
Source: US Census Bureau, 2020 American Community Survey 5-Year Estimates, Table S2504

Majority Renters Pay \$500-999

58.7%

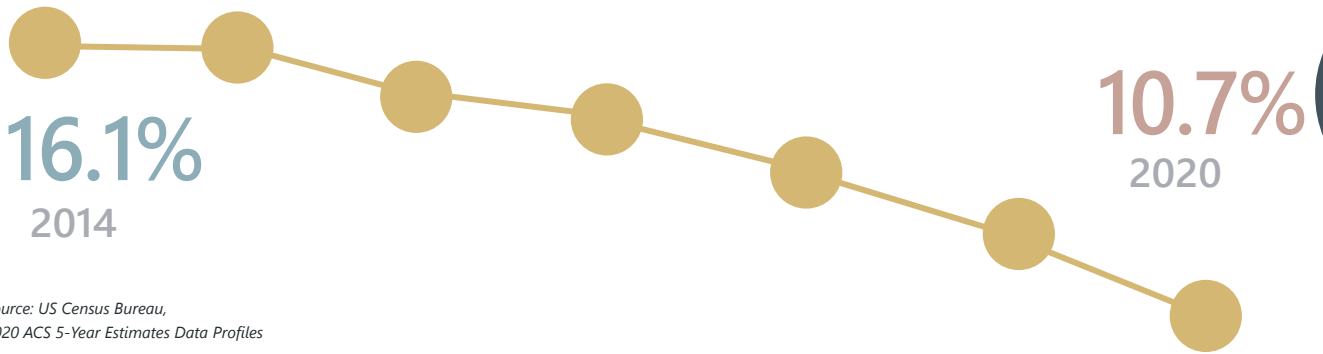
Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table DP04

Housing Values in Monongalia County



Source: US Census Bureau, 2020 ACS 5-Year Estimates Data Profiles

Housing Vacancy Rates



Source: US Census Bureau, 2020 ACS 5-Year Estimates Data Profiles

4-25

Median Rent

\$845

Monongalia County

VS

\$732

West Virginia

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table DP04

Mean Value of Owner Occupied Units

\$212,400

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Quick Facts

Median Monthly Mortgage Payment

\$1,321

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Quick Facts



Homesless

315

Individuals Served at Morgantown Bartlett House Triage Center (2019)

Source: <https://www.bartletthousingsolutions.org/>

Health Insurance

6.9%

Residents without Health Insurance

Source: US Census Bureau, 2020 ACS 5-Year Estimates Subject Tables

Veterans

5.7%

Monongalia County

vs

8.7%

West Virginia

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table S2101

Vulnerable Population and Mobility Summary:

With 12.7% of the population aged 65 years and older, and 13.4% of the population with declared mobility difficulties, and additional vulnerable communities in the County, a significant number of residents will have, or will be experiencing a change in needs, services, and access to amenities in the near-future. It is expected that this would include access to transportation, universal housing design and options, additional senior housing options and developments with proximity to community services and healthcare opportunities. Additionally, there are approximately 6.9% of residents who are without health insurance which puts them at risk of financial distress.

Population with Disabilities

Monongalia County

13.4%

vs

West Virginia

19.3%

Source: US Census Bureau, ACS 5-Year Estimates, 2016-2020, Table DP04

Source: US Census Bureau, 2020 ACS 5-Year Estimates Subject Tables

Residents with Declared Difficulties

3.8%

Hearing Difficulty

6.8%

Ambulatory Difficulty

2.1%

Vision Difficulty

2.4%

Self-Care Difficulty

5.8%

Cognitive Difficulty

5.4%

Independent Living Difficulty

EXISTING DEVELOPMENT IN THE COUNTY

► SECTION 4.4 REGIONAL CONTEXT

Monongalia County is a largely rural community that contains several more densely populated and developed municipalities located along the Monongahela River and which are framed by the area's two interstates I-68 and I-79. These interstates connect the County to several larger regional metropolitan areas such as Pittsburgh, Washington D.C., and intrastate cities including Charleston and Clarksburg.

One of the original three Counties created by an Act of the Virginia Assembly in October of 1776, Monongalia County is known as the "Mother County" for northern West Virginia. Once the sixth largest County in the United States at the time of the first census (in 1790) at Monongalia County now has over 105,000 residents and is known as a regional hub for government services, healthcare, and education. The County is within commuting distance to Pittsburgh with broader regional connections to Baltimore and Washington D.C.





► SECTION 4.4-1 LAND USES AND DEVELOPMENT CONSTRAINTS

The majority of existing land uses in the County predominantly consist of open spaces, rural living, working farms, and forests interspersed with special use areas (mining). Development types and land uses vary more directly surrounding Morgantown, Westover, Granville and Star City with a broad mix of neighborhood types, educational facilities, campuses, office, retail and industrial spaces. The majority of occupied land uses in the County – residential, commercial, and industrial – are within the Morgantown metro-area.

A review of the existing land use types indicates that a majority of the land within the County planning study area is undevelopable, approximately 60%, with another 30% of land understood to be farm/vacant land, with the remaining portion of land assigned to residential (6%), commercial (3%), and the remaining 1% attributed to parks and recreation spaces.

Land use constraints include open water bodies, steep slopes greater than 25%, and limited ability for universal infrastructure provision. These natural resources and features are spread throughout the County – and create varying influences on the types of development that are possible. The entire County lies within the Appalachian Plateau. The western portion of County lands are defined by very narrow valleys and steep ridges – moving west the terrain begins to shift to more continuous valleys and larger more continuous mountain ridges.

These constraints influence how and where development can occur long-term in the County, and directly determine what type of land uses may be most appropriate (residential, retail, service, industrial, etc.) in different areas of the County.



60%

Undevelopable Land

Land constraints include open water bodies, steep slopes greater than 25% and limited availability for infrastructure.



30%

Farm or Vacant Land

6%

Residential Land

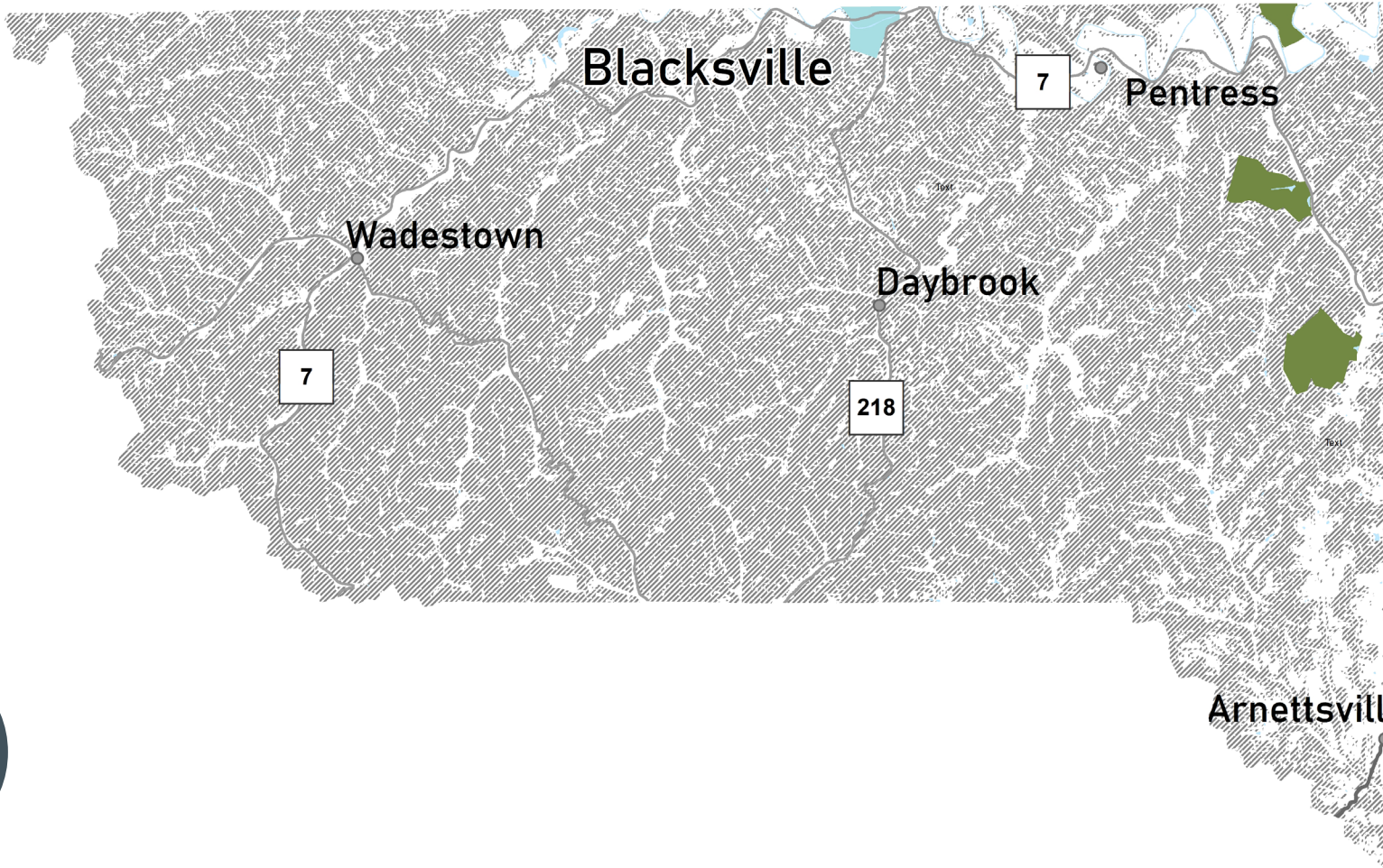


3%

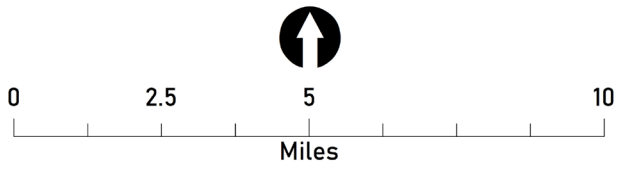
Commercial Lands



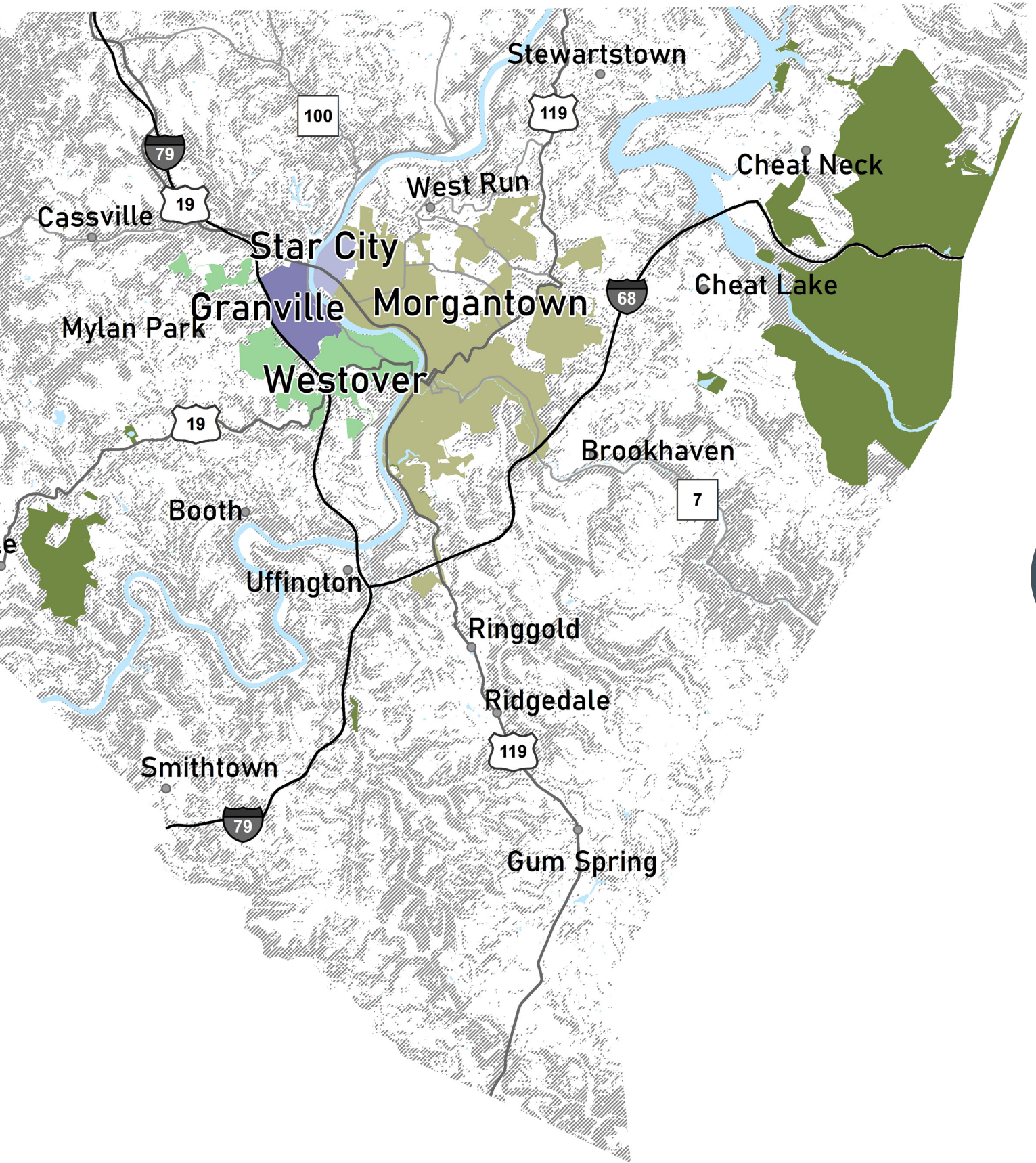
▶ MAP 4.4-1: MONONGALIA COUNTY DEVELOPMENT CONSTRAINTS



4-32



- Unincorporated Places
- Interstates
- US Highways
- State Roads
- Water Body
- ▨ Steep Slope
- Protected Natural Area





4-33



FUTURE GROWTH

▶ SECTION 4.5 HOW, WHEN, WHERE WILL THE COUNTY GROW?

Growth in the County is inevitable given its longstanding status as a regional hub for employment.

Observed growth between 2010 and 2021 was 10,198, which represents an increase of 9.5%, and growth is expected to continue to accelerate in the future, reaching up to 118,962 residents County-wide by 2030, and up to 148,058 residents County-wide by 2050. With the majority of development currently residing within the municipalities, the County is expected to see a large uptick in population, housing demand, employment and commercial development opportunities.

Why is this important?

Even with a firm focus on channeling development and infill development into areas immediately adjacent to municipalities within the Planning Buffer Areas, and subsequently, or simultaneously into the Targeted Investment Areas (both denoted on the FLUM) the County will still need to expand its public services and utilize land use management controls to strategically place development - whether residential, commercial, retail, or industrial - appropriately in locations that do not impede or disrupt the preservation of rural character of the County and the environmental protections considered in this Plan.

Understanding how growth will occur, when it will occur, and where it can occur will set the County up for success and allow for the thoughtful implementation of planning tools and measures, ample lead-time for collaboration and coordination with regional entities and partners, and procurement of adequate funding for capital projects and investments.

HOW WILL THE COUNTY GROW?

▶ SECTION 4.5-1 WHAT INFLUENCES GROWTH AND DEVELOPMENT?

The Land Use Plan is one document of many that influences how and when development takes place, and what it looks like upon completion. Development found in Monongalia County — both patterns and intensities — are contingent on practical land assemblages and generally driven by five growth factors: (1) market demand; (2) local economies and growth outlooks; (3) property owners' desire and willingness to participate; (4) government regulations and policies; and (5) the availability and capacity of infrastructure and (6) practical land use assemblage. These factors have some degree of influence over each other and can change over time, both which affect the location and type of development that is experienced in the community.

While all of these factors tend to work together, in Monongalia County, due to steep slopes and historical development patterns, the provision and capacity of infrastructure plays a larger role than typical in most communities in how growth occurs. As the County moves forward, it will be of particular importance to ensure that the regulations and policies related to land use create a strong foundation for attracting and increasing market demand in targeted growth areas.



1) PERCEPTION OF MARKET DEMAND, AVAILABLE CAPITAL, AND DEVELOPER INTERESTS

The demand for different development types, patterns, and intensities is established by future buyers or renters attracted to the area — and their purchasing power — that fill new products or pay different price points. Developers and private parties decide where and when to pursue a project based upon several considerations, including their own interests, market demand, available financing, and the probability of success. Private land development is financed by banks and other institutions who establish the minimum lending criteria (and are oftentimes conservative or cautious by nature). These organizations must have reasonable confidence that a project will succeed within the community before they would invest.



2) THE LOCAL ECONOMY AND GROWTH OUTLOOK

Future development is directly influenced by the strength and resilience of the local and regional economies where the private sector takes into consideration projected employment rates, population forecasts and the general demographics of an area before investing in new development projects.



3) WILLING PROPERTY OWNERS

Property owners in Monongalia County will ultimately decide whether land becomes available to develop or redevelop, or if land becomes available to acquire for permanent open space. New growth in the community is the result of property owners' desire for selling property, whether to developers or conservation groups, or even developing the land themselves.



4) GOVERNMENT REGULATION AND INFRASTRUCTURE

Development can be both promoted or restricted through government policies to keep growth in alignment with the community's overarching vision. This can be achieved through zoning and land development controls, environmental policies, programs and protections, and through the administration of regulations by local land use boards. Regulations and zoning restrictions control permitted uses on a parcel, allowances for height and density, and design standards or considerations. While the government has a crucial role in development it is limited to working within the regulations available and cannot restrict or promote a project beyond the limitations provided through ordinances, regulations, and laws.



5) AVAILABLE INFRASTRUCTURE CAPACITY

The delivery and location of available infrastructure capacity is an important component for development projects — whereby if the capacity is not yet available some projects must wait until available capacity exists from either government or third-party service providers. There are opportunities, in some cases, for developers to fund certain on- or off-site infrastructure investments themselves to unlock available capacity and begin their projects on an accelerated timeline. Joint-funding agreements can be utilized by governments and third-party service providers to reimburse developers for expediting infrastructure projects.

6) PRACTICAL LAND USE ASSEMBLAGE

The ability to aggregate parcels into a large enough site to offset costs and have a marketable development.

SECTION 4.5-2 GROWTH RATES FOR POPULATION, EMPLOYMENT, INDUSTRY

A 'base year' data set was pulled utilizing several key data points from 2019, in conjunction with preliminary and subsequently published Census data. These data points have been utilized to provide an analysis of existing conditions in the County and future growth projections. The projections organize population, housing and employment estimates by small geographic areas and use a mathematical model to calculate future growth in order to show how growth is likely to be placed throughout both the municipalities and unincorporated County areas.

Projections are created to understand growth over time, specifically looking at trends and opportunities for the County in 2030, 2040 and 2050.

The total population for the County — 105,474 in 2019 — made it the third most populous county in West Virginia. Between 2009 and 2019, there were 5,702 new housing units built in the County with the majority of residents living in single-family homes (56%).

County employment in 2019 was 61,181 - comprised primarily of service- or medical-related jobs. The region benefits from a strong, diversified economy that has experienced steady population growth over the last several decades. 10.6% of the total population resides in group quarters, which is mostly comprised of student housing, the older adults in assisted living facilities.

Observed growth between 2010 and 2021 was 10,198, which represents an increase of 9.5%. County growth is expected to accelerate in the future, reaching up to 118,962 residents County-wide by 2030, and up to 148,058 residents County-wide by 2050.

Looking at future growth projections for all of Monongalia County through 2050, it is expected to see an annual growth rate of 1.1% (based upon the 2019 'base year' data). This will result in approximately, 13,488 new residents and a

demand for approximately 6,200 new residential units by 2030.

Employment will increase by 1.3% between 2019 and 2050 which will bring an additional 8,654 jobs to the area by 2030.

Additionally, there will be an increased demand for non-residential uses: 411,000 square feet of new retail space, 2,506,000 square feet of new office, service or medical space, and 1,500,000 square feet of new industrial space.

Growth projections also take into consideration an area's attractiveness, and likelihood, for growth of a specific land use (residential, retail, service, or industrial), looking at intended development types based upon local policies and ordinances, known development constraints, proximity to existing or planned sanitary sewer services, and current development status or land (developed, undeveloped, open space, and redevelopment candidate sites).

Future annexations were not considered in the growth projections, and special adjustments were made to the service employment category [capacity for Morgantown to reflect significant infill development and redevelopment potential](#).

Utilizing these baseline assumptions, growth rates were applied across small geographic areas and the results begin to paint a clear picture of how much growth can be accommodated in each of the five municipalities and in unincorporated County areas - with the County being able to accommodate the majority of projected future growth (for both residential and non-residential uses).

A full summary of the data, analysis and key findings can be found in the MMMPO Growth Forecast Technical Document, which is available by request to the Monongalia County Planning Commission.



148,058

Population 2050

105,747

Population 2019

With an annual growth rate of 1.1%,
Monongalia County is expected to see up to
42,311 additional residents by 2050.



1.3%

Employment Growth

The County is expected to see an additional
8,654 jobs by in the area by 2030.



+6,200

Housing Units

The County is expected to see demand for
approximately 6,200 housing units by 2030.

SECTION 4.5-3 SHORT AND LONG-TERM MARKET TRENDS

Short and long-term market trends were evaluated for the study area to guide future year growth projections. Data collected for the study area was supplemented by input from local stakeholders in the region to capture a list of new markets, emerging trends, or singular event-based actions in the economy that may influence the type, timing, location, pattern, or intensity of development in the future. Though these Short-Term events were negative, the County still experienced growth.

Short-Term Trends, 2019 to 2030

Short-term trends incorporated into the growth projections included:

- The Viatrix-Mylan Pharmaceuticals closure resulted in a significant job loss of 1,431 employees for the region, which has secondary impacts (negative) through the region's economy. The company will maintain a smaller research and development operation in the region. (Sanyon, 2020)
- The former Blacksville #2 Mine in western Monongalia County also closed; resulting in a loss of approximately 180 jobs. This continues a pattern of mine closures across the state - creating pressures on local economies, like Blacksville and surrounds, to adapt - in particular, as it grows (or does not) in the future (Wilson, 2021).
- The spread of COVID-19 across the United States in 2020 has had universal impacts on American communities disrupting work and employment patterns, housing costs and availability, inflation, the effects of which are ongoing and have created latent demand.

Long-Term Trends, 2031 to 2050

Long-term trends incorporated into the growth projections included:

- Morgantown and the immediate surrounding municipalities will continue to be a center for government, education, commerce, and

distribution in the region. The location of these communities in relation to each other, with their access to interstates, highways, and the airport favors growth and economic success in future years — especially relative to communities much further away from the urban center.

- The proximity of Morgantown to Pittsburgh could be an asset in future years as residents and business favor the quality-of-life prevalent in the region — while still being “close enough” to the larger metropolitan area.
- Light industrial and flex space development, near the airport and in the existing Morgantown Industrial Park, could bring additional employment growth to the region. Developing freight-friendly access points to Interstates 68 and 79 will be important to facilitating industrial-type development in these locations (Bowen, 2019).
- The redevelopment of existing underutilized and underdeveloped sites in Morgantown, and Westover provides high-value opportunities to grow and expand markets in future years.
- While trends for medical consolidation in the United States may put rural hospitals at risk for closing, the location of WVU Medicine's flagship J.W. Ruby Memorial Hospital is an asset in the region and generator for future growth. Medical growth opportunities in the region could be significant in future years. Recent trends reflect this phenomenon, with employment at WVU Medicine's Ruby Hospital growing 137% between 2010 and 2021 (to just over 8,500 employees). The WVU Medicine Children's Hospital and Mon Health Medical Center also contribute to growth in the medical sector. The group “Workforce West Virginia” anticipates health care related jobs in the region could grow at 1.23% per year over the next 10 years, 2020 to 2030.

SECTION 4.5-4 SHORT AND LONG-TERM MARKET TRENDS

over the last ten years, the University's presence in Morgantown is an enormous asset to the region. WVU currently employs approximately 8,300 employees, which is an increase from 7,900 in 2015, but a decrease from 8,400 in 2012. The region's ability to attract and retain students, faculty, doctors, and researchers will be critical for sustained growth. University towns, especially those with medical centers are well-positioned to grow across the country in future years by leveraging their young, well-educated workforce to build or expand opportunities in the fields of science, information, and health care (Hart 2019).

- While not anticipated to grow substantially in future years, public sector employment, and in particular the presence of federal labs or

prison facilities, will help maintain job growth in the region, especially during economic downturns.

- The region's natural amenities, quality-of-life, and reasonable cost-of-living — compared to coastal or more urban, metropolitan areas along the East Coast — could draw new white-collar residents that are able to telework permanently in future years. Programs like "Ascend West Virginia" are helping lure new residents to the State and this region in particular. The region is well-positioned to capitalize on this trend for decades to come.



COMMUNITY INFRASTRUCTURE

► SECTION 4.6 CREATING A STRONG FOUNDATION FOR THE FUTURE

The County's vision for a balanced approach to preservation and development in the Plan requires that community infrastructure be in place either prior, or concurrently with the magnitude, timing, and location of new development.

County officials also recognize growth will continue well beyond the 2030 and 2050 planning horizons, and the Place Types and land use management strategies guiding residential and non-residential development potential in the FLUM make certain assumptions based upon developable land available and the ability to expand utilities into lands that are heavily constrained (steep slopes).

While the FLUM allows for unanticipated growth, changing market conditions and economic development fluctuations not anticipated during the planning process may ultimately impact the funding and implementation of community infrastructure in unincorporated County areas. As such, the FLUM, in addition to the recommendations within this Plan, propose to house the majority of initial growth expected in the County within existing service areas (or immediate proximity).

This section highlights information for six key infrastructure categories: police protection; fire protection and emergency services; parks and recreation, water, sewer and storm service; waste management; and roads. Information for the infrastructure categories provided in the Plan should be shared with the different infrastructure providers serving Monongalia County, and refined further in future Small Area

Plans and/or feasibility studies completed after the Plan is adopted.

WHO IS RESPONSIBLE FOR PROVIDING INFRASTRUCTURE IN MONONGALIA COUNTY?

Residents, business owners, and visitors in Monongalia County expect a well-coordinated and streamlined system of infrastructure to meet existing demands and future year needs. Some infrastructure categories are planned and funded solely by the County, while others are provided by the Morgantown Utilities Board, Monongalia County Solid Waste Authority, Monongalia County Schools, the MMMPO and West Virginia Department of Transportation, or other partners. A brief summary of service provider responsibilities is provided below.

Monongalia County

The County is responsible for many public facilities and services provided in the community, including: police protection, emergency services (fire protection and Mecca 911) and parks and recreation facilities (County owned). Responsibilities for the different categories are spread among multiple departments using in-house staff and equipment to build, operate, maintain, and replace infrastructure. The County Sheriff Office has 21 employees and has its primary facilities in Morgantown. Fire protection services are volunteer based and spread throughout the County with 15 facilities located in Morgantown, Star City, Blacksville, Cassville, Granville, Wadestown, and Westover. Mecca 911 serves



as the emergency first responders in the County answering emergency and no-emergency calls and dispatching 6 police departments, 14 fire departments and 3 EMS services.

Clay Battelle Public Service District (CBPSD)

The CBPSD, a non-profit utility, was instituted in 1967 by the Monongalia County Commission to provide local sewer service.

Morgantown Utility Board

The Morgantown Utility Board (MUB), a public utility, was created by the City of Morgantown in 1987 under the Combined Waterworks and Sewerage Act (WV Code 8-20-1). The Board

operates a regional water, wastewater, and storm facilities serving Monongalia County with treatment plants located in Morgantown, Star City, and Cheat Lake.

The administration of services is guided by legislation intended to assist the Board in their ongoing management of the utility service. The Board establishes service rates for its customers, and plans capital improvements to maintain or expand the different water, sewer, and storm systems. The Board may extend services at its discretion, and has invested millions of dollars since its inception into upgrades to its facilities and expansion of service area to respond to ongoing growth in Monongalia County. It also

SECTION 4.6-1 SERVICE PROVIDERS

manages planning, and funding allocations, for all phases of the different infrastructure systems: capital construction, operations, maintenance, and replacement.

- **Water Treatment** - The main source of the majority of drinking water is surface water from the Monongahela River with approximately 9.5% coming from Cobun Creek Reservoir. On average 10.5 million gallons of water are treated daily - however, the treatment plant has an immediate production capacity of 16 million gallons and is able to expand production up to 24 million gallons daily to respond to future growth. Water treatment facilities are located in Morgantown.
- **Waste Water Treatment** - Waste Water Treatment Plants are located in Star City and Cheat Lake. Average treated flows of fully treated water currently sits at 10 million gallons at the Star City Plant and 750,000 gallons at the Cheat Lake Plant. The Star City Plant has the capacity to expand service up to 12 million gallons per day and is currently undergoing significant upgrades, with investments for the treatment plant and upgrades to the Poponoe Run Interceptor totaling \$101 million and which will bring the Plant capacity up to 20.8 million gallons per day.
- **System** - The overall system of water, wastewater, and stormwater treatment facilities is extensive with approximately 390 miles of water system pipe serving 19 pressure zones, approximately 300 miles of gravity sewer pipe which has 40 regulated Combined Sewer Overflows (CSOs) and 49 sewage pumping stations, the stormwater system includes 105 miles of storm pipe and nearly 4000 inlets which connect to innumerable ditches and streams.

Monongalia County Solid Waste Authority (MCSWA)

The Monongalia County Solid Waste Authority (MCSWA) was created by the West Virginia Legislature in 1989, as a public agency in accordance with WV Code 22C-4-3. MCSWA was created to protect public health and welfare through delivering a comprehensive program of solid waste collection, processing, recycling, and disposal, managed for the most part at the local level.

Authority responsibilities include acquisition, construction, operation of solid waste facilities; local and/or regional solid waste planning; siting approval of commercial solid waste facilities; coordinating public education and awareness; solid waste and litter control project coordination/ management and many other things consistent with WV Code.

The County landfill was initially opened in 1988, and was closed in 1993 when it discovered it was in violation of siting plan regulations due to its location on top of an existing deep mine. In its stead a transfer station was opened in the Morgantown Industrial Park, where commercial customers, haulers and residents can use the station at a per ton cost. Waste is then transferred to one of three landfills regionally.

- There are five authorized private sector waste haulers and two municipal waste haulers servicing the Transfer Station.
- Additional programming with state agencies is provided to for items that do not meet the requirements for conventional waste disposal or recycling.
- Recycling programs offered to Monongalia County residents consists of E-cycling, white goods, household hazardous waste, and tire amnesty. The Pollution Prevention Open Dump Program (PPOD) works to clean up and remediate illegal dump sites in the County.

SECTION 4.6-1 SERVICE PROVIDERS

Monongalia County Schools

The Monongalia County Schools plans, builds, operates, and maintains public education facilities in Monongalia County. In total, there 18 schools in the district, serving approximately 39,500 households and 11,113 students (during the 2021-2022 school year). Of the facilities in the County, 8 schools are considered to be serving cities, or municipalities within the County, with 3 schools considered suburban, and 7 schools considered to be serving rural communities or unincorporated areas. See Table (CH)4-1 below for a full list of schools, locations, and number of students:

Table (CH) 4.6-1: Monongalia County Schools

School	Service Type	Location	# of Students
BROOKHAVEN ELEMENTARY SCHOOL	Suburb: Small	MORGANTOWN	552
CHEAT LAKE ELEMENTARY SCHOOL	Suburb: Small	MORGANTOWN	744
EASTWOOD ELEMENTARY SCHOOL	City: Small	MORGANTOWN	568
MASON-DIXON ELEMENTARY	Rural: Distant	BLACKSVILLE	308
MOUNTAINVIEW ELEMENTARY SCHOOL	City: Small	MORGANTOWN	669
MYLAN PARK ELEMENTARY SCHOOL	Rural: Fringe	MORGANTOWN	425
NORTH ELEMENTARY SCHOOL	City: Small	MORGANTOWN	592
RIDGEDALE ELEMENTARY SCHOOL	Rural: Fringe	MORGANTOWN	474
SKYVIEW ELEMENTARY SCHOOL	Rural: Fringe	MORGANTOWN	465
SUNCREST ELEMENTARY SCHOOL	Suburb: Small	MORGANTOWN	490
MOUNTAINEER MIDDLE SCHOOL	City: Small	MORGANTOWN	657
SOUTH MIDDLE SCHOOL	City: Small	MORGANTOWN	766
SUNCREST MIDDLE SCHOOL	City: Small	MORGANTOWN	495
WESTWOOD MIDDLE SCHOOL	Rural: Fringe	MORGANTOWN	361
CLAY-BATTELLE HIGH SCHOOL	Rural: Distant	BLACKSVILLE	364
MORGANTOWN HIGH SCHOOL	City: Small	MORGANTOWN	1847
UNIVERSITY HIGH SCHOOL	Rural: Fringe	MORGANTOWN	1336

Source: National Center for Education Statistics School Data 2021-2022 School Years

MMMPO

Transportation in Monongalia County is guided by the Metropolitan Transportation Plan (MTP), which provides detailed information and data on the existing conditions of transportation infrastructure, planning and policy recommendations for the Morgantown-Monongalia County region. Updates to the MTP are led by the MPO, a federally designated agency that leads transportation planning efforts for metropolitan areas that exceed a population of 50,000.

The Morgantown-Monongalia Metropolitan Planning Organization (MMMPO), is required to follow a formal set of regulations (per U.S. Code of Regulations 23 CFR 450.300(a) that are laid out by Congress as they authorize funding cycles for national multi-modal surface transportation efforts. The updated MTP was adopted in June of 2022 and served as a guide for recommendations made within the Plan.

SECTION 4.6-2 INFRASTRUCTURE COST, SUPPORTING PLANS & ORDINANCES

TRUE COST OF INFRASTRUCTURE

Changes in the economy, consumer preferences, climate, and lifestyle choices may impact how the County and its partners plan for and invest in new infrastructure.

Forward-thinking and close coordination with officials that influence land use and development standards — the demand factors for the various systems — will be needed to control costs and manage the timing of new infrastructure to meet demand. Some communities struggle with managing the true cost of providing infrastructure — starting with construction or acquisition of the facility or equipment, budgeting for its annual operating and maintenance costs, and programming funds for future years to eventually rehabilitate or replace the asset because it has reached its useful life. These communities are surprised by large, unanticipated budget requests because departments or elected officials are not prepared for the full-accounting of providing infrastructure, especially over time.

Unplanned expenditures lead to unfortunate budget discussions where priorities are triaged because there is not enough money for everything. Rising debt burden for the County may result in less capacity to authorize new debt for capital projects in the future. And, with debt less affordable, the County may need to make difficult decisions to control expenditures and prioritize competing infrastructure requests.

Continued unmet operating and maintenance costs for existing infrastructure deferred to future years may also lead to larger, more expensive capital costs when facilities fail and lead to emergency repairs or replacement. The cost to complete these improvements could place additional long-term burdens on future budgets for decades to come that could be managed with regular spending on maintenance of existing infrastructure.

For Monongalia County, there are both upsides and downsides to not being at the

helm instituting the development, operations, maintenance, and expansion of infrastructure and services. The County, while able to control and provide quality public service relies on the strength of its partnerships and ongoing collaboration with local and regional organizations to fully implement the necessary infrastructure to grow as envisioned in this Plan.

SUPPORTING PLANS & ORDINANCES

The Comprehensive Plan is just one document of a series of plans, studies, and ordinances across the County that influence the type, location, timing, and magnitude of infrastructure built in the community.

It provides general direction for future year conservation and development trends — the demand-side of infrastructure planning — that is further refined in the functional plans or master plans, which are completed by the different facility or service providers after the Plan is adopted.

Specific functional plans or master plans driven by other entities within the County address all of the infrastructure categories highlighted in this chapter. They provide more detail — service area maps, preferred technologies or solutions, level of service standards, candidate projects, and community vision — that will implement broad ideas or concepts in the Plan. They also serve as another bridge between the goals and objectives in the Plan and specific rules and requirements to be codified through future Ordinances.

A few examples of processes and specific functional plans that work cyclically to support universal growth across the County:

- **Policing, Emergency Services, Parks and Recreation** - Annual Budget (Staffing, Operation Costs, Facility Maintenance)
- **Waste Management** - 2021 Comprehensive Litter and Solid Waste Control Plan
- **Water, Wastewater, and Stormwater** - MUB Long Term Control Plan update,

SECTION 4.6-3 PRIORITY INVESTMENTS AREAS, COORDINATION ACTIVITIES

- Capital and Operating Budgets, Article 921 - Sewer Regulations, Article 923 - Industrial Waste, Stormwater Management Plan, MUB Stormwater Design Manual, MUB Stormwater Management Plans
- **Schools** - Policy Manual. Manual includes Board policy on annual budget, operations, facility maintenance, site acquisitions, etc.
- **Transportation** - Metropolitan Transportation Plan 2022 (which includes the 2019 Bicycle and Pedestrian Plan). Study area includes all municipalities and unincorporated areas of the County and provides a priority list of funded projects and corridor plans.

PRIORITY INVESTMENTS

Continued growth places new demands on infrastructure that lowers levels of service and ultimately requires increased capacity or new service areas to keep pace with development. Future investments in community infrastructure should support build out of the Future Land Use Map (FLUM).

Generally speaking, the FLUM advocates for more compact and efficient development patterns that will help manage the timing, location, and magnitude (length and size) of expensive infrastructure investments. The County should prioritize infill development and redevelopment within the Planning Buffer Areas (within water and sewer existing service areas) to cost efficiently manage infrastructure expansions unless it supports clear economic development goals for the County and its partners.

With limited resources, the County may also need to prioritize capital project funding and programming in future years to 1) encourage growth and development in some areas of the community, 2) manage limited resources across departments to be more impactful with intended outcomes, and take advantage of potential economies-of-scale, 3) incentivize development in both the Planning Buffer Areas and the Targeted Investment Areas depicted on the FLUM, and 4) help link neighborhoods with destinations in new or

improved activity centers, create new public spaces between them, and generally support the overall transformation of some areas in the community from a more automobile-exclusive character to a more walkable and vibrant environment.

Market activity and private investments in Monongalia County will help drive the need for capital projects within defined investment tiers, and especially for improvements in the spaces around, between, and adjacent to buildings (i.e., the public realm). Coordinating investments in public spaces — public and private — offers the opportunity to significantly influence the form and function of Monongalia County and create a positive sense of place for the community.

COORDINATION ACTIVITIES

Anticipating new infrastructure needs for the County is essential to planning, programming, and funding new capacity for the future. Direct coordination with different service providers, and the officials that influence development patterns and intensities within Monongalia County, will be critical to ensuring capacity (supply) keeps pace with new development (demand) throughout the community.

County officials should communicate with service providers on future year needs associated with the FLUM. General priority investment areas for managing the timing, location, and magnitude of growth consistent with available resources should also be shared with service providers using the Planning Buffer Areas and Targeted Investment Areas as a guide. Both activities should begin within the year following adoption of the Plan.

Objectives and strategies within the Plan should be refined further in future master plans or feasibility studies completed after the Plan is adopted.

IMPLEMENTATION MATRIX



A comprehensive plan provides a community with the opportunity to look beyond its day-to-day zoning issues and provide guidance for future land use and development. The value of any comprehensive plan, however, is directly related to the community's willingness to follow it and to find a way to translate recommendations into action.

This document summarizes concrete steps to transition the Comprehensive Plan into action. Success depends on building partnerships, having clear objectives and priorities, and consistently monitoring and updating the Plan to reflect progress and new developments. The Implementation Matrix is an essential guideline for outlining time frames and partnerships for each recommendation, policy, and practice proposed in the plan.

The Implementation Matrix includes all of the recommendations, policies, and practices proposed in the Plan. Additional information can be found in the Monongalia County Comprehensive Plan Update 2022.

MATRIX ORGANIZATION

► PRESERVE, GROW, INVEST, SERVE

The Plan’s Recommendations reflect the community’s big ideas and are intrinsically linked to the four key concepts that are the basis for the Strategic Framework and which inform the Future Land Use Map (the Recommendation topics also correspond to the required Plan elements in Section 8A). These recommendations set the goals, objectives, and strategies for the future of development in Monongalia County and are organized into the following categories:

1) Areas to Preserve - How the County can maintain existing rural area character, historic structures and landscapes, and identify areas for conservation and preservation of natural resources. *Responds to mandatory Section 8A requirements for Rural (6) and Historic Preservation (13) components, and the optional Environmental (2), Conservation (3), and Natural Resources Use (6) components.*

2) Areas to Invest - How the County can invest in economic growth, invest in targeted areas to expand activity centers and housing opportunities, identify and intervene in areas that may be declining either economically or socially, future financing and partnerships, investing in tourism

and resident safety. *Responds to mandatory Section 8A requirements for Economic Development (8), Preferred Development Areas (10), Renewal and/or Redevelopment (11), Financing (12) components, and the optional Tourism (3) and Safety (5) components.*

3) Areas to Grow - How the County can utilize the FLUM, land use management controls, design principles, and incentives for affordable housing typologies to create a suite of policies to guide preferred development types and patterns in the future. *Responds to mandatory Section 8A requirements for Land Use (1), Housing (2), and Community Design (9).*

4) Areas that Serve - How the County can support transportation-land use coordination and street design initiatives, the delivery of community infrastructure and public services, and how to expand upon existing recreational opportunities. *Responds to mandatory Section 8A requirements for Transportation (3), Infrastructure (4) Public Services (5), and Recreation (7).*

The matrix also includes information on responsible parties (Partners) and targeted timeframes (See icons below for more detail).



Short-term—This task can be handled within 1-5 years



Mid-term task—This task can be handled within 5-10 years







Long-term task—This task can be handled within 10-20 years



Ongoing

Rural Areas

The County should preserve its existing rural character through several measures including focusing new development and infill into existing neighborhoods and activity centers, protecting sensitive areas from development, maintaining rural residential development patterns that are complementary and sensitive to the surrounding natural environment, and supporting a diverse agricultural base and working farms.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
RA-1	Encourage growth and new development to occur in existing activity centers, neighborhoods, and areas within the Planning Buffer Areas of the FLUM.	All Departments	
RA-2	Ensure future land use management controls provide adequate protections for rural landscapes and residential communities by focusing on cluster development to minimize development impacts and create efficiencies in the provision of community infrastructure.	Planning Office	
RA-3	Conduct analysis of existing rural area development patterns and community character to create parameters for densities, housing types, and sensitive areas to establish 'rural stewardship' guidelines. Utilize guidelines to incentivize preferred development types in rural areas.	Planning Office	
RA-4	Continue to promote and support agricultural uses and working farms in the County through expanding organizational partnerships that can assist with federal, state, and private funding sources to keep farming a viable land use in rural areas. Continue to market agricultural and natural areas in the County as destinations and work to bolster the education of the general public on the importance of agriculture and farming.	Morgantown Area Partnership, County Officials	
RA-5	Work with rural communities to better understand existing challenges related to natural disaster (flooding), and the effects of climate change, in order to develop additional protections that bolster thoughtful development practices in rural areas and increase community resilience.	Planning Office	








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Historic Preservation

The County should continue to act as a steward of historic resources - which include architectural, archaeological, and cultural sites and structures - within the planning area. The County should continue to designate properties that meet State and National Register requirements, and should incentivize ADA compliant structure adaptations or upgrades in historic resources during restoration, rehabilitation, and adaptive reuse.





The County may consider additional programs for properties, sites, developments, or landscapes that are locally significant but may not meet State or National Register requirements - and should explore partnerships and funding mechanisms to allow for incentives for a voluntary designation program for locally significant properties.

4-51

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
HP-1	The County should continue to designate historic resources in the County that are eligible for the State and National Registers - which includes architectural, archaeological and cultural resources.	Planning Office	
HP-2	The County should work with the local Monongalia County Historical Society, and West Virginia Division of Culture and History, to complete an update to the comprehensive survey of historic resources in the County.	Planning Office, Monongalia County Historical Society, West Virginia Division of Culture and History	
HP-3	Evaluate ways to strengthen the designation process in the County and expand programming to assist in the prevention of demolition and demolition by neglect.	Planning Office	
HP-4	The County should incentivize the restoration, rehabilitation, and adaptive reuse of properties eligible for state and national designation through a suite of tools that include economic incentives, expedited permit review, and additional measures (such as regulatory reliefs for parking requirements or building code adherence).	Planning Office, County Officials	
HP-5	The County should refer development applications for both historic resources, and projects that may impact designated properties, to the Monongalia County Historical Society for review and recommendations for consideration by staff.	Planning Office, Monongalia County Historical Society	
HP-6	The County should research the various types of historic designations beyond those currently used. The County should consider the creation of a local designation program for properties, sites, developments, or landscapes that are locally significant but may not meet State or National requirements.	Planning Office	
HP-7	Partner with local organizations to market and educate the public on Monongalia County's historical significance.	Planning Office, Monongalia County Historical Society	






Conservation Areas





The County should consider creating Designated Conservation Areas to assist the community in having conversations about natural assets and resources within the planning area. Designated Conservation Areas should identify areas within the County that require additional protections from new development in order to protect biodiversity, wildlife and natural habitats, and environmentally sensitive areas. These areas should be integrated into the development of a Green Infrastructure Network.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
CA-1	Inventory lands in the County that may need additional environmental protections in order to assess whether the development of Designated Conservation Areas and a Green Infrastructure Network strategy is feasible.	Planning Office	
CA-2	Utilize inventory to create distinct development guidelines related to water quality testing, stormwater management, stream margin and riparian buffer areas, watershed management, dark sky planning, measures for wildlife habitat protections, and emissions mitigation.	Planning Office	
CA-3	Consider adopting Designated Conservation Areas within the County. Development proximate to Designated Conservation Areas would be required to be reviewed against the development guidelines to highlight additional measures that should be considered for site planning and design.	Planning Office	
CA-4	Consider creating Conservation Performance Requirements for environmentally sensitive areas that require additional protections due to the presence or concentration of farmlands, water bodies, steep slopes, wildlife, natural habitats, sensitive natural areas, green spaces, and floodprone lands.	Planning Office	

Natural Resources & Environment

its natural resources and address the impacts of climate change to further strengthen its position as a 'climate receiver' site and increase community resilience.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
NRE-1	The County's ecological health should be considered as equal in importance to other County infrastructure, such as schools, public safety, and transportation.	All Departments, County Officials	
NRE-2	Climate change mitigation and adaptation considerations should be universally integrated into County programs and future policies.	All Departments	
NRE-3	The County should focus on strategic partnerships with local and regional organizations such as the West Virginia Conservation Agency, and School of Natural Resources at West Virginia University, to promote participation in existing conservation efforts and programs and to evaluate new protection measures based upon best practices - which may inform the Designated Conservation Areas development guidelines for wildlife habitats, soils, air quality, water quality.	Planning Office	
NRE-4	Encourage individual environmental stewardship through public outreach and education to raise awareness of issues specific to the County and the cumulative positive or negative impacts individual actions can have on the environment.	Planning Office, County Officials	
NRE-5	Incentivize the retention of tree canopy across the County, specifically on new development sites and subdivisions.	Planning Office, Monongalia County Historical Society	







NRE-6	Safeguard the environmental integrity of regional water sources and recreational water bodies.	Planning Office	
NRE-7	Promote more compact development patterns closer to major 'nodes' in the County to mitigate the impacts of development (trips on and off-site, emissions, development waste, site run-off etc.) on the environment and County natural resources.	Planning Office	
NRE-8	Institute natural stormwater management measures, consider green street policies, and incentivize installation of on-site stormwater management for new developments and subdivisions.	Planning Office	
NRE-9	Consider the creation of a Green Infrastructure Network strategic plan that incorporates environmental and conservation initiatives with recreational planning to create large contiguous areas of open and natural spaces that offer better protections for wildlife and natural habitats, and that link informal or programmed recreational opportunities.	Planning Office	

Economic Development

The County should focus on collaborating with local and regional partners to bolster a diverse and self-sustaining economy that maintains its status as a regional employment hub while attracting new industries.






The County should support innovation, industrial and commercial growth, create opportunities for expanded and new mixed-use activity centers, support agriculture and farming practices, promote job diversity and support both small and large businesses..

4-55

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
ED-1	Encourage new development, and infill development, to occur in existing activity centers, neighborhoods, and areas within the Planning Buffer Areas of the FLUM to encourage the creation of job opportunities in areas of the County that have adequate supporting community infrastructure and amenities.	Planning Office, Morgantown Area Partnership	
ED-2	Retain and expand the use of industrial lands to support employment opportunities that pay a living wage.	Planning Office, Morgantown Area Partnership, County Officials	
ED-3	Diversify and support the local job market to maximize opportunities to grow regional employment. Specifically, the County should work with the Morgantown Area Partnership, and other local and regional economic development resources, to create specific tools and strategies for supporting long-term job creation and diversity, attracting and retaining businesses, and targeting investments in emerging markets.	Planning Office, Morgantown Area Partnership	
ED-4	Encourage a balanced ratio of jobs and housing through development incentives in order to provide adequate housing supply options at a range of price points to cater to workers in different industries.	Planning Office, County Officials	
ED-5	Continue to promote and support agricultural uses and working farms in the County building upon existing partnerships, funding mechanisms, regional programs, and innovative operations that reflect the changing needs and economic drivers of agriculture in Monongalia County.	Planning Office, County Officials	
ED-6	Encourage a business climate that supports small and diverse business growth and opportunities, and which values diversity and inclusion.	Planning Office	

Preferred Development Areas

The County should create Targeted Investment Area Plans (AKA Small Area Plans) for preferred development areas identified through the planning process - specifically addressing prioritization of identified areas, applicable Core Planning Principles, Place Type Guidelines, preferred Site Plan Concepts, potential expansion of infrastructure and delivery of community amenities and services.





#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
PDA-1	Conduct a planning process with Monongalia County residents to develop a unique vision for each of the Targeted Investment Areas.	Planning Office	
PDA-2	Develop Plans for each of the Targeted Investment Areas, that incorporate community visions, applicable Core Planning Principles, Place Type Guidelines, preferred Site Plan Concepts, potential expansion of infrastructure and delivery of community amenities and services.	Planning Office	
PDA-3	Work collaboratively with local entities and organizations to create and implement programs and incentives for mixed-use developments, which focus on the expansion of housing options and employment opportunities, investments in infrastructure, broadband, and multi-modal transportation initiatives and increasing connections to recreation areas in the Targeted Investments Areas.	Planning Office, Local Organizations	
PDA-4	Incorporate design principles and environmental considerations into Targeted Investment Area Plans to ensure new developments offer open spaces, parks, recreation opportunities, trail linkages, and activated public spaces that cater to residents of all ages and abilities.	Planning Office, Local Organizations	
PDA-5	Promote the safe and comfortable access of Targeted Investment Areas through the incorporation of multi-modal transportation opportunities.	Planning Office, MMMPO	

4-56

Renewal and/or Redevelopment





The County should identify and implement strategies that reverse declining economic and social characteristics of County lands, neighborhoods, and structures. The County should introduce parameters for demolition by neglect, and create incentives for revitalization and redevelopment projects through collaboration and partnerships with the development community.

4-57

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
RR-1	Conduct an analysis of areas within the County that have experienced decline, whether economic, social, or built form, and collaborate with community members and local organizations, to identify strategies for area improvements and priority projects.	Planning Office, Morgantown Area Partnership	
RR-2	Define County standards for demolition by neglect and work with property owners to educate and support property maintenance, safety standards, and building code requirements.	Planning Office, Morgantown Area Partnership, County Officials	
RR-3	Collaborate with the development community to develop incentives for revitalization and renewal projects.	Planning Office, Morgantown Area Partnership	
RR-4	Explore public-private partnerships for the renewal and/or redevelopment of key areas and properties in the County.	Planning Office, County Officials	

Financing

The County should focus on long-term priorities to improve its financial outlook by exploring increases to its overall tax base and its economic diversity. The County should explore the creation of new relationships and/or partnerships to assist in the development or acquisition of funding mechanisms for priority projects - exploring new financial instruments including but not limited to grants, technical assistance, public sector loans, tax revenues and/or fees, and public private partnerships (PPP).

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
F-1	The County should coordinate with municipalities and regional planning entities for planning efforts to assess joint responsibilities, roles, funding mechanisms and investments.	Planning Office	
F-2	The County should be creative in implementing strategies that maximize sustainable revenue streams for future year infrastructure investments,.	Planning Office	
F-3	The County should consider incentives that encourage redevelopment of underutilized commercial parcels in the County to increase sales tax revenues.	Planning Office, Local Organizations	
F-4	The County should explore a variety of financial instruments to assist in the implementation of the goals, objectives, and strategies within the Plan.	Planning Office, Local Organizations	

Tourism

The County should focus on expanding tourism opportunities that are focused around its natural environment. These efforts should encompass a balanced approach to flexibility for innovation and new industries and sustainability and conservation measures to ensure the long-term environmental health and ongoing enjoyment of County resources by both residents and tourists alike.

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#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
T-1	Promote and support a variety endeavors that enhance the tourism industry, including attracting both small and large tourism operators, development of lodging units in proximity to key recreational opportunities, development of marketing strategies, expansion or co-location of retail opportunities to support tourist demands, and development of simple physical assets that promote tourism (wayfinding, shelters, transit stops/connections, and restrooms) to enhance user experience.	Planning Office, Morgantown Area Partnership, County Officials	
T-2	Assess County lodging units and identify areas that present key opportunities for recreational areas - specifically focusing on established transportation corridors and activity centers.	Planning Office, Morgantown Area Partnership, County Officials	
T-3	Maintain and improve transportation infrastructure, focusing on multi-modal transit, to increase access to trails, parks, and other recreational opportunities and connections throughout the County.	Planning Office, MMMPO	

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Safety

The County should focus on long-term priorities to improve its financial outlook by exploring increases to its The County should prepare for the expansion of community services and infrastructure to support future growth.

Areas targeted for growth and development on the FLUM will generate the need for new or expanded fire protection facilities, expanded policing, underlying community infrastructure upgrades to increase carrying capacities, and updated evacuation and emergency management protocols.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
S-1	Plan for the expansion and funding of additional fire protection, emergency response, and policing services and related facilities in areas targeted for growth on the FLUM.	Planning Office, County Officials	
S-2	Ensure land use management policies support the safety and welfare of County residents by planning for the expansion and funding of adequate community facilities and services.	Planning Office, County Officials	
F-3	Utilize design principles that foster safe, connected, accessible streets, neighborhoods, mixed-use activity centers, and recreational destinations for community members.	Planning Office	
S-4	Assess community infrastructure on a pre-determined schedule against changing development conditions in the County taking into account densities, access points and evacuation corridors for emergency management.	Planning Office, County Officials	






Land Use







The Comprehensive Plan (“Plan”) provides a road map for achieving desirable development patterns and community character supported by findings during the planning process.

The County and its partners should celebrate the Plan, and use it as a key resource in development review, infrastructure planning, and coordination with outside service providers.

The FLUM should be used as a guide for future land use management decisions and policy development.








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#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
LU-1	The Plan should be reviewed every five years and updated every ten years to evaluate changing conditions in markets, demographics, residents’ values, state and federal legislations.	Planning Office, County Officials	
LU-2	The FLUM in conjunction with the goals, objectives, and strategies in the Plan should be utilized as a guide for everyday decision-making and land use policy development.	Planning Office, County Officials	
LU-3	The County should program resources to review and revise rules and requirements, as needed, in order to implement recommendations in the Plan.	Planning Office, County Officials	
LU-4	County officials should encourage and incentivize new development and infill development within the Planning Buffer Areas indicated on the FLUM.	Planning Office, County Officials	
LU-5	Targeted Investment Areas should be prioritized for future growth and development taking into account the design principles and goals in this Plan. Specifically, these areas should be higher-density, mixed-use communities where people can live, work, shop, play, be entertained. It should be well connected via local bus circulator, bicycle lanes, and/or sidewalks to provide additional opportunities to meet daily needs inside County without a vehicle or by parking “once”. Small Area Plans should be developed for these areas, as currently identified on the FLUM, and any additional areas of interest that may result from changing conditions in the County.	Planning Office, County Officials	

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
LU-1	The Plan should be reviewed every five years and updated every ten years to evaluate changing conditions in markets, demographics, residents' values, state and federal legislations.	Planning Office, County Officials	
LU-2	The FLUM in conjunction with the goals, objectives, and strategies in the Plan should be utilized as a guide for everyday decision-making and land use policy development.	Planning Office, County Officials	
LU-3	The County should program resources to review and revise rules and requirements, as needed, in order to implement recommendations in the Plan.	Planning Office, County Officials	
LU-4	County officials should encourage and incentivize new development and infill development within the Planning Buffer Areas indicated on the FLUM.	Planning Office, County Officials	
LU-5	Targeted Investment Areas should be prioritized for future growth and development taking into account the design principles and goals in this Plan. Specifically, these areas should be higher-density, mixed-use communities where people can live, work, shop, play, be entertained. It should be well connected via local bus circulator, bicycle lanes, and/or sidewalks to provide additional opportunities to meet daily needs inside County without a vehicle or by parking "once". Small Area Plans should be developed for these areas, as currently identified on the FLUM, and any additional areas of interest that may result from changing conditions in the County.	Planning Office, County Officials	
LU-6	Land Use Management Controls should be instituted - including but not limited to ideas expressed on the FLUM: Planning Buffer Areas, Targeted Investment Areas, and Rural Stewardship - to create a framework for future growth in the County. Some of these principles will be appropriate to implement immediately, where others such as the development of Small Area Plans for the Targeted Investment Areas will require additional planning processes with the community to determine vision, priorities, funding mechanisms, and priority projects. Staff will administer the rollout of land use management controls as deemed appropriate by the Planning Director.	Planning Office, County Officials	

Community Design

With the projected growth the County is facing, and the development pressure that goes along with such growth in an area with restrictive development constraints, Monongalia County has an opportunity to influence and shape the pattern of development by adopting Place Type Guidelines (see Chapter 5 for the Planning Toolkit) that promote a greater mix of uses and high-quality design in future development and redevelopment whether in activity centers or new subdivisions and associated regulations.








#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
CD-1	Utilize the Plan’s Planning Toolkit - Core Planning Principles, Place Type Guidelines, and Site Plan Concepts - to guide development principles in the County.	Planning Office, County Officials	
CD-2	Ensure future land use management policies are in alignment with the Planning Toolkit Core Planning Principles, Place Types Guidelines, and Site Plan Concepts.	Planning Office, County Officials	
CD-3	Establish discernible neighborhood structures that are focused on walkability and a centralized core of locally serving amenities and businesses.	Planning Office, County Officials	
CD-4	Provide attention to building and development transitions in activity centers, and Targeted Investment Areas, to establish streetscape structure and continuity in design.	Planning Office, County Officials	
CD-5	Increase walkability through implementation of a ‘park-once’ strategy for new developments and redeveloped activity centers to help mitigate the impacts of vehicle trips. Supplement parking design strategies with sidewalk networks to promote connectivity across developments and centers.	Planning Office, County Officials	
CD-6	Focus on public realm development through inclusion of complete street principles, activation of spaces through public art and street furniture, adequate lighting and pedestrian shelters and seating.	Planning Office, County Officials	
CD-7	Orient building placement towards the street to activate streetfronts in new and redeveloped activity centers, included Targeted Investment Areas.	Planning Office, County Officials	

Housing

The County should promote distinct, safe, and vibrant neighborhoods that provide greater access to a range of home choices people need at different stages of their life, including young adults, families, empty-nesters, retirees, seniors, and people of different income levels.

Housing opportunities should include single-family homes of all sizes, multi-family units such as duplexes and quadplexes, townhomes, apartments, condominiums, senior-living units, and potentially live-work units. New neighborhoods should generally focus on mixed'middle' housing choices to respond to growing demand.

Strong neighborhoods and a diverse housing strategy will make Monongalia County a more livable community—one where residents can live their entire lives and which can support the influx of new residents and workers as the County continues to grow.





#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
H-1	Increase opportunities for affordable housing choices through the creation and use of development incentives, particularly within the Buffer Areas on the FLUM.	Planning Office, Morgantown Area Partnership, County Officials, City Officials	
H-2	Encourage activity centers to meet diverse housing needs addressing accessibility, affordability and universal design. These areas have the opportunity to serve nearby employment hubs, increase housing stock diversity, be walkable and provide high-quality connections to transit service.	Planning Office, County Officials	
H-3	Focus on increasing the supply of housing units in new developments that are attainable to low- and moderate-income households and special needs households, including provision of universal design units.	Planning Office, County Officials	
H-4	Promote development incentives that aim to create both rental and for-purchase home choice options.	Planning Office, County Officials	
H-5	Support the new development and redevelopment of multi-family communities to meet the County's current and future rental housing demands and ensure that resident displacement is minimized in redevelopment projects.	Planning Office, County Officials	
H-6	Encourage and explore options to increase the diversity of home choices in rural communities.	Planning Office, County Officials	
H-7	Facilitate the use of shared and/or multi-use sewerage system technologies to create more diverse home choices in rural areas and communities.	Planning Office, County Officials	

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Transportation

Transportation initiatives in the County should be guided by the Metropolitan Transportation Plan (MTP), which provides detailed information and data on the existing conditions of transportation infrastructure, key future transportation projects and policy recommendations for the Morgantown-Monongalia County region. While the County does not have any transportation responsibilities, it should support MTP policies and recommendations, as amended from time to time.

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#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
TR-1	Improve transportation-land use coordination among local and regional entities including the WVDOH, MPO, municipalities, and other regional entities that implement transportation and land use policies to evaluate the impacts of road projects under consideration on surrounding communities, the environment and conservation areas, and County identified Targeted Investment Areas.	Planning Office, WVDOH, MMMPO, County Officials, City Officials	
TR-2	Protect mobility corridors - much of the County's development occurs along and within proximity to several mobility corridors. As development occurs, the County should plan to develop design guidelines that incorporate street improvement recommendations at a development or site-specific level, or in the case of the Targeted Investment Area Plans, identifying key principles for street upgrades and prioritizing projects.	Planning Office, WVDOH, MMMPO, County Officials, City Officials	
TR-3	Improve land use-transportation connections by improving street connectivity for significant arterial and collector streets that will serve the development principles in the FLUM and Planning Toolkit (including but not limited to Beechhurst Ave, Stewartstown Road, Greenbag Road, and Mileground Road).	Planning Office, MMMPO, County Officials, City Officials	
TR-4	Explore street design standards that emphasize adequate drainage, appropriate travel lanes, curb cuts, new development ingress/egress, typical street sections, corner clearance, joint and cross access, interchange areas, access connection and driveway design, requirements for outparcels and phased development, emergency access, nonconforming access, reverse frontage, flag lots, shared access, turn lane warrants, traffic impact analyses, sidewalks, cross walks, and right-of-way needs that reinforce the character recommendations associated with the different Place Type Guidelines.	Planning Office, County Officials	







#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
TR-1	Improve transportation-land use coordination among local and regional entities including the WVDOH, MPO, municipalities, and other regional entities that implement transportation and land use policies to evaluate the impacts of road projects under consideration on surrounding communities, the environment and conservation areas, and County identified Targeted Investment Areas.	Planning Office, WVDOH, MMMPO, County Officials, City Officials	
TR-2	Protect mobility corridors - much of the County's development occurs along and within proximity to several mobility corridors. As development occurs, the County should plan to develop design guidelines that incorporate street improvement recommendations at a development or site-specific level, or in the case of the Targeted Investment Area Plans, identifying key principles for street upgrades and prioritizing projects.	Planning Office, WVDOH, MMMPO, County Officials, City Officials	
TR-3	Improve land use-transportation connections by improving street connectivity for significant arterial and collector streets that will serve the development principles in the FLUM and Planning Toolkit (including but not limited to Beechhurst Ave, Stewartstown Road, Greenbag Road, and Mileground Road).	Planning Office, MMMPO, County Officials, City Officials	
TR-4	Explore street design standards that emphasize adequate drainage, appropriate travel lanes, curb cuts, new development ingress/egress, typical street sections, corner clearance, joint and cross access, interchange areas, access connection and driveway design, requirements for outparcels and phased development, emergency access, nonconforming access, reverse frontage, flag lots, shared access, turn lane warrants, traffic impact analyses, sidewalks, cross walks, and right-of-way needs that reinforce the character recommendations associated with the different Place Type Guidelines.	Planning Office, County Officials	

Community Infrastructure

The County should focus on ensuring that community infrastructure is in place as growth occurs. The County should direct growth to areas that are currently serviced by providers understanding that the topography in the County makes expansion into certain areas challenging or unfeasible.







Infrastructure needs are often regulated by higher governmental organizations and policies, and owned and operated by private entities. The County must actively engage with these entities to plan for service expansions and identify priority projects for Targeted Investment Areas on the FLUM.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
CI-1	Monitor available water resources and sewer capacity on an ongoing basis and encourage expansion of public sewer systems into areas immediately surrounding and adjacent to existing utility services areas.	Planning Office, MUB, County Officials, City Officials	
CI-2	Increase coordination with the Morgantown Utility Board (MUB) to effectively implement and phase County initiatives for growth from the Plan. Consider development of a water and sewer master plan for the County to prioritize projects across the County and, when applicable, in Targeted Investment Areas.	Planning Office, MUB, County Officials, City Officials	
CI-3	Encourage the placement of higher-density development, and infill development, in areas that are served by existing water and sewer systems.	Planning Office, MUB, County Officials, City Officials	
CI-4	Encourage enhanced water quality by discouraging illegal waste disposal.	Planning Office, County Officials	
CI-5	Introduce stream margin and riparian buffers along streams and rivers in the County to help protect valuable water bodies and natural assets.	Planning Office, County Officials	

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
CI-1	Monitor available water resources and sewer capacity on an ongoing basis and encourage expansion of public sewer systems into areas immediately surrounding and adjacent to existing utility services areas.	Planning Office, MUB, County Officials, City Officials	
CI-2	Increase coordination with the Morgantown Utility Board (MUB) to effectively implement and phase County initiatives for growth from the Plan. Consider development of a water and sewer master plan for the County to prioritize projects across the County and, when applicable, in Targeted Investment Areas.	Planning Office, MUB, County Officials, City Officials	
CI-3	Encourage the placement of higher-density development, and infill development, in areas that are served by existing water and sewer systems.	Planning Office, MUB, County Officials, City Officials	
CI-4	Encourage enhanced water quality by discouraging illegal waste disposal.	Planning Office, County Officials	
CI-5	Introduce stream margin and riparian buffers along streams and rivers in the County to help protect valuable water bodies and natural assets.	Planning Office, County Officials	
CI-6	Support state initiatives that limit the maintenance and ownership of water and sewer systems by individual homeowner associations (HOAs).	Planning Office, County Officials	




Public Services

In the absence of comprehensive zoning that would assist in the allocation of lands for future public service needs, the County should create a strategic plan to identify key public services that will need be in place to support future growth. This includes schools, police, fire protection and emergency services, libraries, medical facilities, historic and cultural programs, and local government provision.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
PS-1	The County should support and consult with the the Monongalia County Schools District on their future plans for facilities and encourage consideration of growth management and land use goals in the Plan by the Board of Education.	Planning Office, Monongalia County Schools, County Officials	
PS-2	Collaborate with the County library sytem to identify expansion needs, necessary improvements to facilities, and priority projects.	Planning Office, Monongalia County Library System, County Officials	
PS-3	Support local public safety agencies in their provision and planning of public safety services to new development and continue efforts to expand emergency services across the County through the establishment of additional operational hubs.	Planning Office, County Officials, Mecca 911, Fire Department	
PS-4	Focus on improving coordination efforts across policing entities, fire protection and emergency services in order to implement the goals and objectives in the Plan.	Planning Office, County Officials, Mecca 911, Fire Department, Police Department	
PS-5	Update hazard mitigation and evacuation protocols to reflect evolving natural and man-made disaster risks. Educate the public on updated measures and protocols.	Planning Office, County Officials, Mecca 911, Fire Department, Police Department	
PS-6	Promote the expansion of web-based services in the County. Support the community by providing up-to-date information about medical services, medical transport, healthcare centers, schools, police, fire protection and emergency services, community services, animal control, and community GIS mapping on the County website.	Planning Office, County Officials	

Recreation







Monongalia County has abundant natural, recreational, scenic and historic resources within its boundaries and should continue its focus on environmental stewardship and conservation principles in future expansions to park lands, open spaces, green spaces, recreational trails, cultural facilities, arts facilities, and public programming.

#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
REC-1	Promote the creation and protection of new parks, open spaces, green spaces, recreational hubs and cultural facilities in conjunction with new development and infill development within Planning Buffer Areas and Targeted Investment Areas.	Planning Office, Parks and Recreation Department BOPARC, County Officials, City Officials	
REC-2	Incentivize the addition of small parks and open spaces in existing neighborhoods and developments. Strive to link recreational areas when possible to create larger networks of green space.	Planning Office, BOPARC, County Officials, City Officials	
REC-3	Consider the creation of a Green Infrastructure Network strategic plan that incorporates recreational planning with environmental and conservation initiatives to create large contiguous areas of open and natural spaces that offer better protections for wildlife and natural habitats, and that link informal or programmed recreational opportunities.	Planning Office, Parks and Recreation Department, County Officials	
REC-4	Assess lands available for the development of parks that support designated growth areas. Support the Monongalia County Parks and Recreation Department in the acquisition of additional parklands for hiking and biking trails.	Planning Office, Parks and Recreation Department, County Officials	
REC-5	Review opportunities to require land dedication in developments over certain density thresholds, specifically density triggers that require a percentage of open space in residential and subdivision developments.	Planning Office, Parks and Recreation Department, County Officials	
REC-6	Protect and maintain existing sites and facilities in the County, including the Mason Dixon Historical Park, Camp Muffly Park, and Chestnut Ridge Park and Campground.	Planning Office, Parks and Recreation Department, County Officials	
REC-7	Support the guidelines, recommendations and projects of interest made by the Board of Parks and Recreation Commissioners (BOPARC) in master plan, community recreation study, and project prioritization efforts.	Planning Office, Parks and Recreation Department, BOPARC, County Officials	

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Additional Recommendations

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#	IMPLEMENTATION STRATEGY/ RECOMMENDATION	Partners	Timeframe
AR-1	The Plan defines a County-wide vision - to achieve this vision becomes the task of the entire County and as such should eliminate the need for the former planning districts.	Planning Office, County Officials	
AR-2	The entire County should participate in the land management of the County regardless of the level of or even absence of planning requirements.	Planning Office, County Officials	
AR-3	Additional planning expectations and management should be provided for the targeted areas in order to coordinate the investments needed to achieve the future visions for those areas. Additional guidance (rather than regulation or prescription) and tools for local application shall be provided for those areas outside the target or nodal areas.	Planning Office, County Officials	
AR-4	As an effort to coordinate planning efforts across the County's municipal boundaries, guidance and tools should be consistent with and integrated with the comprehensive planning efforts in those communities.	Planning Office, County Officials	
AR-5	As an effort to coordinate County investments with areas that are targeting investments, the County should undertake the study of adapted tax or finance systems such as Land Value tax and/or other related mechanisms.	Planning Office, County Officials	
AR-6	As part of the expanding boundaries of future development as shown in the FLUM, possible study of the expansion of the MS4 area should be explored.	Planning Office, County Officials	
AR-7	Coordination with the MMMPO's MTP to ensure that the mechanisms to enable the future vision of transportation proposed is supported by County actions, including but not limited to the appropriate land use management coincident with the proposed transportation efforts.	Planning Office, MMMPO, County Officials	