



2014- Piedmont Triad2018 Comprehensive Economic Development Strategy

Piedmont Triad Regional Council

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TRIAD TOMORROW

The Comprehensive Economic Development Strategy for the Piedmont Triad Region was unanimously approved by the Piedmont Triad Regional Council Board of Delegates on February 19, 2014.



PIEDMONT TRIAD REGIONAL COUNCIL

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EXECUTIVE SUMMARY

Triad Tomorrow, the Piedmont Triad Comprehensive Economic Development Strategy (CEDS), serves as the foundational economic development element of our region's sustainable communities planning effort, Piedmont Together. The CEDS is YADKIN designed to help stakeholders form partnerships to leverage Yadkinville existing resources that will revitalize the communities of our Building on existing regional and local economic region. DAVIE development plans, Triad Tomorrow strategies focus on supporting collaboration among local and regional stakeholders within the economic development community, private industry, educational institutions, local government, foundations and the private sector. The CEDS is a responsive and flexible five-year strategic economic development plan, designed to be easily adjusted to meet the changing needs of communities throughout the region.

The Piedmont Triad Regional Council undertook development of *Triad Tomorrow* as part of the statewide *NC Tomorrow Initiative*, which aims to create a more uniform, coordinated approach to economic development planning across our state. In this initiative, led by the North Carolina Association of Regional Councils, regional CEDS are developed by each of the 16 regional councils across the state, with the ultimate goal of combining them to create a statewide strategic plan. This CEDS will benefit communities in our region in three important ways:

- The CEDS is to be combined with those of the other regional councils across the state, and then submitted to the Economic Development Administration (EDA) for approval. Upon approval, organizations in our region will be eligible to compete for assistance under EDA's public works program, economic adjustment program, and many of its planning programs.
- The CEDS highlights key priorities on which the region can work together to achieve significant results. By marshaling resources and fostering collaboration, local communities and regional organizations can make progress in these critical areas.

SURRY

• The CEDS identifies important regional interests. Communities seeking to advance projects in these identified areas can use the CEDS to demonstrate that their projects are not just of local concern, but support broader regional interests.

Triad Tomorrow outlines the region's four priority economic development focus areas:

<u>Competitive Advantage & Leverage</u> – Sectors of the Piedmont Triad's regional economy vital to our economic mix which are growing or emerging, and/or unique to the region. These include market clusters, entrepreneurship support systems and our quality of life. The primary goal related to competitive advantage and leverage is to build on and improve the economic sectors that are authentic to the Piedmont Triad region.

<u>Regional Infrastructure</u> – Fixed assets of the region including transportation, utilities, support systems, broadband and the natural environment. The primary goal related to infrastructure is to build on and improve the fixed assets of the region.

<u>Vibrant Communities</u> – The characteristics of communities with a high quality of life, including local leadership, housing stock, and community amenities. The primary goal related to vibrant communities is to provide resources that support a high quality of life in the region.

<u>Talent</u> – The human assets of the region, including our workforce, education and healthcare systems and access to capital. The primary goal related to talent is to invest in the region's human assets and support systems.





SUMMARY OF TRIAD TOMORROW GOALS & OBJECTIVES

COMPETITIVE ADVANTAGE & LEVERAGE

<u>GOAL</u>: Build on and improve sectors of the Piedmont Triad's regional economy which are vital to our economic mix, are growing or emerging, or are unique to our region.

- □ <u>Objective 1</u>: Assess and affirm the most promising urban and rural industrial clusters of the region.
- □ <u>Objective 2</u>: Develop select low location-quotient areas of opportunity in the region.
- □ <u>Objective 3</u>: Develop "Talent Clusters" through education, mentoring and internship programs.
- □ <u>Objective 4</u>: Develop collaborative economic development processes.
- Display="block-type: Establish a strong focus on entrepreneurship & self-sustaining economic development efforts."

REGIONAL INFRASTRUCTURE

<u>GOAL</u>: Build on and improve the fixed assets of the region – transportation, utilities, connectivity, healthcare, support systems and the natural environment.

- □ <u>Objective 1</u>: Expand the reach and increase the upload/download speeds of broadband internet service throughout the region.
- □ <u>Objective 2</u>: Enhance transportation options.
- □ <u>Objective 3</u>: Maximize the efficiency of public utilities and solid waste management efforts.
- □ <u>Objective 4</u>: Encourage reduced energy use.
- □ <u>Objective 5</u>: Prepare industrial land for development.
- □ <u>Objective 6</u>: Encourage increased healthcare facility access.

VIBRANT COMMUNITIES

<u>GOAL</u>: Provide opportunities for a high quality of life in communities throughout the region.

- □ <u>Objective 1</u>: Enhance the vitality of the region's downtowns.
- □ <u>Objective 2</u>: Promote greater connectivity among local farms and with the urban core.
- □ <u>Objective 3</u>: Promote greater community connectivity.
- □ <u>Objective 4</u>: Develop connections in and among communities for cultural & recreational facilities & programming.
- □ <u>Objective 5</u>: Foster the efficient and sustainable use of land resources to increase the benefits and reduce the costs of future growth.

TALENT STRATEGIES

<u>GOAL</u>: Invest in and develop the human capital of the region – the youth, workforce, disenfranchised, and those with underdeveloped capacity.

- □ <u>Objective 1</u>: Promote excellent baseline education.
- □ <u>Objective 2</u>: Provide accessible and affordable supplemental education for workplace engagement.
- □ <u>Objective 3</u>: Develop greater levels of economic capacity through greater educational attainment, more knowledge, and networked relationships.
- □ <u>Objective 4</u>: Promote increased civic engagement.
- □ <u>Objective 5</u>: Encourage the Inclusion of Prosperity-Enhancing Components Beyond Wages in Economic Development Recruitment and Local ED Contracts

IMPLEMENTATION

Though the Piedmont Triad Regional Council has taken the lead role in developing the Piedmont Triad CEDS, it will take the concentrated energy, resources and knowledge of many strategic partners to accomplish the goals and complete the objectives and strategies outlined in the plan. The CEDS contemplates a five-year horizon (2014-2018), while recognizing that achieving the plan's goals will, in most cases, be more long term. The plan will require update and renewal as its five-year term ends. This CEDS is a starting point, which takes the good work already being done in the region and moves it forward, bringing the public and private sectors together to continue to achieve great things. As the plan is implemented, it will be reworked, retooled and refined, to better reflect the economic development goals and aspirations of our region, now and in the future.

CONCLUSIONS

The guiding principles, investment priorities and standards of excellence cited in the Plan (see below) serve as the underlying framework interwoven throughout this CEDS plan. The best of current and past plans, regional input, and cutting edge social and economic development trend analysis has been used to develop this plan to be a strategic guidance tool for our region's economic future. Some populist economic concepts are given a litmus test against current trends, allowing this plan to be less encumbered by more traditional economic development approaches used in past planning efforts.

HUD-EPA-DOT LIVABILITY PRINCIPLES	EDA INVESTMENT PRIORITIES	NADO STANDARDS OF EXCELLENCE
1. Provide more transportation choices	1. Collaborative regional innovation	1. Build more resilient economies and communities
2. Promote equitable, affordable housing	2. Public-Private Partnerships	2. Foster a regional collaborative framework to align resources
3. Enhance economic competitiveness	3. National Strategic Priorities	3. Use modern scenario, data and analysis tools and planning techniques
4. Support existing communities	4. Global Competitiveness	4. Create a more strategy-driven planning process
5. Coordinate and leverage federal policies and investments	5. Environmentally Sustainable Development	5. Increase collaboration across boundaries and position regional CEDS into building blocks for statewide strategies
6. Value communities and neighborhoods	6. Economically Distressed and Underserved Communities	6. Communicate in compelling and modern communication techniques: online and social media
		7. Engage in the public, private, non-profit and educational sectors along with the general public in the development of the CEDS

Guiding Principles, Priorities and Standards

Source: NC Tomorrow

Triad Tomorrow identifies and values a wide range of economic assets, resources, and opportunities – urban and rural, large and small, wealthy and underserved. This CEDS underscores the importance of equity among our citizens, sustainable growth, and building more resiliency in our local economies and communities. It acknowledges and shows appreciation for our region's past and exhorts all of us to aggressively pursue the new technologies and thinking of the future. It outlines our key challenges while advocating for the implementation of tangible solutions. And finally and foremost, this plan affirms our strong belief in the strength of collaboration and our willingness to work together for a better Piedmont Triad Tomorrow.

REGIONAL CEDS ADVISORY GROUP

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Florence Gatten	City of Greensboro
Judge Lawrence McSwain	Retired District Court Judge
Addy Jeffrey	Latino Community Coalition of Guilford County
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INTRODUCTION

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Table 1. Guiding Principles and Standards

Source: NC Tomorrow

PRIORITY ECONOMIC DEVELOPMENT FOCUS AREAS

Triad Tomorrow outlines the region's four priority economic development focus areas:

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GEOGRAPHIC AREA OF FOCUS



Figure 1. Piedmont Triad Region

REGIONAL DEMOGRAPHIC PROFILE

POPULATION

According to Census, the 2010 population of the Piedmont Triad region was 1,640,717 (US Census Bureau, 2010). Between 2000 and 2010, the region grew by 12%.

Continued population growth is anticipated for the region, with a projected 2030 population of 1,873,752 (NC Office of Management and Budget, 2012). Historically, population growth has not been equally distributed across the region. This trend is expected to continue, with urban counties in the region growing the fastest and rural counties typically seeing more modest growth rates, with two counties in the region expected to lose population over the next twenty years (Table 1).



Figure 2. Piedmont Triad Region Projected Population Growth, 2030

Source: US Census Bureau, 2010, NC Office of Management and Budget

- By 2030, the Piedmont Triad region will...Add 230,000 new residents
 - Be more diverse
 - Be older on average

County	Census 2000	Census 2010	Growth 2000-10	% Growth 2000-10	2020 Projection	2030 Projection	Growth 2010-2030	% Growth 2010-2030
Alamance County	130,800	151,131	20,331	15.5%	160,706	169,844	18,713	12.4%
Caswell County	23,501	23,719	218	0.9%	24,131	24,507	788	3.3%
Davidson County	147,246	162,878	15,632	10.6%	171,866	181,172	18,294	11.2%
Davie County	34,835	41,240	6,405	18.4%	43,962	46,645	5,405	13.1%
Forsyth County	306,067	350,670	44,603	14.6%	380,495	403,826	53,156	15.2%
Guilford County	421,048	488,406	67,358	16.0%	545,706	601,951	113,545	23.2%
Montgomery County	26,822	27,798	976	3.6%	29,678	31,203	3,405	12.2%
Randolph County	130,454	141,752	11,298	8.7%	151,400	160,901	19,149	13.5%
Rockingham County	91,928	93,643	1,715	1.9%	92,966	92,305	-1,338	-1.4%
Stokes County	44,711	47,401	2,690	6.0%	48,811	49,601	2,200	4.6%
Surry County	71,219	73,673	2,454	3.4%	73,050	72,487	-1,186	-1.6%
Yadkin County	36,348	38,406	2,058	5.7%	38,974	39,310	904	2.4%
Piedmont Triad	1,464,979	1,640,717	175,738	12.0%	1,761,745	1,873,752	233,035	14.2%
North Carolina	8,049,313	9,535,483	1,486,170	18.5%	10,614,862	11,629,556	2,094,073	22.0%
United States	281,421,906	308,745,538	27,323,632	9.7%	341,386,665	373,503,674	64,758,136	21.0%

Table 2. Piedmont Triad Region Population Growth, 2000-2030

Source: US Census Bureau, 2000 & 2010 decennial census; US Census Bureau, 2010-2050 Population Projections, 2008;

NC Office of Management & Budget, 2012

Age

The Piedmont Triad region has maintained a relatively consistent age distribution over the past decade (US Census Bureau, 2000-2010). However, the percentage of older adults (65 and up) in the region is outpacing national trends (Table 2). With a majority of baby boomers reaching 65 by 2030, the average age of the region will continue to shift upward.

 Table 3. Piedmont Triad Region Population by Age Group, 2010

County	Under 18	% Under 18	18 - 44	% 18 - 44	45 - 64	% 45 - 64	65 and up	% 65 and up
Alamance County	35,443	23.5%	53,800	35.6%	39,807	26.3%	22,081	14.6%
Caswell County	4,889	20.6%	7,434	31.3%	7,641	32.2%	3,755	15.8%
Davidson County	38,872	23.9%	54,232	33.3%	46,386	28.5%	23,388	14.4%
Davie County	9,751	23.6%	12,366	30.0%	12,294	29.8%	6,829	16.6%
Forsyth County	85,401	24.4%	127,336	36.3%	92,422	26.4%	45,511	13.0%
Guilford County	114,483	23.4%	188,497	38.6%	125,303	25.7%	60,123	12.3%
Montgomery County	6,746	24.3%	8,875	31.9%	7,813	28.1%	4,364	15.7%
Randolph County	34,714	24.5%	47,916	33.8%	39,173	27.6%	19,949	14.1%
Rockingham County	20,789	22.2%	29,751	31.8%	27,932	29.8%	15,171	16.2%
Stokes County	10,521	22.2%	14,807	31.2%	14,498	30.6%	7,575	16.0%
Surry County	17,217	23.4%	23,557	32.0%	20,649	28.0%	12,250	16.6%
Yadkin County	8,938	23.3%	12,315	32.1%	10,912	28.4%	6,241	16.3%
Piedmont Triad	387,764	23.6%	580,886	35.4%	444,830	27.1%	227,237	13.8%
North Carolina	2,281,627	23.9%	3,512,362	36.8%	2,507,407	26.3%	1,234,079	12.9%
United States	74,181,467	24.0%	112,806,642	36.5%	81,489,445	26.4%	40,267,984	13.0%

Source: US Census Bureau, 2010

Figure 3. PiedmontTriad Region Population Density, 65 and Up, 2010



Source: US Census Bureau, 2010

RACE AND ETHNICITY

The diversity of the Piedmont Triad region's population continues to grow. In particular, between 2000 and 2010, the percentage growth of the Hispanic population in the region slightly outpaced that of North Carolina (US Census Bureau, 2000-2010). According to recent population projections, these trends are set to continue into 2040 (Nelson, 2012).

County	White	% White	African American	% African American	Asian	% Asian	Hispanic	% Hispanic
Alamance County	101,718	67.3%	28,369	18.5%	1,837	1.2%	16,639	11.0%
Caswell County	14,513	61.2%	8,020	33.7%	60	0.3%	744	3.1%
Davidson County	133,486	82.0%	14,421	8.8%	1,994	1.2%	10,408	6.4%
Davie County	35,257	85.5%	2,593	6.2%	239	0.6%	2,496	6.1%
Forsyth County	205,934	58.7%	91,227	25.5%	6,495	1.9%	41,775	11.9%
Guilford County	265,228	54.3%	158,899	32.1%	19,176	3.9%	34,826	7.1%
Montgomery County	17,875	64.3%	5,231	18.6%	441	1.6%	3,926	14.1%
Randolph County	115,205	81.3%	8,176	5.6%	1,431	1.0%	14,698	10.4%
Rockingham County	68,744	73.4%	17,655	18.7%	430	0.5%	5,159	5.5%
Stokes County	43,447	91.7%	1,916	4.0%	125	0.3%	1,254	2.6%
Surry County	62,611	85.0%	2,749	3.6%	347	0.5%	7,155	9.7%
Yadkin County	33,022	86.0%	1,192	3.0%	78	0.2%	3,749	9.8%
Piedmont Triad	1,097,040	66.9%	340,448	20.7%	32,653	2.0%	142,829	8.7%
North Carolina	6,223,995	65.3%	2,048,628	21.2%	208,962	2.2%	800,120	8.4%
United States	196,817,552	63.7%	38,929,319	12.2%	14,674,252	4.8%	50,477,594	16.3%

 Table 4. Piedmont Triad Region Population by Race & Ethnic Origin, 2010

Source: US Census Bureau, 2010





EMPLOYMENT

The Piedmont Triad region was hard-hit by the economic downturn of the past decade, losing more than 84,000 jobs since 2000 (NC Department of Commerce, 2010). The bulk of regional job losses were in the Manufacturing and Trade, Transportation & Utilities sectors. In contrast, the Education & Health Services sector showed steady growth, while other regionally significant employment sectors remained relatively stable.

County	2000	2005	2007	2010	Change 2000-10	% Change 2000-10	Change 2007-10	% Change 2007-10
Alamance County	64,650	58,770	60,269	54,889	(9,761)	-15.1%	(5,380)	-8.9%
Caswell County	3,772	3,077	3,256	3,081	(691)	-18.3%	(175)	-5.4%
Davidson County	50,449	44,623	44,168	38,754	(11,695)	-23.2%	(5,414)	-12.3%
Davie County	11,076	10,456	11,153	9,485	(1,591)	-14.4%	(1,668)	-15.0%
Forsyth County	182,486	179,746	186,636	172,659	(9,827)	-5.4%	(13,977)	-7.5%
Guilford County	279,686	271,980	281,460	256,841	(22,845)	-8.2%	(24,619)	-8.7%
Montgomery County	11,895	10,639	9,974	8,482	(3,413)	-28.7%	(1,492)	-15.0%
Randolph County	51,260	48,216	49,379	44,372	(6,888)	-13.4%	(5,007)	-10.1%
Rockingham County	33,534	30,696	29,495	26,622	(6,912)	-20.6%	(2,873)	-9.7%
Stokes County	7,461	7,356	7,285	6,892	(569)	-7.6%	(393)	-5.4%
Surry County	36,515	31,751	31,518	27,423	(9,092)	-24.9%	(4,095)	-13.0%
Yadkin County	10,304	10,328	9,465	9,079	(1,225)	-11.9%	(386)	-4.1%
Piedmont Triad	743,088	707,638	724,058	658,579	(84,509)	-11.4%	(65,479)	-9.0%

Table 5. Piedmont Triad Region Employment, 2000-2010

Source: NC Department of Commerce, Division of Employment Security

Figure 5. PiedmontTriad Region Employment by Sector, 1990-2010



WAGES & INCOME

While the average annual wage increased by 26.7% between 2000 and 2007 for workers in the Piedmont Triad region, between 2007 and 2010 wage growth slowed to 4.9% as the nation went into recession (Table 5). The recession has also negatively impacted incomes, with very modest income growth in the region between 2000 and 2010 (Table 6).

County	2000	2005	2007	2010	Change 2000-10	% Change 2000-10	Change 2007-10	% Change 2007-10
Alamance County	\$27,352	\$31,044	\$33,176	\$34,060	+\$6,708	24.5%	\$ 884	2.7%
Caswell County	23,244	25,844	27,820	29,588	+6,344	27.3%	1,768	6.4%
Davidson County	26,156	28,652	30,368	31,512	+5,356	20.5%	1,144	3.8%
Davie County	24,648	27,196	29,536	30,056	+5,408	21.9%	520	1.8%
Forsyth County	33,956	38,324	40,560	42,796	+8,840	26.0%	2,236	5.5%
Guilford County	32,240	36,660	39,000	41,080	+8,840	27.4%	2,080	5.3%
Montgomery County	23,036	27,924	29,224	30,264	+7,228	31.4%	1,040	3.6%
Randolph County	25,948	28,496	30,524	30,836	+4,888	18.8%	312	1.0%
Rockingham County	25,740	29,120	31,096	32,500	+6,760	26.3%	1,404	4.5%
Stokes County	24,492	26,052	27,196	28,444	+3,952	16.1%	1,248	4.6%
Surry County	23,660	26,572	28,704	30,004	+6,344	26.8%	1,300	4.5%
Yadkin County	22,412	24,752	27,612	29,432	+7,020	31.3%	1,820	6.6%
Piedmont Triad	30,160	34,164	36,452	38,220	+8,060	26.7%	1,768	4.9%
North Carolina	31,044	35,932	38,896	41,132	10,088	32.5%	2,236	5.7%
United States	35,053	40,807	44,693	47,046	11,993	34.2%	2,353	5.3%

Table 6. Piedmont Triad Regional Average Annual Wage, 2000-2010

Source: NC Department of Commerce, Division of Employment Security

Table 7. Piedmont Triad Region Median & Per Capita Income, 2000-2010

County	2010 Median Household Income	% Change 2000-10	Median Family Income	% Change 2000-10	Per Capita Income	% Change 2000-10
Alamance County	\$44,167	11.33%	52,806	11.98%	22,819	15.02%
Caswell County	36,927	4.33%	44,401	5.62%	17,814	7.54%
Davidson County	44,249	9.40%	54,652	15.39%	22,268	16.01%
Davie County	49,727	13.70%	61,659	22.64%	26,139	18.29%
Forsyth County	46,749	8.48%	59,867	13.09%	26,213	12.17%
Guilford County	45,676	6.18%	59,367	11.33%	26,267	11.14%
Montgomery County	33,861	2.47%	43,740	9.43%	18,618	11.35%
Randolph County	40,346	2.18%	49,257	9.92%	21,297	14.37%
Rockingham County	39,231	11.62%	48,641	16.08%	20,801	17.70%
Stokes County	42,689	4.84%	49,134	9.20%	20,852	13.05%
Surry County	37,294	9.55%	47,248	17.66%	20,541	13.72%
Yadkin County	39,807	5.43%	50,990	14.18%	20,379	8.85%
Piedmont Triad	44,078	10.7%	55,426	15.40%	24,164	16.10%
North Carolina	45,570	16.3%	56,153	21.20%	24,745	21.90%
United States	51,914	23.6%	62,982	25.80%	27,334	26.60%

Source: US Census Bureau, American Community Survey, 2006-2010



Figure 6. PiedmontTriad Commuting Patterns, 2006-2008

Source: Census Transportation Planning Package, 2006-2008

COMMUTING

The majority of commuters in the Piedmont Triad region drive alone to get to work each day (US Census Bureau, 2005-2009). 30% of commuters leave their county of residence for work (Figure 6).

County	% Drove Alone	Average Travel (minutes)	% Carpool	Average Travel (minutes)	% Public Transport	Average Travel (minutes)	% Other Means*	Average Travel (minutes)
Alamance County	81.9%	21.31	13.3%	24.06	0.2%	36.00	2.2%	20.20
Caswell County	80.5	33.55	13.9	38.64	0.0	NA	2.6	13.43
Davidson County	85.8	21.95	10.5	25.75	0.3	33.11	1.3	13.67
Davie County	83.0	26.04	9.3	30.49	0.0	NA	2.9	14.87
Forsyth County	83.3	19.90	8.9	24.56	1.2	37.29	3.4	14.66
Guilford County	82.3	20.54	9.3	23.69	1.6	36.43	3.2	18.66
Montgomery County	84.1	25.60	12.1	32.88	0.4	27.75	2.0	14.45
Randolph County	83.6	26.15	12.1	27.21	0.1	59.00	1.8	17.81
Rockingham County	80.4	24.94	15.3	28.19	0.1	26.88	1.8	10.17
Stokes County	85.8	28.46	9.7	32.46	0.2	149.12	1.9	12.14
Surry County	82.8	23.18	11.3	32.06	0.4	38.10	2.1	16.34
Yadkin County	82.3	24.07	12.7	32.27	0.2	52.26	2.9	33.23

* Other Means includes taxi, motorcycle, bicycle, walk or other

Source: US Census Bureau, 2000 decennial census, and the 2005-2009 American Community Survey

POVERTY

The regional poverty rate of 15.8% in 2010 was higher than the national rate of 13.8% and has risen more rapidly in the Piedmont Triad than in North Carolina or the US (US Census Bureau, 2006-2010).

Table 9.	Piedmont Triad	Regional	Povertv	Rate.	2000-2010

County	Persons in Poverty	Under 18 in Poverty	Under 18 Poverty Rate	2010 Poverty Rate (%)	Change, 2000-2010
Alamance County	23,324	8,514	24.6%	16.3%	+ 6.9%
Caswell County	4,841	1,807	36.0%	21.7%	+ 8.6%
Davidson County	23,016	8,559	22.3%	14.5%	+ 4.6%
Davie County	4,901	1,958	20.1%	12.2%	+ 4.1%
Forsyth County	50,942	19,233	23.1%	15.3%	+ 4.7%
Guilford County	73,375	24,676	22.1%	15.9%	+ 5.5%
Montgomery County	6,134	2,175	33.9%	23.2%	+ 8.6%
Randolph County	23,766	8,953	26.5%	17.2%	+ 8.3%
Rockingham County	14,396	5,021	24.1%	15.6%	+ 3.9%
Stokes County	5,698	1,956	18.5%	12.2%	+ 2.7%
Surry County	12,197	3,858	22.7%	16.9%	+ 4.7%
Yadkin County	5,507	1,821	20.2%	14.7%	+ 4.9%
Piedmont Triad	248,097	88,531	23.3%	15.8%	+ 4.9%
North Carolina	1,399,934	476,790	21.6%	15.5%	+ 3.2%
United States	4,917,513	13,980,497	19.2%	13.8%	+ 1.4%

Source: US Census Bureau, American Community Survey, 2006-2010; Small Area Income and Poverty Estimates, 2000

EDUCATION

Educational attainment rates in the region have increased over the past decade, with 82.4% of adults receiving a High School diploma or equivalent. However, regional educational attainment rates continue to lag behind North Carolina and the US (Census 2010).

	2000				2010				
County	% HS diploma	% some college	% bachelor's degree	% master's degree	% HS diploma	% some college	% bachelor's degree	% master's degree	
Alamance County	76.5	45.4	19.2	5.4	81.4	51.4	21.4	6.8	
Caswell County	69.2	32.5	8.3	2.3	75.0	37.4	11.1	3.8	
Davidson County	72.0	38.8	12.8	3.2	79.1	44.0	16.3	4.5	
Davie County	78.1	43.4	17.6	5.0	84.4	51.7	23.6	7.8	
Forsyth County	82.0	55.0	28.7	9.5	86.9	58.7	31.2	10.3	
Guilford County	83.0	57.8	30.3	9.0	86.9	60.3	32.4	10.4	
Montgomery County	64.2	32.1	10.0	2.7	72.1	41.0	14.8	4.4	
Randolph County	70.0	34.3	11.1	3.0	75.6	40.6	13.0	3.4	
Rockingham County	68.9	35.6	10.8	3.2	76.6	41.1	12.5	3.0	
Stokes County	73.2	33.1	9.3	2.3	79.2	36.6	10.9	2.9	
Surry County	67.0	37.5	12.0	3.3	74.5	43.9	14.9	4.6	
Yadkin County	72.0	35.2	10.3	2.9	76.9	38.9	11.2	3.1	
Piedmont Triad	76.9	47.1	21.1	6.3	82.4	51.7	23.7	7.4	
North Carolina	78.1	49.7	22.5	7.2	83.6	55.3	26.1	8.7	
United States	80.4	51.8	24.4	8.9	85.0	56.0	27.9	10.3	

Table 10. Piedmont Triad Educational Attainment, 2000-2010

Source: US Census Bureau, 2000 decennial census, and the 2006-2010 American Community Survey

Figure 7. Piedmont Triad Educational Attainment, 2000-2010
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Percent Bachelor's Degree or Higher





Figure 8. PiedmontTriad Region Select Household Characteristics, 2010

Source: US Census Bureau, 2010

HOUSEHOLDS

Between 2000 and 2010 the Piedmont Triad grew by nearly 75,000 households – a growth rate of more than 12% (Census 2010). The region is slightly outpacing North Carolina and US trends for single person households and households with persons 65 and up (Census 2010).

County	Households 2000	Households 2010	% Change 2000-10	2010 Persons per HH	% Families	% Living Alone	% with Children under 18	% with person age 65+
Alamance County	51,584	59,960	16.2%	2.45	66.5%	27.8%	32.8%	26.6%
Caswell County	8,670	9,190	6.0%	2.43	69.2%	26.9%	29.7%	30.4%
Davidson County	58,156	64,515	10.9%	2.50	71.3%	24.3%	33.9%	26.2%
Davie County	13,750	16,245	18.1%	2.52	73.5%	22.8%	33.4%	28.6%
Forsyth County	123,851	141,163	14.0%	2.41	64.1%	30.1%	32.6%	23.7%
Guilford County	168,667	196,628	16.6%	2.41	62.6%	29.8%	31.9%	22.3%
Montgomery County	9,848	10,544	7.1%	2.53	69.5%	27.2%	31.5%	30.3%
Randolph County	50,659	55,373	9.3%	2.54	71.2%	24.4%	34.3%	25.9%
Rockingham County	36,989	38,963	5.3%	2.39	67.6%	28.1%	30.8%	28.7%
Stokes County	17,579	19,416	10.4%	2.42	70.0%	26.0%	31.1%	28.1%
Surry County	28,408	29,914	5.3%	2.43	69.2%	27.3%	31.6%	29.5%
Yadkin County	14,505	15,486	6.8%	2.46	70.3%	25.9%	32.1%	28.9%
Piedmont Triad	582,666	657,397	12.8%	2.44	66.3%	28.0%	32.3%	25.1%

Table 11.	Piedmont Triad	Region Household	Characteristics.	2000-2010
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Source: US Census Bureau, American Community Survey, 2006-2010

HOUSING

The Piedmont Triad added more than 100,000 housing units between 2000 and 2010. The majority of housing currently available within the Piedmont Triad region consists of single family structures, followed by manufactured homes (see Figure 9).

County	Housing Units 2000	Housing Units 2010	Change 2000-10	% Change 2000-10	Vacant Units	% Vacant Units	% Owner Occupied	% Renter Occupied
Alamance County	55,463	66,576	11,113	20	6,616	9.9%	60.2%	29.8%
Caswell County	9,601	10,619	1,018	10.6	1,429	13.5%	65.8%	20.7%
Davidson County	62,432	72,655	10,223	16.4	8,140	11.2%	64.5%	24.3%
Davie County	14,953	18,238	3,285	22	1,993	10.9%	72.3%	16.8%
Forsyth County	133,093	156,872	23,779	17.9	15,709	10.0%	57.5%	32.5%
Guilford County	180,391	218,017	37,626	20.9	21,389	9.8%	54.8%	35.3%
Montgomery County	14,145	15,914	1,769	12.5	5,370	33.7%	48.4%	17.8%
Randolph County	54,422	61,041	6,619	12.2	5,668	9.3%	66.2%	24.5%
Rockingham County	40,208	43,696	3,488	8.7	5,003	11.4%	61.8%	26.7%
Stokes County	19,262	21,924	2,662	13.8	2,508	11.4%	69.1%	19.5%
Surry County	31,033	33,667	2,634	8.5	3,753	11.1%	64.6%	24.3%
Yadkin County	15,821	17,341	1,520	9.6	1,855	10.7%	68.0%	21.3%
Piedmont Triad	630,824	736,560	105,736	16.8	79,433	10.8%	59.8%	29.4%

Table 12. Piedmont Triad Region Housing, 2000-2010

Source: US Census Bureau, 2000 & 2010 decennial census



Figure 9. Piedmont Triad Region Housing Structures, 2010

Source: US Census Bureau, 2010

OPPORTUNITY INDEX

The Opportunity Index was developed by *Measure of America* to index the potential economic opportunities available within the US. The premise of the index is that there are numerous, interrelated conditions within communities that impact the economic opportunities available to its residents.

The opportunity score considers 16 indicators in three broad categories (Figure 10), yielding a score of 1 to 100. North Carolina ranks 36th in the US, with a statewide opportunity score of 48. Two counties in the Piedmont Triad fair better than the state as a whole (Forsyth and Guilford), while the other ten counties fair worse.

Economy	Education	Community Health & Civic Life
Unemployment	Pre-School Enrollment	Youth Economic & Educational Inclusion
Affordable Housing	High School Graduation Rate	Community Safety
Median Household Income	Post-Secondary Graduate Rate	Healthcare Access
Access to Capital		Access to Healthy Food
Poverty		Volunteerism
Economic Equality		Community Engagement
Internet Access		
Assets		

Figure 10. Opportunity Indicators

County	Economy	Education	Community Health & Civic Life	Opportunity Score
Alamance	47.8	41.7	41.7	43.5
Caswell	37.9	37.3	28.3	34.5
Davidson	47.7	42.7	38.6	43.0
Davie	57.5	44.3	34.6	45.5
Forsyth	54.0	51.6	50.6	52.1
Guilford	50.9	56.6	47.7	51.7
Montgomery	40.2	42.6	34.1	39.0
Randolph	46.7	39.1	35.5	40.4
Rockingham	47.0	36.9	39.9	41.3
Stokes	59.4	45.0	32.8	45.7
Surry	46.1	41.7	43.7	43.8
Yadkin	48.6	44.8	39.8	44.4
North Carolina	46.6	45.7	51.6	48.0
United States	49.1	47.2	53.7	50.0

Table 13. 2012 Opportunity Score, by County

Source: Opportunity Index, 2012, constructed using official statistics from the US Census Bureau, Bureau of Labor Statistics, Federal Communications Commission, US Department of Justice.

"Times and conditions change so rapidly that we must keep our aim constantly focused on the future." - Walt Disney

EXISTING REGIONAL INFRASTRUCTURE

Infrastructure is defined as the essential facilities, services, and conveyances necessary to support a community. The term is often applied more broadly to include the network of institutions and services found within a community. Infrastructure provides the structure that makes life in communities possible, facilitates commerce and can dramatically influence quality of life.

For the purpose of this report, infrastructure is construed to be fixed assets and facilities in the 12 county area that include:

- Broadband
- Freight and Passenger Rail
- Public Transportation Services
- Electric Utilities
- Highways
- Schools, Colleges & Universities
- Freight and Passenger Air Service
- Parks & Protected Lands
- Water & Wastewater Systems

The following sections describe the characteristics of each regional infrastructure system, along with summaries of existing plans where they are available.

BROADBAND

Broadband is the general term for high speed internet access which can be delivered through a number of means – fiber, wireless, satellite, Digital Subscriber Line (DSL), cable, or power lines (BPL). Broadband infrastructure is vital to economic growth and essential for communities to compete in the global marketplace, and allows citizens affordable and efficient access to basic amenities such as education, healthcare, public safety and government services.

PLANS

In 2012 NC Broadband inventoried the availability of broadband in the Piedmont Triad region as part of a statewide broadband study which identified broadband accessibility and categories of demand for service on a regional As illustrated in Figure 2, access to basis. broadband service is not equally available across the region, with limited availability found in the region's most rural areas. Efforts are currently underway to identify strategies to serve all parts of the Piedmont Triad with high quality broadband, focused on locations with topographic barriers and low population densities.

Figure 11. Piedmont Triad Percentage of Households with Broadband Access, 2012



Source: NC Department of Commerce

ELECTRIC UTILITIES

While there are other utilities like natural gas available in the Piedmont Triad, our society relies on ready access to electrical power. The Piedmont Triad is served by a range of public, non-profit and private utility providers. Among providers, local governments and consumers there is growing interest in alternative fuel sources and an increasing demand for publicly available electric vehicle charging infrastructure.

DUKE ENERGY CAROLINAS

Duke Energy Carolinas owns nuclear, coal-fired, natural gas and hydroelectric generation facilities providing approximately 19,500 megawatts of electricity to 2.4 million customers in a 24,000-square-mile service area of North and South Carolina.

ELECTRIC COOPERATIVES

The North Carolina Electric Membership Corporation consists of the state's 26 electric cooperatives which provide energy and related services in 93 of North Carolina's 100 counties. Each of the cooperatives are member-owned, not-for-profit and overseen by a board of directors elected by the membership. In the Piedmont Triad, these include:

- Central Electric
- Piedmont Electric Membership Corporation
- Energy United
 - Pee Dee Electric
- Randolph Electric Membership Corporation
- Surry Yadkin Membership Corporation

ELECTRICITIES

NC Public Power is a municipally-owned and operated electric service comprised of more than 70 communities in North Carolina collectively known as NC Public Power. In the Piedmont Triad, these include:

- Lexington
- High Point

PLANS

In 2012, the North Carolina Solar Center and the Piedmont Triad Regional Council published *Triad Plugging In*, a regional plan which recommends specific steps to prepare the region for the growing demands for plug-in electric vehicles. Figure 3 illustrates priority locations for electric vehicle charging equipment.

In addition, the plan recommends the review of local development requirements to insure local policies support electric transportation options and identified an ongoing need to share information with the public about the benefits of alternative fuels.

Figure 12. PiedmontTriad Priority Locations for ElectricVehicle Charging Infrastructure



Source: PTRC, NC Solar Center

FREIGHT AND PASSENGER AIR SERVICE

North Carolina has a rich aviation history. Today, air services for freight and passengers are a critical part of the transportation network, linking Piedmont Triad businesses to national and international markets. These services are provided through a network of eight publicly owned general aviation airports and the Piedmont Triad International Airport (PTIA) which offers scheduled commercial air service in addition to general aviation (Figure 4). In 2009, PTIA served more than 1.7 million passengers and moved 152 million pounds of freight.

According to the 2012 NCDOT report *Economic Contribution of North Carolina's Airports*, Piedmont Triad airports contribute \$2.4 billion dollars in gross revenues to the regional economy, support 12,000 jobs and generate \$67 million dollars in state and local tax revenue each year (ITRE, 2012).

Foreign Trade Zone #230 serves the Piedmont Triad in several locations, including PTIA. The trade zone provides manufacturers and distributors with advantages related to import/export duties, tariffs and fees.

PLANS

In 2010, PTIA published the *Airport Master Plan and Strategic Long Range Visioning Plan*. The plan anticipates expansions north of Bryan Boulevard and capital improvements totaling \$276 million over the next 10 years.

Interest in an 'aerotropolis' logistics hub centered on PTIA resulted in several initiatives, including an in-depth analysis of industrial development sites in the region and the formation of the NC Center for Global Logistics. The *Seven Portals Study* completed in 2011 underscores the regional goal of supporting growth in the aviation economy and the establishment of a logistics village serving PTIA.

The 2011 Governor's Logistics Task Force found airports

Figure 13. Piedmont Triad Public Airport Locations



Source: NCDOT, PTRC

crucial to the regional and state economy, as key sectors increasingly rely on the logistics benefits of quality air service. The Task Force recommended continued development of aviation facilities to improve safety, reduce congestion in major airports, and preserve infrastructure.

Airport	Call Letters	Runway Length (feet)
Piedmont Triad	GSO	10,001; 9,000, 6,380
International		
Asheboro Regional	HBI	5,501
Burlington-Alamance	BUY	5,000
Regional		
Elkin Municipal	ZEF	4,003
Davidson County	EXX	5,004
Mount Airy/Surry County	MWK	4,301
Rockingham County – NC	SIF	5,199
Shiloh		
Montgomery County	43A	4,001
Smith Reynolds	INT	6,655, 3,938

Figure 14: Piedmont Triad Public Airports

Source: North Carolina Department of Transportation, Division of Aviation

FREIGHT AND PASSENGER RAIL

For 150 years railroads have played an important role linking the people and goods of the Piedmont Triad to destinations and markets across the United States. Most of North Carolina's rail system is owned, operated and maintained by the private sector. Of the 5,767 miles of rail lines in North Carolina, 491 miles are owned by the State through the North Carolina Railroad Company. The remaining trackage is owned and operated by a combination of Class 1 railroads like Norfolk Southern and CSX, and short line railroads like the Yadkin Valley Railroad Company.

Amtrak provides three daily passenger services in the Piedmont Triad, accessible in Burlington, Greensboro and High Point. Plans are underway to establish a permanent passenger depot in Lexington, with daily service beginning in 2014.



Figure 15. Piedmont Triad Amtrak Passenger Boarding, 2005-2012

PLANS

The Federal Railroad Administration (FRA) has designated the route connecting Washington, DC to Atlanta as one of five national highspeed rail corridors. The state of North Carolina has committed to completing rail infrastructure improvements that will increase the maximum train speed through the Piedmont Triad region to 70 mph, reducing the travel time between Raleigh and Charlotte by nearly an hour.

In 2011 the Governor's Logistics Task Force recommended the creation of a network of regional intermodal facilities that include an inland port near Greensboro and the development of 'logistics villages' across the Piedmont Triad. The 2011 *Seven Portals Study* for the Piedmont Triad detailed plans for five logistic villages in the region, as shown in Figure 7.

Location	Existing Freight Accessibility			
	Highway	Air	Rail	
Greensboro – PTIA	~	\checkmark		
Winston-Salem – Reynolds Airport	\checkmark	\checkmark	\checkmark	
Burlington – Alamance Regional Airport	\checkmark	\checkmark	\checkmark	
Montgomery/Moore – Heart of the NC Mega Site	~		\checkmark	
Davidson County – Lexington	~	\checkmark	\checkmark	

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Figure 16.	Recommended	Logistics Village	s, Piedmont Triad

Source: North Carolina Department of Transportation, Analysis by High Point MPO

Source: Seven Portals Study, 2011

HIGHWAYS

The Piedmont Triad is served by an unparalleled network of Interstate highways. According to the *Seven Portals Study*, the region's highway network provides overland access to half of the continental US in two days or less (Figure 8).



Figure 17. US Highway Accessibility from the Piedmont Triad

Source: Seven Portals Study, Triad Region, 2011

PLANS

The region's transportation planning needs are met by four Metropolitan Planning Organizations and two Rural Planning Organizations. These MPOs and RPOs are responsible for preparing long range transportation plans and prioritizing transportation projects for inclusion in the State Transportation Improvement Program (STIP). The STIP is the North Carolina Department of Transportation's primary tool for identifying and funding statewide transportation improvements. While the TIP includes projects for all types of transportation improvements – rail, air, bicycle, pedestrian and ferry – the majority of funding goes to maintain and improve the state's highway network.

Figure 9 illustrates the combined highway component of the adopted comprehensive and long range plans for the region. These plans identify existing roads in need of improvement and proposed alignments for new roadway segments across a range of high-level roadway types.

Figure 18. Piedmont Triad Region Comprehensive and Long Range Highway Plans



PARKS & PROTECTED LANDS

Parks, protected wilderness and undisturbed natural lands provide important eco-system services in addition to their value for recreation, hunting, fishing, and tourism. As an infrastructure element, our primary focus is on lands held in public ownership at the federal, state or local level.

FEDERAL

The Federal government manages more than 51,000 acres of protected lands in five counties within the region. These sites include the Uwharrie National Forest, the Guilford Courthouse National Military Park and a portion of the Cumberland Knob Recreation Area on the Blue Ridge Parkway. Plans for managing and expanding these sites are ongoing.

STATE

The State managed lands located in the region are diverse: four State Parks, four state historical sites, five game land holdings and the North Carolina Zoo. These sites total more than 93,000 acres.

LOCAL

Local jurisdictions have provided parks and open spaces for recreational uses for nearly a century. Park facilities can be found in virtually every community, and range from modest playgrounds to elaborate gardens, recreation facilities and multi-use greenway trails. Together, local governments in the Piedmont Triad manage nearly 20,000 acres of park lands.

Figure 19. Piedmont Triad Parks and Protected Lands



PRIVATE

In addition to protected public lands, North Carolina's local land trusts preserve land and waterways by working cooperatively with landowners to protect private lands for a variety of purposes - clean drinking water, recreation, tourism, healthy forests, and working farms. The Piedmont Triad region is served by the Land Trust for Central North Carolina and the Piedmont Land Conservancy. Between these two agencies more than 180 sites encompassing 8,900 acres are preserved through conservation easements.

PUBLIC TRANSPORTATION

Public transportation options provides an important alternative for individuals who cannot or choose not to drive or do not have access to an automobile. The regional vanpool program coordinated by the Piedmont Authority for Regional Transportation (PART) matches commuters with similar commutes. In 2010, PART provided 45 vanpools which supported 110,628 passenger trips (PART, 2010). Fixed route public transportation services facilitate the movement of people within and between communities on a published schedule following predetermined routes. In the Piedmont Triad region, fixed route services are provided by local and regional transit authorities, individual jurisdictions and other service providers. The figure below summarizes the fixed route services available in the Piedmont Triad.

Provider	Routes	Ridership
Davidson County Transportation	3	87,460
Greensboro Transit Authority/HEAT (GTA)	24	4,000,000
High Point Transit System (Hi-Tran)	13	777,705
Piedmont Authority for Regional Transportation (PART)	15	520,966
Winston-Salem Transit Authority (WSTA)	27	2,000,000
Source: North Carolina Department of Transportation Publ	ig Transportation Dir	vision

Figure 20.	Existing	Fixed R	oute Ser	vices.	Piedmont	Triad
D ¹ · · · ·		-				

Source: North Carolina Department of Transportation, Public Transportation Division

PLANS

PART's 2010 Regional Transit Development Plan describes a vision for transit service improvements for 10 counties through 2025, as illustrated in Figure 21. The plan proposes expansions and improvements to fixed route services, park and ride facilities and intermodal connections. PART's enabling legislation – chapter 160A section 638 – states "The purpose of the Authority is to enhance the quality of life in its territorial jurisdiction by promoting the development of sound transportation systems which provide transportation choices, enhance mobility, accessibility, and safety, encourage economic development and sound growth patterns, and protect the man-made and natural environments of the region." To fulfill its purpose, PART has a variety of funding options available (e.g. vehicle registration fee, sales referendum tax) to assist individual communities and multiple community partners achieve local and regional public transportation system goals.

Figure 21. Piedmont Triad Regional Transit Vision, 2025



Source: PART

SCHOOLS, COLLEGES AND UNIVERSITIES

Residents of the Piedmont Triad have access to a diverse group of educational offerings. The 17 local school districts in the region provide primary and secondary educational services to pre-K-12 students at 435 schools with a total enrollment of 252,032 students (Department of Public Instruction, 2011). These students come from increasingly diverse backgrounds, with more than 150 languages spoken in classrooms throughout the region.

The Triad is home to twenty-three institutions of higher learning: fourteen colleges and universities and nine community colleges with a collective enrollment of more than 110,000 students (Statistical Abstract of Higher Education in North Carolina, 2010-11). Three of these are classified as research universities, which drive innovation within the regional and develop new opportunities to participate in the global economy.

PLANS

The nine community college systems operate 28 campuses and centers across the 12-county area and reach 50,090 students annually. In 2010 the State Board of Community Colleges produced a plan that recommends strategies to improve access, enhance quality and increase student success across the community college system. North Carolina's community colleges are authorized to provide customized training to companies that will create jobs, enhance productivity, or make significant technology investments.

The University of North Carolina system has four campuses in the Piedmont Triad Region that serve more than 36,000 students. In 2012, the UNC Board of Governors launched *Strategic Directions*, a planning effort intended to produce a five-year plan for the university system. A report with recommendations for each campus is anticipated in early 2013.

Figure 22. PiedmontTriad Institutions of Higher Education



Source: Statistical Abstract of Higher Education in North Carolina,

WATER & WASTE WATER SYSTEMS

The Piedmont Triad lies in three main river basins which serve as the source of the majority of drinking water supplied to the region. The region is served by 56 water distribution systems and 38 waste water systems.

The majority of local water distribution systems are interconnected, while fewer than half the waste water systems are interconnected. Interconnections allow for the sale and purchase of water and waste water treatment services between jurisdictions and provide important redundancy in emergencies.

Currently, 13% of the region is served by both water and sewer, with water service more widely available than sewer, as shown in Figure 15.



Figure 24. Piedmont Triad Water & Sewer Service Areas

Source: PTRC



Figure 23. Primary River Basins in the Piedmont Triad



PLANS

Compiled by the NC Division of Water Resources, Local Water Supply Plans assess the current and future needs of water and sewer systems and determine if existing resources are sufficient to meet those needs. The 2010 and 2011 plans for the region's systems were compiled and summarized as shown in the Figure 16.

As a whole, current water demand in the region is 42% of the available supply, increasing to 51% by 2040. However, the demand for and supply of water is not evenly distributed across the region. Demand on six water systems in the region has reached 80% or more of available capacity. By 2040, that number grows to ten. Conversely, 24 water systems are currently operating at 25% capacity or less.

Waste water systems in the region are operating overall at 31% of the total permitted waste water discharge capacity. With the loss of water intensive manufacturing across the region, waste water capacity is more than double the current average rate of discharge. Waste water capacity is well distributed across the region, with just eight systems operating above 50% capacity.

Water Systems		Waste Water Systems		
Water Lines:	10,624 Miles	Total Permitted Capacity:	390.84 Million Gallons/Day	
Finished Water Storage Capacity:	235 Million Gallons	Average Daily Discharge:	118.63 Million Gallons/Day	
2011 Demand as % of Supply:	42.16%	Average Available Discharge:	272.30 Million Gallons/Day	
2040 Demand as % of Supply:	51.00%	Average Available Capacity:	69%	
Interconnected Systems:	42 Systems	Interconnected Systems:	14 Systems	

Figure 25. Piedmont Triad Water and Sewer Systems Summary

Source: NC Division of Water Resources, PTRC

SYNTHESIS OF EXISTING PLANS

PREVIOUS ECONOMIC DEVELOPMENT PLANNING EFFORTS

Planning initiatives related to the local and regional economy have been undertaken at differing geographies across the region for many years. Previous plans have encompassed individual counties, congressional districts, and the 12-county economic partnership area. Some plans have focused on specific subject matter, while others have been more general in nature. Each plan brought together subject matter experts, business interests, local officials and the wider community to develop potential solutions to the economic challenges facing the Piedmont Triad.

EXISTING PLANS

REGIONAL PLANS Regional Vision Plan, Piedmont Triad Region, NC	2005
SUB-REGIONAL PLANS	
Assessing the Economic Competitiveness of the Danville, Virginia Region (includes Caswell County)	2009
Northwest North Carolina Comprehensive Economic Development Strategy	2004
8 th Congressional District Comprehensive Economic Development Strategy	2003
JURISDICTIONAL PLANS	
Winston-Salem Downtown Plan	2013
Winston-Salem / Forsyth County Legacy 2030 Comprehensive Plan	2012
City of High Point Core City Plan	2007
Greensboro Partnership 2012 Strategic Plan	2012
Greensboro Downtown Economic Development Strategy	2010
Balanced Economic Development: A Strategic Plan for East Greensboro	2011
The Connections 2025 Comprehensive Plan (Greensboro)	2003
The Consolidated Plan 2010-2014: Plan for a Resilient Community (Greensboro)	2010
Rockingham County Competitive Assessment	2011
Randolph County Competitive Assessment and Target Industry Study	2010
Montgomery County Economic Development Strategic Plan (21st Century Communities)	2006
Caswell County Economic Development Strategic Plan (21st Century Communities)	2005
Marketing Plan for High Point, North Carolina	2003
SUBJECT PLANS	
Regional Profiles of Broadband Utilization in North Carolina	2011
Seven Portals Study, Piedmont Triad Region	2011
Economic Impact Analysis of an Auto Assembly Plant in the Piedmont Triad	2011
Economic Impact Analysis of the Piedmont Triad International Airport	2011
Airport Master Plan Update and Strategic Long-Range Visioning Plan – PTIA	2010
Hanging Rock Corridor Committee Report	2010



STRENGTHS AND CHALLENGES

Analysis of the collected planning documents was performed using the prescribed focus areas of *NC Tomorrow*. Plans were reviewed to identify challenges and strengths within each focus areas and potential solutions (Figures 27-29).

COMPETITIVE ADVANTAGE & LEVERAGE

This focus area describes the sectors of the Piedmont Triad's regional economy which are vital to our economic mix, are growing or emerging, and/or unique to the region.

REGIONAL INFRASTRUCTURE

This focus area includes the fixed assets of the region, including transportation, utilities, support systems and the natural environment.

VIBRANT COMMUNITIES

This focus area refers to the characteristics that create communities with a high quality of life, including local leadership, housing stock, and community amenities.

TALENT

This area focuses on the human assets of the region, including our workforce, education and healthcare systems and access to capital.

Key words and phrases from the vision statements found within the reviewed plans have been assembled to the right highlighting the breadth and depth of the visions identified through previous planning efforts (Figure 26).

Figure 26: Vision Statement Key Words


Figure 27. Identified Strengths From Past Plans

Competitive Advantage & Leverage	Regional Infrastructure
Scenic beauty	Transportation infrastructure
Strategic location in the southeast and eastern seaboard	Interstate access
Abundant resources	Piedmont Triad International Airport (PTIA)
2/3 of the US population lies within a one-day drive	Brownfield redevelopment opportunities
Federal Express Mid-Atlantic Hub	Above average usage of broadband in information, education,
High quality business parks	retail, professional services, leisure and hospitality sectors
Low labor and land costs	Available land
Goods-production in the region is more intense than NC and US	Telecommunications infrastructure
as a whole	Growing cargo shipments at PTIA
Cooperative relationships between local government and business community	Availability of rail service
Leadership in public and private sector	
Diversifying industrial base	
Agricultural potential	
Continued population growth	
Presence of existing industrial sites prime for redevelopment	

Vibrant Communities

Low cost of living Cultural heritage Diversity 'Home Place' migration trends Institutional capital (local governments and community organizations) Growing support for local foods Cultural capital (leisure, arts and entertainment organizations) Institutional capital (local government and community organizations) Faith community Pro-business climate Rich history, sense of place Wide commitment to address economic issues

Talent

Wealth of public and private colleges & universities Elasticity in local, available workforce Work ethic of the labor force Access to quality healthcare services

Figure 28. Identified Challenges From Past Plans

Competitive Advantage & Leverage

Regional identity and branding Regional collaboration and cooperation Development of a shared vision Building a culture of entrepreneurship Regional communication Economic transition away from manufacturing Continued reliance on traditional industry sectors Reliance on external funding Competition from across state lines Competition among regional jurisdictions Working together as a single economic unit or entity Ready to go industrial sites Regional Infrastructure Solid waste issues Water quality, quantity and distribution Public transportation Limited 'visitor ready' tourism assets Broadband and cellular coverage Below average usage of broadband usage in construction, transportation and real estate sectors Watershed restrictions impact on growth Declining passenger boardings at PTIA Growth restrictions Insufficient truck routes serving entire region

Vibrant Communities

Coordination of land planning Air Quality Changing demographics & increasing diversity Preserving and creating green space Strengthening central business districts Affordable housing Pessimism Contentious relationships among institutional organizations Public health Brain drain Aging population Crime, perception of crime Racial tensions Inconsistent land development planning and zoning policies Surface water quality Regional inconsistencies in population growth and loss

Talent

Shrinking labor force and low participation rates Illiteracy Educational attainment at all levels Leadership drain Unemployment and underemployment Population is older, less affluent than NC as a whole Disconnect between transitioning workforce and training services Loss of workforce to other areas due to layoffs Persistent public health issues – Teen pregnancy, obesity Funding cuts impacting education Stagnant income levels

Competitive Advantage & Leverage	Regional Infrastructure
Create a leadership framework to align goals, build trust and	Develop regional transportation plans accommodating alternative
maximize cooperation within the region	modes of transportation
Create regional structures to promote cooperation and sharing of	Improve cellular and high speed internet access
resources Develop a positive regional identity and brand	Develop plans to address solid waste disposal
Develop regional media outlets	Insure adequate water supply and water quality
Build diverse regional leadership capacity	Develop local and regional trails
Focus support on small and medium enterprises (1-50 emp)	Target broadband improvements to high growth opportunity industries
Conduct site assessment for new class A industrial parks	Establish regional priorities for broadband
Nurture the elder care economy	Improve tele-health service availability
Promote the region internationally, nationally, statewide and	Identify new locations for business parks
locally	Expand Piedmont Triad International Airport
Provide internet resources identifying incentives, demographics	Complete interstate improvements on I-73/74 Corridor
and available sites	Complete the promised Transportation Trust Fund improvements
Promote the cultural, historic and scenic assets of the region	on NC and US highways in the region
Provide resources to retain and grow existing businesses	Complete the Urban Loops
Develop and support Piedmont Triad Research Park	Create an on-line regional implementation tool
Develop advanced research and technology center	
Establish a regional design collaborative	
Vibrant Communities	Talent
Develop and expand target business clusters:	Improve student performance and local schools K-12
– Healthcare – Finance & Insurance	Increase educational attainment
 Logistics Food Processing Wholesale Trade Arts 	Encourage community participation in schools, develop adopt-a- school program region-wide
	Invest in student apprenticeship programs
0	Improve access to quality child care & pre-K education
Expand art, cultural, recreational and entertainment offerings	Provide retraining for displaced workers
Attract and retain young people	Capitalize on college and university research and collaboration
Improve air quality without hampering economic growth	Strengthen relationships between training outlets and businesses
Coordinate land use, green space and transportation plans	Create an environment that supports entrepreneurship
Develop nature-based tourism assets	Targeted workforce training in priority industry sectors
Develop agri-tourism assets	Support development of home-based businesses
Develop training and resources to improve internet usage and skills to older adults and lower income households	Re-engineer education systems to equip workforce with skills necessary to compete in global economy
Encourage and incentivize downtown development	
Promote and preserve agricultural potential	Create and support local entrepreneurial culture; focus support
Grow virtual farmers market initiatives	
	Create and support local entrepreneurial culture; focus support for transitioning workforce Increase resources for educational programs, teachers and
Invest in civic entrepreneurship to solve pressing problems together	Create and support local entrepreneurial culture; focus support for transitioning workforce

2014-2018 CEDS ACTION PLAN

FORWARD

With a gross unemployment number of 78,000 and an unemployment rate of 10.6%, the Piedmont Triad region is striving to recover from the huge downdraft of domestic manufacturing that preceded the biggest recession since the Great Depression. For generations manufacturing has been the lifeblood of our region – leading the nation in textile, apparel, furniture and tobacco industrial output. As these industries declined, so did the prosperity of our region. The goal of this Comprehensive Economic Development Strategy is to bring about a higher level of sustainable prosperity for our region through a higher level of workplace engagement.

Over 1.6 million people call the 12-county Piedmont Triad area home. However, half of our population is in Guilford and Forsyth counties and over 70% of our future growth (2010 to 2030) is projected to be in these two urban core counties. Our region's only major airport is located near the county line separating the two counties. They have 80% of the region's area currently served by both water and sewer. Our urban core has abundant



Source: www.revolutionmillstudios.com

interstate highway access and hosts eight of the nine colleges and universities in the region. Guilford and Forsyth are the two highest scorers on the Opportunity Index from *Measure of America* and are the only two counties in the region with a bachelor's degree attainment percentage above 25% (eight counties are below 13%). Our region's two largest counties are at a different level of development with a greater range of traditional economic development assets than their rural neighbors.

One of the dangers of regional economic development planning is to treat all areas and every community as if they are all alike. In a region as large and diverse as ours they are clearly not. Therefore, the cluster mix included in this plan takes our intra-regional differences into account. As our economic development efforts succeed, most notably in and surrounding our central urban counties, our more rural counties will also greatly benefit. Residential overflow and access to work by an excellent regional highway and transit system can provide region wide benefits as well. Healthcare access is migrating towards greater affiliation among providers, providing more services locally and supporting the continuation of rural healthcare provision.

KEY TRENDS

Since 2000, the United States has added 34 million new residents. However, the private sector has added virtually zero new jobs. We repeat: **zero net new jobs in the last13 years with 34 million more of us in the U.S**. Businesses are finding other ways to produce besides adding full-time employees. Contract workers, project managers, part-time help, internships and technology are providing potential employers with the productivity they need to get the job done. The modest growth in military personnel and the public sector (a net increase of about one million teachers, firemen, police, etc.), to address the needs of 34 million more Americans, hardly met the country's employment needs. Millions more are not in the workplace due to retirements and unemployment. The growth in workplace engagement is due solely to the *"Proprietor Economy"* – the free agent, consultant, self-employed, contract worker who is in the workplace in a role other than the typical job relationship. This trend has taken hold in the U.S. economy and has become a critical building block of any local economic development effort. This trend is evident in the Piedmont Triad region. From 2000 to 2010 *every* county in the region had a decline in the number of jobs. Our region added nearly 176,000 people but *lost* 84,000 (net) jobs. No job sector was spared from the larger trends in the economy (not just a drop in manufacturing) and the economic recession.

Another key trend is the **dramatic changes taking place in our region's demographic makeup**. Minorities will comprise virtually all growth to 2040 while our region's non-Hispanic White population will decline. Older adults will account for more than half of the change in population between 2010 and 2025 and 40% to 2040. Between 2010 and 2025, households with children will comprise only 8% of the share of household growth while households without children will comprise 92% and single-person households with account for 51% of the share. To 2040, these household shares will be 16% households with children, 84% households without children, and 64% single person households. The rising mean and median ages of our region's residents and our increasing racial

diversity match national trends. English as a Second Language (ESL) is prominently provided in the region's school systems. Some school systems report that nearly 100 different nationalities are represented among their student rolls. Backgrounds of newer arrivals different than those of the native born bring a rich diversity and at times some inclusion difficulty. In addition, the Piedmont Triad region is not keeping pace with state and national growth in Median Household Income, Median Family Income, or Per Capita Income. The region is getting poorer relative to the state and nation. A very high priority of this plan is to reverse that trend.

WHY EQUITY MATTERS

The face of America is changing. Our population is rapidly diversifying. By 2042, we will be a majority people-of-color nation. Strategic educational and workforce development investments are essential to economic growth for our nation, our state and our region. As our country witnesses new extremes of inequality alongside the emergence of a new people-of-color majority, equity has become an economic imperative for stronger growth; a better bottom-line; and better connections to global markets. To secure America's prosperity, our nation needs to implement a new economic model based on equity, fairness, and opportunity. Metropolitan regions like the Piedmont Triad are where this new growth model will be created. Regions are the key competitive unit in the global economy, and the level where strategies can best be incubated to bring about robust job growth, a more resilient economy with opportunities for all. Regions are equitable when all residents-regardless of their





Source: The Pew Charitable Trusts, "Pursuing the American Dream," 2012 © 2013 The Pew Charitable Trusts

race/ethnicity/nativity, neighborhood of residence, or other characteristics—are fully able to participate in the region's economic vitality, contribute to the region's readiness for the future, and connect to the region's assets and resources. Strong, equitable regions:

- Possess economic vitality, providing high-quality jobs to their residents and producing new ideas, products, businesses, and economic activity so the region remains sustainable and competitive;
- Are ready for the future, with a skilled, ready workforce, and a healthy population; and
- Are places of connection, where residents can access the essential ingredients to live healthy and productive lives in their own neighborhoods, reach opportunities located throughout the region (and beyond) via transportation or technology, participate in political processes, and interact with other diverse residents.

As the Piedmont Triad inches its way out of the Great Recession and looks toward the future, the need for a new policy framework to guide our economic growth is clear. The middle-class has shrunk, making the gap between the affluent and poor the widest it has ever been and, the gap continues to grow. The Piedmont Triad region is rapidly becoming more diverse. Building economic prosperity and resilience for everyone in our region will require a wide-ranging set of approaches, spearheaded and sustained by numerous stakeholders representing a broad range of interests from throughout our region. Collaboration across organizations and sectors will ensure and sustain robust, opportunity-rich communities.

Economic revitalization and social equity go hand in hand.

The Piedmont Triad region was hard-hit by the economic downturn of the past decade, losing more than 84,000 jobs since 2000 (NC Department of Commerce, 2010). Our region's massive job losses and plant closings have created a huge financial burden affecting the ability of many of our communities to rely on their

shrinking tax base to address the ever growing need to provide public services and repair or replace aging infrastructure. Economic revitalization and social equity go hand in hand. By embracing the demographic changes that are sweeping our region and taking meaningful action to provide opportunities for everyone, the Piedmont Triad can become an even more competitive player on a global scale while providing a safe and healthy environment for all our citizens to live, work and play.

Deficits in traditional financial wealth and a competitive level of formal education put many recent arrivals plus tens of thousands of native residents in our region in a precarious financial and competitive position. Over 40% of all live births in the US are now delivered by single moms – more than half among some demographic groups. Coupled with a greater than 50% divorce rate, an increasing number of children in single-parent households are facing a steeper climb toward educational and financial success. This is happening in the context of the widest spread in income levels between top income producers and low wage earners in US history. This plan focuses on three methods for creating more equitable opportunities for everyone in our region: 1) Raising the level of formal educational

attainment to allow those from disenfranchised backgrounds the ability to compete on a level playing field of knowledge; 2) Providing for entrepreneurial support, giving those who have the talent, passion and ability the opportunity to become more income self-reliant and provide for ownership in business; and 3) Promoting the concept of co-ownership in business, by melding mutual interest in one's work with others to provide for personal income, an equity stake, and collective good in communities throughout our region.

HISTORICAL PLAN PERSPECTIVE

Much effort has been previously spent on economic growth plans in the Piedmont Triad region. Most such plans are general in nature and designed to foster the traditional economic development goals of creating jobs and increasing tax base. Though worthy goals, there is more we need to consider moving forward. Past plans are written with a confidence the future is controllable and by simply focusing well enough and working hard enough the outcomes projected in the plan will emerge – that we can control our destinies. Perhaps in a previous era that was true. However, it is clear communities and economic development organizations are finding it increasingly challenging to directly counter the impact of rapidly changing economic, technological and societal trends. The confluence of trends that have been in play for decades have come together, wreaking havoc on traditional manufacturing economies. A new type of thinking for the new economic paradigm is in order.

Assessment of current social, environmental, economic, technological and political trends is necessary for successful implementation of a 21^{st} Century economic development plan. Simple distillations of past plans based on earlier economic paradigms are no longer adequate. A new type of assessment and plan of action is in order – including concrete ideas and specific actionable steps towards moving the regional economy forward. A quote attributed to Henry Ford supports this approach: "If I had asked people what they wanted, they would have said faster horses."

"If I had asked people what they wanted, they would have said faster horses." - Henry Ford

ASSESSMENT OF TRADITIONAL PLAN ELEMENTS

Most economic development plans written since 2000 include a traditional set of components less relevant than they once were. We have entered an economic era that pays little homage to the industrial successes of the past and is transitioning toward a new job paradigm. Therefore, this section assesses the current status of traditional economic development planning elements – <u>Industry Clusters</u>; <u>Regional Branding</u>; <u>Regional Cooperation</u>; and <u>Entrepreneurship</u> – and frames their relevance to the Triad Tomorrow CEDS.

INDUSTRY CLUSTERS

Promoted in 1990 by Harvard professor Michael Porter in his book "<u>The Competitive Advantage of Nations</u>", cluster theory advances the ideas that industries best thrive in two scenarios: 1) when companies have the benefit of many or all of the related components of what they use nearby, raising efficiencies and synergies among industry suppliers and, 2) when they are surrounded by like companies, creating a level of shared, yet competitive, expertise and an ever-evolving higher level of competence in that industry.

In many cases clusters are considered the core of the economy in whatever geographic location is being analyzed and it may take decades for a cluster to fully develop. A cluster strategy is generally applicable to many areas, and economic developers across the U.S. recognize and practice cluster development when it is suitable. The downside to an aggressive cluster focus is what we in North Carolina are currently experiencing. The clusters of furniture, tobacco, textiles and apparel – manufacturing in general – all witnessed a comprehensive, concurrent collapse. 84,000 jobs have been lost in the region - 40,000 jobs in manufacturing alone - and the bulk of those jobs aren't coming back.

The Piedmont Triad is not a homogeneous entity with uniform characteristics and assets. Our region's urban core areas can cite advantages in higher education, logistics, aviation, research & development, and tourism & hospitality. The same advantages are less apparent in surrounding rural areas. Some of the less site-centric clusters may have connectivity possibilities with more distant locales, but to claim regional industry clusters for such a disparate region is a stretch. Industry cluster identification and development is not applicable everywhere. Where it provides focus and benefit it should certainly be used. But painting the entire Piedmont Triad with the same cluster identity brush has not proved to be particularly successful.

The current practices of cluster development, industry recruitment and job training have all been around for years and at some level all fit into the mix of recommended activities to counter our region's massive economic shifts. But we need to give these efforts context. Several economic development entities in one area of our region have conducted five industry cluster studies over the past twelve years identifying some 25 different industry clusters as suitable and preferred for development. This dizzying array of options and directions points to the need for a tighter focus.

Industry cluster concentration provided the manufacturing focus in furniture, textiles, apparel and tobacco by which the Piedmont Triad region thrived for decades. However, according to a recent report on municipal economic development trends, 60 to 70 percent of clusters fail (McKinsey & Co., September, 2013 - governing.com). When clusters break down, the fallout can be painful. Having the benefits of sharply focused economic attention on specific economic opportunities, yet developing a diverse mix of industries seems a better strategy for weathering future economic cycles.

Business recruitment should logically follow the industry clusters identified by a community. Yet often, neither recruitment efforts nor successes match with publicly stated and policy-adopted industry clusters. Rather, industry recruitment often appears to be driven by



the old economic development mantra: "Shoot anything that flies. Claim anything that falls."

One of the industry clusters identified in recent economic development plans that fits an expansion profile, and has had success is the aviation cluster. The expansion of HondaJet and the TIMCO airplane maintenance facility, among others, are providing a launch pad for future aviation-related expansions and relocations. Nevertheless, this is why we have to think differently, starting with this plan. The State of North Carolina (through its various training and education branches), HondaJet, and the Cemala Foundation (\$932,500) have committed well in excess of one million dollars to aviation training in our region. Through various programs, the publicly stated outcome in 2013 will be about 75 trained individuals with the capacity to work at

one of the aviation-related companies. Program coordinators struggled to find applicants for the free education and training. This number should increase in 2014.

Though this cluster development effort is laudable, it needs to be put into perspective. With an investment of at least \$1.25 million, approximately 200 people will be trained for jobs in the aviation industry that should largely pay household sustaining wages. However, in Guilford County alone, there are currently 25,000 people on the unemployment rolls (not counting those who have quit looking) among the 78,000 in the same condition across the region. At this cost and pace of employment in a successful program, the old, standard means of addressing unemployment simply will not get the region where it needs to be. The rules have changed. We need to acknowledge that and prepare for an economic world we have never experienced. That is what this plan intends to do.

Regarding industry clusters, one recurring theme that seems to be present in nearly every economic development plan that exists – across America - is the uniform belief that each state, region, county and community has a decided advantage over everyone else in the pursuit of "advanced manufacturing." It is remarkable to witness plan after plan that declares so many jurisdictions to be better able to attract and support manufacturing (clearly with each area's technological advantages over their peers) in advanced processing. In reality, these ubiquitous advanced manufacturing claims represent a lot of identical competing cluster confusion and noise that prevents any jurisdiction or entity from gaining a market awareness foothold on anything but the most unique – almost exclusive – industrial clusters.

In today's world we are working through three economies in "churn": the <u>Industrial Economy</u>, the <u>Knowledge Economy</u>, and a new one, as yet without an adopted name, titled by Rick Smyre as the "<u>Creative Molecular Economy</u>." As the most recent economic era grows, the older ones are diminished. Individual capacity in a networked environment is becoming more predominant. So – rather than focusing on "Industry Clusters," this plan instead focuses on "<u>Talent Clusters</u>" through a range of recommended talent-building work force development and education strategies.

REGIONAL BRANDING

Efforts to identify unique characteristics and to promote a positive regional brand to the rest of the country and world are laudable. However, like the noise and confusion surrounding attempts to stand out for advanced manufacturing prowess, regional branding is extremely difficult. Since 1990, the Piedmont Triad has been promoted and advertised to achieve economic market awareness. Our postmark was changed to "Piedmont Triad" from cities and towns. The regional airport in Greensboro was renamed "Piedmont Triad International Airport." The names of larger cities in the region were routinely understated in deference to the regional name. But after nearly 25 years it is clear marketing a region nationally by a pseudonym is not particularly effective. While the benefit of being a "Top 50 Market" or having bragging rights to a regional population of 1.6 million is seen as a clear marketing benefit, the "Piedmont Triad" brand arguably means little to those outside of North Carolina. "*Greensboro, Winston-Salem and High Point as lead cities in a region of 1.6 million people*" may tell a more compelling story to an outsider and surrounding counties and towns can gain the same benefits. We challenge the reader to name six nationally-known economic development regional successes in the U.S. Scratch Boston, Austin or any other region identified by a well-known city. Can you name even three? Branding a region is extremely difficult. Perhaps only the "Silicon Valley" and "Research Triangle" have actually succeeded in this expensive and elusive quest, with the odds stacked terribly against anyone attempting it. While we are proud of our region, gaining national or international attention for its fine attributes demands a heavy cost. This plan proposes to apply those limited resources elsewhere - focusing our efforts on building the skills and abilities of our citizens – garnering attention instead for our developed talent clusters.

REGIONAL COOPERATION

Several contributors to this plan noted the lack of trust and the need to build cooperation among the jurisdictions in the Piedmont Triad. Their observations are well founded. On multiple occasions jurisdictions close to one another have engaged in a bidding war for corporate expansions and relocations. Despite words to the contrary, there is little abatement in that competition. In addition, there are several examples of jurisdictions providing financial incentives to a company to relocate from an adjacent city or county.

On the other hand, there are numerous examples of regional cooperation in the Piedmont Triad, especially in the non-profit arena. *First Tee of the Triad* works because there is no need for multiple administrations across the region. The name accurately reflects who



they are and does nothing to diminish the exposure for the individual towns and cities they cover. The same can be said of the *SPCA of the Triad*. Regionalism works best when there are mutual benefits to working together. For example, the *Piedmont Triad Regional Water Authority* is a multi-jurisdictional group of five municipalities (Randleman, Greensboro, High Point, Archdale, Jamestown) plus Randolph County, formed to oversee the creation of Randleman Dam Lake. The recent *Early Action Compact*, designed to be the regional response to air quality compliance violations, served the area well. Likewise, the *Piedmont Authority for Regional Transportation* (PART) provides mass transit service and funding options for participating members throughout the region.

Regionalism is best accepted when there is a mutual need and benefit. Currently, economic development is the low-hanging fruit of mutual need. Announcements for economic development relocation or expansion are about increasing the tax base, jobs – and pride. In a depressed economy, policies and best practice guidelines are skirted in deference to a project that proposes to add employment for local communities. Economic Boards, ED staff and local elected officials, trying to do what they think best for their jurisdictions, compete with all comers to land a project. It doesn't matter if the competition is two continents, eight states, or twelve miles away, local jobs are at stake. There is little sense of regionalism, trust or cooperation in such an environment. For all the talk about working together - when it comes down to landing an ED project each triad community will compete with its neighbors if need be. That's why the necessary trust and cooperation to enhance a regional approach to economic development has difficulty moving forward. As long as location matters – *location matters*.

However, if the actual site no longer mattered in a regional economic development relocation or expansion; if the net cost or net tax revenue benefit was the same regardless of which side of a jurisdictional line a project landed; if access to the job from distance or ease of transportation made the new jobs equally accessible by everyone in the region – then outside of the pride factor, location would no longer matter. And if location no longer was a competitive factor, everyone got a piece of the tax benefit, and everyone's citizens had a no-advantage cheap transportation access to the jobs, then regionalism would have a fighting chance to emerge and flourish.

North Carolina state statutes allow for interlocal agreements for economic development. Interlocal agreements put in place in North Carolina promote sharing of expense and revenue for the projects. This collaborative method of building a regional economy minimizes the hard focus on location. This type of arrangement can work well in the Piedmont Triad, where counties, cities and towns opt in for an interlocal agreement whereby they share proportionately the costs of site enhancement and share in the property tax proceeds. The issues to negotiate can be tricky, but the reward for success can be huge – both for the immediate project and regional cooperation.

ENTREPRENEURSHIP

The private sector of the U.S. economy has added virtually zero net new jobs since year 2000. That trend shows no signs of abating. Businesses are regarding human labor – especially full-time employees – as undesirable payroll expense and are avoiding adding personnel to the payroll. Consequently, partially out of the opportunity to fill those gaps through project work and labor fulfillment projects and partially out of self-preservation, millions of Americans have become self-employed.

The "Proprietor Economy," consisting of self-employed entrepreneurs, small business persons, independent contractors and others has provided all of the workplace engagement net increases since year 2000. They have been the only area of net increase in the workplace in 13 years. Private sector jobs and public sector jobs – those areas where there is a direct "job" workplace affiliation – have added essentially zero net new positions in thirteen years.

For years elected officials and business supporters have pointed to the venerable status of "small business," citing that area of the economy as the one that "creates 80% of the jobs." In fact, small businesses are no more likely to create (or lose) jobs than large companies. What is true is that a subset of small business is critical to any job creation. <u>New</u> small businesses – those in their first five years - are the job creators (Dr. John Haltiwanger, University of Maryland). This critical five year period is when they are adding internal functions in the original growth spurt upon achieving solid footing. After five years, those growth-in-jobs moves subside. Either way – in job creation or in the only area of workplace engagement growth in the economy ("proprietor") – entrepreneurial growth is imperative to revive our region's economy and provide greater access to productive capability.

CEDS GOALS, OBJECTIVES AND STRATEGIES

This plan is built on the framework set out by the North Carolina Association of Regional Councils for the NC Tomorrow initiative. The uniform framework establishes four overarching goals and a series of objectives for each. Regions are free in this process to add and/or modify objectives and strategies. The resulting CEDS is consistent with the uniform statewide goals while addressing the key issues of most importance in the Piedmont Triad Region. In developing the strategy, the following guidance was applied:

- <u>Goals</u> are general, often intangible, outcomes that move the region towards its vision. Goals are aspirational. Directional progress towards the goal should be definable, but it is often difficult to capture a goal by precise metrics.
- <u>**Objectives**</u> Tangible milestones that define progress toward achieving goals. Objectives should be clear enough to leave little doubt whether, or to what degree, an objective has been achieved.
- <u>Strategies</u> Work elements necessary and designed to achieve the objectives.
- Estimated Costs An estimation of costs anticipated to achieve each objective using the following relative scale:

\$ Can accomplish with existing staffing levels and revenue allocations

\$\$ May require reallocation of existing staff and revenues

\$\$\$ Requires modest increase in staff and revenues

\$\$\$\$ Requires additional staff and/or increased revenues

\$\$\$\$ Requires significant additional staffing and/or new revenue sources



COMPETITIVE ADVANTAGE & LEVERAGE STRATEGIES

A traditional evaluation of competitive advantages and the leveraging of those advantages is generally performed with existing assets. It makes sense to use what you already have. These advantages, including many legacy industries in communities throughout our region (e.g. textiles, furniture), will provide substantial benefit for many years to come. However, with an economy going through such a monumental shift – in which the private sector is choosing to minimize the use of the employee platform and "Proprietor" workplace engagement becoming more prevalent – these advantages may carry a different weight than in the past. Because of the sheer population size of our region (36th largest MSA in America), our ability to adapt to the trends that represent the new economy is crucial to impact a significant number of citizens seeking personal economic sustainability. Promising opportunities for leveraging regional advantages and new methods of building workplace capacity are required to address our intense need to adapt to new economic realities.

<u>**Urban / Rural Connectivity</u>**</u>

The Piedmont Triad has remarkable institutional, infrastructure and human capital assets. The urban core has a significant number of traditional economic development competitive advantages, including universities, highways, airports and utilities. Formal educational attainment and projected population increases are highest in our region's urban core.

Our rural areas, represented by six to eight of the twelve counties in our region, are not projected to grow substantially and migration into rural communities will be modest. The routes considered toward economic prosperity can be very different in a more static environment. Though they may find success in two vastly different ways, the synergy leading to success will be maximized if all players are engaged in regional economic development efforts with others. The rural areas, in particular, will benefit by creating connectivity and alliances with nearby urban markets and urban assets within the region.

The Piedmont Triad's industrial and economic strengths in areas that are growing indeed provide a competitive advantage. There are distinct differences in the economic development characteristics between the urban core and rural areas of the

Figure 30: Piedmont Triad Urban Core



Piedmont Triad. Cluster strategies for each area have been identified and are highlighted below.

Inter-Jurisdictional Collaboration

Because of the importance of developing and increasing a non-residential property tax base – and because of the political, ego and pride issues of claiming expansions and relocations – there has been less collaboration than possible among jurisdictions on economic development projects. Minimizing the financial and pride factors of siting a project – of location – is critical. As long as that ingredient is in the mix, territorial one-upmanship with neighboring jurisdictions will continue to rule. Interlocal agreements promote sharing of project expenses and revenues and minimize the hard focus on location.

Entrepreneurship

Over the last thirteen years, with 34 million more people in the U.S., there are virtually no net new private sector jobs to accompany that level of growth. The figures in the Piedmont Triad are worse: every county in the region has lost jobs in that period (population growth was meager in six rural counties as well). The only area of the economy that had more workforce engagement was the self-employed – the "Proprietor" economy. By a wide margin, the biggest area of "job" creation was in the formation of *new* small businesses. Either way, both the maturing and mentoring of the region's skills, talents, learning or passion *and* the acquisition of entrepreneurial skills are paramount to achieve rising prosperity in the new economy. It is also one of the key areas of increasing opportunity and equity within the region.

<u>GOAL</u>: Build on and improve sectors of the Piedmont Triad's regional economy which are vital to our economic mix, are growing or emerging, or are unique to our region.

Dejective 1: Assess and affirm the most promising urban and rural industrial clusters of the region. \$\$\$

The relative range of development among the identified industrial clusters in the region, and whether there are substantial gains to

be made through public and private sector attention varies widely among the industries. Among the clusters of the urban core, aviation appears to be the industry with the most to benefit from focused attention in traditional economic development terms both in industry expansion and the opportunity for job creation. Hospitality/Tourism can reinvent itself by establishing a curriculum focused on superior customer service provision. Most of the others have the critical baseline of size and scale to grow with little assistance. The intersection among these clusters and the Talent Cluster, discussed below, is very important. In particular, the Aviation, Hospitality/Tourism, and Bio- and Nano-Science clusters will need higher levels of knowledge, education and training than have currently been achieved to reach their potential.

The largest potential area of economic growth in many of our rural communities appears to be in the expansion and development of new agricultural opportunities. With the expansion of broadband internet service and advances in new areas like 3-D printing, the Proprietor Economy will expand into rural areas and democratize many economic efforts that are currently largely sited in urban areas. These developments will provide important income streams that have been lost due to recent manufacturing closures.

Urban Industry Clusters

- <u>The Aviation Cluster</u> Takes advantage of numerous manufacturing, maintenance and service growth opportunities in a variety of airplane-related industries. HondaJet (design and construction), TIMCO and Cessna (airplane maintenance), and the logistics strength of FedEx provides an excellent area of focus.
- The Warehouse/Distribution/Logistics Cluster Though diminished, the Piedmont Triad still has a very strong manufacturing component, has significant interstate and four-lane highway capacity, and is geographically well-positioned. This cluster development will be largely dependent on the relative strength of manufacturing and continued access to welldeveloped shipping modes.
- The Hospitality/Tourism Cluster One of the greatest economic strengths of our region's urban core areas. Though often given little notice, this cluster is a powerful economic generator. Guilford County is the third largest tourist county in North Carolina, built largely on the strength of the High Point Furniture Market, the Koury Center/Sheraton Four Seasons, and events at the Greensboro Coliseum Complex. This cluster still has

ample room for future growth.

- The Bio/Nano Sciences Cluster The Joint School of Nanoscience and Nanotechnology (NC A&T/UNCG) in Greensboro and the Wake Forest Innovation Quarter in Winston-Salem will provide the Piedmont Triad with both education and industry access to two areas of science that will be huge areas of growth in the future. Though their current economic impact is relatively small, prospects for each are excellent.
- <u>The Finance and Insurance Cluster</u> With a large presence in the Piedmont Triad, the biggest area of jobs is in call center operations, where CitiCard, BB&T, Bank of America and others have regional operations sites.



Source: www.conehealth.com

- The Healthcare Cluster The Piedmont Triad's wealth of hospitals and healthcare facilities (supported by an aging demographic) will provide a real source of direct jobs and related services.
- The Advanced Manufacturing Cluster Highly technical machines and processes (e.g. 3-D printing, robotics)

- 1. Affirm the land use, road reconfiguration and airport business plans and projections with the PTI Airport Authority and all adjacent jurisdictions. Focus on:
 - a) Just-in-time manufacturing
 - b) Warehousing/Distribution/Logistics
 - c) Aviation design and manufacturing
 - d) Aviation maintenance and repair
- 2. Explore opportunities for community college, university and private sector engagement and technology transfer
 - a) Wake Forest Innovation Quarter (formerly called the Piedmont Triad Research Park)
 - b) Joint School of Nanoscience and Nanotechnology
- 3. Engage local hospitals, college nursing and public health programs, community colleges, K-12 and other relevant parties to begin a comprehensive healthcare training program for the region.
- 4. Initiate a Disney-style world-class customer service training program at select area high schools. Provide training in superior ways to handle public interaction applicable to success in event management, facility management, restaurant operations and management, and call center operations.

<u>Rural Industry Clusters</u>

<u>The Agriculture/Tourism Cluster</u> – Though our rural communities still feel the diminished income effects from significant decreases in traditional tobacco farming, agriculture continues to be the most prominent source of private sector income for rural counties in the Piedmont Triad. Efforts to migrate to a manufacturing economy in our rural counties have been fairly successful as far back as the late 19th century. However, over the past thirty years scores of textile, apparel and furniture mills and factories have closed. The economic gaps created by these closures have led many of the region's rural communities to reassess avenues toward economic prosperity. Building industrial clusters around existing legacy manufacturing successes is still relevant



and well worth developing further. However, agriculture - in its many forms - is a universal cluster for the rural counties of the Piedmont Triad. The emphasis on local, healthy food choices among many residents - urban and rural - is providing opportunities for farmers, growers and ranchers. New and revived efforts to promote farmers' markets, collectives and coops are finding success. Agritourism is producing an alternate revenue stream for some farmers. And viticulture and microbreweries are finding their stride across the rural landscape of the region.

Strategies

- 1. Create Food Policy Councils in each county in the Piedmont Triad. Assess the marketplace for growth opportunities in food production. Principal areas to investigate:
 - a) Farmers' Market opportunities.
 - b) Farmer/grower/rancher co-ops and collectives of same-product producers, principally for food processing or unique product marketing (e.g. Purple Sweet Potatoes).
 - c) Co-ops and collectives for multi-line production, largely serving restaurants and farm-to-home delivery.
 - d) Access supply chain expertise to develop distribution networks for all product/processes.
- 2. Assess the market for rural tourism demand. Determine demand for bed and breakfast, rural "dude ranch" equivalents, and NC wine country day trips and overnight stays.
- 3. Develop a partnership with NC Cooperative Extension and home food processing experts to mentor willing and able home cooks to develop more local food products for the market. (e.g. Jenny's Pickles).
- 4. Assess the viability of developing fish hatchery and processing facilities.
- 5. Explore opportunities to develop alternative energy technologies (e.g. biomass, solar).

<u>Objective 2: Develop select low location-quotient areas of opportunity in</u> <u>the region</u>. \$\$\$

Related to the concept of cluster economic development is the practice of measuring the Location Quotient (LQ) of an industry to gauge the level job activity compared to other industries. The LQ reflects the percentage of a region's individual industry cluster employment compared with the cluster's total employment nationally. A value over 1.0 indicates a concentration higher than the national average. The intent is to identify and measure areas of growing cluster strength. Industrial clusters included in local and regional economic development plans in the Piedmont Triad reflect the areas of advantage cited for expansion and leveraging. Some sectors with low LQ scores have enough critical mass or perceived potential for growth that they are still deemed worthy of development.

 <u>The Arts Cluster</u> – In all its many forms, the Arts Cluster provides both economic activity and community vitality to all areas of the region – urban and rural. Largely operated as non-profit organizations, arts groups still provide some level of employment for thousands of Piedmont Triad residents.



Strategies

- 1. Access current arts and performance studies to determine opportunities for artistic business opportunities.
- 2. Create a database and map of performance and gallery venues.
- <u>The Advanced Manufacturing Cluster</u> The Piedmont Triad has a proud heritage of manufacturing was once a dominant manufacturing power and to this day still carries a large manufacturing level of output. From four of the largest tobacco companies in the U.S., to the largest denim and textile manufacturers in the world, to one city (High Point) once being simultaneously the furniture and hosiery capitals of the world, to every town in the region having a mill as a central formative ingredient, manufacturing has been at the core of the region's development. However, advanced manufacturing is a different animal. It doesn't rely on a ready supply of semi-skilled, inexpensive labor. Instead, it largely relies on highly technical machines and processes that take a substantial amount of education and training to operate. Assembly jobs that call themselves "advanced" manufacturing can be put into place, it is a positive economic development strategy.

<u>Strategies</u>

- 1. Focus manufacturing efforts on targeting processes and products that use techniques that are new and different from generations earlier or those commonly used in low-cost foreign operations. Migrate away from products and processes that are simple and labor intensive and can easily be displaced by cheaper competition.
- 2. Incorporate technological advances such as 3-D printing and robotics into the mix of producing capacity.
- <u>Green Industries Cluster</u> Green industries provide the opportunity for multiple benefits for the Piedmont Triad region. The first advantage is employment for those working in the arena from research to installations to manufacturing green industry can provide benefit. Fuels produced locally support local businesses; green fuels aid in air quality efforts. Recycling

takes pressure off of landfill capacity stresses. A more focused green industry (principally energy) will help develop this talent cluster.

Strategies

- 1. Develop energy/fuel training and processing capacities.
 - Assess the viability of biofuel processing, using co-operative methods. Develop training curricula at local community colleges and/or NC Cooperative Extension offices for biodiesel (including algae) and other renewable energy (ex. solar energy).
 - b) Apply for grant assistance to establish and develop the program (ex. Biorefinery Assistance Program).



- 2. Expand the business opportunities behind recycled waste and recycled products.
 - a) Assess the viability of recapturing value from the waste streams of recycled products.
 - b) Initiate discussions for relocation or expansion of companies repurposing recycled waste into commercial products.
- 3. Evaluate the potential for geothermal energy use in the region. Because of moderate (nearly constant) year-round shallow ground temperatures, geothermal heat pumps might be widely suitable for both cooling and heating.
- 4. Take advantage of opportunities to retool current and former manufacturing operations to become green industry component manufacturers for wind, solar and biomass technologies (see "<u>Renewable Energy in North Carolina: The Potential Supply Chain</u>", Keith Debbage of UNCG, August 2008).

Dijective 3: Develop "Talent Clusters" through education, mentoring and internship programs. \$\$\$\$

Traditional development of industry clusters in key growth sectors has merit. Of greater importance moving forward will likely be the ability of communities throughout the Piedmont Triad region to develop intense core bases of knowledge and the practical skills necessary to apply this knowledge to new and expanding growth sectors. Developing such talent clusters will provide potential opportunities for creation of true industry clusters in each area of expertise. This strategy will also create the talent base necessary to attract industries to the region to take advantage of such a remarkable asset. Aviation, Hospitality &Tourism, and Bio & Nano Sciences are good examples of industrial clusters that would greatly benefit from focused education, knowledge development and training efforts. These industries have the distinction of also being recognized as talent clusters, where increased individual capacity would likely lead to greater industrial cluster capacity.

Strategies

- 1. Develop or expand curricula in selected industrial clusters that benefit from industry-specific education or training.
 - a) Provide increased access to Aviation maintenance training.
 - b) Create greater access for high school students to engage a wide swath of Hospitality/Tourism education and training.
 - c) Develop greater educational capacity in Bio and Nano Science higher education. Create a pathway for high school students to access the field.
- 2. Develop or expand curricula in <u>3-D Printing.</u>
 - a) Develop and expand training at community colleges followed by high schools and universities
 - b) Incorporate existing industry and entrepreneurial exposure into the 3-D printing mix.
 - c) Promote talent cluster capacity in relevant industry channels.
- 3. Develop or expand curricula in <u>Robotics.</u>
 - a) Begin robotics training at community colleges and within university engineering programs.
 - b) Introduce high school students to the process.
 - c) Promote talent cluster capacity in relevant industry channels.
- 4. Develop or expand curricula in <u>Solar Energy</u>.
 - a) Expand solar instruction at community colleges to dramatically increase the number of individuals licensed to install and maintain solar panels and projects.
 - b) Provide introductory education in solar power at the K-12 level and encourage the addition of solar power within college and university curricula.
 - c) Establish a leadership position in solar power implementation by encouraging local governments, school boards, non-profits and the business sector to install solar arrays on rooftops.
- 5. Develop or expand curricula in <u>Application Development (Coding)</u>.
 - a) Explore K-12 options with organizations like Code.org to expand computer science and coding education.
 - b) Create curricula in community colleges and higher education for application development.
 - c) Encourage mentor-led "hackerspace" type of coding education.
- 6. Foster development of <u>Talent Clusters around Local Expertise</u>.
 - a) Promote the business opportunities in unique handmade products (e.g. furniture, quilts, musical instruments).
 - b) Support business development and business expansion around local food products (ex. Ms. Jenny's Pickles, Moravian Cookies and Sugar Cake, Lexington-style BBQ).

□ <u>Objective 4: Develop collaborative economic development processes</u>. \$\$\$\$

- 1. Assess the current legal and legislative status of inter-jurisdictional agreements and legislation
 - a) Review current legislation and affirm the extent of collaborative opportunities that are available for projects like jointly-developed business parks.
 - b) Educate local elected officials on the legal opportunities current legislation allows for jurisdictions to partner with others for economic development purposes.
- 2. Evaluate the interest in and the opportunity for inter-jurisdictional business parks.
 - a) Open discussion for infrastructure needs
 - b) Facilitate development of inter-jurisdictional plans and documents among committed parties.
- 3. Maximize the economic development potential of the Piedmont Triad International Airport.
- 4. Establish rural partnerships to provide for scale-appropriate business parks.
- 5. Investigate urban/rural partnerships using less expensive rural land and urban amenities as a means for collaboration.



Source: markparkerr.wordpress.com

Objective 5: Establish a strong focus on entrepreneurship & self-sustaining economic development efforts. \$\$\$\$

- 1. Assess our region's current practices and capacity for entrepreneurial mentorship and internship opportunities.
 - a) Identify the overall supply of, and demand for mentorship and internship opportunities, and placing special emphasis on the needs of traditionally underserved populations and newer immigrant populations.
 - b) Develop an asset map and matrix of active entrepreneurial initiatives, programs and resources throughout the region (e.g. Federal, State, regional, university, county and municipal resources).
- 2. Promote and support direct entrepreneurial education, mentorship and internship efforts.
 - a) Pursue joint projects (e.g. startup competitions, business students assistance to small business owners) with Triad universities with strong entrepreneurship education programs (e.g. Wake Forest University, High Point University, Elon University, UNC Greensboro, N.C. A&T State University). One robust model for student teams assisting businesses is the Small Business Institute at East Carolina University, established in 1975.
 - b) Increase the capacity and connectivity with youth-related entrepreneurship organizations (e.g. Junior Achievement, NC REAL Entrepreneurship, 4H, and Future Farmers of America) to build entrepreneurship capacity (e.g. Alamance County Schools twice-yearly student team participation in the *Hop on the Bus!* statewide high school business plan competition, and *Valley Academy* a Yadkin Valley Regional Career Academy campus providing entrepreneurial programs for youth.
 - c) Develop education, mentorship and internship programs in communities throughout the region, building on existing capacity, expanding talents and opportunities, establishing a mentorship and internship pool, and pairing entrepreneurs with mentors (e.g. Piedmont Triad SCORE Chapter) and internship opportunities.
 - d) Provide for entrepreneurial education, mentorship and internship opportunities among traditionally underserved and immigrant populations.
- 3. Promote and support direct entrepreneurial **technical assistance** efforts.
 - a) Develop plans to more fully utilize current assets and resources including: Small Business Centers at each community college, UNC-affiliated Small Business and Technology Development Centers, cooperative extension and rural development services, business incubators (e.g. *The Nussbaum Center for Entrepreneurship*), the state's Business Link (BLNC) on-line and 1-800 information and referral service and local SCOPE Chapters to increase entrepreneurial knowledge and capacity.
- 4. Promote and support the development of entrepreneurial-friendly work spaces and facilities.
 - a) Explore the formation of new "Business Incubators" starting with best practices of successful incubators (e.g. *Nussbaum Center* in Greensboro, *STARWorks* in Star, *American Underground* in Durham, NC)
 - i. Begin by forming the relationships and building the social capital and business support necessary to adequately coordinate resources before considering the need for and location of a physical facility.
 - ii. Help selected entrepreneurs test their ideas and get expert guidance before they take their next step, whether getting first round funding, gaining admission to an accelerator, or bootstrapping their company to revenue.
 - iii. Provide flex-space, co-working space and shared resources for start-up ventures.
 - iv. Encourage the co-location of multiple resource agencies to provide on-site expertise (e.g. community college-
 - affiliated small business centers, regional career academies, university-affiliated small business technology development centers, cooperative extension and rural development services).
 - v. Seek multiple revenue streams beyond tenant rents (e.g. The Triangle South Enterprise Center in Harnett County NC became a USDA Intermediary Lender for rural start-up companies).
 - vi. Set space occupation and program limits (e.g. 2 to 3 years) to encourage entrepreneurs to "graduate" and provide space for new start-up participants.



- b) Explore with UNCG and other university partners the formation of a "Regional Business Accelerator" (e.g. The *American Underground* in Durham and Raleigh, NC, *Accelerating Appalachia* in Asheville, NC) to provide competitively selected entrepreneurs with intensive, expert counseling in the identification and formation of potential high-growth businesses, and provide connections with venture capital and angel investor groups.
- c) Pursue development of affordable co-working spaces for individuals from a wider range of work engagement who could benefit by being in a creative environment with like-minded entrepreneurs
- 5. Promote and support entrepreneurial business capital formation.
 - a) Promote available NC business lending programs including U.S. Small Business Administration and U.S. Treasury programs administered through SBTDC and the N.C. Rural Center in partnership with NC banks.
 - b) Create more awareness of local venture capital and angel investment groups for entrepreneurs (e.g. *Inception Micro Angel Fund*, *Piedmont Angel Network*, Greensboro Chamber of Commerce "*Capital Connects*").
 - c) Create more awareness of crowd-sourced finance opportunities (e.g. Kickstarter, Indiegogo).
- 6. Explore development of, and support for a regional resource wizard to access entrepreneurship assistance.
 - a) Study and assess the Guilford County Resource Wizard as a model for the creation of a regional database of business assistance tools (e.g. federal, state, local) applicable to local businesses providing data in one place and helping entrepreneurs avoid cluttered google searches.
 - b) Develop a similar Resource Wizard that identifies all the regulatory entities entrepreneurs may have to engage to start or expand a business in the region (e.g. NC Secretary of State; county health departments; planning departments).

REGIONAL INFRASTRUCTURE STRATEGIES

The state of the regional infrastructure in the Piedmont Triad is well-documented above. The scale of the infrastructure development in the Piedmont Triad has had a tremendous bearing on the strength of several industrial clusters and will have a huge impact on the ability to compete in many business arenas in the future.

Broadband Internet

High speed internet (1G broadband) service is a critical feature for economic activity for the foreseeable future, especially in the urban core. It has been a proven business generator and in-migration draw in Kansas City and Chattanooga. Rural areas need universal access to at least some level of high speed internet. Among all the infrastructure components considered, 1G broadband internet access may provide the most upside economic impact.

<u>Highways</u>

Among the infrastructure strengths of the Piedmont Triad, the highway system in the region may currently be its greatest differential asset. The (last) two interstate highways to be built are being constructed through the region, adding to the two already in place. Urban loops around Greensboro and Winston-Salem have significant pieces already in service and the remaining parts of the loops are in the planning process. The additional interstate highways will enhance interstate commerce and the highway loops will provide for better inter-region traffic flow and impact both the levels of highway business and lower traffic emissions that stem from congested traffic patterns.

Electric Utilities

The Piedmont Triad (and most of North Carolina) has an abundant supply of inexpensive, reliable electricity. Efforts are underway to reduce the amount of carbon-based energy used in the region. A big area of focus is on automotive use, where the bulk of the projected source of PM2.5 and NOX air pollution will emanate in the future. Making electric vehicles a more viable option is a focus through better consumer education, better planning and programs like Triad Plugging In.

Freight and Passenger Air Service

The Piedmont Triad International Airport (PTIA) is the only airport in the region providing full commercial airline service. It is an attractive facility with excellent access. The number of enplanements has drifted downward for over a decade, as business travel has diminished with local industrial closures. The absence of a major discount airline at the airport has contributed to local passengers taking their business to larger airports in Raleigh and Charlotte to capture cheaper fares. Efforts to lure a discount air passenger carrier have been a focus for PTIA leadership.

The plans for airport footprint expansion to accommodate more time-sensitive shipments of manufactured items can provide a real boost to the local economy. The FedEx mid-Atlantic air cargo hub is located at the airport, a Foreign Trade Zone sub-zone is there, and a large presence of FedEx Ground and UPS freight services makes the airport a promising manufacturing/logistics hub for the future.

Freight and Passenger Rail

Amtrak boardings are up 150% over the last seven years, and there are plans to designate the main rail route through the region as a high speed corridor, raising the popularity of rail travel. Regional intermodal facilities, including inland ports, are in the planning stages. Five "logistics villages" across the Piedmont Triad are also in the development stage.

Public Transportation

The Piedmont Authority for Regional Transportation (PART) has done a credible job of increasing inter-regional bus transit and removing thousands of single passenger auto trips from the highways. This has been a daunting task in a region that has an historic love affair with the automobile and is accustomed to driving on an ample highway and street system to the front door of the final destination. PART's plans include expanding their services to the further reaches of the rural counties of the region and providing a wider range of service and funding options to participating communities across the region.



Triad Tomorrow

Several areas of the primary infrastructure focus are in good enough stead to not need a unified regional planning focus to maintain their current positions and handle perceived needs in the future. As this plan is evaluated on a regular basis, those perceptions of the infrastructure needs will be systematically revisited.

Schools, Colleges and Universities

The number and size of educational institutions in the Piedmont Triad seem appropriate in educational offerings, affordability and geographical access to be well-suited for the region's citizens. As online courses and alternate means of conveying the educational message become more prevalent, the need to build more buildings to accommodate education will diminish, placing the currently built educational facilities in even further good stead.



Source: Wake Forest University

Water and Wastewater Systems

With the demise of many heavy water using industries, the demand for water is easily met by current supplies. Projections indicate that there will be localized water supply pressures in several decades, but with Randleman Lake now operational as a water supply, the threat of water shortages is largely diminished. The industrial plant build up provided for excess supply of sewer treatment capacity. For now, there is little unmet demand on the horizon. However, aging water and wastewater infrastructure in communities throughout the region is in need of leakage detection and repair to maintain delivery efficiency and protect water quality.

Parks and Protected Lands

Land and open space protection efforts have been very effective over the past twenty years. Efforts by the Land Trust for Central North Carolina and the Piedmont Land Conservancy have complemented the efforts of organizations like the Guilford County Open Space Committee and the State of North Carolina (who worked together to open the newest state park in the region, the Haw River State Park). Though encroachment into sensitive eco-systems in the region has been minimized by the current lull in sub-divisions and homebuilding, these organizations have proven to be diligent in both good and bad economies to protect environmentally sensitive areas. Park and recreational field development has consistently been done as local demand has arisen.

Others: Solid Waste

Though not on the list of primary focus areas, the means of solid waste disposal will remain on the infrastructure radar until a technological solution to MSW is developed. Local and regional landfill space appears adequate, but Greensboro's closure of its lined landfill several years ago has led to a high-cost transfer station and 60 mile solid waste delivery to Montgomery County. The cost and long-term solid waste uncertainty in Greensboro makes only their solid waste situation questionable. Currently they are seeking a regional landfill solution and overtures are being shared with several jurisdictions in the region.

Development-ready Sites

Two private and non-profit infrastructure providers, though not on the primary list, are important to the built environment in the Piedmont Triad. Ready-to-build industrial sites are regularly cited by local economic developers as an important element in economic development recruiting and expansion. Though the number and size of large industrial projects has fallen, having developed sites ready for building has merit.

Existing Site Redevelopment

Communities throughout the Piedmont Triad have a universal commonality – a high number of former industrial factory buildings that are currently closed or under-utilized. Depending on their status and potential productive capacity, many of these properties are available for redevelopment. Large-scale manufacturing operations that characterized their original use are often no longer appropriate. However, many of these sites and buildings can be utilized in a repurposed format to include a wide range of research and development, office and commercial (e.g. business incubator space), residential (e.g. condominiums and apartments, senior and student housing), and institutional uses (e.g. community center). To help address this ubiquitous issue, the Piedmont Triad Regional Council (PTRC) has conducted an initial survey of potential brownfield properties throughout the 12 county region in preparation for a three-year EPA brownfields site assessment coalition grant which began in October 2013. PTRC is building a regional program to facilitate the assessment, cleanup and redevelopment of abandoned, idled or underused brownfields sites and bring them back to productive use. Strategic investments will be pursued in catalyst areas to stimulate the redevelopment of brownfield sites and surrounding properties,

to improve quality of life, increase tax base, create jobs, and provide greater housing and transportation choices in communities throughout the region. These efforts will focus on areas posing the most risk to human health and the environment, yet with the most potential for redevelopment and reuse. Emphasis will be placed on properties located in and around municipal core areas. Initial program efforts will begin in coalition communities located along the B-85/I-85 Corridor. Numerous sites have been identified in this corridor, including abandoned mills, gas stations, vehicle repair facilities, dry cleaners, and unknown uses. A more detailed inventory and site prioritization process will be underway soon. Founding coalition members include Archdale, Greensboro, Jamestown, Lexington, Thomasville and Trinity – and the 3 Counties in which they are located – Davidson, Guilford and Randolph. Over time, additional members may be added at the discretion of the coalition.

Healthcare Facilities

The importance of the Piedmont Triad's hospitals and healthcare facilities cannot be overstated. NC Baptist Hospital, Moses Cone Health Care System, Forsyth Hospital and High Point Regional Hospital are all large hospital systems and provide excellent health care services throughout the region. Besides being major employers and a source for much of the job growth opportunities in the region, their sheer infrastructure presence would be virtually impossible to build or duplicate today. The Piedmont Triad is most fortunate to have them.

<u>GOAL</u>: Build on and improve the fixed assets of the region – transportation, utilities, connectivity, healthcare, support systems and the natural environment.

□ <u>Objective 1: Expand the reach and increase the upload/download speeds of broadband internet service</u> <u>throughout the region</u>. \$\$\$\$

Strategies

- 1. Pursue rapid development of local implementation of the NC Next Generation Network (NCNGN). (Currently, Winston-Salem is engaged.)
- 2. Make other urban areas of the region aware of the program and encourage their engagement.
- 3. Build upon NC Broadband programs (BIP, Middle Mile, others) to bring high speed broadband to rural areas of the Piedmont Triad.
- 4. Establish local Wi-Fi in downtowns and heavily trafficked areas in each community (e.g. Lexington).

□ <u>Objective 2: Enhance transportation options</u>. \$\$\$

- 1. Complete the urban beltways around Greensboro and Winston-Salem.
 - a) Winston-Salem Beltway (32.4 miles).
 - b) Greensboro Urban Loop (39.3 miles).
- 2. Complete the planned Interstate and NC highway improvements.
 - a) I-73 through Rockingham, Guilford, Randolph and Montgomery counties.
 - b) I-74 through Surry, Stokes, Forsyth, Guilford, Randolph and Montgomery counties.
 - c) NC Hwy 68 and 220 in Rockingham and Guilford counties.
- 3. Expand regional (PART) and local mass transit system and funding options.
 - a) Provide easier connectivity between local mass transit options (including consideration of more shared-use park and ride sites like shopping centers and other places with overbuilt parking) and PART routes.
 - b) In the urban core, provide more mass transit (i.e. bus) options for others who are not using the buses for jobdependent reasons (ex. Trips that provide mobility and remove cars from the streets).
 - c) Encourage the facilitation of new local mass transit system & funding options.



- 4. Encourage the use of car-sharing and ride-sharing services.
 - a) Explore car sharing services to allow drivers to rent from each other or rent on a short term basis (as little as an hour). This reduces the need for expensive car ownership, reduces the number of cars on the road and provides greater utility of cars that are in service. Existing companies include Getaround, car2go and Zipcar.
 - b) Explore peer-to-peer ride sharing service opportunities with existing drivers such as crowd-sourced, smartphonegenerated taxi service to a smartphone enhanced fast-paced rider board. Existing companies include Lyft and Sidecar.
- 5. Increase lower-cost air transportation options.
 - a) Continue the existing efforts to pursue discount airline contracts with PTIA.
 - b) Revisit the Skybus business model with local investors and those who represented other hub cities.

Dijective 3: Maximize the efficiency of public utilities and solid waste management efforts. \$\$\$

In some municipalities, up to 30% of the town's budget is spent on treating and pumping water and wastewater. Landfill development is extremely expensive and takes up to a decade to get through environmental and other permitting processes. Trucking trash to distant sites is not only a violation of optimal sustainability practices, it is expensive and leaves the municipality with few affordable solid waste disposal options. Addressing these issues proactively cuts municipal costs both today and in the long term.

- 1. Optimize existing landfill space to maximize its lifespan.
 - a) Increase recycling efforts.
 - i. Make free recycling a standard part of solid waste collection plans with private trash haulers.
 - ii. Invest in roll-out recycling cans to make recycling easier.
 - iii. Pursue aggressive contracts with recycling sorters to maximize the types of containers and products recycled.
 - iv. Provide educational programs for the communities about recyclable items and recruit corporate partners to support marketing campaigns and to explore waste for profit opportunities (e.g. waste to energy technology).
 - v. Add clearly marked, easy to use recycling containers in public spaces, buildings, schools and universities.
 - vi. Introduce recycling contests in local schools and community centers.
 - vii. Engage initiatives like Freecycle to reuse local assets and reduce waste.
- 2. Begin the process of studying long-term solid waste disposal options.
 - a) Explore new technological solutions to solid waste landfill options (e.g. anaerobic digestion, gasification, plasma).
 - b) Pursue the retrieval and development of landfill-sourced biofuels.
 - c) Identify regional collaborative solutions to solid waste management.
- 3. Pursue water and wastewater reduction and efficiency programs.
 - a) Explore options for business programs (e.g. plumber certification) and citizen programs (e.g. replacement of spigots, showerheads and toilets with low-flow options).
 - b) Investigate a tiered water use metering system to reduce water use (e.g. promote use of the UNC School of Government Environmental Finance Center "NC Water and Wastewater Rates Dashboard" http://www.efc.sog.unc.edu/reslib/item/north-carolina-water-and-wastewater-rates-dashboard).
 - c) Establish audit systems to reduce leaks in water and wastewater systems in the Piedmont Triad.
 - d) Study the possibilities of water reuse programs.
 - i. Gray water collection and reuse for both utility providers and end-users, especially larger private sector industries.
 - ii. Roof runoff collection systems.
 - iii. Rainwater barrel collection programs for home lawn and garden use.
- 4. Conduct a region wide water and wastewater system assessment to identify existing and potential future service areas, treatment and delivery capacities, and system demands and maintenance requirements.
- 5. Pursue a region wide water and wastewater system funding initiative to identify top-priority needs and assist local governments to apply for and administer grant funds (e.g. Community Development Block Grant, Clean Water Management Trust Fund, DENR Water Infrastructure Fund, Appalachian Regional Council) and implement projects.

□ <u>Objective 4: Encourage reduced energy use.</u> \$\$\$

Options for alternate energy sources, diverging from traditional sources, have grown immensely in the last ten years. Taking pressure off the power grid reduces the need for additional electric infrastructure construction and costs, reducing the need for rate hikes. Cleaner air and more dollars kept local are nice side-benefits.

Strategies

- 1. Adopt programs to promote reduced household energy use to retain more dollars in the community.
 - a. Provide for weatherization, CFL replacement bulbs and other energy reduction measures.
 - b. Support legislation to provide for net metering of solar power.
 - c. Engage in programs that provide for auto plug-in recharging sites.
 - d. Support additional biking and walking options to reduce vehicle trips and improve public health.
- 2. Encourage local governments and school boards to adopt sustainability policies and conduct audits covering water, energy and vehicle use.

□ <u>Objective 5: Prepare industrial land for development.</u> \$\$\$\$

Though diminishing in number, large industrial projects still materialize at times. Having construction-ready sites available to meet this demand has merit. However, new sites are only a part of the picture. The Piedmont Triad is a twelve county region whose communities were almost universally started around the development of a local mill. As the mill towns grew, other economic activities developed. But nearly every community still has significant vestiges of its former manufacturing buildings and footprints which serve as valuable assets to be redeployed and repurposed.

- 1. Seek local government accommodation for the development of shovel ready industrial sites.
 - a) Develop an inventory of potential industrial sites.
 - b) Insure that proper zoning, special use permits, watershed regulations, permitting requirements and any other potential obstacles are preempted so that the site development can move quickly when needed.
 - c) Create a regional, on-line geographic information system identifying shovel ready industrial sites.
- 2. Seek local government accommodation for the redevelopment of existing shuttered or underutilized industrial sites.
 - a) Build on and refine the existing PTRC regional brownfield inventory to identify shuttered or underutilized industrials sites and buildings throughout the region.
 - b) Perform a baseline assessment to identify the sites and buildings with the greatest potential and capacity for redevelopment (e.g. >5,000 square feet building space, >2 acres of reclaimable land)
 - c) Build on the existing PTRC regional brownfields assessment program to identify top-priority brownfields sites in each community to be assessed, cleaned up and redeveloped.
- 3. Seek inter-jurisdictional collaboration on site development.
 - a) Identify the infrastructure needs of potential sites and whether these needs can best be met by a neighboring jurisdiction.
 - b) Discuss cost sharing/tax (and utility) revenue sharing possibilities with these potential partners.
 - c) Identify the mutual benefits necessary to enter into an inter-jurisdictional joint development agreement.
- 4. Assess the desirability, necessity and feasibility of public/private partnerships for business/industrial park development.
 - a) Enter into discussions with private developers of potential industrial sites to better understand the needs of each individual site to make it construction-ready.
 - b) Where legal, advisable and crucial to the successful development of a site, consider options for public investment (preferably from a loan pool) like grading and utilities to ready the site.
 - c) For more densely planned development sites, consider the use of Tax Increment Financing (TIF) as a public infrastructure financing assistance tool.



- d) For redevelopment in lower income areas, consider the use of New Market Tax Credits to assist with the financing.
- e) Investigate other special financing options (e.g. historic preservation tax credits, mill rehab credits, tax increment financing) to provide assistance.

□ <u>Objective 6: Encourage increased healthcare facility access</u>. \$\$\$

Treatment services are expanding beyond the traditional hospital/emergency room/private doctor office paradigm. Providing services in closer proximity to where people live and work in a speedier fashion is a better course of action.

<u>Strategies</u>

- 1. Support increased use of clinics to provide accessible healthcare assistance. Clinics tend to provide quicker and more accessible treatment services as opposed to major medical centers, especially in less densely populated areas.
- 2. Create public/private/healthcare/non-profit coalitions to deliver additional healthcare services. Community coalitions that include hospitals, county governments, county health and social services departments, county schools, doctors, dentists, nutritionists, psychologists, drug stores (and any other entity that provides or funds any level of healthcare services) are encouraged to join in an initiative that will offer maximum preventative health and treatment services while avoiding expensive duplication and lost opportunities.

VIBRANT COMMUNITIES STRATEGIES

The hallmark characteristics of a vibrant community are varied and derived from multiple sources. What everyone wants is to capture the "cool" factor that makes a place incredibly appealing. It is more feeling than data that makes the creation or migration to such a station in the life of a town, city or county. It's one of those "know it when you see it" characteristics that tends to draw people to a place because of the way both the built environment and the people come together. Seattle, Austin, Asheville and many college towns tend to be regarded in this way.

Downtown

Very few places are considered as vibrant communities if the same can't be said about their downtowns. Downtowns typically represent the principal gathering place for a community. "Clean," "safe," "walkable," "fun" and "in good repair" are terms used to describe a baseline of common positive features. Economic factors



Uptown Lexington, NC

many times have a substantial effect on what can be done to introduce these elements, because implementing these conditions many times have a cost, especially if issues have been ignored and things are run down. Business activity is central to that downtown vibrancy: the ability to sustain restaurants, cafes and bars; streetscape appearance; and universal amenities like free Wi-Fi.

Farmers Markets

Considered earlier in the Competitive Advantages section, farmers' markets provide a superior mix of economic activity, healthy and local food options, and a living sense of community. They generally are inexpensive to establish and can pay excellent community vibrancy dividends.

Trail Connectivity

Communities that are developed or retrofitted to provide for bike and walking paths exude a sense of vitality and healthiness. The mental picture of someone jogging with her dog or another roller blading on a paved path versus washed out gravel and cracked sidewalks is a very telling depiction of what a community wants to be. Trail connectivity can be a real part of community vibrancy.

Shared Use Facilities

If local government coffers were flush with money to build every amenity desired by the public, we would have parks and libraries and recreation facilities everywhere. Unfortunately, that isn't the case. Governmental budgeting, especially in a recessionary environment, increasingly means those are the last things to which local tax dollars are allocated. However, when creative and willing minds get together, sometimes solutions are found where a win/win becomes a reality. A community that wants a library can team with the local school system and a larger nearby library system to do a modest expansion of the local high school media center (for example), add a children's section, make sure security, parking and lighting are suitable, have the nearby library operate it on an after-school-hours basis for evenings, weekends and summers and it might be done for 15 cents on the dollar of building a free-standing library. The same could be done with the need for recreation fields: a coalition of a jurisdiction or partner who agrees to provide field upgrades; with another to buy or develop rec field property near or adjacent to a local school or non-profit land owner; and a local recreation user (soccer association, for example) who contractually agrees to maintain the fields. Such group efforts by key members of any part of the region help build amenities which add to the life of a community. Adding desired facilities to a jurisdiction in such a manner does a lot of other good as well. Connectivity and trust and a renewed sense of community are inspired. That brings its own measure of community vibrancy.

Sustainable Development

A close inspection of a jurisdiction's sustainable habits says a lot about them. Do residents walk or bike to places because it is easy to do so? Are recycling containers easily available and there is a sense of encouragement to use them? Are lighting fixtures and water and bathroom fixtures the type that tells you they care about energy and water conservation? These small actions are sure signs that the community cares about sustainability - and that concern and appreciation for appropriate use (and disdain for waste) of natural resources has become a barometer for cool communities - and community vibrancy.

Cultural Connectivity

Our population is getting older and browner. As our region becomes more diverse, formerly homogeneous communities will increasingly feel the stress of cultural changes. Though often a challenge, these changes in diversity can also become outstanding community assets. New foods, arts, languages, cultures, talents and abilities add vitality to a community, making them stronger and more attractive to visitors and residents alike.

GOAL: Provide opportunities for a high quality of life in communities throughout the region.

□ <u>Objective 1: Enhance the vitality of the region's downtowns.</u> \$\$\$\$

Downtowns are the windows to the soul of our region's communities. The appearance of healthy commercial and social activity is central to making a town feel positive about itself and strongly impacts how outsiders view the community. **Strategies**

- 1. Initiate façade and beautification programs for downtown buildings, sidewalks and streetscapes.
 - a) Establish façade and awning loan or grant programs.
 - b) Pursue budgeted town streetscape improvements (e.g. light posts, hanging plants/flowers, benches).
 - c) Consider a downtown service district fee to provide specific additional services (e.g. street cleaning, trash collection, repair, security).
- 2. Promote engaging community activities and cultural offerings.
 - a) Create or expand downtown arts or food festivals highlighting offerings from local businesses.
 - b) Establish regularly scheduled downtown "days" or "nights" with music, food, business bargains and festivities.
- 3. Support private sector activities and investments.
 - a) Consider permit fee reductions for downtown upfits and infill development.
 - b) Encourage efforts to promote downtown businesses (e.g. downtown directories, maps, online advertising).
 - c) Work with non-profit organizations to fill long-term unleased space to keep unfilled space at a minimum.
 - d) Encourage local business shopping promotions.
- 4. Access outside assistance (e.g. NC STEP & NC Main Street Programs for small towns).

Objective 2: Promote the agricultural economy by organizing greater connectivity among local farms and urban centers. \$\$

Greater societal and community awareness of the benefits of fresh, locally grown food are likewise providing both health and business-related benefits to local economies and its citizens. Creation of a "Regional Food Study" – a census of local farmers, growers, ranchers and processors – will greatly enhance the successful implementation of the food market and industry strategies recommended below. Successful projects will also require the development of strong connections with other communities and counties within the Piedmont Triad to develop synergies of effort and to reach beyond local community boundaries. Knowledge of both vertical and horizontal operations within our regional agricultural area, and urban to rural knowledge of market opportunities will also provide greater sources of farm to market opportunities. Another key element of success in activating local agricultural interests is the formation of local Food Policy Councils (FPCs). FPCs are typically comprised of community residents and representatives from five key food sectors (production, processing, distribution, consumption, and waste recovery) who collaborate on mutually beneficial solutions to food system problems. The comprehensive nature of their focus, including eliminating food deserts, makes such an approach worth pursuing. <u>Strategies</u>

- 1. Create Food Policy Councils in each county of the Piedmont Triad.
 - Ensure broad levels of participation, including not only the sectors listed above, but organizations that address issues of food sustenance and hunger (local schools, social service organizations, etc.).
 - b) Facilitate cooperation among councils to maximize their impact.
- 2. Develop local Farmers' Markets.
 - a) Initiate a process (e.g. led by the local Food Policy Council) designed to build or expand a market using public and private resources.
 - b) Contact potential agricultural participants to gauge interest and a preferred scope of operations (e.g. days, hours).
- 3. Develop a Region-wide Local Food Network.



Piedmont Grown, a local food network based in Rockingham County, provides a template for successful operation, bringing fresh produce from rural areas to the urban core.

- a) Perform an assessment of market supply/demand and opportunities.
 - i. Identify sources of agricultural products for which there is household or restaurant demand.
 - ii. Identify potential customers and establish means of contact.
- iii. Identify places and method of delivery.
- b) Explore the possibility of forming a region-wide distribution system that systematically brings fresh produce and farm products from the farthest reaches of the Piedmont Triad (Caswell, Surry, Montgomery counties), distributes some product on its route, and picks up additional product on its way to its final destination at the centrally located Piedmont Triad Farmers Market in Colfax (at the Guilford/Forsyth county line on I-40) and other urban markets.
- 4. Establish Regional & Local Food Processing and Distribution Co-ops and Collectives. One current example that is working and provides a model to emulate is <u>Pilot Mountain Pride</u>, which provides central warehousing and distribution for a variety of products at one convenient site.
 - a) Identify the production capacity of existing or potential agricultural products (e.g. grape production for wine, purple sweet potatoes, hops for beer).
 - b) Work with current processors to expand capacity or create a new processing facility as necessary to provide a local bulk market for agricultural products (e.g. a former grist mill or grain elevator, grape processing or winery; Biofuels processing; Inland fish processing.)

□ <u>Objective 3: Promote greater community connectivity.</u> \$\$

Connectivity includes both physical access to resources and services and building relationships among people within a community. By focusing on making their community more welcoming to newcomers, areas with more static populations and less lifestyle mobility (e.g. smaller towns and rural communities) can successfully assimilate new residents, maintaining their population and adding new ideas and richness into their community.

- 1. Enhance pedestrian, biking and trail options.
 - a) Add connective pieces to existing infrastructure (e.g. sidewalks, trails, bike lanes) to provide safe and convenient pedestrian and bicycle transportation options between residential areas and work, school and commercial centers in communities.
 - b) Pursue opportunities (e.g. PARTF, PART) to access funding for pedestrian and bike system expansion.
 - c) Create community bike-share programs that provide a healthy transit option, reduce automotive traffic and add a sense of vibrancy to communities.
- 2. Pursue greater public transit options for dependent and non-dependent riders (especially in and among urban centers).
 - a) Increase access, connectivity, reliability and timeliness to enhance public transit for dependent riders and to encourage non-dependent riders to elect using public transit systems.
 - b) Explore electric or bus trolley systems for downtown mobility in urban centers to provide an attractive transit option and enhance economic development opportunities in downtowns.
 - c) Pursue alternative public transit funding opportunities (e.g. PART).
- 3. Increase social connectivity, including engaging diverse communities, newcomers and young and elderly adults.
 - a) Encourage communities to provide inclusive community outreach and engagement efforts in all neighborhoods that build relationships, help to identify and affirm a diversity of interests, and encourage everyone to contribute to the good of the community.
 - b) Establish community-wide events to engage and celebrate the diversity of the entire community.



Photo: PTRC

Triad Tomorrow

□ <u>Objective 4: Develop connections in and among communities for cultural &</u> recreational facilities & programming.

Community amenities like libraries, recreation centers and fields, pools and courts, community centers and arts centers are generally expensive to build and operate at a deficit. If built with public dollars – bonds or otherwise – there is an expectation that the facilities will be well-maintained and run properly. Charging usage rates at a level that allows the facilities to break even financially would place the price above the level most would consider reasonable because generally people don't know how much running a facility costs. Both affordability and community cohesion are enhanced when citizens, government and usage groups come together to build a plan for community amenities and their usage.

Strategies

- 1. Pursue development of after-school shared-use libraries.
 - a) Determine local community demand for library services.
 - b) If demand warrants, form a partnership between the public school system, the local library system and the community desiring library service to develop the plan for any construction addition or modification; additional library books and resources (computers, etc.); and operational costs (utilities, librarians).
- 2. Pursue the development of shared-use parks and athletic fields.
 - a) Determine local community demand for athletic field, pool, athletic court and park space.
 - b) If demand is sufficient, form a partnership between the public school system, recreational leagues, neighborhood groups, other interested parties and the community desiring athletic fields and parks to develop the plan that includes land acquisition, facility construction and facility operation.
- 3. Pursue the development of Public/Private/Non-profit partnerships for community centers, arts and performance facilities, youth, teen and elderly centers.
 - a) Gather community input to identify facility wants and needs.
 - b) Establish working committees to find paths of least resistance to procure potential funding sources to meet the goals brought forth by the community assessment.
 - c) Create beneficial coalitions among parties to address the funding and usage of each facility.

□ <u>Objective 5: Promote the efficient and sustainable use of land and resources</u>. \$\$\$

Community sustainability is multi-faceted and comprehensive, ranging from how the community is built to day-to-day individual life choices. It is a key ingredient to community vibrancy.

<u>Strategies</u>

- 1. Foster the efficient and sustainable use of land resources to increase the benefits and reduce the costs of future growth.
 - a) Focus most new development and infrastructure investments in existing communities where services and infrastructure already exist.
 - b) Pursue growth policies and regulations to support the efficient use of existing water, sewer and transportation infrastructure.
 - c) Identify and protect environmentally sensitive conservation areas and habitats and farm and forest lands.
 - d) Encourage infill, reuse and redevelop of existing urban areas before developing rural farm and forest lands.
 - e) Encourage new development to be designed to accommodate future re-use and redevelopment.
 - f) Encourage new development that balances economic, social and environmental community interests.
 - g) Foster the assessment, clean-up and redevelopment of old commercial and industrial sites (i.e. brownfields).
 - h) Encourage transportation, water & sewer infrastructure plans that support and incorporate sustainable community development patterns and principals.



Denton Public Library



- i) Encourage land development plans and ordinances that support proposed road functions and incorporate sustainable community patterns & principles.
- j) Incentivize and streamline the approval process for the kind of sustainable development patterns communities decide they want in the future.
- 2. Build vibrant, lively and attractive neighborhood & town centers with a mix of higher-density uses in areas communities identify as most appropriate.
 - a) Foster functional, efficient and aesthetically-pleasing design that supports economic, environmental and social interests.
 - b) Identify top-priority opportunity areas for redevelopment of under-utilized sites into mixed-use reinvestment areas and corridors which are accessible by multiple modes of transportation.
 - c) Support site planning for redevelopment areas in our region's communities to serve as sustainable reinvestment pilot projects.
 - d) Pursue flexible land use policies and regulations allowing higher densities and a wider mixture of uses in redevelopment areas and town centers.
- 3. Provide more housing choices with greater access to jobs and services.
 - a) Incentivize affordable housing options, especially along major transit corridors.
 - b) Foster collaborative partnerships between public & private sectors in the provision of affordable housing
 - c) Encourage development of housing, jobs and services in close proximity to one another.
- 4. Pursue Farmland and Open Space Protection.
 - a) Support the Voluntary Agricultural District program.
 - b) Support land conservation and open space protection efforts.
 - c) Identify programs that protect land and water quality in rural areas (e.g. WHIP, EQIP, NC-WRP) and insure they are in place in the region.
- 5. Promote LEED and green construction support.
 - a) Consider LEED-affirmed permit fee rebates.
 - b) Allow reduced permit fees for green energy installations (e.g. solar, geo-thermal).
 - c) Provide information, resources and best practice advice.
- 6. Provide connectivity planning and support.
 - a) Connect sidewalks, trails and bike paths to provide a more complete network of transportation choices especially among major residential areas, employment and commercial areas, and community landmarks and gathering areas.
- 7. Promote sustainable practices among citizens, local businesses and governmental organizations.
 - a) Pursue programs to promote reduced household, office and industrial energy use by providing weatherization, CFL replacement bulbs and other energy reduction measures.
 - b) Support additional biking and walking options to reduce vehicle trips and improve public health.
 - c) Engage in programs that provide for auto plug-in recharging sites.
 - d) Pursue water and wastewater reduction and efficiency programs.
 - i. Provide low-flow replacement spigots, showerheads and toilets.
 - ii. Investigate a tiered water use metering system to reduce water use.
 - e) Study water reuse programs.
 - i. Gray water collection and reuse.
 - ii. Roof runoff collection systems.
 - iii. Rainwater barrel collection programs for home lawn and garden use.
 - f) Encourage local governments and school boards to adopt sustainability water, energy and vehicle use policies.
 - g) Enhance and encourage local recycling efforts.
 - i. Make free recycling a standard part of solid waste collection plans with private trash haulers.
 - ii. Invest in roll-out recycling cans to make recycling easier.
 - iii. Pursue aggressive contracts with recycling sorters to maximize allowable recycling container and product types.
 - iv. Provide community education program concerning allowable recyclable items.
 - v. Add clearly marked, easy to use recycling containers in public spaces and buildings.
 - vi. Introduce recycling contests in local schools and community centers.
 - vii. Engage initiatives like Freecycle to reuse local assets and reduce waste.

TALENT STRATEGIES

Talent represents the skills, knowledge and abilities consistent with preparing for and providing value in the workplace. As our economy continues to migrate from a job-centric paradigm to one that will be more centered on self-generation of income, talent development of our region's citizens will become increasingly and critically important. Salaried jobs or the performance of rote tasks in an hourly wage industrial setting will become less and less the norm as potential employers continue to seek non-employee means of production. The slow simmer of eliminating domestic jobs from the production equation over the last thirty years has turned to a full boil in the last ten. Few communities have been fully prepared for a transition of this magnitude at this speed.

Our region will need a wide range of multi-faceted strategies to successfully address this critical workforce development trend. Not everyone is at the same station in life. People have different capacities and skill sets to develop. A higher baseline of educational attainment, training for citizens of all ages to "learn how to learn," and providing for greater adaptability, will all become paramount in the emerging global economy.

Children in particular need quality childcare and an excellent education centered on critical thinking skills - an integral ingredient to



success in the new economy. As we start our children off with an excellent baseline education we also need to continue working hard at bring others successfully back into our regional workforce and challenge everyone to engage in lifelong learning. Greater awareness of the uses of technology and global connectivity will increasingly be critical to regional success. The ways we learn and the ways educational messages are imparted are perpetually changing. The use of technology, online learning, and *Massive Open Online Courses* (MOOCS) is increasing. On the job training and "learning by doing" opportunities within a mentorship or internship setting are prevalent. All of these strategies will contribute to increasing the levels of knowledge and capacity among our region's citizens.

Recognizing that each community is strongest as each person is more capable, greater civic engagement can help mitigate the impact of economic challenges and strengthen our region. As communities throughout the Piedmont Triad build their collective social capital, they will become more capable of continuing the process toward community transformation, where human talent is optimized for local and regional success.

<u>GOAL</u>: Invest in and develop the human capital of the region – the youth, workforce, disenfranchised, and those with underdeveloped capacity.

□ <u>Objective 1: Promote excellent baseline education</u>. \$\$\$\$

Early childhood education has been proven to provide more benefit to educational achievement than any other measure. Children that are poor readers at the end of the 3rd grade rarely make up the gap later in school. Remedial education is expensive and less effective than early childhood education. Inclusion of technology into the learning process reduces the gap in educational achievement and introduces many students to mainstream technology that they might otherwise not experience. School budgets are overwhelmed with more demand for services and capital needs than can be met through traditional sources of revenue. Schools must find other ways to impart education that is something more than some derivation of the same methods little different than a century ago. Technology and greater utilization of buildings that already exist are two potential options to consider.

- 1. Support greater 4-star and 5-star childcare opportunities.
 - a) Develop a consortium of foundation, education and community organizations to develop greater high quality childcare access.
 - b) Introduce quality childcare bonus stipulations in economic development incentive contracts. (Bonus incentive for providing quality childcare, especially for lower-waged employees.)
- 2. Seek K-12 enhancements that provide more real world connectivity and uses limited resources more wisely.
 - a) Migrate the educational methodology to include more technological components.
 - b) Introduce different operational concepts that lower costs and reduce the achievement gap (e.g. consider year-round multi-track schools).
 - c) Provide greater industry/high school connectivity for internship and post-high school opportunities.

- 3. Promote greater use of inclusion programs (e.g. ESL).
 - a) Create a coalition of educators and adults with foreign language skills to provide greater English language adoption among school children.
 - b) Develop an organized process for adults to attain a working ability to communicate in English.

□ <u>Objective 2: Provide accessible and affordable supplemental education for workplace engagement</u>. \$\$\$\$

<u>Strategies</u>

- 1. Seek more internships and On-the-Job Training for greater education/industry connectivity.
- 2. Develop more mentoring programs.
- 3. Promote increased training-to-work efforts for the long-term unemployed with increased focus on individual situations and additional attention to current efforts.
 - a) Identify individuals who have been unemployed for an extended period of time.
 - b) Identify their talents and capacities.
 - c) Identify the companies who have needs and identify the accompanying skill set required.
 - d) Train to meet those needs.

<u>Objective 3: Develop greater levels of economic capacity through greater educational attainment, more</u> <u>knowledge, and networked relationships</u>. \$\$\$\$

The developing Proprietor Economy – individuals building income streams through self-generation of revenue – is rapidly building momentum. In most workplace engagements, degrees still matter. However, knowledge will increasingly be considered, regardless of degree, underscoring the importance of access to information and knowledge through online learning

opportunities such as *Massive Open Online Courses* (MOOCs). Networking is very important in today's economy and will become a more critical factor as the Proprietor Economy grows. Those with developed skills will often team with others with complementary skills to complete projects or to maximize output. A good example of this type of work arrangement is the production of a movie, in which different talents and skill sets are brought together to produce a movie and are then dispersed to work on their next project, with some or none of their previous partners. These types of networking arrangements often expand to include connections throughout a region and sometimes throughout the wider global economy.



- 1. Focus efforts to develop individual capacity in two top-priority identified industrial clusters to achieve widely applicable talent cluster capacity.
 - a) <u>Healthcare</u>: Engage local hospitals, college nursing and public health programs, community colleges, K-12 and other relevant parties to begin a comprehensive healthcare training program for the region.
 - b) <u>Tourism/Hospitality</u>: Initiate a Disney-style world-class customer service training program at select area high schools. Provide training in superior ways to handle public interaction applicable to success in event management, facility management, restaurant operations and management, and call center operations.
- 2. Promote greater citizen achievement of a bachelor degree.
 - a) Expand the awareness and access to online degree completion.
 - b) Continue to emphasize "Degrees Matter" and other pro-degree initiatives.
- 3. Promote increased online/MOOC course involvement.
 - a) Identify companies who need skill sets and knowledge that is well (or best) accessed through MOOC or other outside online education.
 - b) Once collaboratively identified, suggest coursework to individuals who have the ability and proclivity to engage in such online education for employment or other workplace engagement.
 - c) Promote free (or inexpensive) MOOC education as a viable educational alternative.
- 4. Create a culture of education throughout the region.

- a) To challenge and reverse generations of limiting formal education due to the desire and need to work in the region's mills and factories, create a consortium of foundation, non-profit, business and education representation to develop local plans for engaging each community to stress the importance of education.
- b) By using the same (or similar) structure, work through the local school systems to make home visits to affirm to parents and guardians the importance of children getting a solid education and to stress the critical necessity of their involvement in the process.
- 5. Create greater access to personal network and global connectivity.
 - a) Provide speakers, demonstrations, movies, events and other means to open the eyes of local residents and children to both different domestic and foreign cultures and opportunities.
 - b) Introduce Skype and similar technologies to residents and (supervised) children to develop friendships and connectivity.
 - c) Take advantage of the connectivity and knowledge of newer members of the community.

Objective 4: Promote increased civic engagement. \$\$\$\$

One way to address economic challenges in our region is to build more connectivity and capability among residents within our communities. This type of talent is generally unrelated to formal education advancement and thrives on developing the personal capacity (e.g. emotional intelligence) and connectivity among citizens.

<u>Strategies</u>

- 1. Encourage the re-formation and growth of participatory civic leadership organizations.
 - a) Develop local initiatives pairing community members who have led civic and leadership development groups (e.g. Rotary, Lions, Ruritans, Jaycees) with young, rising leaders in the community to infuse these groups with newer ways of communicating and engaging in community transformation toward civic activism for the common good. Emphasize the inclusion of new and diverse members of the community.
 - b) Identify top-priority community improvement projects for civic and leadership development groups.
- 2. Build more civic participation in K-12 education.
 - a) Develop local processes for classroom assistance.
 - b) Generate a process for pairing mentors in typically out-of-school arenas with interested students to introduce outside topics and develop non-curriculum subject knowledge.
- 3. Introduce community transformational processes and practices into communities.
 - a) Explore the Communities of the Future "*Master Capacity Builder*" model.

Objective 5: Encourage the Inclusion of Prosperity-Enhancing Components Beyond Wages in Economic Development Recruitment and Local ED Contracts \$\$

Typical industrial recruitment processes focus primarily on the creation of new tax base and a net increase in jobs, while other components of prosperity are typically ignored or omitted. More progressive practices call for health care benefits for full time employees (e.g. *NC Job Development Investment Grant Program*) and some measure of wage level that meets local averages (e.g. *Article 3J Tax Credits*, guidelines for *One North Carolina Fund*). The inclusion of such prosperity-enhancing ED components augments the standard wages earned by employees. By providing some measure of health care, child care, and work-related transportation, the financial pressure on both employees and community service providers can be mitigated (e.g. Social Services, Public Health, and local school and transportation systems). Use of these practices will become increasingly important as the Piedmont Triad seeks to build a more resilient economy with opportunities for all residents to participate in the region's economic vitality. For example, as companies receive state and local incentives for their business expansions, the inclusion of prosperity-enhancing measures would insure new employees receive a greater level of support as part of the agreement. Local governments and taxpayers could also receive some financial relief from low-wage related social service assistance to individuals employed by companies that are receiving local government incentives.

Strategies

1. Expand the inclusion of explicit health care dollar amounts (or hourly contributions) in local economic development incentive contracts to provide for basic healthcare insurance coverage for employees and their families.

- 2. Include an allowance in local economic development incentive contracts (e.g. 10%) for incentivized companies to receive a match for their tax-deductible provision of transportation alternatives to help their employees get to and from work (e.g. bus, rail, vanpool, ride-sharing, etc.).
- 3. Include the provision in local economic development contracts for companies to receive a match (e.g. 50%) for providing 4-star and 5-star child care for their employees.

IMPLEMENTATION

The similarities and differences among communities within the Piedmont Triad are discussed throughout this plan. With two large urban core counties, several urbanizing adjacent counties, and multiple surrounding rural counties, our region also shares many common traits with neighboring regions. To our east is the Triangle J Council of Governments (Research Triangle) Region, with Wake County and Raleigh its largest members. To the southwest is the Centralina Council of Governments Region, its largest members being Mecklenburg County and Charlotte. Known as the



Figure 31: NC Regional Councils



Piedmont Crescent, these three, largely urban regions located along the I-40/I-85 corridor account for about 25% of the state's counties and land area, but more than half its population. Though each has the benefit of rural areas within its region, the economic activity of all three regions is dominated by their urban core. The cities in the urban cores of these regions have a unique set of assets – but also a unique set of challenges – almost exclusive to themselves. They have different issues in transportation infrastructure, urban redevelopment, and housing. One key common trait – all three regions are competing with an even larger set of worldwide economic development players.

By the same token, our more rural counties share many common traits with other rural counties across the state. The recent era of plant and factory closures due to shifts in the manufacturing realm has had a tremendous impact on rural counties in North Carolina. The closure of a single entity can impact the employment and property tax base of an entire sub-region. For example, a penny can equal approximately \$4 million in tax revenue in a more urban county like Guilford. However, in a significantly rural county like Washington County, that penny raises only \$70,000 in tax revenue. In addition, on-going population shifts are further widening the gap among North Carolina's urban and rural communities. Our state's population grew by 2.3% in 2012 to just over 9.8 million residents. Currently the tenth largest state, North Carolina is expected to pass Michigan for #9 by the end of 2014. However our growth is not evenly disbursed. In 2011, 47 of our state's 100 counties lost population, and half of the counties in the Piedmont Triad are expected to have very little, if any, population growth through year 2030.

The State of North Carolina recognizes these disparities and has programs to assist rural and economically disadvantaged counties. The NC Rural Economic Development Center provides economic development assistance to the 85 non-urbanized counties in the state. The other 15 counties are not eligible for assistance through this program – nor any rural areas within these counties. Twelve of the fifteen "urban" designated counties in the state are in the three Piedmont Crescent regions. Eight of the twelve counties in the Piedmont Triad region qualify for this assistance (all except Guilford, Forsyth, Alamance and Davidson). The North Carolina Department of Commerce also has a tiered economic incentive program to assist disadvantaged counties. Its 3-tier system currently includes 20 Tier 1 counties (the most disadvantaged), 40 Tier 2 counties, and 40 Tier 3 counties. This program (Article 3J) provides a \$12,500 incentive per job created in Tier 1 counties: Montgomery, Caswell, Surry and Rockingham. The intent of the program is to induce private business expansions and relocations in disadvantaged, rural counties. However, most projects – especially those with higher paying jobs and greater investment – are likely to go to urban areas with expanding populations.

Urban counties in North Carolina generally have more population and wealth. However, they also have a significantly higher level of burden to maintain their current provision of services including infrastructure maintenance and traffic congestion, pockets of urban poverty and redevelopment needs, and increasing demands for schools, libraries, parks and other public services. In addition, the cumulative effects of tens of thousands of unemployed individuals and the constant competition for top tier economic development projects pushes the collective pressure on urban counties to a fever pitch. For example, communities with whom our urban core counties compete are achieving 1 Gigabit-per-second internet speeds, yet nothing at that level is underway in North Carolina. Clearly a collaborative effort focused on dealing with urban core issues on a statewide scale is required.

In all instances – urban and rural, within and outside our region – there is a need for greater collaboration and support to address today's economic challenges. Implementation of this plan and much of our region's future economic prosperity will depend on the partnerships and connectivity built among our 12 counties, and with other regions. To expand collaborative efforts, two initiatives are recommended to open pathways to greater support and funding from the State of North Carolina, foundations, and the private sector:

- 1. The first proposed initiative is to establish an <u>urban core alliance</u>, initially among the three Piedmont Crescent regions the Piedmont Triad, Triangle J (Research Triangle), and Centralina Regional Council (Charlotte/Mecklenburg) service areas. The alliance can be designed to formally identify and receive state support to address its most pressing issues (e.g. transportation infrastructure, urban poverty and redevelopment, housing, competitive broadband). Alliance members may also seek technical assistance and support from organizations such as the NC League of Municipalities, the NC Association of County Commissioners, and the UNC School of Government to help frame key urban issues, seek greater state support and funding, and to form partnerships in seeking outside, non-state funding. The alliance could be modeled after and/or partner with the *North Carolina Metropolitan Mayors Coalition*. Founded in 2001, this Coalition is comprised of the mayors of the state's larger cities Burlington, Charlotte, Durham, Greensboro, High Point, Raleigh, Winston-Salem, Wilmington and 20 other cities, serving more than three million citizens. The Coalition is a non-partisan, mayor-driven organization that focuses on issues of special interest to large NC cities in a fast-growing and urbanizing state. The Coalition has worked successfully with federal and state elected officials to promote job creation, protect local revenues, invest in public infrastructure, and keep cities safe (Julie White, Executive Director and Lobbyist jwhite@metromayors.com http://ncmetromayors.com/)
- 2. To secure outside sources of funding from supportive foundations and private sector donors, the second proposed initiative is to create a **<u>qualifying non-profit corporation</u>**. Establishing the region as an *Economic Development District* (EDD) would be a good first step. The construction of a non-profit leadership group could come in many forms. Formation of an EDD board and getting the proper tax-exempt framework in place through a non-profit corporation would provide the organizational and funding framework necessary for successful region-wide collaboration.

CONCLUSIONS

The guiding principles, investment priorities and standards of excellence cited in the Plan Introduction serve as the underlying framework interwoven throughout this CEDS plan. The best of current and past plans, regional input, and cutting edge social and economic development trend analysis has been used to develop this plan to be a strategic guidance tool for our region's economic future. Some populist economic concepts are given a litmus test against current trends, allowing this plan to be less encumbered by more traditional economic development approaches used in past planning efforts.

Though the Piedmont Triad Regional Council has taken the lead role in developing the Piedmont Triad CEDS, it will take the concentrated energy, resources and knowledge of many strategic partners to accomplish the goals and complete the objectives and strategies outlined in the plan. The CEDS contemplates a five-year horizon (2014-2018), while recognizing that achieving the plan's goals will, in most cases, be more long term. The plan will require update and renewal as its five-year term ends. This CEDS is a starting point, which takes the good work already being done in the region and moves it forward, bringing the public and private sectors together to continue to achieve great things. As the plan is implemented, it will be reworked, retooled and refined, to better reflect the economic development goals and aspirations of our region, now and in the future.

This Comprehensive Economic Development Strategy identifies and values a wide range of economic assets, resources, and opportunities – urban and rural, large and small, wealthy and underserved. This plan underscores the importance of equity among its citizens, sustainable growth, and building more resiliency in our local economies and communities. It acknowledges and shows appreciation for our region's past and exhorts all of us to aggressively pursue the new technologies and thinking of the future. It outlines our key challenges while advocating for the implementation of tangible solutions. And finally and foremost, this plan affirms our strong belief in the strength of collaboration and our willingness to work together for a better Piedmont Triad Tomorrow.

