Regional Economic Competitiveness Assessment

Economic Forecast for The Regional Planning Commission of Greater Birmingham

3/18/2013

Forecasting the economic future and assessing the regional competitiveness of the Greater Birmingham region.
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Executive Summary

This report is prepared by Regional Economic Models, Inc. (REMI) on behalf of the Regional Planning Commission of Greater Birmingham. The purpose of the study is twofold – to produce a fundamental economic and demographic forecast for the six-county Greater Birmingham region, and to provide an assessment of the region's economic competitiveness. Primary indicators prepared in the forecast include employment, gross regional product, output, personal income, and population. Economic competitiveness is evaluated by comparing the current economic state of the region to its past and future potential, and by measuring against national benchmarks and comparable metropolitan regions. Thus this assessment effectively takes the form of both a times series and cross-sectional analysis.

This method of analysis gives the stakeholders of Greater Birmingham greater insight into their region. This improved understanding of their region then allows them to plan and prepare accordingly for the future. Regions now more than ever are facing strong economic headwinds from the nation’s capital, internal demography and technological innovation. To compete in the 21st century, regions must be intimately aware of their economic trajectories and their relation to other regions. By assessing internal industrial clustering patterns, demographic shifts, labor market dynamics, and other economic indicators, regions will be better equipped to plan for a robust future.

The structure of this report is a narrative of Greater Birmingham’s past, present, and predicted future. By integrating graphical forecasts and quantitative measures with qualitative analysis, the authors paint an economic and demographic picture of the region. The story told can then be used as an analytical tool for regional planning, as well as a holistic medium to better understand the Greater Birmingham region. This particular arrangement introduces readers to the region with a top-down analysis which summarizes the assessment and provides a general picture of the regional economy. From there the study pivots to regional fundamentals, assessing Birmingham’s demography, industrial base, and labor market to lay the groundwork for the structure of the economy. The structural explanation of the regional economy is then expanded using measures of economic competitiveness, such as business costs, self-sufficiency, national influence, and productivity. The assessment concludes by comparing Birmingham’s economy to similar regional economies in the United States.

Finally, the authors offer some general methods for producing economic growth housed within the REMI framework. These strategies are presented in light of Birmingham’s unique economy and demography, with the ultimate intention of assisting stakeholders in bridging the gap between analysis and application.
Methodology of Forecast and Assessment

The forecasting model employed for this study of the six-county Greater Birmingham area is known as the REMI model, a proprietary economic and demographic model produced by REMI. The REMI model includes four different quantitative methods in its structural framework: Computable General Equilibrium (CGE), Input-Output Tabulation (I/O), Econometric Estimation, and New Economic Geography.

Computable General Equilibrium provides the backbone of the REMI economic model. CGE modeling adds market-level concepts and the principles of equilibrium economics. These include markets for labor, as well as housing and consumer goods, composite inputs for firms, and market shares for local industries. CGE allows the economic system to be viewed in a more holistic and comprehensive manner.

Input-Output Tabulation looks for the transactions between industries and households in the economy. This includes the flow of goods from firm-to-firm through their supply chains, to final sales to households, and then wages paid and spent by individuals and families. The data for the table comes from the Bureau of Labor Statistics (BLS) and the theoretical foundation comes from work by Nobel laureate Wassily Leontief.

Econometric Estimation includes statistical parameters for behavioral patterns and responses inside of the economy. These include elasticities to price and wealth, the response of households and businesses to changes in prices and wages, and the “rate of adjustment” from a shock to a new stability inside of the economy. Econometric parameters are re-estimated on an annual basis to account for changes in macroeconomic response rates.

New Economic Geography includes concepts of agglomeration, labor pooling, and economies of scale to the model. Labor-intensive industries, such as healthcare or professional services, tend to cluster in urban centers with an educated labor force with specializations in their exact areas. The same is true on goods-producing industries, which tend to locate themselves near customers, input suppliers, transport hubs, and other “environmental” factors that help them lower their costs or increase productivity. Our model includes these concepts endogenously, adjusting for clusters by region.

The research behind the REMI model is public and reviewed in peer-reviewed journals. These publications include the Journal of Regional Science, the American Economic Review, and the Review of Economics and Statistics. REMI primarily uses data from public data sources when populating its national macroeconomic model. These sources include the Bureau of Labor Statistics, the Bureau of Economic Analysis, the U.S. Census Bureau, and the Energy Information Administration at the US Departments of Commerce and Energy. REMI relies on the Research Seminar in Quantitative Economics (RSQE) for its short-run cyclical forecast. The national forecast works with county-level data on local industry mixes, wages, and demography to give the model a customized-sub-national geography unique for regional macroeconomic forecasting and analysis.
The model includes a block structure, which represents different parts of the economy:

Each block has its own “perspective.” Block 1 is final demand and final production; it is the “macroeconomy” in terms of its total aggregates. That includes consumer spending, investment, net exports, government spending, and a subtraction for intermediate inputs in a local area. Block 2 is the business perspective on the economy, in which industries produce output. To do this, they need inputs (which include labor, capital, and fuel), but they will also try to minimize costs when adjusting for productivity. Block 3 is the household concept in REMI, which includes how consumers spend by region, how they choose to offer themselves on the labor force, and how intra-national migration changes a regional economy over time. Block 4 primarily relies on the CGE component of the model and includes market concepts. These markets include those for labor, housing, consumer goods, costs of living, and the cost of doing business in an area for firms. Block 5 measures competitiveness for a region on the domestic and international marketplace. This includes how “skilled” an area is at satisfying local demand with local production in its ability to keep imports out, and how well it satisfies external demand with local production by stimulating exports.
Regional Summary

Like many economies across the nation, the economy of Greater Birmingham is in a period of great flux. After experiencing strong growth led by housing and construction in the years preceding the “Great Recession,” the six-county region is now in the process of macroeconomic recovery. After reaching a historical high of $60 billion of gross regional product in 2007, the economy stumbled and by 2009 GRP had fallen to roughly $55.5 billion, levels not seen since 2003-2004. While 2012 GRP is estimated to be back at 2007 levels, years of greater-than-expected output will be needed to return the region back to its potential. Regional employment follows a similar path, peaking in 2007 with over 675,000 jobs. By 2010 the economy had returned to 2004-2005 employment levels at just under 637,000 jobs. REMI does not expect the region to return to 2007 levels until 2014. Again, years of growth will be needed to return employment back to its natural level in Birmingham.

Another major economic trend for the region lies in its demography. Population is crucial for a macroeconomy in that it provides both a source of output from the labor force and serves as a source of aggregate demand from household consumption, private investment, and government expenditure. Thus as population increases, so will aggregate demand and output, and vice versa. In the case of Greater Birmingham, population has increased steadily since 1990 and will continue to increase through 2040. The rate of this increase, however, is declining. In the early 1990s Birmingham added about 10,000 individuals a year. This rate has trended downward to about 7,000 individuals a year currently and will continue to decrease in the future. The cause of this phenomenon is driven primarily by the decreasing natural change in population, derived from birth and survival rates. Economically motivated migration is expected to go negative for over a decade in 2025, also putting downward pressure on regional population. In all, these demographic shifts have been and will continue to affect Greater Birmingham, negatively affecting aggregate demand in the region. The ultimate outcome is expected to decrease Birmingham’s share of national output, production and income.

Developments in industry and the labor market form the last major trend for the Greater Birmingham economy. With 13% of the region’s production and employment dependent upon manufacturing in 1990, the region has been harshly affected by the national decline in that sector. Shift share analysis shows that this sector’s decline has destroyed over 34,000 jobs in Birmingham since 1990. Growth in the healthcare and professional services sectors has combated this decline, however, by adding 23,000 and 12,000 jobs since 1990, respectively. Healthcare will continue to drive the economy, adding over 60,000 jobs by 2040. Professional services will continue to lead the economy, adding over 10,000 jobs by 2040, as will construction, contributing 9,500 jobs. Unfortunately, manufacturing is expected to lose an addition 16,000 jobs, while retail will subtract almost 33,000. The region has been and will continue to be a hub for utilities, construction, wholesale, finance, management and healthcare. Unique to Birmingham is its productive workforce in the healthcare, finance and transportation industries.
Macroeconomic Forecast for Greater Birmingham Region

Output, GDP, and Income

After a serious disruption during the Great Recession, the economy is rebounding.

Employment and Population, Thousands

Private non-farm employment will see strong growth, while population growth slows in future.
Similar to their aggregate counterparts, per capita income and gross domestic product are rebounding and poised for long-term growth. When accounting for the lower price of housing, real per capita income is even higher.

Consumption, investment, net exports and government expenditure form regional aggregate demand. Greater Birmingham is a consumption-based economy with positive net exports.
Regionally, Shelby and Jefferson County are forecasted to maintain higher per capita income. St. Clair County is forecasted to have the third highest per capita income by 2032 at around $57,000.

Most of the area’s personal income and employment are in Jefferson County. Personal income greater than employment generally indicates a household-based county, while employment greater than personal income indicates a work-based county. All counties but Jefferson are household-based, indicating commuting from these counties.
In Blount County, the second smallest in the region by all indicators, personal income exceeds production, indicating that individuals live in the county but work elsewhere.
Chilton County is the smallest county in the region, as measured by all indicators. Indicators imply that, in aggregate, residents work outside of the county.
Jefferson County is by far the largest county in the region as measured by all indicators. By incorporating data on the other counties, we can ascertain that employees commute into Jefferson for employment. Employment catching up to population indicates a centering of employment opportunity in Jefferson County.

GDP is expected to roughly double by 2040.
St. Clair County is the third in population and personal income, but the fourth in total employment. This indicates that, in aggregate, St. Clair residents work elsewhere. The spike in population in the late 2000s indicates that the county benefitted from the housing expansion of the previous decade.
The bump in output during the late 2000s indicates that Shelby County, the second largest county in the region by all indicators, was particularly affected by the housing boom and bust.
Walker County is the region’s third by employment and production, but fourth by population and income, eclipsed by St. Clair County in 2004-2005.
Demographic Integration

“Demographics is Destiny”

As accounted for in the REMI model, the demography of Greater Birmingham is an integral part of the regional economy. Demographics affect the amount and type of consumption and expenditure of residents, as well as provide a source of production inputs for business in terms of the labor supply. In the same vein, the economy of a region drives its demography. For example, if a region has high wages relative to the nation, individuals will be more likely to move into the region, observed as economically motivated in-migration and upward pressure on the population. Or, if a region has low employment opportunity individuals will be less likely to move into the region, observed as economically motivated out-migration and downward pressure on the population.

Greater Birmingham’s population has been growing steadily since 1990 and will continue to grow through 2040. This growth, however, is predicted to come at a slower annual rate. This change can be observed as the population curves bend slightly downward as time passes. The cause of this phenomenon is seen as the narrowing of the gap between the region’s starting and ending populations. As the gap narrows, we can ascertain that Birmingham is increasing its population annually at a lower rate. The effect of this phenomenon is a gradual decrease in Greater Birmingham’s share of the national population, as exhibited by the declining green curve above. This waning national demographic influence has significant effects on Greater Birmingham’s economy relative to the nation.
The total change in regional population is driven by natural changes and migratory changes. A steady decrease in the natural change indicates an aging population, which has implications for the labor force and government services. Migration is primarily driven by economic factors, such as the region’s relative employment opportunity and real relative wages. Greater Birmingham’s real relative wages have been and will continue to be above the national average, inducing upward pressure on economic migration. While employment opportunity is expected to decline, it will remain positive, inducing upward pressure on economic migration, albeit at a lesser rate.

Both relative employment opportunity and real relative wages are expected to remain above the national average for the foreseeable future. Thus, economic out-migration, as shown above, must be driven by another factor, such as the region’s access to a diverse range of consumer consumption commodities.
Labor, Industry, and Economic Competitiveness

The labor force is projected to continue its steady increase, helped in part by a higher labor force population and a higher participation rate. Specifically, the African American cohort will contribute through increasing participation and the Hispanic cohort through its high participation and growing population.

Participation is expected to buck the national trend with its steady increase, driven by employment opportunity and real relative wages.
Compensation and earnings are projected to recover and steadily increase through 2040, driven by growth in output and employment.

Average annual wages are also expected to recover from the Great Recession, contributing to the region’s higher real relative wages.
Note: Sales and administrative occupations not included

Strong growth is expected for high paying occupations such as management, financial, and healthcare professionals. Construction occupations are expected to recover as that industry and the housing market recovers.
As demonstrated in the graph above, Greater Birmingham will continue to increase its reliance on healthcare occupations (shown in red) and decrease its reliance on manufacturing, sales and administrative positions (shown in orange).
Healthcare and social assistance is expected to continue to follow national trends and be the leading employment sector for Greater Birmingham in the near future. Professional and technical services and finance will also contribute positively to employment. Retail and manufacturing will follow national trends and continue to put downward pressure on employment in the future. Construction is expected to recover and continue to be a driving force for the region.
Shift-share analysis is a method for calculating the causes of employment changes within a given industry in a given period of time. “Share” changes are derived from the national employment picture affecting the industry. “Mix” changes deal with how national changes in the given industry affect local industry employment levels. “Shift” changes account for the changes in local industry employment that are not accounted for in industry mix or national share. It is ultimately a gauge of local industry job creation. The total change in an industry’s employment is thus attributed to changes in the national economy, changes in the national industry, or changes in the local industry.

Period 1990 - 2013

<table>
<thead>
<tr>
<th>Category</th>
<th>Share</th>
<th>Mix</th>
<th>Shift</th>
<th>Total</th>
<th>Percent</th>
<th>1990</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forestry, Fishing, and Related Activities</td>
<td>0.360</td>
<td>-0.236</td>
<td>0.067</td>
<td>0.191</td>
<td>17%</td>
<td>1.144</td>
<td>1.335</td>
</tr>
<tr>
<td>Mining</td>
<td>1.430</td>
<td>0.365</td>
<td>-2.909</td>
<td>-1.114</td>
<td>-25%</td>
<td>4.541</td>
<td>3.427</td>
</tr>
<tr>
<td>Utilities</td>
<td>2.336</td>
<td>-4.207</td>
<td>1.684</td>
<td>-0.187</td>
<td>-3%</td>
<td>7.419</td>
<td>7.232</td>
</tr>
<tr>
<td>Construction</td>
<td>10.714</td>
<td>1.757</td>
<td>-2.417</td>
<td>10.054</td>
<td>30%</td>
<td>34.025</td>
<td>44.079</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>17.304</td>
<td>-34.561</td>
<td>-0.147</td>
<td>-17.404</td>
<td>-32%</td>
<td>54.952</td>
<td>37.548</td>
</tr>
<tr>
<td>Wholesale Trade</td>
<td>9.106</td>
<td>-4.726</td>
<td>0.121</td>
<td>4.259</td>
<td>15%</td>
<td>28.917</td>
<td>33.176</td>
</tr>
<tr>
<td>Retail Trade</td>
<td>19.879</td>
<td>-7.825</td>
<td>0.852</td>
<td>11.202</td>
<td>18%</td>
<td>63.130</td>
<td>74.332</td>
</tr>
<tr>
<td>Transportation and Warehousing</td>
<td>3.965</td>
<td>1.022</td>
<td>1.029</td>
<td>6.016</td>
<td>48%</td>
<td>12.592</td>
<td>18.608</td>
</tr>
<tr>
<td>Finance and Insurance</td>
<td>9.844</td>
<td>3.155</td>
<td>0.223</td>
<td>12.776</td>
<td>41%</td>
<td>31.262</td>
<td>44.038</td>
</tr>
<tr>
<td>Real Estate and Rental and Leasing</td>
<td>4.544</td>
<td>5.994</td>
<td>2.572</td>
<td>13.109</td>
<td>91%</td>
<td>14.429</td>
<td>27.538</td>
</tr>
<tr>
<td>Management of Companies and Enterprises</td>
<td>1.815</td>
<td>1.488</td>
<td>1.021</td>
<td>4.324</td>
<td>75%</td>
<td>5.763</td>
<td>10.087</td>
</tr>
<tr>
<td>Administrative and Waste Management Services</td>
<td>6.343</td>
<td>12.300</td>
<td>1.804</td>
<td>20.447</td>
<td>102%</td>
<td>20.143</td>
<td>40.590</td>
</tr>
<tr>
<td>Educational Services</td>
<td>1.472</td>
<td>4.343</td>
<td>2.556</td>
<td>8.371</td>
<td>179%</td>
<td>4.675</td>
<td>13.046</td>
</tr>
<tr>
<td>Health Care and Social Assistance</td>
<td>13.281</td>
<td>22.094</td>
<td>-4.461</td>
<td>30.914</td>
<td>73%</td>
<td>42.177</td>
<td>73.091</td>
</tr>
<tr>
<td>Arts, Entertainment, and Recreation</td>
<td>1.888</td>
<td>3.268</td>
<td>0.719</td>
<td>5.876</td>
<td>98%</td>
<td>5.996</td>
<td>11.872</td>
</tr>
<tr>
<td>Accommodation and Food Services</td>
<td>7.760</td>
<td>6.300</td>
<td>4.343</td>
<td>18.403</td>
<td>75%</td>
<td>24.644</td>
<td>43.047</td>
</tr>
<tr>
<td>Other Services, except Public Administration</td>
<td>9.811</td>
<td>-0.328</td>
<td>7.236</td>
<td>16.719</td>
<td>54%</td>
<td>31.157</td>
<td>47.876</td>
</tr>
</tbody>
</table>

The decline in the manufacturing sector has destroyed 34,561 jobs since 1990 in Greater Birmingham. To counter this, the region has benefited from national industrial changes, as employment in professional and technical services and health care and social assistance has continually increased. In these industries, mix changes accounted for 12,609 jobs and 22,094 jobs, respectively. Educational services has experienced the largest total percentage growth at 179%, while manufacturing has declined by 32% in the period. In total, administrative and healthcare have added the most jobs at 20,447 and 30,914, respectively.
The above table is a shift-share forecast representing predicted changes in local industry employment for the period 2014 to 2040. Over the coming decades we estimate greater employment growth coming from the healthcare sector, creating 80,955 jobs and increasing by 107%. This is primarily driven from the national healthcare sector contributing 61,208 jobs.

Nationally, the professional services industry should contribute an additional 10,715 jobs, adding 27,850 jobs in total for Greater Birmingham. Following national trends, the manufacturing and retail sectors will weigh down the economy by destroying 16,474 and 32,941 jobs, respectively. Relative to other industries, however, both manufacturing and retail are approaching employment equilibrium in job terms.
Clusters of both labor and industry can be measured with location quotients. Location quotients measure the concentration in terms of employment or output of a particular industry relative to the national average. By taking the percentage of Greater Birmingham’s employment devoted to healthcare relative to the nation’s employment devoted to healthcare, we can determine if a labor cluster exists. Measurements above one indicate clustering in either labor or industry. Current and forecasted clusters for labor and industry are presented.
By dollar value, real estate and finance contribute most to the economy, with wholesale, healthcare, and professional services expected to continue large contributions.
Manufacturing is expected to continue its decline as a major sector by value added. Construction and education will also decrease their relative weight, while information, real estate, finance, and professional services will expand their influence in Greater Birmingham.
After weighting output for employment, we can get a measure of industry productivity. This measure becomes interesting when we compare industry productivity in Birmingham to national productivity. Values above one indicate above average productivity for industry.

Productivity is greatly affected by production costs and unit labor costs. These factors contribute greatly to market share and competitiveness. Greater Birmingham has below average costs of production at 95% of the nation and above average productivity-adjusted labor costs. These relatively high labor costs are most likely due to a combination of low-productivity industries in the region; however, they are expected to decline in the future.
Closely correlated with production and labor costs is the cost of living in Greater Birmingham. Cost of living is represented below with housing prices and delivered prices.

![Prices Relative to Nation](image)

Beneficial to households and consumers, prices for housing and consumption items are expected to remain below national averages for the foreseeable future.

Lower regional prices and production costs increase a region’s ability to export and reduce imports. Greater Birmingham’s ability to do so can be measured with its regional purchase coefficient.

![Regional Purchase Coefficient](image)

The regional purchase coefficient is the proportion of demand within a region that is supplied by the region itself. Higher RPCs are associated with higher competitiveness. Greater Birmingham’s RPC has followed the national trend and steadily declined from about 55% of demand to about 53% currently, driven heavily by the corrosion of the manufacturing sector. Equilibrium of the RPC is expected later in the decade at just under 0.53.
Cross-Metropolitan Comparison

A great deal of this assessment has compared the economy of Greater Birmingham to the nation in aggregate. This comparison comes to a head in the graph below, displaying Greater Birmingham’s declining share in both economic and demographic terms. Declining population, as explained above, is the primary cause for a declining economy in terms of size relative to the nation.

For further insight, we can compare the Greater Birmingham region to other comparable metropolitan areas. We do so by using each metropolitan area’s central county as a proxy for the region. Included below are the counties of Birmingham, Mobile, Huntsville, Chattanooga, Nashville, Jacksonville, Raleigh, and Louisville.

<table>
<thead>
<tr>
<th>Economic Indicator</th>
<th>AL</th>
<th>AL</th>
<th>AL</th>
<th>TN</th>
<th>TN</th>
<th>FL</th>
<th>NC</th>
<th>KY</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDP, % Nation</td>
<td>0.279</td>
<td>0.119</td>
<td>0.132</td>
<td>0.129</td>
<td>0.326</td>
<td>0.408</td>
<td>0.362</td>
<td>0.321</td>
</tr>
<tr>
<td>Employment, Thousands</td>
<td>473.076</td>
<td>238.999</td>
<td>234.492</td>
<td>244.401</td>
<td>576.175</td>
<td>642.246</td>
<td>609.576</td>
<td>545.383</td>
</tr>
<tr>
<td>Population</td>
<td>661.038</td>
<td>418.906</td>
<td>343.814</td>
<td>343.446</td>
<td>655.581</td>
<td>892.088</td>
<td>962.240</td>
<td>756.043</td>
</tr>
<tr>
<td>Income, % Nation</td>
<td>0.220</td>
<td>0.104</td>
<td>0.109</td>
<td>0.104</td>
<td>0.238</td>
<td>0.274</td>
<td>0.314</td>
<td>0.243</td>
</tr>
<tr>
<td>Income per capita, Thousands, 2012</td>
<td>48.295</td>
<td>35.849</td>
<td>45.096</td>
<td>43.770</td>
<td>51.647</td>
<td>45.331</td>
<td>45.907</td>
<td>47.721</td>
</tr>
<tr>
<td>Relative Housing Price</td>
<td>0.574</td>
<td>0.537</td>
<td>0.689</td>
<td>0.622</td>
<td>0.717</td>
<td>NA</td>
<td>0.975</td>
<td>0.616</td>
</tr>
</tbody>
</table>
Relative to its comparable metropolitan areas, Birmingham is experiencing low population growth over the coming decades. Again, this is due primarily to its low natural population growth and decreasing economic migration.

All regions but Huntsville experienced large employment losses during the past five years. Employment growth in Birmingham is expected to share a similar path as its economic counterparts in the future.
Conclusion

A handful of predominant trends characterize the past, present, and future of Greater Birmingham’s economy. Recent cyclical forces caused by the housing boom and bust and the Great Recession put downward pressure on regional production, employment, and income. The economy is expected to recover in the coming years and to continue upon its path of long-run prosperity. The population is expected to continue to grow, albeit at a lower rate primarily due to less natural growth and also due to decreasing economic migration in the future. While the region has taken a large hit from the decline of US manufacturing, it is expected to benefit from national growth in healthcare. Other high-value industries that will contribute to economic growth in the region are finance, real estate, and professional and technical services. The region’s employment opportunity, high real wages, low cost of living and production add greatly to its economic vitality.

To facilitate and encourage this natural economic vitality, prudent regional economic policy can be employed in Greater Birmingham. Suggestions for such economic policies are housed within the REMI model and macroeconomic framework. They include, but are not limited to, investing in infrastructure and human capital, providing a suitable regulatory environment for business and property, ensuring appropriate levels of taxation and expenditure, and continuing to make the region an attractive place to live and work.

Investing in infrastructure in Greater Birmingham, when done effectively, can increase the region’s internal productivity, thus increasing its economic competitiveness. Infrastructure investment primarily takes the form of transportation improvements, such as public transit, roads and highways, and air or water port access. Better public transit improves the connection between employers and employees, giving businesses an improved labor pool, and thus increasing the productivity of those firms. Expanding highways or regional ports improve the connection between firms, both potentially decreasing transportation costs and improving the efficiency of the supply chain. This can lead to industrial clustering and greater macroeconomic productivity from regional businesses.

Similar to improved public transit, investments in human capital target household and labor market productivity. As workers expand their skill sets or students become more knowledgeable, they become more productive and enhance the competitiveness of a region. This can be achieved through investments in pre-kindergarten and daycare education, primary and secondary schooling, community colleges and universities, and workforce and occupational training programs. When implemented effectively, all of the aforementioned investments will fundamentally enhance regional productivity and economic competitiveness for Greater Birmingham.

Business can benefit from a suitable regulatory environment. Smart laws on business can decrease the cost of production which makes regional firms more competitive. Appropriate levels of taxation can do the same, so long as state and local budgeting is taken into consideration as well. Through similar mechanisms, effective regulation of nonresidential capital and property decreases business costs and improves competitiveness.
Regional economic competitiveness can also be improved by focusing on improving the quality of life of Greater Birmingham’s residents. Smart housing regulation, when matched with appropriate levels of property taxation, decrease the cost of living in the region. This can free discretionary income which will circulate back into the regional macroeconomy and can increase the likelihood of positive economic migration. Increasing regional amenities, such as public parks, bike lanes, and sidewalks, might also induce positive economic migration. Economic migration is beneficial for a regional economy in that it gives firms greater access to labor, thus improving business productivity and macroeconomic competitiveness.

As this report demonstrates, the economy of Greater Birmingham has been and will continue to be robust and dynamic. While certain industries are waning, others are expanding and adding to the economic competitiveness of the region. These natural macroeconomic developments will push the region forward, but it can also be helped with smart economic policies. Investing in infrastructure and human capital, providing a suitable regulatory environment, ensuring appropriate state and local fiscal policy, and working to make the region attractive are just some policy items that can facilitate long-term economic growth. The region’s natural economic strengths, coupled with such policies, are sure to keep Greater Birmingham on its path to regional economic competitiveness and sustainable macroeconomic vitality.