

CHAPTER 5 – REGIONAL GROWTH FORECASTS

5.1 Introduction

Land use and socioeconomic conditions are inextricably linked with transportation. These factors drive the demand for transportation infrastructure, and the efficiency and safety of how these facilities operate. A primary objective of a Long Range Transportation Plan (LRTP) is to plan for a transportation system that encourages and leads to regional growth and development that is supported by its citizenry.

An extensive visioning process that involved a large number of area stakeholders and the general public established the regional vision for future growth in the region. These publically desired development and redevelopment patterns, not just a continuation of past trends, were used to geographically allocate forecasted changes in socioeconomic conditions to the region. LRTP *Chapter 2 – Regional Vision* describes in detail the framework for future growth that was developed through the visioning process. The desired framework is illustrated in Figure 2-1.

In addition to growth patterns, another important input to the plan is the quantity of anticipated growth and development expected over the 28 year horizon of the LRTP. Socioeconomic forecasts are a key input into the transportation demand modeling process which is described in *Chapter 6 – Transportation Demand Model Development*. Reasonable estimates of transportation demand and traffic volumes are needed to identify where future capacity and operational deficiencies in the system will occur. The modeling is used to evaluate how well proposed improvements might address those deficiencies.

5.2 Socioeconomic Trends

Historic Population

Monongalia County is among a small number of West Virginia counties that have experienced a stable growth pattern over the last 20 to 30 years. According to U.S. Census Bureau data, from 1970 through 2010, population in the state of West Virginia increased from 1,744,000 to 1,853,000, or by 6.3 percent. In the same period, population in Monongalia County increased from 63,700 persons in 1970 to 96,189 persons in 2010, an increase of 51 percent.

When compared to the historical change in population for the surrounding counties in West Virginia and southern Pennsylvania, Monongalia County is the only county in the surrounding seven-county region that has observed continuous growth over the last five census

The Transportation/ Land Use Connection



periods. Table 5-1 displays the historical population and change for Monongalia and the surrounding Counties.

Table 5-1. Historical Regional Population (1970 to 2000)

County	Population					Percent Change Per Decade			
	1970	1980	1990	2000	2010	1970-80	1980-90	1990-2000	2000-10
Monongalia	63,700	75,000	75,500	81,900	96,300	+17.7%	+0.7%	+8.5%	+17.6%
Marion, WV	61,400	65,800	57,200	56,600	56,400	7.2%	-15.0%	-1.1%	-0.04%
Preston, WV	25,500	36,500	29,000	29,300	34,000	+43.1%	-20.5%	+1.0%	+16.0%
Taylor, WV	13,900	16,600	15,100	16,100	16,900	+19.4%	-9.0%	+6.6%	+0.5%
Wetzel, WV	20,300	21,900	19,300	17,700	16,600	+7.9%	-11.9%	-8.3%	-6.2%
Greene, PA	36,100	40,500	39,600	40,700	38,700	+12.1%	-2.2%	+2.8%	-4.9%
Total	154,700	159,400	145,300	148,600	136,600	+3.0%	-8.8%	+2.3%	-8.1%

Source: U.S. Census Bureau

5.3 Population Forecasts

Population in this region is expected to continue to grow at a relatively high rate. The Bureau of Business and Economic Research (BBER) at West Virginia University (WVU) published a document entitled: *Population Projection for West Virginia Counties* in August 2011 that forecasts the area’s population to be 129,800 in 2035. Extrapolating the projections results in a population forecast of 138,000 in 2040, an approximately 43 percent increase from 2010 (1.44 percent per year).

5.4 Housing and Employment Forecasts

Breaking down future growth in terms of both households and jobs is also essential to the travel forecasting process. Changes in travel patterns are a function of the type, location, and density of land uses in the region.

Housing



The housing projections used for the LRTP update were calculated using demographic forecasts but were informed by real estate market factors. The overall methodology is heavily dependent on 30-year countywide population projections provide by the BBER at WVU. These population projections, coupled with trends and forecasts in average household size (U.S. Bureau of the Census and Claritas, Inc.) and WVU enrollment forecasts, yielded countywide household projections. Long-term household size was calculated based on a linear regression model. Countywide housing demand was projected based on household growth and trends in vacancy and replacement factors.

The basis for deciding where in the region to allocate the future growth in households was the Vision Framework Map and Principles as described in *Chapter 2 – Regional Vision*. That vision includes a housing policy that allows a regulatory and incentive environment to encourage housing patterns consistent with community preferences identified through the visioning process.

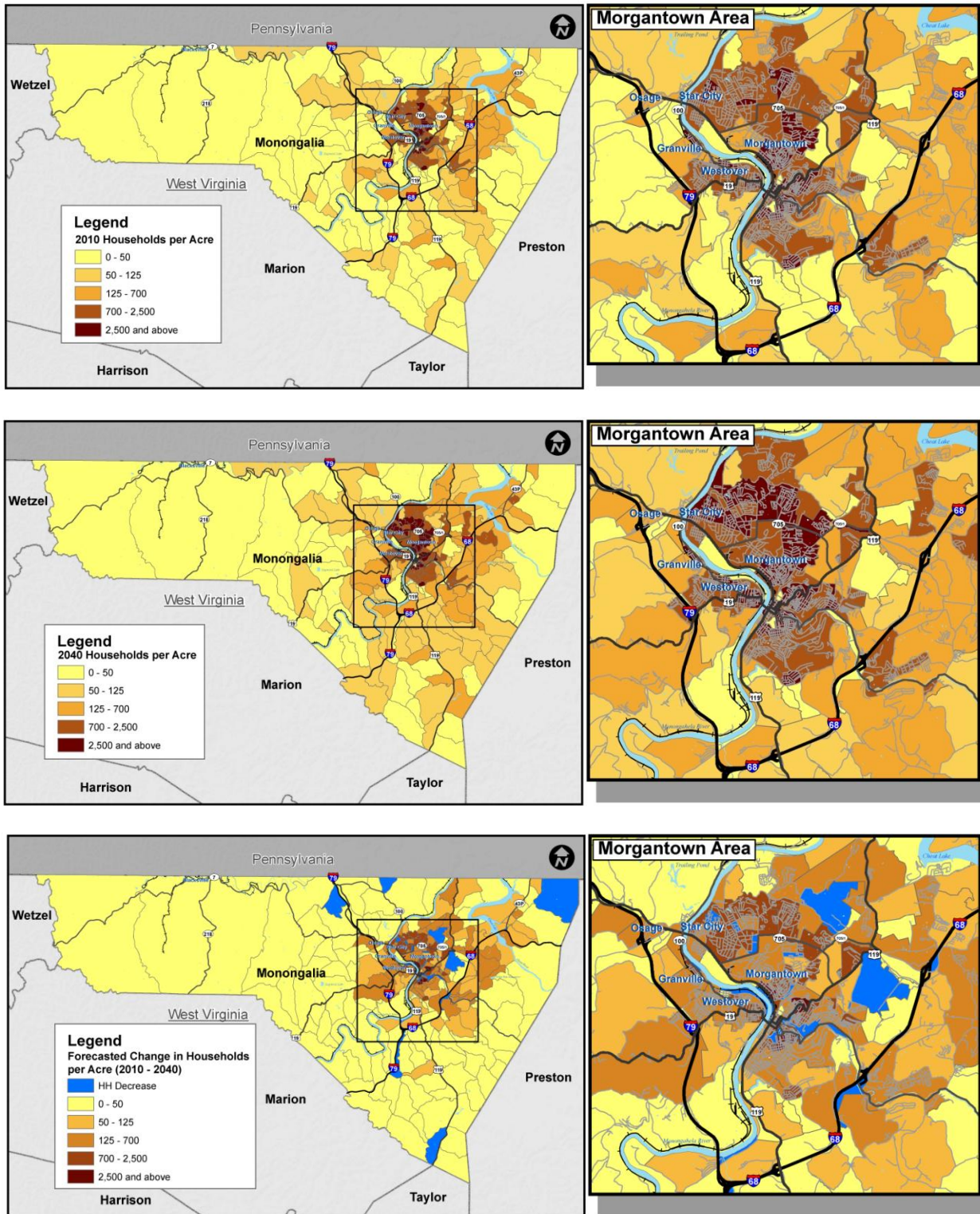
Such policies would, for example, encourage infill development and higher densities in central neighborhoods, discourage “sprawl” in outlying areas which are difficult to serve with infrastructure, and promote mixed-use (housing and job-inducing) development in key corridors or nodes.

Once housing demand (in development units) was distributed by sub-area and planning period, then the number of households was recalculated for each sub-area and planning period. Housing demand is greater than households because it allows for vacancy and other factors.

The following graphics (Figure 5-1) illustrate the forecasted changes in housing in the region’s urbanized area from 2010 to 2040. See Appendix B for further details related to housing forecasts



Figure 5-1. Forecasted Changes in Housing 2010 to 2040



Retail Jobs

County-wide demand for retail services was projected based on household and income growth, yielding expenditure potentials by type of good or service. Allowances were also made for vacancy factors. Projected retail demand was apportioned and distributed by sub-area similarly to housing. However, other factors also affected the apportionment of retail space, including destination potential driven by transportation access, exposure, centrality, identity, and other factors.

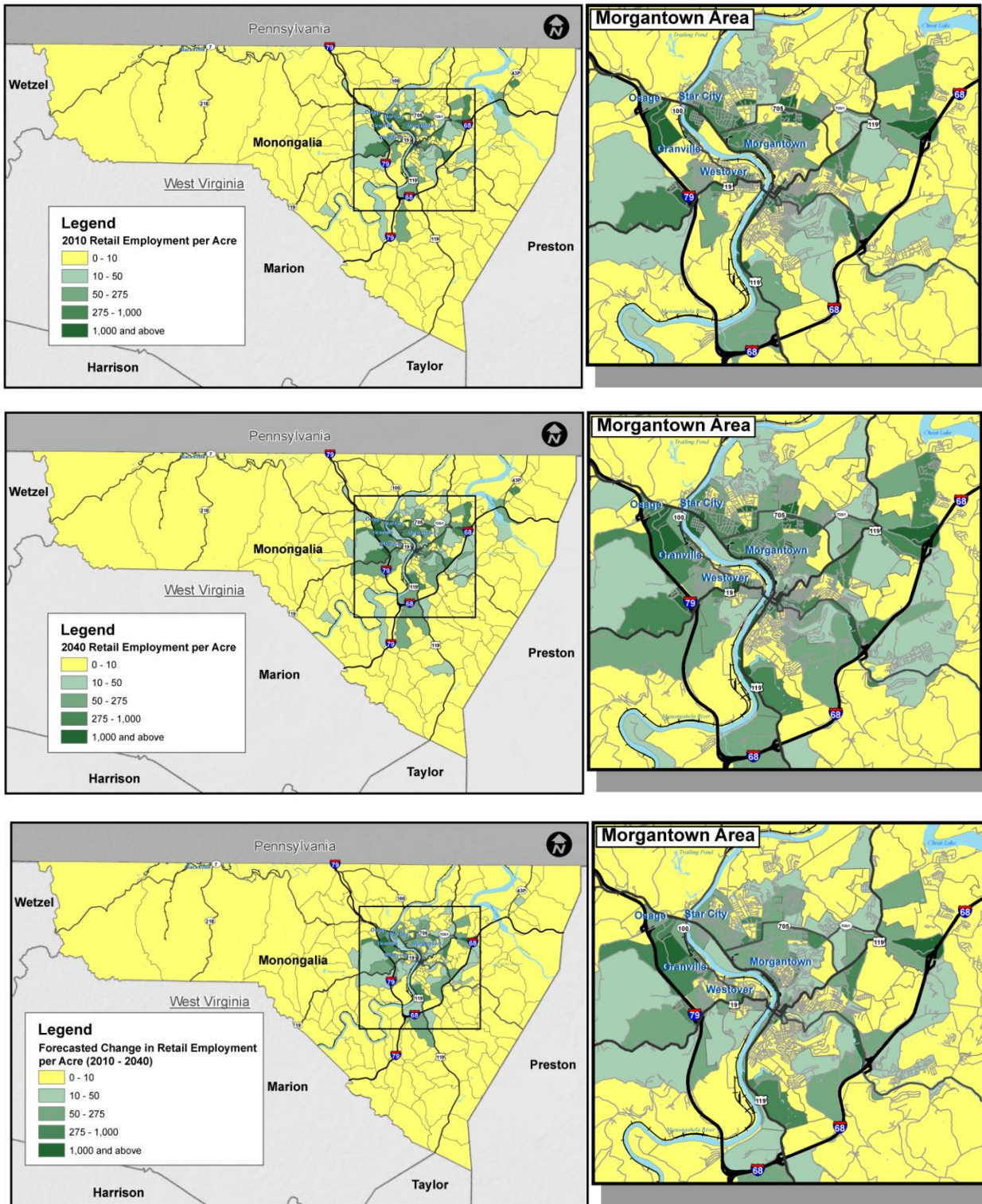
County enterprise and assessment data, coupled with City of Morgantown inventory information, was valuable in confirming existing retail business uses and employment as a baseline for projections. It should be noted that growth or decline in retail demand at certain locations may be slowed or accelerated, but not necessarily reversed through land use policy decisions by local governments.

Once retail demand (in square feet) was distributed by sub-area and planning period, then retail employment was projected for each sub-area and planning period. Importantly, retail space (and therefore employment) includes more than just the businesses included within the Retail Trade sector (North American Industry Classification System [NAICS]), but also includes restaurants and other businesses that would normally be found in retail space and therefore constitute a retail land use. As such, retail employment forms only part of the broader category of economic activities included in retail space.

The following graphics (Figure 5-2) illustrate the forecasted changes in retail jobs in the region’s urbanized area from 2010 to 2040. See Appendix B for further details related to retail job forecasts.



Figure 5-2. Changes in Retail Jobs 2010 to 2040



5.5 Non-Retail Employment Forecasts

The office and industrial employment projections contained herein were calculated using employment projections informed by real estate market factors. The overall methodology is heavily dependent on 20-year Workforce Investment Area (WIA) employment projections by employment classification provided by Workforce West Virginia.

The employment projections, coupled with trends in local employment by industry (U.S. Bureau of the Census) and absorption data yielded countywide office and industrial projections. Long-term employment projections were calculated based on a linear regression model.

Like the housing forecasts, the basis for deciding where in the region to allocate the future growth in jobs was the Vision Framework Map and Principles as described in *Chapter 2 – Regional Vision*. Projected office demand was apportioned and distributed by sub-area assuming a future regulatory and incentive environment encouraging employment patterns consistent with the community preferences identified through the planning process.

Such policies would, for example, encourage infill development and increased densities in central neighborhoods, with a particular focus on strengthening the job base within the Morgantown central business district (CBD). This policy would also discourage office/commercial “sprawl” in outlying areas not served by public utilities and services, and promote mixed-use (housing and job-inducing) development in key corridors or nodes.

Office Jobs

Countywide office demand was projected based on employment growth in office-related economic sectors (and the office component of other sectors), using survey data generated by the Building Owners and Managers Association (BOMA). Demand also was considered in light of local and regional office development and absorption trends and other factors. Once office demand (in square feet) was distributed by sub-area and planning period, then the number of total jobs was recalculated for each sub-area and planning period.

Industrial Jobs

County-wide industrial demand was projected based on employment growth in industrial-related sectors, using in-house data generated through surveys and interviews with industrial businesses. Demand was

also considered in light of local and regional industrial development and absorption trends, availability of developable industrial land, and other factors.

Projected industrial demand was then apportioned and distributed by sub-area using the same method as for office space. However, other factors also affected the apportionment of industrial space, including local and regional marketing of industrial parks and potential driven by transportation access. County enterprise and assessment data, coupled with City inventory information, was valuable in confirming existing industrial business uses and employment as a baseline for projections.

Once industrial demand (in square feet) was distributed by sub-area and planning period, then industrial employment was projected for each sub-area and planning period.

The following graphics (Figure 5-3) illustrate the forecasted changes in non-retail jobs in the region's urbanized area from 2010 to 2040. See Appendix B for further details related to non-retail job forecasts.

NOTES ON SOCIOECONOMIC FORECASTS

The projections included herein represent a best effort in the absence of real estate, market trend data, countywide baseline population and housing inventories, long-term demographic and employment forecasts (other than population), office and industrial real estate market trend data, county-centered baseline employment inventories, and long-term county-centered employment forecasts.

The projections are heavily dependent on WVU population forecasts and the State's Workforce West Virginia employment forecasts, but every effort has been made to incorporate other sources where possible, including U.S. Bureau of the Census (demographic, housing, and employment trends, employment by industry trends), U.S. Internal Revenue Service (migration data), the MPO travel demand model (current traffic analysis zone [TAZ] apportionments), Monongalia County (assessment database of employers), City of Morgantown (inventory of existing Morgantown uses), local real estate brokers and realtors (existing real estate market inputs), local businesses (market sources, sales, etc.), and others.

Figure 5-3. Forecasted Changes in Non-Retail Employment 2010 to 2040

