

## APPENDIX B

### SOCIOECONOMIC DATA FORECASTS



Memorandum

To Mr. Steve Thieken, Burgess & Niple, Inc. Page 3

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CC Mr. Bill Austin, Morgantown Monongalia Metropolitan Planning Organization (MMMPO)

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Subject 2040 Socio-economic Projections

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From Jamie L. Snow

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Date October 11, 2012 Project Number 60276837

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The purpose of this memorandum is to document the steps taken to create the 2040 model input socio-economic data. This data was used for the MMMPO 2040 Long Range Transportation Plan (LRTP) update. Two initial 2040 projections were provided by Development Economics and can be found in memorandums written by Randall Gross titled Monongalia County 25-year projections. Currently, the 2040 uses both a market trend forecast and a policy trend forecast. The market trend forecast reflects how the Metropolitan Planning Organization’s region would grow if it continues to grow as it has in the past. The policy trend reflects how it would grow based on implementing new policies that reflect how the community has stated they would like to grow.

**Background and 2010 Socio-economic Data**

The MMMPO model uses the number of households, retail employment, and non-retail employment by zone to determine number of trips and how they are allocated. The 2010 household model data was developed using data gathered from the census bureau at census block level and then aggregated into the traffic analysis zone (TAZ) structure of the model. Retail and non-retail job data was provided by the West Virginia Division of Highways by business address and by North American Industry Classification System (NAICS) code. It was assumed that retail jobs were those with a retail NAICS code (44 or 45) or a restaurant NAICS code (72). All other NAICS classified jobs were assumed to be non-retail.

Development Economics provided socio-economic data for the comprehensive plans for the City of Morgantown and the Town of Star City, which are being developed concurrently with MMMPO’s LRTP. For this reason, the data set was slightly different than what was needed for the model.

**2040 Socio-economic Data Update**

Development Economics provided data for retail, office, and industrial jobs and housing for 2012 – 2040. The county level comparison of the 2010, 2012, and 2040 data is included below.

	2010 Model Input	2012 Subarea	2040 Subarea (Market)	2040 Subarea (Policy)
Retail Jobs	11,461	8,940	13,599	13,602
Non-retail Jobs	40,217	16,728	19,215	19,293
Households	39,781	40,608	59,910	59,909

Based on this comparison, it appears that there is data missing out of both the retail and non-retail jobs provided for 2012 and 2040. Further discussion with Development Economics revealed that the non-retail job data provided was only for industrial and office jobs. It did not include any of the other NAICS classifications. There was no real explanation for why the retail jobs were different other than

the NAICS codes used to calculate the model 2010 retail jobs must have varied from those used by Economic Development. Through discussions with the MMMPO, it was determined that the “missing” jobs from the 2012 data would be added back into the 2040 data by TAZ.

To do this, a difference of 2010 minus 2012 was calculated by TAZ to determine which zones were missing retail and non-retail job data. These jobs were then added into the market based and policy based 2040 data. As part of this process, the 2012 and 2040 subarea data had to be disaggregated to the zone level using percentages provided by ACP Visioning + Planning. If the 2010 data minus 2012 data plus 2040 data produced a negative value, that particular zonal socio-economic data was allowed to equal the value provided by Development Economics. Disaggregating the data to zone level slightly modified the number of households.

	2010 Model Input	2012 by Development Economics	2040 (Market) by Development Economics	2040 (Policy) by Development Economics	2040 Updated (Market)	2040 Updated (Policy)
Retail Jobs	11,461	8,940	13,599	13,602	16,128	16,151
Non-retail Jobs	40,217	16,728	19,215	19,293	42,865	42,787
Households	39,781	40,608	59,910	59,909	59,880	59,873

To verify the validity of the new retail and non-retail 2040 values and the 2040 household values provided by Development Economics, comparisons of household family size (Population/Households), labor force (Employment/Population), and percentage of retail versus non-retail were made. Generally, a region’s rates do not change drastically over time so these rates should remain fairly consistent. Projected 2040 population was provided by WVU Business Center. The population projection was assumed to be constant.

	2010 Model Input	2040 Updated (Market)	2040 Updated (Policy)
Population	96,189	138,069	138,069
Households	39,781	59,880	59,873
Total Employment	51,678	58,993	58,938
Retail Jobs	11,461	16,128	16,151
Non-Retail Jobs	40,217	42,865	42,787
Household Family Size (Pop/HH)	2.42	2.31	2.31
Labor Force (Emp/Pop)	0.54	0.43	0.43
% Non-Retail of Total Employment	77.8%	72.7%	72.6%

If no further changes were implemented, the market based and policy based forecasts assume an unexpected change in the household family size and labor force rates. These are fundamentally stable rates and should not change as much as indicated in the table above unless the area expects a demographic shift. There is no evidence that Monongalia County anticipates this type of shift in the next 28+ years. Therefore, it was assumed that this demographic change would not occur and that the non-retail jobs were still too low and the number of households was too high. With no additional information for where or how it should be modified, the data was scaled globally. Assuming the 2040 population is the constant, correcting the household family size was accomplished by forcing the total number of households in the county to equal  $138,069 / 2.42 = 57,107$ . Similarly, correcting the labor force rate was accomplished by forcing the total number of jobs in the county to equal  $138,069 * 0.54 = 74,178$ . It was then assumed that non-retail jobs would represent 77.8% of the total number of jobs, or 57,727 jobs. This change was then introduced at the TAZ level by modifying each TAZ as a percentage of what the total should be. For example, in the updated market based forecast, zone 1 had 80 non-retail jobs. Zone 1 non-retail jobs divided by the total number of updated non-retail jobs multiplied by the total number of non-retail jobs that should be there provides the calculation of 80 /

42,865 \* 57,727 and modifies zone 1's non-retail jobs to 108. This calculation was done for non-retail jobs and number of households for each zone. The final 2040 dataset totals are listed below.

	2010 Model Input	2040 Final (Market)	2040 Final (Policy)
Population	96,189	138,069	138,069
Households	39,781	57,097	57,092
Total Employment	51,678	73,854	73,872
Retail Jobs	11,461	16,128	16,151
Non-Retail Jobs	40,217	57,726	57,721
Household Family Size (Pop/HH)	2.42	2.42	2.42
Labor Force (Emp/Pop)	0.54	0.53	0.54
% Non-Retail of Total Employment	77.8%	78.2%	78.1%

The 2040 final datasets for a market based forecast trend and a policy based forecast trend were implemented in the model at a TAZ level. Appendix A includes thematic delta comparisons between the two different growth trends and between each growth trend and the 2010 model run. Appendix B contains forecast volumes from the three model runs; 2010, 2040 Market, and 2040 Policy. To make the comparisons clearer, no changes to the network were introduced at this time.

**MONONGALIA COUNTY 25-YEAR PROJECTIONS:**

**HOUSING  
HOUSEHOLDS  
RETAIL SQ. FT.  
RETAIL JOBS**

## Randall Gross / Development Economics

**Table 1. HOUSING PROJECTIONS: MARKET-BASED TREND**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
CBD	471	483	498	521	561	605	654	673
WVU	430	441	454	475	512	553	597	615
N Mtown Nbhds	2,832	2,905	2,991	3,129	3,373	3,638	3,930	4,047
Evansdale/WVU	940	965	993	1,039	1,120	1,208	1,305	1,344
Star City	1,113	1,142	1,176	1,231	1,326	1,430	1,545	1,591
Suncrest	7,090	7,274	7,488	7,835	8,446	9,108	9,840	10,132
S Mtown Nbhds	3,926	4,028	4,147	4,339	4,677	5,044	5,449	5,611
E Mtown Nbhds	1,874	1,923	1,980	2,071	2,233	2,408	2,601	2,679
Mileground	1,579	1,620	1,667	1,745	1,881	2,028	2,191	2,256
Westover	2,217	2,275	2,342	2,450	2,641	2,849		3,169
Granville	518	531	547	572	617	665	719	740
I-68/Sabraton	894	917	944	988	1,064	1,148	1,240	1,277
I-68/Cheat Rd	438	449	463	484	522	563	608	626
I-68/I-79/US119	1,241	1,273	1,311	1,371	1,478	1,594	1,722	1,773
South County	3,145	3,226	3,321	3,475	3,746	4,039	4,364	4,494
East County	1,779	1,825	1,879	1,966	2,119	2,285	2,469	2,542
Cheat Lake	5,458	5,599	5,764	6,031	6,501	7,011	7,575	7,799
North County	2,937	3,014	3,102	3,246	3,499	3,773	4,077	4,198
Rosedale	898	921	948	992	1,069	1,153	1,246	1,283
West County	4,432	4,547	4,680	4,898	5,279	5,693	6,151	6,333
<b>TOTAL</b>	<b>44,212</b>	<b>45,360</b>	<b>46,692</b>	<b>48,859</b>	<b>52,666</b>	<b>56,795</b>	<b>61,360</b>	<b>63,181</b>

Sources: U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc., and Randall Gross / Development Economics.

## Randall Gross / Development Economics

**Table 2. HOUSING PROJECTIONS: POLICY-BASED**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
CBD	471	483	451	472	509	492	531	547
WVU	430	441	408	427	460	439	474	488
N Mtown Nbhds	2,832	2,905	2,991	3,129	3,321	3,581	3,838	3,920
Evansdale/WVU	940	965	993	990	1,067	1,151	1,213	1,217
Star City	1,113	1,134	1,121	1,173	1,211	1,306	1,411	1,453
Suncrest	7,090	7,319	7,581	7,982	8,656	9,335	10,116	10,448
S Mtown Nbhds	3,926	4,028	4,109	4,251	4,582	4,941	5,308	5,434
E Mtown Nbhds	1,874	1,923	1,933	2,023	2,127	2,294	2,448	2,489
Mileground	1,579	1,620	1,681	1,759	1,896	2,045	2,178	2,211
Westover	2,217	2,275	2,335	2,443	2,633	2,840	3,037	3,096
Granville	518	531	594	621	722	779	872	930
I-68/Sabraton	894	917	944	988	1,064	1,148	1,240	1,277
I-68/Cheat Rd	438	449	509	533	627	676	761	815
I-68/I-79/US119	1,241	1,273	1,307	1,368	1,475	1,590	1,749	1,832
South County	3,145	3,226	3,362	3,518	3,845	4,146	4,510	4,675
East County	1,779	1,825	1,821	1,906	2,001	2,158	2,332	2,401
Cheat Lake	5,458	5,599	5,857	6,178	6,659	7,238	7,851	8,115
North County	2,937	3,014	3,175	3,371	3,634	3,976	4,326	4,486
Rosedale	898	876	901	943	1,017	1,096	1,185	1,220
West County	4,432	4,547	4,623	4,788	5,161	5,566	5,983	6,129
<b>TOTAL</b>	<b>44,212</b>	<b>45,351</b>	<b>46,694</b>	<b>48,861</b>	<b>52,668</b>	<b>56,797</b>	<b>61,363</b>	<b>63,184</b>

Sources:  
 U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc.,  
 and Randall Gross / Development Economics.

## Randall Gross / Development Economics

**Table 3. HOUSEHOLD PROJECTIONS: MARKET-BASED TREND**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
CBD	423	439	456	482	523	568	618	640
WVU	386	400	416	440	478	519	564	584
N Mtown Nbhds	2,675	2,760	2,841	2,973	3,205	3,456	3,734	3,845
Evansdale/WVU	888	916	943	987	1,064	1,148	1,240	1,277
Star City	995	1,033	1,074	1,135	1,234	1,340	1,458	1,510
Suncrest	6,670	6,886	7,114	7,444	8,024	8,654	9,349	9,627
S Mtown Nbhds	3,614	3,739	3,879	4,087	4,433	4,792	5,177	5,331
E Mtown Nbhds	1,728	1,788	1,854	1,953	2,118	2,288	2,472	2,545
Mileground	1,455	1,506	1,562	1,645	1,784	1,927	2,082	2,143
Westover	2,020	2,093	2,173	2,291	2,487	2,699	2,924	3,011
Granville	475	492	510	538	584	632	683	703
I-68/Sabraton	823	852	884	931	1,009	1,091	1,178	1,213
I-68/Cheat Rd	406	420	435	458	496	535	578	595
I-68/I-79/US119	1,172	1,210	1,245	1,303	1,405	1,515	1,636	1,685
South County	2,970	3,065	3,155	3,302	3,559	3,838	4,146	4,270
East County	1,648	1,704	1,767	1,860	2,013	2,171	2,346	2,415
Cheat Lake	4,724	4,922	5,136	5,440	5,928	6,454	7,033	7,298
North County	2,749	2,840	2,941	3,084	3,324	3,585	3,873	3,988
Rosedale	824	853	885	933	1,012	1,096	1,184	1,219
West County	3,963	4,114	4,279	4,520	4,913	5,337	5,805	6,013
<b>TOTAL</b>	<b>40,607</b>	<b>42,031</b>	<b>43,551</b>	<b>45,807</b>	<b>49,592</b>	<b>53,644</b>	<b>58,080</b>	<b>59,910</b>

**Sources:** U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc., and Randall Gross / Development Economics.



## Randall Gross / Development Economics

**Table 4. HOUSEHOLD PROJECTIONS: POLICY-BASED**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
CBD	423	439	413	436	474	462	502	520
WVU	386	400	374	395	429	412	448	464
N Mtown Nbhds	2,675	2,760	2,841	2,973	3,155	3,402	3,647	3,725
Evansdale/WVU	888	916	943	941	1,014	1,094	1,152	1,156
Star City	995	1,025	1,024	1,081	1,127	1,224	1,331	1,379
Suncrest	6,670	6,929	7,203	7,584	8,225	8,869	9,611	9,927
S Mtown Nbhds	3,614	3,739	3,844	4,004	4,342	4,695	5,043	5,163
E Mtown Nbhds	1,728	1,788	1,810	1,907	2,018	2,180	2,326	2,365
Mileground	1,455	1,506	1,574	1,659	1,799	1,943	2,070	2,101
Westover	2,020	2,093	2,166	2,284	2,479	2,690	2,886	2,941
Granville	475	492	554	584	683	740	829	883
I-68/Sabraton	823	852	884	931	1,009	1,091	1,178	1,213
I-68/Cheat Rd	406	420	479	505	596	643	723	775
I-68/I-79/US119	1,172	1,210	1,242	1,300	1,401	1,511	1,662	1,741
South County	2,970	3,065	3,194	3,342	3,653	3,939	4,285	4,442
East County	1,648	1,704	1,712	1,803	1,901	2,051	2,215	2,281
Cheat Lake	4,724	4,922	5,219	5,572	6,072	6,663	7,290	7,593
North County	2,749	2,840	3,010	3,203	3,453	3,777	4,110	4,262
Rosedale	824	811	841	887	962	1,042	1,125	1,159
West County	3,963	4,114	4,226	4,419	4,803	5,218	5,646	5,818
<b>TOTAL</b>	<b>40,607</b>	<b>42,024</b>	<b>43,556</b>	<b>45,810</b>	<b>49,595</b>	<b>53,645</b>	<b>58,080</b>	<b>59,909</b>
<b>Sources:</b>	U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc., and Randall Gross / Development Economics.							

## Randall Gross / Development Economics

**Table 5. RETAIL PROJECTIONS: MARKET-BASED TREND (\$F)**

Sub-Area	2012	2017	2020	2025	2030	2035	2040
CBD	325,595	337,876	351,349	370,995	403,143	437,895	492,756
WVU	51,300	53,235	55,357	58,453	63,518	68,993	77,637
N Mtown Nbhd	228,231	235,529	242,448	253,699	273,467	294,906	328,066
Evansdale/WVU	190,541	196,635	202,411	211,804	228,307	246,206	273,890
Star City	93,177	96,736	100,635	106,300	115,548	125,544	141,443
Suncrest	467,977	483,150	499,157	522,322	563,020	607,160	675,430
S Mtown Nbhd	421,913	436,611	452,908	477,195	517,548	559,523	622,438
E Mtown Nbhd	34,549	35,747	37,076	39,059	42,357	45,749	50,893
Mileground	206,245	213,396	221,330	233,170	252,859	273,108	303,817
Westover	565,342	585,687	608,145	641,314	696,083	755,312	842,633
Granville	1,196,640	1,251,133	1,311,198	1,395,694	1,529,212	1,673,079	1,898,614
I-68/Sabraton	438,663	458,437	475,504	505,971	548,717	592,851	666,108
I-68/Cheat Rd	509,855	548,261	585,349	634,821	707,024	785,327	926,836
I-68/I-79/US119	403,068	420,114	436,779	466,190	507,539	552,803	633,534
South County	35,596	36,734	37,813	39,568	42,651	45,995	51,166
East County	57,581	59,545	61,729	65,003	70,346	75,861	84,391
Cheat Lake	46,065	47,995	50,085	53,050	57,805	62,941	71,165
North County	3,141	3,244	3,360	3,524	3,798	4,096	4,557
Rosedale	4,188	4,335	4,498	4,740	5,142	5,570	6,196
West County	631,298	622,583	647,618	684,025	743,486	767,369	864,464
<b>TOTAL</b>	<b>5,910,963</b>	<b>6,126,984</b>	<b>6,384,750</b>	<b>6,766,898</b>	<b>7,371,572</b>	<b>7,980,289</b>	<b>9,016,036</b>

Sources: U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc., and Randall Gross / Development Economics.

## Randall Gross / Development Economics

**Table 6. RETAIL PROJECTIONS: POLICY-BASED (SF)**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
CBD	325,595	334,047	343,860	393,584	424,251	457,511	494,287	508,955
WVU	51,300	52,631	54,177	56,691	61,109	59,126	63,879	65,775
N Mtown Nbhds	228,231	234,155	241,034	252,219	271,871	297,763	321,698	336,337
Evansdale/WVU	190,541	195,487	201,230	210,568	237,649	256,280	276,881	285,097
Star City	93,177	94,894	101,589	106,303	114,586	123,569	133,502	137,464
Suncrest	467,977	483,119	500,393	526,840	567,890	612,412	661,639	681,273
S Mtown Nbhds	421,913	432,865	445,580	471,509	508,247	548,093	592,151	609,722
E Mtown Nbhds	34,549	35,446	35,626	37,279	40,184	43,334	47,949	49,372
Mileground	206,245	217,525	223,915	240,689	259,443	287,203	318,305	327,751
Westover	565,342	580,017	595,219	610,385	657,945	709,527	766,560	789,308
Granville	1,196,640	1,227,703	1,371,635	1,435,289	1,668,790	1,799,621	2,015,156	2,220,914
I-68/Sabraton	438,663	472,318	486,192	508,755	548,396	619,270	669,049	688,903
I-68/Cheat Rd	509,855	523,090	592,807	677,191	791,260	853,294	993,309	1,096,330
I-68/I-79/US119	403,068	413,531	424,648	444,355	478,978	516,529	568,014	595,131
South County	35,596	36,520	36,998	38,162	40,540	43,718	47,232	47,918
East County	57,581	59,076	58,946	61,682	64,783	69,862	73,491	75,672
Cheat Lake	46,065	47,261	49,043	51,319	55,318	59,654	64,191	65,829
North County	3,141	3,174	3,267	3,366	3,572	3,852	4,162	4,286
Rosedale	4,188	4,085	4,205	4,172	4,497	4,850	5,240	5,100
West County	631,298	641,225	651,828	675,117	727,720	768,592	821,633	837,014
<b>TOTAL</b>	<b>5,910,963</b>	<b>6,088,168</b>	<b>6,422,191</b>	<b>6,805,476</b>	<b>7,527,029</b>	<b>8,134,061</b>	<b>8,938,328</b>	<b>9,428,150</b>

Sources:  
 U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc.,  
 and Randall Gross / Development Economics.

## Randall Gross / Development Economics

**Table 7. RETAIL EMPLOYMENT PROJECTIONS: MARKET-BASED TREND**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
<b>CBD</b>	492	532	555	597	642	696	715	743
<b>WVU</b>	78	84	88	94	101	110	113	117
<b>N Mtown Nbhds</b>	345	371	383	408	435	468	478	495
<b>Evansdale/WVU</b>	288	310	320	341	363	391	399	413
<b>Star City</b>	141	152	159	171	184	199	205	213
<b>Suncrest</b>	708	761	789	840	896	965	985	1,019
<b>S Mtown Nbhds</b>	638	687	716	767	824	889	907	939
<b>E Mtown Nbhds</b>	52	56	59	63	67	73	74	77
<b>Mileground</b>	312	336	350	375	402	434	443	458
<b>Westover</b>	855	922	961	1,031	1,108	1,200	1,228	1,271
<b>Granville</b>	1,810	1,970	2,073	2,244	2,434	2,658	2,740	2,864
<b>I-68/Sabraton</b>	663	722	752	814	873	942	971	1,005
<b>I-68/Cheat Rd</b>	771	863	925	1,021	1,125	1,248	1,312	1,398
<b>I-68/I-79/US119</b>	610	661	691	750	808	878	914	956
<b>South County</b>	54	58	60	64	68	73	75	77
<b>East County</b>	87	94	98	105	112	121	123	127
<b>Cheat Lake</b>	70	76	79	85	92	100	103	107
<b>North County</b>	5	5	5	6	6	7	7	7
<b>Rosedale</b>	6	7	7	8	8	9	9	9
<b>West County</b>	955	980	1,024	1,100	1,183	1,219	1,253	1,304
<b>TOTAL</b>	<b>8,939</b>	<b>9,647</b>	<b>10,094</b>	<b>10,881</b>	<b>11,734</b>	<b>12,677</b>	<b>13,053</b>	<b>13,601</b>

**Sources:** U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc., and Randall Gross / Development Economics.

## Randall Gross / Development Economics

**Table 8. RETAIL EMPLOYMENT PROJECTIONS: POLICY-BASED**

Sub-Area	2012	2017	2020	2025	2030	2035	2037	2040
CBD	492	529	540	629	661	713	722	734
WVU	78	83	85	91	95	92	93	95
N Mtown Nbhds	345	371	379	403	424	464	470	485
Evansdale/WVU	288	310	316	337	370	399	404	411
Star City	141	150	160	170	179	193	195	198
Suncrest	708	766	787	842	885	954	966	983
S Mtown Nbhds	638	686	700	754	792	854	865	880
E Mtown Nbhds	52	56	56	60	63	68	70	71
Mileground	312	345	352	385	404	448	465	473
Westover	855	919	936	976	1,026	1,106	1,119	1,139
Granville	1,810	1,945	2,156	2,295	2,602	2,805	2,943	3,204
I-68/Sabraton	663	748	764	813	855	965	977	994
I-68/Cheat Rd	771	829	932	1,083	1,234	1,330	1,451	1,582
I-68/I-79/US119	610	655	667	710	747	805	830	859
South County	54	58	58	61	63	68	69	69
East County	87	94	93	99	101	109	107	109
Cheat Lake	70	75	77	82	86	93	94	95
North County	5	5	5	5	6	6	6	6
Rosedale	6	6	7	7	7	8	8	7
West County	955	1,016	1,025	1,079	1,134	1,198	1,200	1,208
<b>TOTAL</b>	<b>8,939</b>	<b>9,647</b>	<b>10,094</b>	<b>10,881</b>	<b>11,734</b>	<b>12,677</b>	<b>13,053</b>	<b>13,601</b>

Sources: U.S. Bureau of the Census, Burgess & Niple, West Virginia University, Claritas Inc., and Randall Gross / Development Economics.

**KEY TO SUB-AREAS:**

(By Transportation Analysis Zones - TAZ)

**CBD:** 1,2,3,4,5,6,7,11,12,13,14,15

**WVU/Downtown:** 8,9,10,19

**North Neighborhoods** (Sunnyside, Willes Hill): 18,34,35,49,36,37,50,38,39,40

**Evansdale/WVU:** 69,70,94,118

**Star City:** 182,183,184,185,222,223

**Suncrest/North Hills:** 51,71,72,92,93,95,96,119,120,121,122,123,124,125,126,150,151,152,153,154,155,186,187,188,224

**South Neighborhoods** (Chancey Hill, 1<sup>st</sup> Ward, S Park, S Hills, Greenmount):

25,26,45,60,61,81,82,83,105,106,24,41,42,43,44,59,58,79,23,27,107,108,109,137,138,139,140,141

**East Neighborhoods** (Woodburn, Jerome Park, Sabraton): 20,21,22,55,56,57,76,77,131,78,100,101

**Mileground/Airport:** 52,53,54,73,74,75,97,98,99,127

**Westover:** 17,30,31,32,46,47,48,62,63,64,65,66,67,68,85,86,87,88,89,90,91,110,111,112,113,114,115,116,146,334

**Granville:** 147,148,149,178,179,180,181,220,219,221,333

**I-68/W Sabraton:** 80,102,103,104,130,132,133,134,165,166

**I-68/Cheat Road:** 128,129,159,160,161,162,163,164,195,196

**I-68/I-79/US119:** 135,136,142,143,171,172,173,174,211,212,213,215,216,246,247,248,249,250

**South County/79 Corridor:**

84,209,210,241,242,243,244,245,251,266,267,268,269,270,271,272,273,274,275,296,297,314,315,316,317,318,319,320,321,322,330,331,332

**East County** (Rte 7/Brookhaven): 167,168,169,170,203,204,205,206,207,208,240,265,313

**Cheat Lake:** 193,197,199,200,201,202,229,230,231,232,233,234,235,236,237,238,239,262,263,264,292,293,295,306,307,308,309,310,311,312

**North County** (Baker Ridge/Van Voorhuis/Marion Meadows): 156,157,158,189,190,191,192,194,225,226,227,228,291

**Rosedale/Bertha Hill/Maidsville:** 259,260,285,286,287,288,289,290,302,303,304,305

**West County:**

144,145,175,176,177,214,217,218,252,253,254,255,256,257,258,276,277,278,279,280,281,282,283,284,298,299,300,301,323,324,325,326,327,328,329

**NOTES & ASSUMPTIONS**

Overall Basis for Projections

The housing and retail projections contained herein were calculated using demographic forecasts but were informed by real estate market factors. The overall methodology is heavily dependent on 30-year County-wide population projections provided by the Bureau of Business and Economic Research (BBER) at West Virginia University:

2010	96,189
2015	101,681
2020	107,780
2025	114,561
2030	121,820
2035	129,768
2040	138,069

These population projections, coupled with trends and forecasts in average household size (U.S. Bureau of the Census and Claritas, Inc.) and WVU enrollment (ACP) yielded County-wide household projections. Long-term household size was calculated based on a linear regression model.

Housing Demand

County-wide housing demand was projected based on household growth and trends in vacancy and replacement factors.

Housing Apportionment by Sub-Area

Projected housing demand was then apportioned and distributed by sub-area using two scenarios:

- 1) Housing Market-Based Trend, which examines past trends, vacancy patterns, and housing market conditions
- 2) Housing Policy, which allows a regulatory and incentive environment to encourage certain housing patterns consistent with community preferences identified so far through the planning process. Such policies would, for example, encourage infill and densification in central neighborhoods, discourage “sprawl” in outlying underserved areas, and promote mixed-use (housing and job-inducing) development in key corridors or nodes.



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## **Randall Gross / Development Economics**

### Households

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

### Retail Demand

County-wide retail demand was projected based on household and income growth, yielding expenditure potentials by type of good or service, and allowing for vacancy factors.

### Retail Apportionment by Sub-Area

Projected retail demand was apportioned and distributed by sub-area using the same two scenarios as 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 inventory information, proved invaluable 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 policy decisions.

### Retail Employment

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 (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.

### Caveat

The projections included herein represent a best effort in the absence of retail estate market trend data, county-wide baseline inventories, and long-term demographic and employment forecasts (other than population). The projections are heavily dependent on the WVU population forecasts, but every effort has been made to incorporate other sources where possible, including Claritas, Inc. (short-term demographic forecasts), U.S. Bureau of the Census (demographic, housing, and employment trends), U.S. Internal Revenue Service (migration data), Burgess & Niple (current TAZ apportionments), Monongalia County (assessment database of employers), City of Morgantown and ACP (inventory of existing Morgantown uses), Workforce West Virginia (employment and wage trend data), local real estate brokers & realtors (existing real estate market inputs), local businesses (market sources, sales, etc) and others.



**MONONGALIA COUNTY 25-YEAR PROJECTIONS:**

**OFFICE SQ. FT.  
OFFICE JOBS  
INDUSTRIAL SQ. FT.  
INDUSTRIAL JOBS**

# Randall Gross / Development Economics

Table 1. OFFICE PROJECTIONS (\$F), MARKET-BASED										
Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040	
<b>CBD</b>	316,000	321,200	323,200	328,100	321,500	328,900	332,000	329,100	328,300	
<b>WVU</b>	94,500	97,100	98,600	101,100	101,100	105,600	108,700	110,000	112,000	
<b>N Mtown Nbhd</b>	250,100	254,200	255,700	257,000	251,900	257,600	260,100	257,800	257,200	
<b>Evansdale/WVU</b>	200,500	205,900	209,200	214,500	214,500	223,900	230,700	233,300	237,500	
<b>Star City</b>	15,100	15,300	15,400	15,600	15,500	15,800	16,000	15,900	15,800	
<b>Suncrest</b>	559,400	585,900	607,300	635,200	647,900	683,100	710,600	725,900	746,400	
<b>S Mtown Nbhd</b>	159,800	162,400	161,800	162,600	159,300	163,000	164,500	163,100	162,700	
<b>E Mtown Nbhd</b>	19,500	19,800	19,800	19,800	19,500	19,900	20,100	19,900	19,900	
<b>Mileground</b>	8,000	8,000	8,000	8,000	7,900	8,100	8,100	8,100	8,100	
<b>Westover</b>	56,600	58,100	58,500	59,300	58,200	59,500	60,000	59,500	58,800	
<b>Granville</b>	49,800	51,700	53,100	55,000	56,100	59,700	62,700	64,700	67,200	
<b>I-68/Sabraton</b>	42,200	42,900	43,200	43,900	43,400	44,900	45,800	45,800	46,200	
<b>I-68/Cheat Rd</b>	71,500	73,400	74,600	76,500	76,500	81,500	85,600	88,300	91,700	
<b>I-68/I-79/US119</b>	30,000	30,800	31,000	31,400	31,400	32,800	33,800	34,200	34,400	
<b>South County</b>	12,000	12,200	12,100	12,200	12,000	12,200	12,300	12,200	12,200	
<b>East County</b>	11,500	11,600	11,500	11,600	11,400	11,600	11,700	11,600	11,600	
<b>Cheat Lake</b>	67,300	70,500	73,100	77,200	79,500	85,500	91,600	97,200	103,900	
<b>North County</b>	5,700	5,900	6,100	6,400	6,500	7,000	7,400	7,800	8,300	
<b>Rosedale</b>	6,600	6,800	6,900	7,100	7,100	7,400	7,600	7,700	7,800	
<b>West County</b>	20,000	20,900	21,500	22,200	22,700	24,400	25,900	27,200	28,800	
<b>TOTAL</b>	1,996,100	2,054,600	2,090,600	2,144,700	2,143,900	2,232,400	2,295,200	2,319,300	2,358,800	
<b>Sources:</b>	Workforce West Virginia, U.S. Bureau of the Census, and Randall Gross / Development Economics.									

# Randall Gross / Development Economics

OFFICE PROJECTIONS (\$F), POLICY-BASED										
Table 2.	Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040
	<b>CBD</b>	316,000	323,300	330,600	341,100	341,200	358,400	369,100	375,600	384,800
	<b>WVU</b>	94,500	97,100	98,600	101,100	101,100	105,600	108,700	110,000	112,000
	<b>N Mtown Nbhds</b>	250,100	256,200	260,400	267,000	269,200	281,000	291,700	295,000	300,300
	<b>Evansdale/WVU</b>	200,500	205,900	211,300	216,700	216,700	228,400	235,300	237,900	242,200
	<b>Star City</b>	15,100	15,500	17,800	18,300	20,400	21,300	21,900	24,500	25,000
	<b>Suncrest</b>	559,400	576,500	585,800	600,700	600,700	627,100	645,900	653,200	665,000
	<b>S Mtown Nbhds</b>	159,800	162,400	161,800	165,900	159,300	166,300	171,300	173,300	176,400
	<b>E Mtown Nbhds</b>	19,500	19,800	20,200	20,700	20,700	21,600	22,200	22,500	22,900
	<b>Mileground</b>	8,000	8,200	10,400	10,700	2,100	2,200	4,600	4,600	4,700
	<b>Westover</b>	56,600	58,100	58,500	59,300	58,200	59,500	60,000	59,500	58,800
	<b>Granville</b>	49,800	51,700	53,100	55,000	56,100	59,700	62,700	63,400	64,600
	<b>I-68/Sabraton</b>	42,200	42,900	43,200	43,900	43,400	44,900	46,200	46,700	47,600
	<b>I-68/Cheat Rd</b>	71,500	73,400	74,600	76,500	76,500	81,500	85,600	88,300	89,900
	<b>I-68/I-79/US119</b>	30,000	30,800	31,000	31,400	31,400	32,800	33,800	34,200	34,400
	<b>South County</b>	12,000	12,200	12,100	12,200	12,000	12,200	12,300	12,200	12,200
	<b>East County</b>	11,500	11,600	11,500	11,600	11,400	11,600	11,700	11,600	11,600
	<b>Cheat Lake</b>	67,300	70,500	73,100	74,900	74,900	78,200	80,600	81,500	83,000
	<b>North County</b>	5,700	5,900	6,100	6,400	6,500	7,000	7,400	7,800	8,300
	<b>Rosedale</b>	6,600	6,800	6,900	7,100	7,100	7,400	7,600	7,700	7,800
	<b>West County</b>	20,000	20,900	21,500	22,200	22,200	23,200	23,900	24,200	24,600
	<b>TOTAL</b>	<b>1,996,100</b>	<b>2,049,700</b>	<b>2,088,500</b>	<b>2,142,700</b>	<b>2,131,100</b>	<b>2,229,900</b>	<b>2,302,500</b>	<b>2,333,700</b>	<b>2,376,100</b>
	<b>Sources:</b>	Workforce West Virginia, U.S. Bureau of the Census, and Randall Gross / Development Economics.								

## Randall Gross / Development Economics

Table 3. OFFICE EMPLOYMENT PROJECTIONS, MARKET-BASED										
Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040	
<b>CBD</b>	1,580	1,606	1,616	1,640	1,608	1,645	1,660	1,645	1,641	
<b>WVU</b>	473	485	493	506	506	528	544	550	560	
<b>N Mtown Nbhds</b>	1,250	1,271	1,279	1,285	1,259	1,288	1,300	1,289	1,286	
<b>Evansdale/WVU</b>	1,002	1,029	1,046	1,073	1,073	1,120	1,153	1,166	1,187	
<b>Star City</b>	75	77	77	78	77	79	80	79	79	
<b>Suncrest</b>	2,797	2,929	3,037	3,176	3,240	3,416	3,553	3,629	3,732	
<b>S Mtown Nbhds</b>	799	812	809	813	797	815	823	815	813	
<b>E Mtown Nbhds</b>	98	99	99	99	97	99	100	100	99	
<b>Mileground</b>	40	40	40	40	39	40	41	40	40	
<b>Westover</b>	283	290	292	297	291	297	300	298	294	
<b>Granville</b>	249	258	265	275	280	298	314	323	336	
<b>I-68/Sabraton</b>	211	215	216	219	217	224	229	229	231	
<b>I-68/Cheat Rd</b>	358	367	373	383	383	407	428	442	459	
<b>I-68/I-79/US119</b>	150	154	155	157	157	164	169	171	172	
<b>South County</b>	60	61	61	61	60	61	62	61	61	
<b>East County</b>	58	58	58	58	57	58	59	58	58	
<b>Cheat Lake</b>	337	352	365	386	397	427	458	486	520	
<b>North County</b>	28	30	30	32	33	35	37	39	41	
<b>Rosedale</b>	33	34	34	35	35	37	38	38	39	
<b>West County</b>	100	105	107	111	113	122	129	136	144	
<b>TOTAL</b>	<b>9,980</b>	<b>10,273</b>	<b>10,453</b>	<b>10,724</b>	<b>10,719</b>	<b>11,162</b>	<b>11,476</b>	<b>11,596</b>	<b>11,793</b>	
<b>Sources:</b>	Workforce West Virginia, U.S. Bureau of the Census, Building Owners and Managers Association; and Randall Gross / Development Economics.									

# Randall Gross / Development Economics

Table 4. OFFICE EMPLOYMENT PROJECTIONS, POLICY-BASED

Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040
<b>CBD</b>	1,580	1,616	1,653	1,706	1,706	1,792	1,846	1,878	1,924
<b>WVU</b>	473	485	493	506	506	528	544	550	560
<b>N Mtown Nbhds</b>	1,250	1,281	1,302	1,335	1,346	1,405	1,458	1,475	1,502
<b>Evansdale/WVU</b>	1,002	1,029	1,057	1,083	1,083	1,142	1,176	1,190	1,211
<b>Star City</b>	75	77	89	91	102	106	110	123	125
<b>Suncrest</b>	2,797	2,882	2,929	3,004	3,004	3,135	3,229	3,266	3,325
<b>S Mtown Nbhds</b>	799	812	809	829	797	832	857	866	882
<b>E Mtown Nbhds</b>	98	99	101	103	103	108	111	112	114
<b>Mileground</b>	40	41	52	53	11	11	23	23	24
<b>Westover</b>	283	290	292	297	291	297	300	298	294
<b>Granville</b>	249	258	265	275	280	298	314	317	323
<b>I-68/Sabraton</b>	211	215	216	219	217	224	231	234	238
<b>I-68/Cheat Rd</b>	358	367	373	383	383	407	428	442	450
<b>I-68/I-79/US119</b>	150	154	155	157	157	164	169	171	172
<b>South County</b>	60	61	61	61	60	61	62	61	61
<b>East County</b>	58	58	58	58	57	58	59	58	58
<b>Cheat Lake</b>	337	352	365	375	375	391	403	407	415
<b>North County</b>	28	30	30	32	33	35	37	39	41
<b>Rosedale</b>	33	34	34	35	35	37	38	38	39
<b>West County</b>	100	105	107	111	111	116	120	121	123
<b>TOTAL</b>	<b>9,980</b>	<b>10,248</b>	<b>10,442</b>	<b>10,713</b>	<b>10,655</b>	<b>11,149</b>	<b>11,513</b>	<b>11,669</b>	<b>11,880</b>

Sources: Workforce West Virginia, U.S. Bureau of the Census, Building Owners and Managers Association; and Randall Gross / Development Economics.

## Randall Gross / Development Economics

Table 5.		INDUSTRIAL PROJECTIONS (SF), MARKET-BASED									
Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040		
<b>CBD</b>	10,800	11,300	11,700	11,700	11,600	11,300	11,000	10,700	10,400		
<b>WVU</b>	1,700	1,800	1,800	1,900	1,900	1,900	1,900	1,800	1,800		
<b>N Mtown Nbhd</b>	226,100	236,200	243,000	241,300	238,800	232,100	225,900	221,000	215,500		
<b>Evansdale/WVU</b>	47,400	50,000	52,000	52,700	53,200	52,800	52,400	52,300	52,000		
<b>Star City</b>	20,700	21,600	22,300	22,300	22,300	21,700	21,100	20,700	20,100		
<b>Suncrest</b>	523,700	552,500	579,900	593,400	605,400	600,500	596,400	595,200	586,300		
<b>S Mtown Nbhd</b>	116,700	121,900	124,100	123,300	122,000	118,600	115,400	112,900	110,100		
<b>E Mtown Nbhd</b>	23,500	24,600	25,000	24,900	24,600	23,900	23,300	22,800	22,200		
<b>Mileground</b>	229,600	242,200	251,700	252,500	252,500	247,900	243,700	240,800	237,200		
<b>Westover</b>	64,600	68,100	70,100	70,300	69,600	67,600	65,800	64,400	62,100		
<b>Granville</b>	56,600	60,300	63,300	64,800	66,700	67,500	69,100	71,000	72,700		
<b>I-68/Sabraton</b>	94,200	99,300	103,200	104,600	105,700	104,800	104,100	102,800	101,300		
<b>I-68/Cheat Rd</b>	86,900	91,700	95,300	96,600	97,600	96,800	96,100	95,900	95,400		
<b>I-68/I-79/US119</b>	283,900	299,500	314,300	321,600	328,200	332,000	336,300	345,700	354,300		
<b>South County</b>	208,000	217,200	223,400	224,100	224,100	220,100	216,400	213,800	210,600		
<b>East County</b>	41,400	42,800	43,600	43,300	42,800	41,600	40,500	39,600	38,600		
<b>Cheat Lake</b>	34,600	36,500	37,900	38,400	39,200	38,900	39,000	38,900	38,700		
<b>North County</b>	137,900	148,400	157,300	162,600	167,500	171,100	175,000	181,700	188,000		
<b>Rosedale</b>	67,500	71,300	74,800	76,500	78,100	78,200	78,500	79,100	79,500		
<b>West County</b>	86,600	91,300	94,900	97,100	99,100	99,300	99,600	100,400	100,900		
<b>TOTAL</b>	<b>2,362,400</b>	<b>2,488,500</b>	<b>2,589,600</b>	<b>2,623,900</b>	<b>2,650,900</b>	<b>2,628,600</b>	<b>2,611,500</b>	<b>2,611,500</b>	<b>2,597,700</b>		
<b>Sources:</b>	Workforce West Virginia, U.S. Bureau of the Census, and Randall Gross / Development Economics.										

# Randall Gross / Development Economics

Table 6.		INDUSTRIAL PROJECTIONS (\$F), POLICY-BASED									
Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040		
<b>CBD</b>	10,800	11,300	11,700	11,700	11,600	11,300	11,000	10,700	10,400		
<b>WVU</b>	1,700	1,800	1,800	1,900	1,900	1,900	1,900	1,800	1,800		
<b>N Mtown Nbhds</b>	226,100	236,200	243,000	241,300	238,800	232,100	225,900	221,000	215,500		
<b>Evansdale/WVU</b>	47,400	50,000	52,000	52,700	53,200	52,800	52,400	52,300	52,000		
<b>Star City</b>	20,700	21,600	22,300	22,300	22,300	21,700	21,100	20,700	20,100		
<b>Suncrest</b>	523,700	552,500	579,900	593,400	605,400	600,500	596,400	595,200	586,300		
<b>S Mtown Nbhds</b>	116,700	121,900	124,100	123,300	122,000	118,600	115,400	112,900	110,100		
<b>E Mtown Nbhds</b>	23,500	24,600	25,000	24,900	24,600	23,900	23,300	22,800	22,200		
<b>Mileground</b>	229,600	244,600	256,700	262,700	268,100	268,500	272,000	276,900	278,300		
<b>Westover</b>	64,600	68,100	70,100	71,000	72,400	72,500	72,800	72,600	72,300		
<b>Granville</b>	56,600	60,300	63,300	64,800	66,100	66,200	66,400	66,900	67,200		
<b>I-68/Sabraton</b>	94,200	99,300	104,300	106,700	109,900	111,200	112,700	114,700	115,200		
<b>I-68/Cheat Rd</b>	86,900	92,600	97,200	99,500	101,500	101,700	102,000	102,800	103,300		
<b>I-68/I-79/US119</b>	283,900	302,500	320,600	331,300	341,400	345,400	353,300	363,100	372,200		
<b>South County</b>	208,000	219,400	230,300	235,600	242,800	245,600	248,800	255,800	259,600		
<b>East County</b>	41,400	42,800	43,600	43,300	42,800	41,600	40,500	39,600	37,800		
<b>Cheat Lake</b>	34,600	36,500	37,600	37,700	37,700	36,600	35,600	34,900	34,000		
<b>North County</b>	137,900	148,400	155,800	159,400	162,600	162,900	163,400	164,700	165,500		
<b>Rosedale</b>	67,500	67,000	61,900	55,900	49,700	43,300	37,400	32,100	27,200		
<b>West County</b>	86,600	89,500	88,400	83,300	75,700	66,800	58,400	50,700	42,900		
<b>TOTAL</b>	<b>2,362,400</b>	<b>2,490,900</b>	<b>2,589,600</b>	<b>2,622,700</b>	<b>2,650,500</b>	<b>2,625,100</b>	<b>2,610,700</b>	<b>2,612,200</b>	<b>2,593,900</b>		
<b>Sources:</b>	Workforce West Virginia, U.S. Bureau of the Census, and Randall Gross / Development Economics.										

# Randall Gross / Development Economics

INDUSTRIAL EMPLOYMENT PROJECTIONS, MARKET-BASED										
Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040	
<b>CBD</b>	31	32	33	33	33	32	31	31	30	
<b>WVU</b>	5	5	5	5	5	5	5	5	5	
<b>N Mtown Nbhds</b>	646	675	694	689	682	663	646	631	616	
<b>Evansdale/WVU</b>	135	143	149	150	152	151	150	149	149	
<b>Star City</b>	59	62	64	64	64	62	60	59	58	
<b>Suncrest</b>	1,496	1,579	1,657	1,695	1,730	1,716	1,704	1,700	1,675	
<b>S Mtown Nbhds</b>	333	348	355	352	349	339	330	323	315	
<b>E Mtown Nbhds</b>	67	70	72	71	70	68	67	65	63	
<b>Mileground</b>	656	692	719	721	721	708	696	688	678	
<b>Westover</b>	184	195	200	201	199	193	188	184	177	
<b>Granville</b>	162	172	181	185	191	193	197	203	208	
<b>I-68/Sabraton</b>	269	284	295	299	302	299	297	294	289	
<b>I-68/Cheat Rd</b>	248	262	272	276	279	276	275	274	273	
<b>I-68/I-79/US119</b>	811	856	898	919	938	949	961	988	1,012	
<b>South County</b>	594	621	638	640	640	629	618	611	602	
<b>East County</b>	118	122	124	124	122	119	116	113	110	
<b>Cheat Lake</b>	99	104	108	110	112	111	111	111	111	
<b>North County</b>	394	424	449	464	479	489	500	519	537	
<b>Rosedale</b>	193	204	214	219	223	223	224	226	227	
<b>West County</b>	247	261	271	277	283	284	284	287	288	
<b>TOTAL</b>	<b>6,750</b>	<b>7,110</b>	<b>7,399</b>	<b>7,496</b>	<b>7,574</b>	<b>7,510</b>	<b>7,462</b>	<b>7,461</b>	<b>7,422</b>	
<b>Sources:</b>	Workforce West Virginia, U.S. Bureau of the Census, BOMA, and Randall Gross / Development Economics.									



# Randall Gross / Development Economics

Table 8. INDUSTRIAL EMPLOYMENT PROJECTIONS, POLICY-BASED

Sub-Area	2012	2015	2017	2020	2025	2030	2035	2037	2040
<b>CBD</b>	31	32	33	33	33	32	31	31	30
<b>WVU</b>	5	5	5	5	5	5	5	5	5
<b>N Mtown Nbhds</b>	646	675	694	689	682	663	646	631	616
<b>Evansdale/WVU</b>	135	143	149	150	152	151	150	149	149
<b>Star City</b>	59	62	64	64	64	62	60	59	58
<b>Suncrest</b>	1,496	1,579	1,657	1,695	1,730	1,716	1,704	1,700	1,675
<b>S Mtown Nbhds</b>	333	348	355	352	349	339	330	323	315
<b>E Mtown Nbhds</b>	67	70	72	71	70	68	67	65	63
<b>Mileground</b>	656	699	734	751	766	767	777	791	795
<b>Westover</b>	184	195	200	203	207	207	208	207	206
<b>Granville</b>	162	172	181	185	189	189	190	191	192
<b>I-68/Sabraton</b>	269	284	298	305	314	318	322	328	329
<b>I-68/Cheat Rd</b>	248	265	278	284	290	291	291	294	295
<b>I-68/I-79/US119</b>	811	864	916	947	975	987	1,009	1,038	1,063
<b>South County</b>	594	627	658	673	694	702	711	731	742
<b>East County</b>	118	122	124	124	122	119	116	113	108
<b>Cheat Lake</b>	99	104	107	108	108	105	102	100	97
<b>North County</b>	394	424	445	455	465	465	467	471	473
<b>Rosedale</b>	193	191	177	160	142	124	107	92	78
<b>West County</b>	247	256	252	238	216	191	167	145	123
<b>TOTAL</b>	<b>6,750</b>	<b>7,117</b>	<b>7,398</b>	<b>7,493</b>	<b>7,573</b>	<b>7,501</b>	<b>7,459</b>	<b>7,463</b>	<b>7,411</b>

Sources: Workforce West Virginia, U.S. Bureau of the Census, BOMA, and Randall Gross / Development Economics.

**KEY TO SUB-AREAS:**

(By Transportation Analysis Zones - TAZ)

**CBD:** 1,2,3,4,5,6,7,11,12,13,14,15

**WVU/Downtown:** 8,9,10,19

**North Neighborhoods** (Sunnyside, Willes Hill): 18,34,35,49,36,37,50,38,39,40

**Evansdale/WVU:** 69,70,94,118

**Star City:** 182,183,184,185,222,223

**Suncrest/North Hills:** 51,71,72,92,93,95,96,119,120,121,122,123,124,125,126,150,151,152,153,154,155,186,187,188,224

**South Neighborhoods** (Chancey Hill, 1<sup>st</sup> Ward, S Park, S Hills, Greenmount):

25,26,45,60,61,81,82,83,105,106,24,41,42,43,44,59,58,79,23,27,107,108,109,137,138,139,140,141

**East Neighborhoods** (Woodburn, Jerome Park, Sabraton): 20,21,22,55,56,57,76,77,131,78,100,101

**Mileground/Airport:** 52,53,54,73,74,75,97,98,99,127

**Westover:** 17,30,31,32,46,47,48,62,63,64,65,66,67,68,85,86,87,88,89,90,91,110,111,112,113,114,115,116,146,334

**Granville:** 147,148,149,178,179,180,181,220,219,221,333

**I-68/W Sabraton:** 80,102,103,104,130,132,133,134,165,166

**I-68/Cheat Road:** 128,129,159,160,161,162,163,164,195,196

**I-68/I-79/US119:** 135,136,142,143,171,172,173,174,211,212,213,215,216,246,247,248,249,250

**South County/79 Corridor:**

84,209,210,241,242,243,244,245,251,266,267,268,269,270,271,272,273,274,275,296,297,314,315,316,317,318,319,320,321,322,330,331,332

**East County** (Rte 7/Brookhaven): 167,168,169,170,203,204,205,206,207,208,240,265,313

**Cheat Lake:** 193,197,199,200,201,202,229,230,231,232,233,234,235,236,237,238,239,262,263,264,292,293,295,306,307,308,309,310,311,312

**North County** (Baker Ridge/Van Voorhuis/Marion Meadows): 156,157,158,189,190,191,192,194,225,226,227,228,291

**Rosedale/Bertha Hill/Maidsville:** 259,260,285,286,287,288,289,290,302,303,304,305

**West County:**

144,145,175,176,177,214,217,218,252,253,254,255,256,257,258,276,277,278,279,280,281,282,283,284,298,299,300,301,323,324,325,326,327,328,329

**NOTES & ASSUMPTIONS**

Overall Basis for Projections

The office and industrial projections contained herein were calculated using employment projections but were 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 County-wide office and industrial projections. Long-term employment projections were calculated based on a linear regression model.

Office Space Demand

County-wide 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 was also considered in light of local and regional office development and absorption trends and other factors.

Office Apportionment by Sub-Area

Projected office demand was then apportioned and distributed by sub-area using two scenarios:

1. Office Market-Based Trend, which examines past trends, vacancy patterns, and market conditions. County enterprise and assessment data, coupled with City inventory information, proved invaluable in confirming existing office-based business uses and employment as a baseline for projections.
2. Employment Policy, which allows a regulatory and incentive environment to encourage certain employment patterns consistent with community preferences identified so far through the planning process. Such policies would, for example, encourage infill and densification in central neighborhoods, with a particular focus on strengthening the jobs base within the Morgantown central business district. This policy would also discourage office/commercial “sprawl” in outlying underserved areas, and promote mixed-use (housing and job-inducing) development in key corridors or nodes.

Office Employment

Once office demand (in square feet) was distributed by sub-area and planning period, then the number of jobs was re-calculated for each sub-area and planning period.

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### Industrial Space Demand

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.

### Industrial Apportionment by Sub-Area

Projected industrial demand was then apportioned and distributed by sub-area using the same two scenarios as that 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, proved invaluable in confirming existing industrial business uses and employment as a baseline for projections.

### Industrial Employment

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.

### Caveat

The projections included herein represent a best effort in the absence of office and industrial real estate market trend data, county-centered baseline inventories, and long-term county-centered employment forecasts. The projections are heavily dependent on 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 (employment by industry trends), Burgess & Niple (current TAZ apportionments), Monongalia County (assessment database of employers), City of Morgantown and ACP (inventory of existing Morgantown uses), local real estate brokers & realtors (existing real estate market inputs), local businesses (market sources, sales, etc) and others.

**Morgantown Area**

**OPPORTUNITIES ASSESSMENT**

*Comprehensive Plan for the City of Morgantown, Comprehensive Plan for the Town of Star City and Long Range Transportation Plan for the Morgantown Monongalia Regional Planning Organization*



Prepared April 9, 2012  
For American Communities Partnership, Ltd. (ACP)

**By Randall Gross / Development Economics**



## **INTRODUCTION**

As an input to a Comprehensive Plan and Long-Range Transportation Plan, an “Opportunities Assessment” was conducted to identify possible economic development opportunities within the Morgantown-Monongalia County area. This assessment complements work on an Economic Overview completed earlier. Field reconnaissance, coupled with analysis of economic data, assessment of several comparable communities, and information from surveys and interviews, helped provide input to this Opportunities Assessment. The economic analysis considered Location Quotients (LQs) and other indicators of the area’s competitive advantages for different types of industry.

## **INDUSTRY CLUSTERS & CONCENTRATIONS**

A Location Quotients (LQ) analysis was conducted to identify Monongalia County’s unique industry clusters and concentrations, as one indicator of the region’s competitive advantage for attracting certain industries. LQs are simply a ratio or comparison of the county’s employment share within each industry compared with industries’ share of state, regional or national employment. An LQ ratio of 1.0 signals the county has exactly the same concentration of jobs (in a certain industry) as the state or the nation. Thus, the county may not be particularly unique as a location for that industry. An LQ of less than 0.70 signals the county has an unusually low concentration within that industry and may not be a particularly competitive location for that industry at present. An LQ of more than 1.3 signals a particularly strong or unique industry concentration within the local economy, suggesting that the area may have some unique advantages that have helped attract that industry in higher numbers (or with higher employment) than other places.

Not surprisingly, Monongalia County has a high concentration of the state’s government and education jobs, largely because it is home to the state university plus several government laboratories. The analysis below focuses more on non-government private sector jobs, to identify key concentrations and clusters that help create synergies for business development in the area.

**Major Industry Sectors**

Among major private industry sectors, Monongalia County has a relatively high location quotient (LQ) within the state of West Virginia for management services (2.45), much higher than the 1.3 level threshold designating a concentration. This suggests that Monongalia County has a higher concentration of **management services** than other parts of the state. In addition, Mon County has about 15.8% of all management services employment in the state, even though the county only accounts for about 6.4% of the state's non-government job base.

**Table 1. INDUSTRY CONCENTRATIONS AND LOCATION QUOTIENTS (LQ), MONONGALIA COUNTY**

Industry	% Of State	LQ-State	% Of USA	LQ-USA
Agriculture	3.27%	0.509	0.0192%	0.608
Mining	2.47%	0.385	<b>0.1138%</b>	<b>3.614</b>
Utilities	5.35%	0.832	<b>0.0545%</b>	<b>1.731</b>
Construction	6.37%	0.991	0.0291%	0.924
Manufacturing	5.36%	0.833	0.0244%	0.776
Wholesale trade	2.15%	0.334	0.0072%	0.227
Retail trade	<b>6.74%</b>	1.047	<b>0.0400%</b>	<b>1.272</b>
Transport	2.32%	0.361	0.0090%	0.285
Information	5.06%	0.788	0.0158%	0.501
Finance	4.54%	0.706	0.0145%	0.459
Real Estate	<b>10.79%</b>	<b>1.679</b>	0.0338%	1.074
Prof, Tech Svcs	6.48%	1.008	0.0233%	0.740
Management Svcs	<b>15.75%</b>	<b>2.449</b>	0.0222%	0.705
Admin Svcs	<b>6.53%</b>	1.015	0.0203%	0.645
Education Svcs	2.99%	0.465	0.0078%	0.247
Health Care	<b>8.88%</b>	<b>1.382</b>	<b>0.0621%</b>	<b>1.971</b>
Arts, Entertain, Rec	3.08%	0.479	0.0174%	0.552
Accomm, Foodsvc	<b>8.00%</b>	<b>1.245</b>	<b>0.0424%</b>	<b>1.346</b>
Other svcs	5.48%	0.852	0.0269%	0.854
Not Classified	<b>7.32%</b>	1.138	0.0293%	0.929
<b>Total</b>	<b>6.43%</b>		<b>0.0315%</b>	

Note: Private industry only. Excludes Government, public universities / hospitals, etc.

Sources: U.S. Bureau of the Census and Randall Gross / Development Economics.

While Monongalia County has a high concentration of the state's management jobs, it is not well-represented nationally for these jobs, with a national LQ of only 0.70. Similarly with real estate, Monongalia County has a relatively high LQ of 1.68 within the state, but is just slightly above normal for the nation, at 1.07. Not surprisingly, the county has a relatively high LQ of 3.61 in the **mining** sector, which is highly concentrated in West Virginia overall. But when compared with other places in the state, Monongalia County is not that unusual, having an LQ of just 0.39, much lower than par with the state. Similarly, the county has a fairly high concentration of **utility** sector jobs (1.73) on a national basis, but not within West Virginia (0.83).

Where Monongalia County does seem to have a consistently high industry concentration is in **health care**, since the county's health care employment is higher than the norm for the state (1.38) and for the nation as a whole (1.97). The private health care industry is concentrated in Morgantown partly because of the university, and due to its central location for serving a population base throughout north-central West Virginia and beyond. Monongalia County also has a somewhat high LQ in **accommodation and foodservice**, both at the state (1.25) and national levels (1.35).

### **Selected Industries**

Further analysis was completed to assess concentrations within certain selected industries. This analysis examined health care, accommodation, mining and utility industries because of Monongalia County's high LQ levels in those industries. Also examined were manufacturing and professional, scientific and technical services because of the county's significant growth trends in those industries.

**Health Care.** Health care includes ambulatory health services, hospitals, nursing & residential care facilities, and social assistance. Mon County has a somewhat significant concentration in hospital employment (1.38 as compared to the state and **1.63** to the nation). Aside from WVU Healthcare, Mon General (with workforce of nearly 1,500), along with West Virginia Rehabilitation Hospital (about 300) are major employers.

**Accommodation & Foodservice.** Within the accommodation and foodservice industries, there is no particular concentration, although the county has a fair representation of restaurants and drinking places.

**Mining.** The mining sector includes oil & gas extraction, mining (other than oil and gas) and support services. Monongalia County has a very strong concentration in the mining industry (LQ of **2.26**) on a national level, but as noted earlier, the state has much larger concentrations elsewhere. West Virginia as a whole still has more than 10% of the nation's mining jobs.



**Utilities.** The utility sector includes electric power generation, natural gas distribution, and water/sewer services. Mon County does not have a concentration within any particular utility industry, although it has a relatively significant share of the state's electric power generation employment.

**Professional, Scientific, & Technical (PST) Services.** This sector includes legal, accounting, architecture/engineering, specialized design, computer systems, management/technical consulting, scientific R&D, advertising/PR, and other PST services. The county has seen rapid growth in employment within this sector, and has a particular concentration in architecture and engineering services (LQ of 1.74 to the state and **1.95** to the nation). The concentration of services in Monongalia County may relate to or spin-off from the university. The county also has a relatively high concentration of scientific R&D services (LQ of 1.66 to the state and 1.54 for the nation), again perhaps spinning off from the university, serving federal laboratories, or attracted by regional economic development efforts oriented to high-tech industries. The county also has a fairly high concentration in management, scientific and technical consulting services (state 1.47 and national 1.29).

**Manufacturing.** There are about 20 major manufacturing industries, ranging from food production to fabricated metals. The county has a particularly strong concentration in the chemicals industry (LQ of **3.66** for the state and a very high **9.49** for the nation), mainly in pharmaceuticals thanks to the presence of Mylan Pharmaceuticals, which represents more than 90% of the county's chemical production employment. The county has a state concentration in computer manufacturing (LQ of **4.41**), with companies like FCX Systems, but lags behind the national norm at 0.91. Finally, the county has a minor concentration in fabricated metals production (1.27 in the state and 1.33 for the nation).

## Summary

The analysis of concentrations and clusters suggests that WVU and other government activities have a spin-off impact on local private business, helping Monongalia County gain statewide or national concentrations in certain industries. The concentrations in health care and accommodation are no doubt assisted by the presence of a large university. Professional and technical services in architecture and engineering, scientific R&D, and management & technical consulting are likely to gain spin-off support such as through contracts from WVU and various federal laboratories in the area. While the county has a high concentration in mining on a national level, it is relatively small in comparison to other parts of West Virginia. Other than a small concentration in fabricated metals, the county's main manufacturing employment is concentrated in pharmaceuticals, thanks the presence of Mylan.

## **GROWTH PROSPECTS**

West Virginia University's Bureau of Business and Economic Research (BBER) has forecasted positive job growth in all major industry sectors through 2015 for the Morgantown Metropolitan Statistical Area (MSA), which includes Monongalia and Preston Counties. The highest rates of growth will be in professional, scientific and technical services (3.7% per annum); construction (2.9%); education and health services (2.4%); and leisure and hospitality (1.8%).<sup>1</sup> These forecasts are relatively consistent with the region's growth trends as analyzed in the Baseline Economic Conditions report.

## **KEY COMPETITIVE ADVANTAGES**

Several of the area's competitive advantages are identified below, based on the various economic analyses, field reconnaissance, interviews, surveys, and other inputs.

- **West Virginia University.** Provides economic stability, attracts the "best and brightest" from the state and beyond, and invests in innovation that attracts entrepreneurial activity. WVU faculty, staff and students also provide a large and well-educated market base for various goods and services in the regional economy.
- **Federal Laboratories and Innovation Base.** The presence of WVU as well as Mylan Pharmaceuticals and several federal government research facilities has helped strengthen the area's competitiveness for attracting industry and skilled professionals. The university has established an R&D park, various incubators, and other programs which help strengthen the region's innovation base. WVU is also an anchor for marketing the region's I-79 High Tech Corridor. The cluster of these activities provides the region with a solid base for recruiting technology companies.
- **Skilled Professional Base.** The Morgantown area has a relatively high concentration of skilled, educated professionals and business service providers that is unique within the state and broader region, excluding the major metropolitan areas. The presence of the university, along with federal research facilities, no doubt plays a role in attracting these professionals.
- **Regional Health Care Center.** Morgantown and Monongalia County are the health care hub for north-central West Virginia. The presence of competitive and high-quality health care facilities helps enhance the

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<sup>1</sup> *Morgantown MSA Outlook*, Bureau of Business and Economic Research, College of Business and Economics, West Virginia University, March 2011.

quality of life for residents and increases health care standards for workers.

- **Proximity to Pittsburgh.** Morgantown's strategic location just 1½ hours south of Pittsburgh, accessible north and south by I-79 and east by I-68, also provides a competitive advantage for economic growth. Morgantown is part of an urban corridor linked closely with growing cities like Clarksburg and Fairmont in north-central West Virginia.
- **Access to Natural Resources.** The area also has access to natural resources, including shale reserves for natural gas production throughout western Pennsylvania and northern West Virginia. The surrounding area also has unparalleled natural beauty and a strong reputation for outdoor sports and recreation that increasingly attracts sports enthusiasts and tourists from around the country. Coopers Rock State Forest offers 50 miles of hiking/biking trails, white water rafting is available on the Cheat River, and the Rails Trails wind through the region. Natural beauty and available recreation assets in the region contribute to the quality of life that is attractive to young entrepreneurs and emerging technology companies, as well as to retirees and others seeking recreation amenities and a slower pace of life.
- **Historic Downtown and Riverfront Amenities.** Morgantown offers an historic, walk-able downtown environment that is attractive for visitors and residents alike. There are several unique destination stores catering not only to university patrons but also to the region's large recreation-based market. The riverfront offers relatively new meeting, lodging and convention facilities. The PRT, a unique public transit system, helps provide transportation between university campuses and downtown.

## COMPARABLE COMMUNITIES

In order to help identify key characteristics of the region that help strengthen its competitive advantages and provide input to potential opportunities, an assessment was conducted of several "comparable" communities. No community is exactly like Morgantown, which has so many unique characteristics. However, several communities were identified which share some key characteristics and provide a framework for discussion of success factors that may apply to Morgantown.

Among the factors used to identify "comparable" communities were their relative size and location, accessibility, economic base, natural features, and university orientation, among others. In general, these communities tend to be similarly-sized university towns located in the Appalachian region. The cities examined included Asheville (NC), Athens (OH), Blacksburg (VA), Kingsport

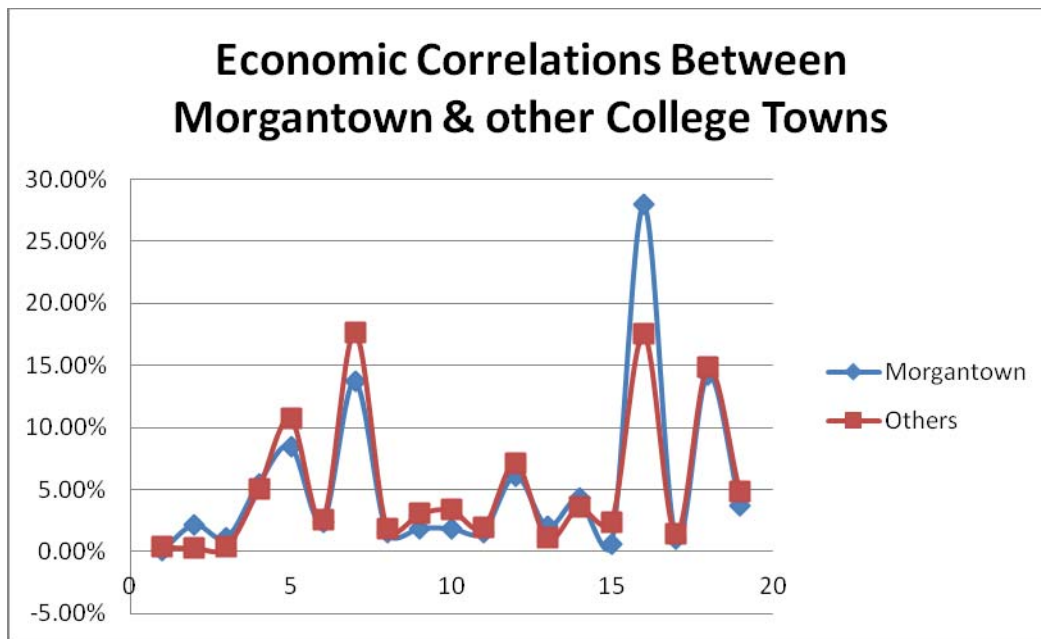
(TN), Ithaca (NY), Burlington (VT), Corvallis (OR), State College (PA), and Logan (UT). A selection of findings on these cities is described below.

- **Asheville, North Carolina.** Asheville, a city of 84,000 in western North Carolina, shares with Morgantown a mountainous Appalachian terrain, steady growth, large health-care employers, and a youth-oriented culture. While not the home of a major university, the Asheville area nevertheless draws thousands of students to its ten universities, including the University of North Carolina-Asheville. The region's economy is tourism-based, with sites such as the Vanderbilt mansion (Biltmore) and the nearby Great Smoky Mountains National Park. But the city itself has become a draw for artists and craftsmen from around the country, who appreciate its laid-back atmosphere. This cultural dynamic has contributed to the city's renaissance and its ability to attract educated professionals, designers, and high-tech firms. The city's population expanded by 21.1% between 2000 and 2010.
- **Blacksburg, Virginia.** Home of Virginia Polytechnic Institute and State University ("Virginia Tech,") Blacksburg is another mountain city and college town that is an economic hub for a broader region. Virginia Tech has enrollment of about 28,000, while Blacksburg has a total population base of 40,000. While development of Virginia Tech's R&D park has been slow, the area has attracted a concentration of engineering firms and services due to the presence of the university. Blacksburg has also become an attractive retirement location, with significant lifestyle amenities appealing to retirees. Major private employers include hospitals and health care providers, as well as several manufacturing firms. Like in Morgantown, Blacksburg's manufacturing base increased at the same time that national and regional manufacturers were cutting jobs.
- **Ithaca, New York.** Cornell University dominates the cultural and economic life of Ithaca, another small city (with a population of 30,000) hemmed into mountainous terrain in the Appalachian range. Ithaca's hills are so steep that a second downtown district has established itself at the top of the hill near the university. Great and beautiful gorges push clean water through falls on Cornell's campus. Ithaca is located at the northern end of the gas boom that is impacting on the region south to Morgantown. Other than the universities (Cornell and Ithaca College) and the booming gas industry, Ithaca's economy is driven by manufacturing, high tech services, and tourism.
- **State College, Pennsylvania.** As home to a major state university (Penn State), State College's economic base is heavily influenced by the university. Health care also plays a critical role in the local economy, along with hospitality, retail, and government. Raytheon has a major presence in the area, with its Intelligence and Information Systems R&D division

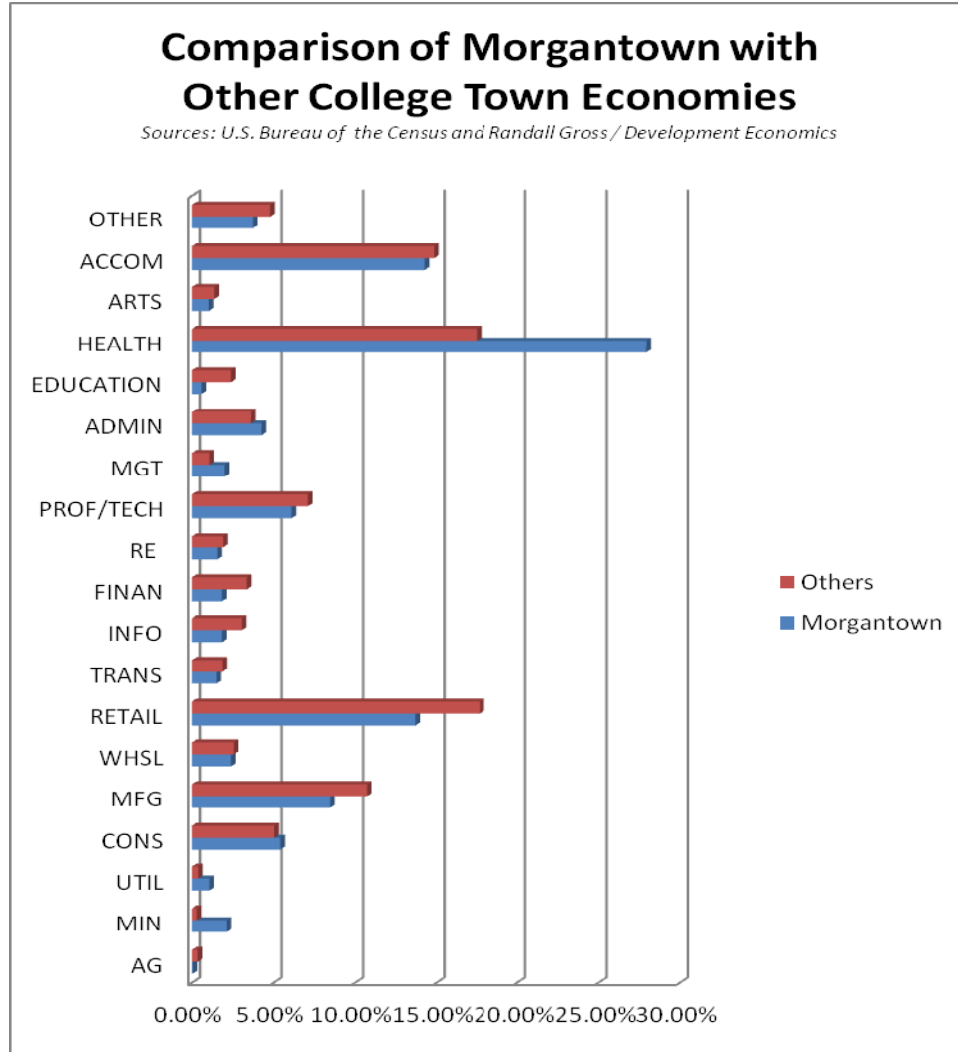
located there. Forbes Magazine has listed State College as one of the 10 best small metros to start a career or business, due in part to the presence of major research and development activity in the area.

### **College Town Economies**

An analysis was conducted to assess the industry mix in the selected college towns (and surrounding counties), and compare these economies with that of Morgantown / Monongalia County. As shown below, there is a fair degree of correlation between Morgantown and other college towns, in terms of the local industry mix.



The analysis suggests that Morgantown/Monongalia County has an industry mix consistent with other college towns in the region, with strikingly similar economic patterns. Where Morgantown stands out as somewhat unique among these communities is in the share of local employment in health and social services. Nearly 28% of Morgantown's employment base is concentrated in health services, compared with 21% in Asheville, 18% in Ithaca, 16% in State College, and 15% in Blacksburg. Not-surprisingly, Morgantown also exceeds the norm for these towns in terms of mining and utility employment. On the other hand, Morgantown-Monongalia County has a relatively small share of its economic base in finance, information services, retail trade, and manufacturing. An industry-by-industry comparison follows.



## KEY ECONOMIC DEVELOPMENT OPPORTUNITIES

Based on the various analyses and inputs, several key economic development opportunities are identified as a basis for further planning and land use assessment. A key finding is the opportunity to utilize the region's strengths to enhance lifestyle-driven economic opportunities. The U.S. Department of Agriculture studied factors that contribute to the success of small cities and rural economies, and determined that amenity value is key to the prosperity of certain regions.

The presence of a college or university, as well as natural amenities like oceans, lakes and/or mountains, helped secure the economic future of some towns located outside of major metropolitan regions. Morgantown is lucky to provide access to both a major university as well as stunning natural amenities. Further, the city and Monongalia County offer easy interstate access to major metros including Pittsburgh and Washington, DC. Industries that often thrive in such high-amenity, education-rich regions include those that employ young



people attracted to recreation and leisure activities, such as those who work in software development, arts & entertainment, tourism, and health services. College towns like Morgantown are also attractive retirement destinations, again due to the lifestyle amenities, further contributing to the growth of such industries as health care, real estate, leisure and recreation services.

- **Bio-Technology.** Synergies exist between the university's R&D efforts, Mylan Pharmaceuticals, the large local health care community, and the large concentration of biometric and identify management expertise in the I-79 Corridor. The State and local governments are already heavily invested in marketing the region for growing bio-tech industries.
- **Information Technologies.** In addition to bio-information management, Morgantown has room to grow as a broader hub for information technology management and software development. The analysis of IT concentrations in comparable college towns found that Morgantown has scope for further development of this industry. The region also has a fairly high concentration of electronics-related manufacturing, which could be developed further into a sustainable industry cluster.
- **Arts, Entertainment and Recreation Services.** College towns are thriving centers for art and culture, and there are opportunities to build on WVU and the region's art and craft strengths to grow production and associated tourism. The region's competitive advantages for recreation translate into some existing destination recreation retail and services, but again there is room to expand the depth and breadth of this sector. Communities like Rock Hill, South Carolina are developing their strengths as amateur sports capitals by pro-actively attracting or building facilities like velodromes and specialized training facilities. There are opportunities for Morgantown and Monongalia County to strengthen the supply chain and asset base to enlarge the recreation industry "cluster." Such an industry cluster can include the broad range of producers, suppliers, and services such as:
  - Outfitters, tour companies, eco-tourism agencies
  - Outdoor recreation associations and organizations
  - Specialized recreation facilities (e.g., mountain bike trails, etc)
  - Training facilities and services
  - Corporate team building companies, facilities, agents
  - Outdoor recreation wholesale and destination retail supply, especially web-based services and suppliers
  - Outdoor recreation equipment manufacturing, product development, testing
  - Recreation-based family entertainment
- **Energy Support Services.** Growth in the oil, gas, and alternative energy sectors has driven demand for various suppliers and services to mining

companies, environmental and engineering consulting, and marketing & management services for energy companies. Monongalia County is not the coal mining capital of West Virginia, but it is well-located to take advantage of growth in the broader region's natural gas industry.

- **Specialized Health Services, Leisure & Health Tourism, and Accommodation Services.** In addition to recreation tourism, there are opportunities for further development of retirement, leisure and health-related tourism. Asheville has been successful as a tourism hub in part by attracting young artists as well as retired professionals and Charlotte day-trippers to the scenic beauty and healthy environment of the city. Morgantown's strength as a medical and health-care hub can be developed further to attract "in-flow" from major metropolitan areas in the region, such as Pittsburgh and Washington, DC.
- **Sustainable Energy Technologies.** The region has a role to play in research and development of new and sustainable energy technologies, with synergies between WVU's activities and the region's growing energy production.
- **Food & Beverage Production.** There are opportunities to expand the region's existing manufacturing base with more specialized food and beverage manufacturing. West Virginia has a strong association with the natural environment and Morgantown is well-placed, as a college town, to test new beverages and foods for a health-conscious market. The area already has a concentration in this industry and competitive advantages, such as central location for distribution to regional markets.

## **Summary**

This report is meant not as a full-scale assessment of target industrial potentials, but rather a framework for discussion of economic development strengths and opportunities, as input to the community's vision and comprehensive planning process. The Morgantown area has many competitive advantages that have helped its economy grow even during a period of national and international financial crisis and economic stagnation. As home to the state university, Morgantown is a "college town" in the sense that the university has a major impact on the local economic base and insulates the community somewhat from the ebb and flow of economic cycles.

The area has a high concentration of real estate, management services, health care, and accommodation services. Within these broad sectors, several specific industries are highly concentrated in the area, including pharmaceuticals, engineering, scientific consulting, hospitals, beverage manufacturing and a few others. The local industry mix mirrors that of comparable college towns in the region, expect that Morgantown has a much higher proportion of health care-



related jobs than do the other cities. Overall, key opportunities were identified in bio-tech and other information technologies; arts, entertainment, and recreation services and associated retail; energy support services; specialized health services; leisure & health tourism; sustainable energy technology; and food & beverage production.

**Morgantown Area**

**BASELINE ECONOMIC CONDITIONS**

*Comprehensive Plan for the City of Morgantown, Comprehensive Plan for the Town of Star City and Long Range Transportation Plan for the Morgantown Monongalia Regional Planning Organization*



Prepared March 18, 2012  
For American Communities Partnership, Ltd. (ACP)

**By Randall Gross / Development Economics**

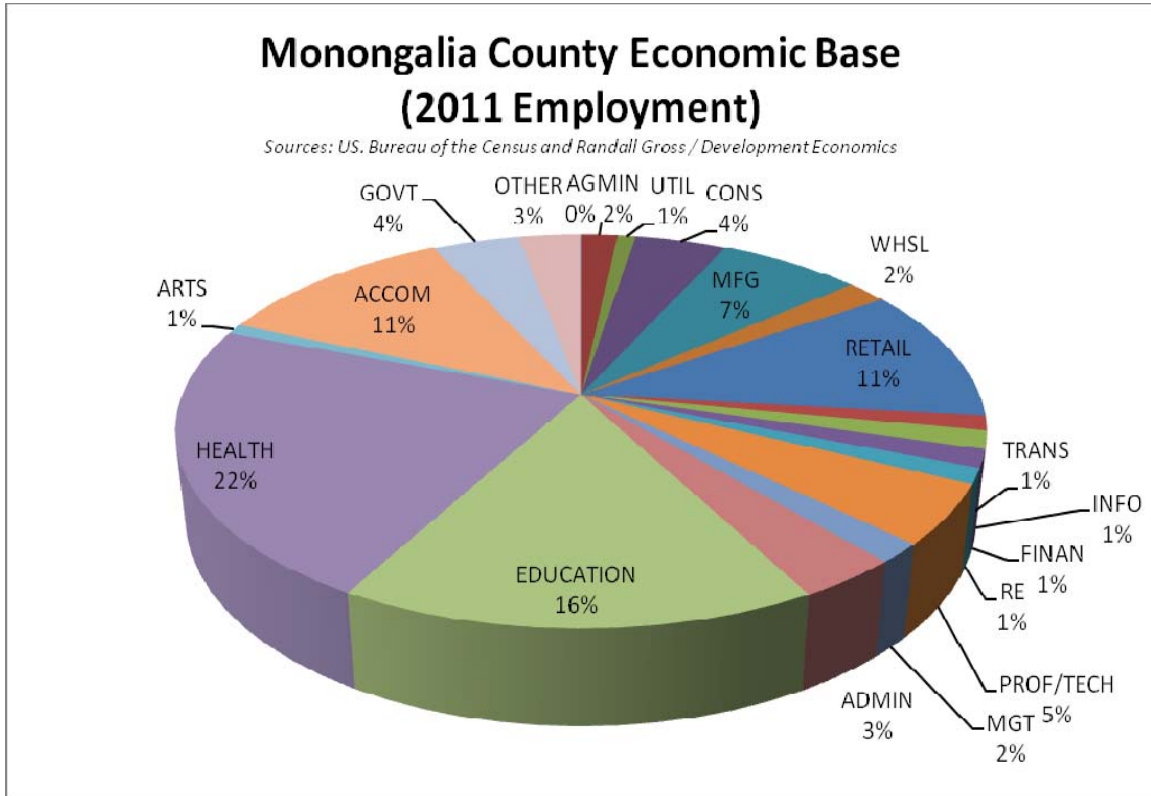
## **INTRODUCTION**

This report provides an overview of existing economic conditions within the Morgantown area, as input to a Comprehensive Plan and Long-Range Transportation Plan. Field reconnaissance was conducted to assess existing economic conditions and to collect data and information from various local sources. Based on this information, and on a review of data from the U.S. Bureau of the Census, Bureau of Labor Statistics, West Virginia University, and other sources, a preliminary assessment was prepared to summarize economic conditions. In addition, a survey was conducted of area businesses to collect information on existing business conditions and key issues impacting on business operations. The response rate for this survey was low, so interviews were also conducted with individual businesses to help bolster the results. Key findings from these surveys and assessments are provided below as one input to the discussion of the local economy.

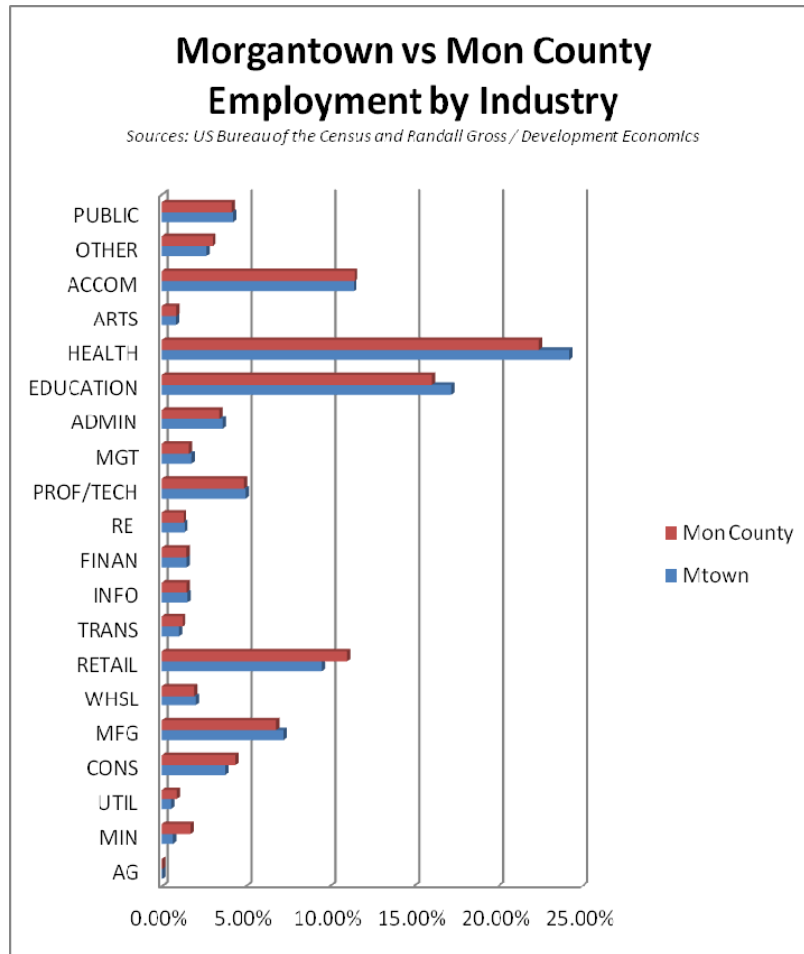
## **ECONOMIC BASE OVERVIEW**

Morgantown is located within Monongalia County and is part of the Morgantown Metropolitan Statistical Area (MSA), which includes Monongalia and Preston counties. The Monongalia County economy is driven by health and education resources, which are concentrated there. West Virginia University (WVU), along with major hospitals and related health and social services, together generate almost 40% of the county's 51,725 jobs (in 2011).

Also important to the local economy are retail and accommodation services (each with 11% of Monongalia employment). Accommodation services include lodging as well as eating and drinking places. To some extent, the accommodation, retail and foodservice industries are dependent on sales generated by WVU, its faculty, staff, students, and visitors. Other important industries in the county include manufacturing (7%), professional & technical services (5%), and construction (4%). The public sector, including local, state and federal government agencies (excluding WVU, which is included in education), accounts for about 4% of total employment in the county.



More than 90% of the county's employment base is located within Morgantown. Less than 1% (about 440) of the county's jobs are located within Star City. The Star City economic base is oriented to retail and restaurants, real estate, manufacturing, local government and other services. Morgantown's economy closely mirrors that of the county as a whole. A slightly higher share of Morgantown employment is in education, health care, and manufacturing than in the county. Meanwhile, Morgantown has a slightly lower share of employment in retail, construction, utilities, and mining.



**Major Employers**

West Virginia University (WVU) employed 6,500 people in 2011, according to Census records, making it the largest single employer in the area. WVU Hospital employed another 4,050 people, not including 1,450 working for WVU Medical Corporation and another 140 in WVU Hospital Management. So, between its education and health care resources, WVU employed more than 12,000 people or almost one-fourth of all local workers in 2011. These numbers do not include people employed by the WVU Foundation, WVU Research Corporation, and other university-affiliated entities. Other key health care and education employers included Monongalia General Hospital, Valley Comprehensive Mental Health, Monongalia Board of Education, and West Virginia Rehabilitation Hospital.

**Manufacturing.** Mylan Pharmaceuticals (a subsidiary of Mylan, Inc.) is based in Morgantown. The company manufactures, markets and distributes generic pharmaceutical products and also conducts research & development (R&D) at its Morgantown facilities. The company employed about 2,530 people in its manufacturing arm and another 280 in wholesale distribution in 2011, making it the top private employer in Monongalia County. The much smaller Swanson

Plating Company, with just over 200 employees, is the second-largest manufacturing company in the area. As such, Mylan dominates local manufacturing employment.

**Mining & Construction.** While mining is not a major direct employer like it is in other parts of West Virginia, Monongalia County is home to companies servicing the mining, quarrying, oil and gas industries throughout the broader West Virginia / western Pennsylvania area. Tulsa-based Tunnel Ridge employs about 160 people in the area. Coastal Drilling and North American Drillers, both based in Mt. Morris, PA together employ about 260 people in Monongalia County. Construction companies like Kvaerner N.A. and March-Westin are also major employers in the area.

**Government.** In addition to local and state government functions, The U.S. Department of Energy employs more than 300 at its National Energy Technology Laboratory, while the Department of Agriculture employs about 100 people at the Natural Resources Conservation Service (NRCS) and other offices in Morgantown. The U.S. Centers for Disease Control (CDC) employs more than 340 at its Morgantown facilities, including the Health Effects Laboratory Division (HELD), Division of Safety Research (DSR), and Division of Respiratory Disease Studies (DRDS).

**Other.** Other sample private employers in the county include United Biosource Corporation (140+ in data processing), Gabriel Brothers (330+ in warehouse/corporate office), Urgent Care MSO (190+), Washington Group (180+), West Virginia's Choice (200+), Allegheny Power (180+ at power station), and others. Teletech Customer Care Management employs nearly 800 in telemarketing, making it the second largest private employer in the county. Waterfront Place Hotel is a major employer in the accommodation sector, with nearly 250 workers. Various retail and restaurant companies also employ hundreds at large stores like Wal-Mart, Kmart, Lowe's and others in the region.

## **Employment Trends**

Monongalia County added about 12,600 jobs between 1998 and 2011, yielding a growth rate of 43.6% (or about **3.35%** per annum). This growth far surpassed the state's employment growth rate of **0.4%** per annum during this period. In fact, the Morgantown area has become a major growth node for the state of West Virginia. The most recent data suggest that the job growth in the Morgantown Metro Area has exceeded the rate of job creation at the national level.

**Growth Sectors.** Growth has not been concentrated in any one industry but has been spread throughout a large swath of the local economy. Growth rates in seven major industries exceeded the average for the county as a whole. The fastest growth was experienced in professional, scientific and technical



services, which saw an increase in employment of nearly 160% between 1998 and 2011. The presence of a large pharmaceutical company, together with research at WVU and government facilities like the National Energy Technology Laboratory and the Centers for Disease Control, have no doubt contributed to spin-off growth in the region's professional, scientific and technical jobs base.



Employment in transportation and warehousing also increased rapidly since 1998 (at 131.5%), as did employment in the construction sector (104.4%). Further diversifying the local economic and cultural base, employment in the arts, entertainment, and recreation industries increased by more than 80% during the 13-year period. Accommodation and food service employment also increased rapidly (64%), suggesting not only a need to meet growth in local demand (generated in part by population growth of more than 17% since 2000), but also to serve a growing travel and tourism industry. Growth in administrative services (which includes companies like Teletech and Action Facilities Management as well as other business service and waste management concerns) was also rapid at 63.4%.

Perhaps most interesting is the county's 68.4% growth in *manufacturing* employment since 1998. Given that the United States as a whole lost 5.3 million manufacturing jobs or nearly 46% of the manufacturing workforce between 1998 and 2009, Monongalia County is exceptional in its growth. Certainly the fact that large companies like Mylan Pharmaceutical have added significant workforce in Morgantown counter-balances declines in other manufacturing industries. Overall, Monongalia County manufacturing employment increased since 1998 in several industries, including food, chemicals (e.g., Mylan), non-metallic minerals, computers & electronics, furniture, and fabricated metal products (although down from 2009). At the same time, employment in several manufacturing industries has declined or disappeared, including jobs in textile mills, petroleum/coal, plastics, and transportation equipment. Employment in local machinery production has been slowly declining for the past 13 years. Other manufacturing has generally remained stable. Thus, the industry represents a "mixed-bag" in terms of employment growth, with a decline in more labor-intensive "heavy" industry but growth in some light manufacturing sectors. Overall, growth in Monongalia County manufacturing has far exceeded the national norm.

**Declining Sectors.** In addition to the several manufacturing industries that have seen declining employment, the county has also lost jobs in several

primary sectors. Forestry, fishing, hunting and agriculture employment has declined, but Monongalia County had less than 100 full-time jobs in this sector even in 1998. Mining, a mainstay industry for West Virginia, saw declining employment locally until 2006. However, since 2006, the industry has seen a rebound, due in part to increased drilling and related services in the natural gas arena.

Recent data suggest that the development of Marcellus shale gas fields in the region have contributed to a sudden uptick in mining employment. From 1<sup>st</sup> Quarter 2010 to 1<sup>st</sup> Quarter 2011, mining employment increased by more than 20% in the Morgantown MSA, or about twice the rate of growth seen nationally.<sup>1</sup>

- Forestry, Fishing, Hunting, Agriculture -73.1%
- Mining -36.1%
  - But increased between 2006 and 2011 by 25.9%
- Management Services -25.2%
  - But increased between 2006 and 2011 by 29.1%

Similarly, the county lost management services jobs between 1998 and 2006, but has seen a turnaround since that time. Thus, despite the national recession, Monongalia County was able to generate a net increase in the jobs base and to reverse the downward trend in several key industries. Overall employment trends by industry are summarized in Appendix Table A-1.

## **Labor Force and Unemployment**

According to the U.S. Bureau of Labor Statistics (BLS), the Morgantown MSA had a total civilian labor force of 63,900, with 3,500 unemployed as of December 2011. The metro area unemployment rate of 5.5%, though higher than the 3.2% rate recorded in 1<sup>st</sup> Quarter 2008, was still well below both the state (7.8%) and national (8.3%) averages. In fact, the Morgantown MSA had the 36<sup>th</sup> lowest unemployment rate of 372 metropolitan areas nationwide and 9<sup>th</sup> lowest among metro areas in the South. While housing markets have fallen precipitously around the country, Morgantown housing prices have generally held steady through the recession. The area's relatively stable economic performance no doubt reflects the strength of its core employment in education and health care, along with the dominance of a large and growing locally-based pharmaceutical company. The re-birth of the mining industry has no doubt contributed to an even faster local recovery from the 2008-2009 recession.

## **REGIONAL ASSETS**

It is not surprising that *Forbes Magazine* ranks the Morgantown area as one of "America's Best Small Cities for Business and Careers." Morgantown, Star

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<sup>1</sup> *Morgantown MSA Economic Monitor*, June 2011. West Virginia University Research Corporation.



City and Monongalia County have a wealth of assets on which to build a strong economic base. As the home of West Virginia University (WVU), Morgantown is the premier center for higher education in the state. The university brings not only highly-regarded resources for higher education but also cultural activities, research, healthcare, and vibrant student life. The contributions of the university and its 30,000 students to the region's socio-economic and cultural well-being are substantial.

WVU Healthcare operates WVU Hospitals - a 531-bed tertiary care center - and provides various health services for the region. WVU Hospitals includes Ruby Memorial Hospital, WVU Children's Hospital, John Michael Moore Trauma Center, and Chestnut Ridge Hospital in Morgantown. Monongalia General Hospital, West Virginia Rehabilitation Hospital, and other health care facilities are also important assets and resources for the region.

Morgantown's location near the intersection of Interstate 79 and Interstate 68 provides exceptional access to points north, south, and east. I-79 links Morgantown north to Pittsburgh, one of the nation's largest metropolitan areas and a major industrial hub, less than 1½ hours away. I-79 continues north to Erie, with direct connections east and west throughout the Great Lakes region. I-79 also links Morgantown south to Charleston and further links east and west. This highway is known as West Virginia's "High Tech Corridor," because of the presence of WVU, federal laboratories, and several corporate R&D facilities. Interstate 68 connects Morgantown to Cumberland, Maryland and provides direct access to points further east including Washington, DC and Baltimore. Since completion of this highway in 1991, travel time from Morgantown to Washington has been cut to less than four hours.

The region's natural setting is also a significant asset, providing a backdrop for the recreation and high-quality living for which West Virginia is well-known. In particular, the area's topography adds a visually-stunning setting for the community, its residential neighborhoods, institutions, and businesses. The Monongahela River, Coopers Rock State Forest, Dorsey Knob, and 1,730-acre Cheat Lake offer scenic beauty and recreation opportunities including Edgewater Marina, Lakeside Marina, and Sunset Beach Marina.

Downtown Morgantown and surrounding neighborhoods offer substantial historic assets and walk-able streets for dining and shopping, people-watching, and festive activities. The Monongalia Arts Center, Metropolitan Theatre, Riverfront Park, and other assets help enliven downtown. Other area attractions include Core Arboretum and WVU sports venues (Mountaineer Field, WVU Coliseum). Morgantown is also known for its Personal Rapid Transit (PRT) system, established as a public transit experiment by the U.S. Department of Transportation in 1975. Few cities of Morgantown's size have a transit system like the PRT, which efficiently moves thousands of people each year between WVU, downtown and other locations.

## **ECONOMIC DEVELOPMENT RESOURCES**

While there is no agency within Morgantown City government which is focused on economic development, there are various organizations and entities involved in economic development throughout Monongalia County and the region. Several of the key economic development agents are described below.

### **Morgantown Area Economic Partnership (MAP) and Monongalia County Development Authority (MCDA)**

The Morgantown Area Economic Partnership (MAP) operates as a non-profit, public-private partnership for economic development in Monongalia and Preston counties. MAP includes representation from local governments, the counties' respective economic development authorities, the Morgantown Area Chamber of Commerce, WVU, and various local businesses, financial institutions and utility companies. The Monongalia County Development Authority (MCDA) was established to "promote, develop, and advance the business prosperity and economic welfare of Monongalia County." MAP and MCDA collaborate on providing business assistance to new and existing businesses, in the form of capital financing, employee recruitment, training, tax incentives, trade, buildings and sites, and community and economic data.

MAP and MCDA regularly update their vision, mission, core goals, and objectives through annual work plans. The core goals of the *2012 Work Plan* are as follows:

1. Retain and expand existing businesses.
2. Recruit new businesses and investments.
3. Stimulate and support small business and entrepreneurial activity.
4. Improve the local, regional, and state business environment and increase the capacity to support economic growth and community development.

New or short-term initiatives set forth in this plan include collaboration with the City of Morgantown on a new business park on the east side of Morgantown Airport; extend Chaplin Hill Business Park Drive to open new parcels for development; update MAP's website and marketing materials; and take advantage of several "special opportunities." Longer-term initiatives focus on:

- Work with the Morgantown Metropolitan Planning Organization (MPO) to improve transportation facilities and services in the area;
- Construct a light manufacturing business incubator;

- Market the area for business recruitment and market its own services to assist local businesses;
- Continue to operate the 14,000 square-foot Morgantown Enterprise Center (MEC);
- Coordinate with other economic development agencies and efforts;
- Monitor environmental issues like air quality that impact on economic development;
- Continue to participate in regional micro loan (<\$50,000) program;
- Continue to maintain and update community profiles;
- Apply for and secure WV Local Economic Development Matching Grant;
- Apply to renew Monongalia County's Certified Development Community Status; and
- Continue to inform the public about MAP's and MCDA's activities

### **Morgantown Area Chamber of Commerce and Greater Morgantown Convention & Visitors Bureau**

The Morgantown Area Chamber of Commerce is active in representing and supporting local business development. The Chamber has worked through Vision 2020, a volunteer organization of community leaders that supports efforts to solve problems and capture opportunities at the local level. The Greater Morgantown Convention and Visitors Bureau (CVB) helps support and promote the region's meeting and tourism base. Waterfront Place Hotel and the Morgantown Event Center provide rooms and 30,000 square feet of meeting space to accommodate intermediate-level conventions and trade shows. Overall, the area offers about 2,000 hotel rooms in support of business and tourism.

### **Main Street Morgantown**

Main Street Morgantown (MSM) actively works to support the revitalization and continued success of downtown Morgantown and the Wharf District. MSM states that, since its founding in 1984, the organization has helped spur the creation of 1,300 new jobs, open 200 new businesses, and attract \$126 million in investments through its historic preservation and economic development efforts.

### **West Virginia University**

West Virginia University also plays an active role in regional and state economic development. The WVU Bureau of Business and Economic Research (BBER) provides regular updates on the region's and state's economy, sponsors conferences, and produces research on the region's economic outlook and opportunities within specific sectors. Within the Office of the Provost, the WVU Research Office has set as its goal to "...broaden its impact on the economies of West Virginia and the United States." The 5,000 square-foot West Virginia University Small Business Development Center (SBDC) "promotes economic

development by supporting entrepreneurs, advancing entrepreneurial activities, and nurturing early-stage businesses with space, facilities, and support services.”

### **I-79 Development Council**

The I-79 Development Council focuses on promoting the I-79 High Tech Corridor. The council’s Executive Committee is comprised of representatives of WVU Office of Economic Development, banks, colleges, development authorities, and businesses. The Council is staffed to provide business assistance (focused on finance, tax credits, transportation and utilities), workforce development, information on available properties, and information on the area’s technology resources. The council has a particular focus on promoting the area’s concentration of biometrics, aerospace, and forensics technologies. The council developed the West Virginia Biometrics Initiative (WVBI), which is particularly focused on growing the region’s biometrics and identity management economy.

### **Region VI Workforce Investment Board (WIB)**

The Region VI Workforce Investment Board (WIB) operates as a non-profit organization under direction of the Governor’s Workforce Investment Division. WIB is responsible for local implementation of the 1998 Workforce Investment Act, which aims to improve the quality of the workforce, reduce welfare dependency, and enhance productivity and competitiveness through various workforce training and investment activities.

## **BUSINESS SURVEY**

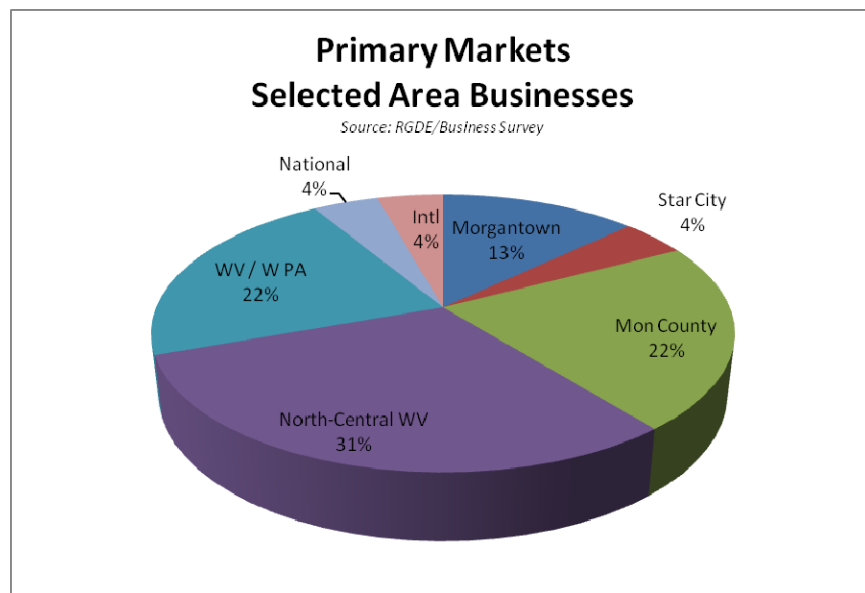
General business conditions were assessed based on the findings of an online survey as well as interviews with individual businesses. The online survey was publicized through the Chamber of Commerce and local leadership. Unfortunately, the response rate was relatively low and the results of the survey therefore cannot be held as representative of the overall business base. Even so, the results of the survey, coupled with data collected through individual interviews, can provide some general indicators of existing business conditions, opinions and needs as input to the planning process.

### **Business Characteristics**

The survey and interviews yielded about 25 responses, which is insufficient to provide a representative sample of the region’s business base but can provide input on indicative trends. The respondents included a relatively diverse mix of businesses and institutions, including professional & technical services; finance, insurance and real estate (FIRE); manufacturing; management; construction; education; arts, entertainment & recreation services, and other business services.

More than two-thirds of the responding businesses or institutions are based in the Morgantown area, and the businesses have been operating an average of more than 10 years. About 62% rent their facilities, with only 38% who own. The businesses employ an average of 34 people, but range in size from one to 150 employees.

Almost one-third of the businesses stated as their primary market the north-central West Virginia region. Another 22% said that Monongahela County alone is their primary market base. Similarly another 22% said that West Virginia and western Pennsylvania together form their market base. Only about 13% of the businesses depend primarily on Morgantown for their sales.



On average, businesses attributed 20% of their sales to West Virginia University contracts, student or staff expenditures. However, dependence on WVU ranged from none to 100%. In general, most of the responding businesses were not dependent on WVU for their sales, with 55% having 10% or less of their sales generated by WVU, its faculty, students or staff.

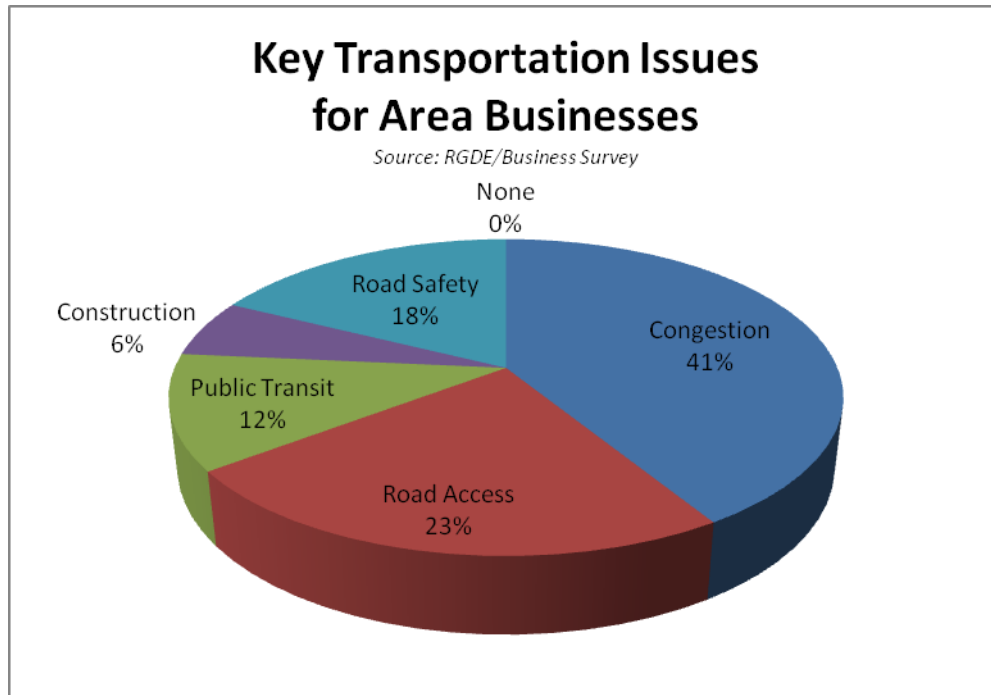
About 75% of businesses' space is in office use, using an average 11,000 square feet. About 30% of the responding businesses had seen recent expansions, and 54% plan new expansions over the next several years. These expansions are expected to add an average of about nine employees for each expanding business.

The reason that many businesses located where they are was due to visibility and access to their market base. The primary comparative advantages of the businesses' location were stated as:

- Location/Market Access
- Available Building Space or Site
- Near the Owner's Home

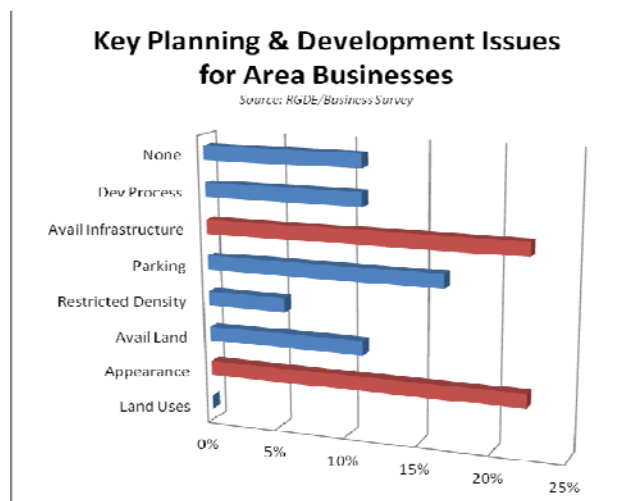
The primary disadvantages of a Morgantown-area location were stated as:

- High Real Estate Costs
- High Taxes



Businesses were also asked specifically about transportation and development issues. The key transportation issues for area businesses are dominated by traffic congestion (41% of responses), followed by road accessibility (23%), and road safety (18%).

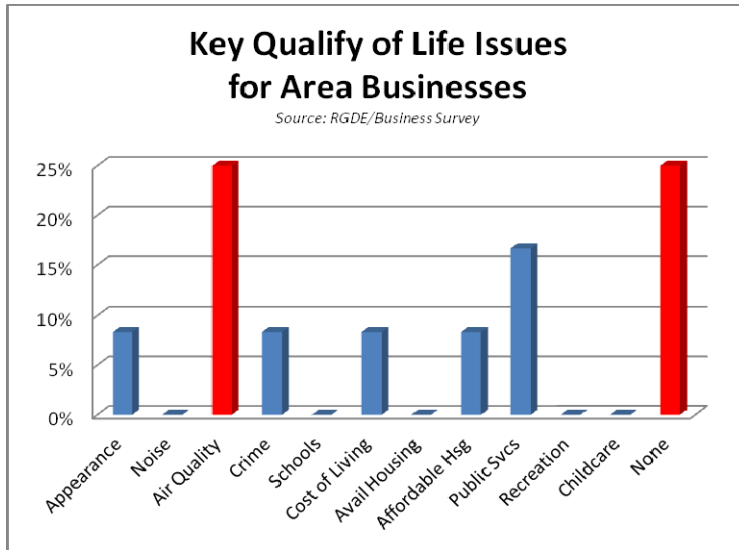
The key planning and development issues include visual appearance (of buildings, streetscape, etc) and the availability of developable land and infrastructure. Not surprisingly, the issues related to the type of business their needs. For example, manufacturing businesses



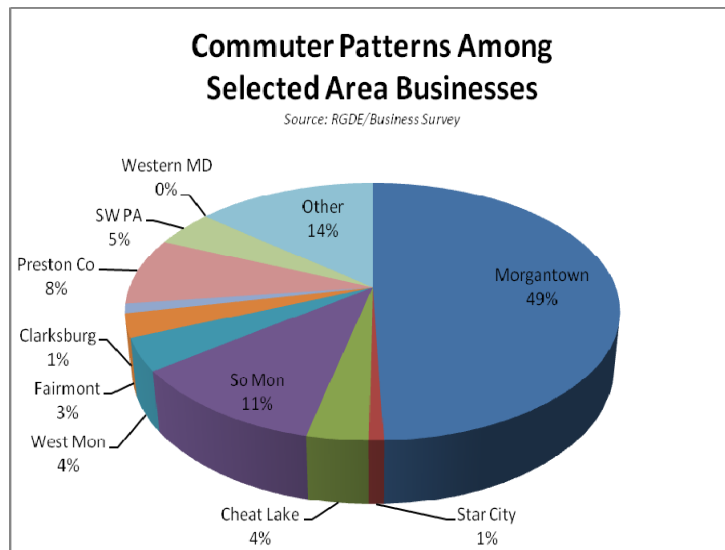


appeared to be concerned most with land and infrastructure, while retail and service businesses were concerned more with parking. Appearance, however, cut across several types of businesses. Tourism-oriented companies were particularly concerned about appearance and about the lack of regulation (or enforcement) in some areas.

While about 25% of the businesses did not identify any serious quality of life issues affecting their operations, a surprisingly large number identified air quality as a serious issue. It is not clear whether the air quality issues are related to the region's industry, vehicular traffic, or geography. Pollution may be trapped in mountain valleys, contributing to poor air quality in the region. The lower quality of public services was also identified as a key quality-of-life issue.



Businesses were asked about their employees' commuting patterns. Based on the information supplied by the respondents, there is the indication that about 1/2 of workers commute to work from within Morgantown. Another 11% commute from southern Monongahela County and 8% from Preston County. At least 5% commute from western Pennsylvania.



Among residents, the Census Bureau reports that, between 2005 and 2009 on average, 87.2% of Monongalia County workers commuted within the county, 7.2% worked in other West Virginia counties and 5.6% commuted to another state.

## **Business Needs**

Area business needs were also assessed through the survey and interviews with businesses. Needs were defined in the context of how local government might help address some of the key issues identified above. Businesses in general identified a need to address infrastructure issues, particularly road conditions. Some businesses complained about the impact of coal trucks on road conditions as well as on air quality and noise pollution. Overall, traffic congestion was identified as a serious and growing problem that local government needed to help address.

Aside from roads, businesses also saw a general need to “formulate a new tax structure” that would help improve the business climate and also help support infrastructure upgrading. There were issues in particular identified with the B&O tax structure. Finally, businesses saw a need for local government to help improve the physical appearance of buildings through better enforcement, licensing, and other tools. The appearance issue seems most pronounced as it impacts on the region’s tourism industry.

## **Employment Needs**

Businesses generally listed as one of the advantages of the area its skilled workforce. That being said, surveys conducted by the 13-county Region VI WIB suggest that there remains a dearth of skilled workers and professionals with higher-level degrees. Education levels in the north-central West Virginia region have been increasing, with the share of adults having completed some college increasing from 11.3% in 1990 to 14.7% by 2003. Those with a Bachelor’s degree increased from 7.1% to 8.5%, while those with a Graduate degree increased from 4.7% to 5.5% during the same period. Those residents with higher degrees tend to be concentrated in Morgantown and surrounding Monongalia County. Region VI WIB included 29 approved training provider organizations, offering a total of 135 courses of study for associate degrees, industry certifications, or apprenticeships as of 2007. There were about 350 Region VI students enrolled in training programs focused on truck driving, computer technologies, trades, administration, personal services, and miscellaneous professions.

Region VI WIB responded to the need for up to 3,730 jobs over five years (through 2012) based on projected employment opportunities in healthcare, information technologies, customer service, hospitality and food services, education and government. These projections did not foresee the economic recession of 2008-2009, but are generally consistent with the growth trends since 2007. Almost one-third of the identified employment needs were identified in healthcare, including caregivers, related support occupations, and health care facility staffing. Most of the jobs identified through workforce projections require



at least a high school diploma, although some of these jobs will require at least a Masters degree.

### **Regulatory Environment**

Some of the businesses that participated in the survey or were interviewed seemed to suggest that the lack of enforcement of existing regulations was an issue. In particular, representatives of many businesses complained about the appearance of buildings and streets in the Morgantown area. Zoning and land use issues were not identified as a priority concern among businesses.

The broader development issues identified by business and the real estate community relate to the cost of development due to the lack of available “developable” land. The extreme topographical conditions within much of the study area have resulted in higher development costs while demand has increased the price for land, thus reducing opportunities in particular, for industrial development.

## **STRENGTHS & CHALLENGES**

The baseline assessment provides a framework for discussion of key strengths and challenges in the local economic base. Several key observations with respect to strengths and challenges are discussed below.

### **Strengths**

Certainly a key strength of the Morgantown area economy is the presence of West Virginia University, which provides stability, attracts the “best and brightest” from the state and beyond, and invests in innovation that attracts entrepreneurial activity. The concentration of highly-skilled and educated professionals in the Morgantown area is fairly unique within the state and even within the 13-county workforce region. As such, the Morgantown area attracts industry in need of such skills. The university is pro-active in establishing and encouraging entrepreneurship through its various incubators, R&D park and other programs which help strengthen the region’s base for economic development. WVU is also an anchor for marketing the region’s I-79 High Tech Corridor, which also includes federal government research facilities and innovative private companies like Mylan Pharmaceuticals. The clustering of these activities does provide the region with a solid base for recruiting technology companies.

Morgantown’s strategic location just 1½ hours south of Pittsburgh, accessible north and south by I-79 and east by I-68, also provides a competitive advantage for economic growth. Morgantown is part of an urban corridor linked closely with growing cities like Clarksburg and Fairmont in north-central West Virginia. The area also has access to natural resources, including shale

reserves for natural gas production throughout western Pennsylvania and northern West Virginia. The surrounding area also has unparalleled natural beauty and a strong reputation for outdoor sports and recreation that increasingly attracts sports enthusiasts and tourists from around the country. The natural beauty and available recreation assets in the region contribute to the quality of life that is attractive to young entrepreneurs and emerging technology companies.

### **Challenges**

While the area offers strengths, there are also challenges to its economic growth and development. Critical among these is the cost of development, which is driven up by a scarcity of developable land and lack of infrastructure. [The revised report will include a comparison of land and development costs, as well as discussion of the premiums on development within this region]. While the interstate system is effective in moving commuters from one part of the region to another, intra-city travel is challenging due to the antiquated road conditions. Traffic congestion is a serious complaint of business and residents alike. Winding mountain roads with steep drop-offs within an urban, inner-city context (especially in a heavy snowfall) contribute to the overall impression that driving is difficult within Morgantown. If not for the PRT and local bus transit, there would likely be even more serious road conditions. As the region continues to experience population and employment growth, the road network can help direct traffic more efficiently.

## APPENDIX

## Randall Gross / Development Economics

Table A-1. AT-PLACE EMPLOYMENT TRENDS, MONONGALIA COUNTY,  
1998-2011

Industry	1998	2006	2009	2011	1998-2011 Change	
					Number	Percent
Agriculture	60	60	25	16	(44)	-73.1%
<b>Mining</b>	<b>1,387</b>	<b>704</b>	<b>840</b>	<b>886</b>	<b>(501)</b>	<b>-36.1%</b>
Utilities	311	333	362	446	135	43.5%
<b>Construction</b>	<b>1,101</b>	<b>1,883</b>	<b>2,131</b>	<b>2,250</b>	<b>1,149</b>	<b>104.4%</b>
<b>Manufacturing</b>	<b>2,091</b>	<b>2,884</b>	<b>3,227</b>	<b>3,521</b>	<b>1,430</b>	<b>68.4%</b>
Wholesale trade	814	603	381	995	181	22.2%
Retail trade	4,825	5,827	6,289	5,694	869	18.0%
<b>Transport</b>	<b>270</b>	<b>306</b>	<b>417</b>	<b>625</b>	<b>355</b>	<b>131.5%</b>
Information	559	622	436	767	208	37.2%
Finance	750	997	847	765	15	2.0%
Real Estate	465	577	614	650	185	39.8%
<b>Prof, Tech Svcs</b>	<b>984</b>	<b>1,639</b>	<b>2,392</b>	<b>2,535</b>	<b>1,551</b>	<b>157.6%</b>
<b>Management Svcs</b>	<b>1,114</b>	<b>645</b>	<b>740</b>	<b>833</b>	<b>(281)</b>	<b>-25.2%</b>
<b>Admin Svcs</b>	<b>1,085</b>	<b>1,777</b>	<b>2,023</b>	<b>1,773</b>	<b>688</b>	<b>63.4%</b>
Education Svcs	184	375	261	246	62	33.7%
<b>Health Care</b>	<b>7,507</b>	<b>10,235</b>	<b>11,834</b>	<b>11,608</b>	<b>4,101</b>	<b>54.6%</b>
<b>Arts, Entertain, Rec</b>	<b>239</b>	<b>375</b>	<b>382</b>	<b>432</b>	<b>193</b>	<b>80.8%</b>
<b>Accomm, Foodsvc</b>	<b>3,614</b>	<b>4,587</b>	<b>5,271</b>	<b>5,927</b>	<b>2,313</b>	<b>64.0%</b>
Other svcs	1,491	1,394	1,502	1,540	49	3.3%
Not Classified	69	10	10	14	(55)	-79.8%
<b>TOTAL</b>	<b>28,921</b>	<b>35,830</b>	<b>39,982</b>	<b>41,523</b>	<b>12,602</b>	<b>43.6%</b>

Note: Some data estimated based on Census ranges. Totals may not add due to rounding.

Sources: U.S. Bureau of the Census and Randall Gross /  
Development Economics.