REGIONAL ECONOMIC DEVELOPMENT STRATEGIC PLAN

Pittsylvania County | City of Danville | Danville Regional Foundation

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Executive Summary

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Executive Summary

Pittsylvania County and the City of Danville (Region) form a Micropolitan Statistical Area (MSA) of approximately 102,000 people. Both jurisdictions have well-established economic development programs and seek to define future business and economic development strategies using this Regional Strategic Economic Development Plan. A stakeholder group was jointly selected by the sponsors of this plan (Pittsylvania County, City of Danville and Danville Regional Foundation) to assist in providing feedback to the consultant team. This group included representation from regional economic development organizations and County and City elected leaders and staff.

The goals of this strategic plan are to:

1. Provide the data and information necessary for stakeholders to agree on a common, current reality for the area.
2. Evaluate the current competitiveness of the Pittsylvania-Danville micropolitan region across 10 important categories: community strengths and weaknesses; economic development organizational structure; industry clusters; labor supply; supply chains; the agriculture and forestry sector; the entrepreneurial ecosystem; commercial real estate products; housing market; and the effectiveness of partners throughout the region in carrying out all critical economic development functions.
3. Make recommendations that will fine-tune current economic development efforts to increase the area's competitiveness over the next three to 10 years. These shorter-term actions will lay the foundation for greater economic success over a 10 to 20-year horizon. Recommended actions are based on the factors of a) ability to control; b) impact; c) available resources; and d) time.

Given the complex array of organizations and individuals involved in the Pittsylvania-Danville economic development system, it is important to have a strategy for aligning goals and activities among all partners.

Plan Section Summaries:

Community Strengths and Weaknesses Analysis:
Strengths and weaknesses of the Region were identified based on feedback from stakeholders, market research and national site selectors.

<u>Strengths (Competitive Advantages):</u>

- Business friendly
- Right-To-Work community
- Regional leadership is accessible and attainable
- Affordability (costs below the national average)
- Proximity to metropolitan areas
- Good quality of life
- Workforce solutions/workforce training
- Limited competition for talent

- River District
- Diversity
- City/County collaboration
- Access to external funding
- Available sites with infrastructure

Weaknesses (Competitive Disadvantages)

- Population decline
- Intra-regional competition/lack of broad regional collaboration
- Weak self-image/ Resistance to change
- City crime
- City school system
- Talent availability/Workforce density
- Regional healthcare
- Negative publicity
- Lack of Interstate highway
- Generational poverty
- Aged housing stock
- Lack of new, high quality building inventory
- State level incentives

Analysis of Economic Development Organizations – Structure and Funding:
Similar economic development organizations across Virginia and the United States are structured and funded in a variety of ways such as:

- Government-operated (city or county department);
- Established within a Chamber of Commerce business organization – in some areas the economic development function is given a distinct brand;
- Separate private organization, usually incorporated as a non-profit entity.

Organizations' scope of activities start with business recruitment, retention, and expansion. Increasingly common additional activities include development of small business and entrepreneurship; workforce development; research and analysis; and tourism. There are several models of close regional collaboration, either through creation of a virtual entity (unified brand) or an actual regional development group.

Industry Cluster Analysis:
Clusters of industries that export goods or services outside of the Region were analyzed to determine the strongest and most promising clusters – those that have an above-average employment concentration within the region and are growing employment. The

- Leading Existing Clusters: plastics; upstream chemical products; food processing; vulcanized and fired materials; wood products.
- Promising Emerging Clusters: automotive; distribution and e-commerce; business services; agricultural inputs and services.

Labor Supply Analysis:
While the Region's population is declining, the rate of decline is slowing but the economy has not improved enough to stop population loss. Demographic challenges of the MSA's population include a lower-than-average share of millennials; more older workers that will retire soon; and fewer college graduates in the adult population. Being able to draw from a wider area does increase the potential for businesses to obtain a quality workforce.

As a micropolitan area, the Region has a smaller labor pool (45,500), but including the labor supply in the counties within a 60-minute drive time expands the labor pool dramatically to 540,000. The Region has many positives when it comes to access to labor. Over 15,000 employees live in the Region but commute away demonstrating an attractive opportunity for hiring. While overall population may be declining, net migration to the area is positive. Graduates are produced from two and four-year institutions with a blend of liberal arts and skilled trade education. Several production technology education programs exist in the Region and have high levels of annual graduates. A manufacturer can find its production workers as well as its management team from local education institutions. Regionally there's an opportunity to increase STEM programs and trade skills.

Supply Chain Analysis:
Tire manufacturing was the Region's top exporter in 2018 and is the Region's top employing traded industry. Tire manufacturing is crucial for the success of the Region's current economy. The Region's top importer in 2018 was petrochemicals. Petrochemicals are a crucial building block of many products, particularly the plastics cluster that is present in the Region. Targeting plastics manufacturers who supply top local companies could keep money in the region and continue to build upon the current growth in the plastics cluster in Pittsylvania and Danville.

The next largest sourcing need is corporate offices. Recruiting more corporate jobs to the Region from one of its top employers will keep more investment in the area.

Seventy three percent of all traded industries' spending for warehousing and storage (e-commerce and distribution cluster) was performed outside the Region. This cluster has been emerging in recent years with strong employment growth and should be focused on.

Overall, building greater connections between larger local firms and local suppliers will benefit the Region's economy.

Agriculture and Forestry Sector Analysis:
Pittsylvania County ranks within the top 10 in Virginia for total farm sales receipts. It is in the top five (5) for flue-cured tobacco, total cropland, other hay, beef cows, and milk cows. The overall economic impact of forestry in Pittsylvania is the 6th-highest in Virginia. Suggestions for strengthening agriculture and forestry in the region include: 1) increased value-added production and attraction of food processing firms; 2) more storage capacity; and 3) increased forest landowner education.

Entrepreneurial Ecosystem Analysis:
The landscape for new business formation in the United States has been challenging over the past 20 years. Locally, the Region offers an impressive list of organizations providing services to entrepreneurs and small businesses. However, the dissemination of information could be improved, particularly regarding access to financial capital and quality employees. Stakeholder ideas for achieving this include:

- The need for an experienced, full-time entrepreneurship coordinator
- A written work plan agreed to by the various service providers
- Completion of a public information website on entrepreneurship and small business assistance.

Commercial Real Estate Product Analysis:
There are strong land options in the area, including land suitable to serve the identified targeted industry clusters. The SoVA Megasite at Berry Hill and Cane Creek Centre are the region's most resourceful sites, due to their size and utility capacities. Food Processing, Business Services and Agricultural Inputs and Services are the most versatile industries and can be served by the most available sites existing in the Region. Sites capable of serving only a few targeted clusters should be marketed and strategically reserved for such clusters, unless additional capital investment is planned to meet minimum resource needs of other targeted clusters.

Existing buildings are plentiful in Danville, but almost all are older and require renovation and upgrades to suit current business needs. Development of new shell buildings would increase the Region's competitiveness. Shell buildings should be planned to accommodate identified industry clusters and designed to be flexible.

Housing Market Analysis:
The greatest strength of the area's housing market is strong affordability across all income levels. Weaknesses in the housing market include no net growth in the housing stock, and particularly little new construction and few housing offerings at the upper end of the market. This can make it more difficult to attract business executives and young professional families to the area. Most households in the Region can find affordable housing, but there is less choice at the upper end of the housing spectrum to attract more affluent families. Most of Danville's housing stock was constructed between 1950 and 1979 while most of the County's housing stock was constructed between 1970 and 1999. Housing amenities sought by today's younger consumers are typically not present in housing stock built prior to 2000.

Analysis of Critical Functions in the Economic Development System:
There is no single successful model for the structure of economic development organizations or how they are funded. They can be established as public government departments, arms of Chambers of Commerce, and other private or non-profit organizations. Funding can be purely public, purely private, or increasingly a mix of the two. The Danville-Pittsylvania County area is one in which many groups are involved in providing critical economic development services.

Looking at the array of economic development-related functions in the Region, the following strengths and weaknesses are noted:

<u>Strengths</u>

- An impressive list of collaborating organizations, especially for a region of this size
- Very good working relationships
- Notable workforce training programs
- Good land product development, especially the SoVA Megasite at Berry Hill.

Weaknesses

- Lack of stability in the tourism program
- A weak regional identity in marketing, or one that doesn't match current reality
- Lack of a joint strategy agreed to by collaborating organizations.

In general, the Danville-Pittsylvania area is doing a good job of covering the most important economic development functions, operating under a model that utilizes a dispersed set of organizations. However, this loose alliance carries a greater risk that inefficiencies or service gaps might occur. It requires a more concerted effort to agree on roles and responsibilities, more frequent communication and collaboration. Improved communication will result in increased efficiency and better provision of client services.

Incentive Program Best Practices:
We reviewed national best practices for business incentive programs, with an eye toward those that could be recommended for adoption by Pittsylvania County, the City of Danville, and the joint Danville-Pittsylvania Regional Industry Facility Authority (RIFA). A good program will be built around the guiding principles of: ***Make a Plan ➔ Measure the Impact ➔ Inform Policy Choices.***

To improve the transparency of incentive deliberations and decision-making, the jurisdictions should develop written incentives policies, including a shared policy for use with RIFA projects. Use of an incentive project scoresheet or matrix will provide a standard way to measure project impacts and their fit with community priorities, and provide for easier comparison between various projects.

Recommendations:
The plan's recommendations are divided into two sections – those that can be implemented with the current level of resources, and those that require additional resources. In addition to those suggested in the analysis sections above, recommendations cover the topics below.

Strategies Assuming the Current Level of Resources:

- For the entire range of existing economic development activities in Pittsylvania-Danville, **improve the regional partners' structure for working together by creating a formal alliance**. This should include all of the responsible parties listed in Section 10, carrying out programming from business recruitment to workforce development to tourism. This **alliance** could jointly develop a staff-level work plan or more formal document outlining the **scope of work, division of duties, basic strategies, and measurable goals** that can be agreed upon by all organizations involved. A joint council comprised of staff members could be formed to develop the work plan and meet perhaps twice a year to review progress.

- Strive to achieve even closer **collaboration** between **economic development and workforce development** service providers, with the goal of providing seamless client service for a business need that is likely to remain of greatest importance for years to come. Economic and workforce development staff should jointly develop and distribute a biannual, area-wide labor force and employment data update targeted to the business community.

- In workforce development, use current resources to **target existing residents** who commute outside of Pittsylvania-Danville. Improve existing residents' awareness of job opportunities within the local area.

- Focus business attraction efforts on the list of **targeted existing and emerging industry** clusters found in section 3. Stakeholders suggest prioritizing those sectors that are most resilient to economic fluctuations.

- Improve the transparency of business incentive deliberations and decision-making in Danville and Pittsylvania by developing **written incentives policies**, including a **shared policy** agreed on by both jurisdictions for use with Regional Industry Facility Authority (RIFA) projects. Use of an **incentive project scoresheet or matrix** will provide a standard way to measure project impacts and their fit with community priorities, and provide for easier comparison between various projects. A scoresheet is intended to assist elected officials with evaluating incentive requests, but should in no way bind them to a particular decision or course of action.

- Use **supply chain data** to connect local firms, and to target new supplier firms. Develop a phone call outreach program to top area employers and implement a targeted visitation program. Stakeholders suggest exploring the defense sector supply chain to take advantage of a resilient sector that is already strong across Virginia.

- To boost the agriculture and food processing sectors, explore development of **shared cold and frozen storage facilities**. Pursue grant funds for this purpose.

- Improve **education opportunities for forest landowners** (on topics such as forest land stewardship and management) by providing an information packet and offering of Generation NEXT workshops to any landowner newly applying for land use taxation status.

- Convene a **summit** to chart a new course and pursue consensus on a higher level of commitment for **tourism development**. An updated tourism plan should focus on bringing in more outside dollars to the area. Moving tourism activities to Danville's Office of Economic Development and integrating them into the department's other programs appears to be the most logical fit.

- Continue to focus on improvement of **broadband internet access and cell phone coverage** throughout the entire area. Pursue state and federal funding to expand these systems and control costs for end users.

- Roll out and publicize a public **website** providing a road map of services available to current and potential **entrepreneurs**. Include a portal to this website on every partner's web home page.

- Consider **housing** incentives and other policy changes to promote new construction, including higher-range single-family homes and attached housing products. Target outreach to developers of mixed-use, planned communities.

- In addition to housing, collaborate with regional organizations to elevate community discussions and actions to improve these important **quality of life issues**:
    - Public school education
    - Early childhood development
    - Healthcare
    - Poverty
    - Childcare

- **Development sites** capable of serving only a few targeted clusters should be marketed and **strategically reserved for such clusters**, unless additional capital investment is planned to meet minimum resource needs of other targeted clusters.

- Recruitment efforts for the **SoVA Megasite** at Berry Hill should be focused on industries with significant acreage and utility needs.

- The Megasite area within Berry Hill should be reserved for **transformative projects** with large investment and employment.

- Conduct additional planning to determine the full build-out and expansion potential of the **Cyber Park** as it has emerged as the site of choice for industries that desire close proximity to the Region's workforce training cluster.

- To aid in **marketing sites and buildings**, ensure product information and "messaging" is current and consistent across all platforms and with all vested parties (i.e. VEDP, SVRA, utility providers, etc.).

- To **expedite stormwater permitting for development**, Pittsylvania County should establish a local Virginia Stormwater Management Program (VSMP) or enter an agreement with the City of Danville which has an approved VSMP.

Strategies Assuming Some Increase in Resources:

- For the economic development alliance work plan described above, creation of a **shared dashboard** for internal use by all economic development partners would increase the ability to measure progress toward agreed-upon goals.

- To improve reporting on the status of the workforce to the business community, elected officials and the general public, collaboration between economic and workforce development offices could include **joint funding and publication of an annual employer survey and labor shed analysis**, and hosting of a **public/private workforce summit** every two years.

- To target residents commuting outside of Pittsylvania-Danville, use new resources for **social media, online, and billboard campaigns** promoting local, available jobs.

- Increase **joint marketing of the region** with one, unified message. The message should be a positive narrative of a region already transforming its economy and its future, targeted to economic development influencers and business clients outside the region.

- Pursue a **dedicated funding stream for tourism development** programming. Danville levies lodging and meals taxes but uses these revenues for numerous purposes unrelated to tourism. Dedicating a portion of this revenue annually to professional tourism development efforts would be an important positive step.

- Fund and hire an **experienced, full-time point person** to coordinate a shared strategy for improving the **entrepreneurial ecosystem**.

- Establish a new, **annual economic information event** co-sponsored by the City of Danville and Pittsylvania County to bring together elected and appointed leaders from both jurisdictions. Focus on evaluation of economic progress metrics for the entire area.

- Improve **electrical infrastructure at the Cyber Park** to increase capacity for continued growth.

- Invest in selected building and site improvements at the **Schoolfield** and **Southern Virginia Multimodal Park (SVMP)** sites to **improve attractiveness**.

- Coordinate with Norfolk-Southern to **improve rail infrastructure** serving **SVMP** and the **SoVA Megasite** at Berry Hill.

Surpassing all of the area-specific recommendations above, perhaps the greatest challenge is achieving communication and cooperation when numerous economic development partners are participating in the same ecosystem. There are many approaches to aligning the efforts of multiple players, but one helpful framework is the Collective Impact Model, originally developed at Stanford University. Collective Impact occurs when a group of actors from different sectors commits to a common agenda in order to solve a specific problem. This structure for collaboration requires buy-in on five principles:

1. A common agenda;
2. Shared measurement systems;
3. Mutually reinforcing activities;
4. Continuous communication;
5. One or more backbone support organization(s).

Regardless of the specific model that is used, Pittsylvania-Danville's varied economic development activities can benefit from clear and mutually agreed-upon goals, defined roles and duties for each group, metrics to evaluate program success, and open channels of communication.

# # #

Pittsylvania County and City of Danville, Virginia

Regional Economic Development Strategic Plan

A. Introduction

Pittsylvania County and the City of Danville comprise a Micropolitan Statistical Area (MSA) of about 102,000 residents. Each government entity has a well-established economic development program. In addition, they have forged ties with other service providers that carry out critical work which drives a broader economic development system – from workforce development to entrepreneurial support to tourism development. The large number of actors involved requires a high level of communication and collaboration in order for the system to function efficiently and effectively.

The goals of this strategic plan are to:

4. Provide the data and information necessary for stakeholders to agree on a common, current reality for the area.
5. Evaluate the current competitiveness of the Pittsylvania-Danville micropolitan region across 10 important categories: community strengths and weaknesses; economic development organizational structure; industry clusters; labor supply; supply chains; the agriculture and forestry sector; the entrepreneurial ecosystem; commercial real estate products; housing market; and the effectiveness of partners throughout the region in carrying out all critical economic development functions.
6. Make recommendations that will fine-tune current economic development efforts to increase the area's competitiveness over the next three to 10 years. These shorter-term actions will lay the foundation for greater economic success over a 10 to 20-year horizon. Recommended actions are based on the factors of a) ability to control; b) impact; c) available resources; and d) time.

Given the complex array of organizations and individuals involved in the Pittsylvania-Danville economic development system, it is important to have a strategy for aligning goals and activities among all partners. One approach, the Collective Impact Model, will be discussed in the Recommendations section.

STAKEHOLDER VISION FOR THE FUTURE

During the initial stakeholder session in January 2019, participants were asked to envision a future in which this economic development strategy had been successful. **If we are successful, what will be different about the area in 5 years? What will be different in 20 years?**

In 5 Years:

- We'll have positive momentum
- We'll achieve consensus about success, and have a plan to move forward
- We'll have clarity and buy-in about our future
- We'll have clarity of vision and desired outcomes
- We will have defined the strengths, weaknesses, and needs of regional partners
- The various regional pieces and assets will be coming together
- We'll have defined what we want to be
- We'll have success with our Megasite
- We'll see positive trends on metrics such as income, population growth, housing
- There will be stable education funding
- Education outcomes will have improved
- We'll be welcoming the next generation of business owners

- We'll have a diverse strategy, and will see success in transitioning the economy
- We'll have a cohesive system of support for entrepreneurial development
- We'll have a diversified economy with strength in entrepreneurship
- The lights at the White Mill will be on again

In 20 Years:

- We'll have better attraction and retention of people (especially young people, and keeping young professionals long-term) - (6)
- We will be a beacon for all of the east coast, and/or a nationally known success story – (2)
- We'll experience success similar to Greensville SC - (2)
- We'll be an economic development success, and able to be selective about what we pursue in the region – (2)
- We'll be well on our way to successfully implementing our plans
- We'll have a growing population, more jobs, and less crime
- Our median household income will be at the state average
- We'll be seen as a region of opportunity
- We'll be a model for regional success
- We'll have successes all across the region, not just in a few areas
- We'll truly be a region
- We'll need to deal with the growth that has occurred
- We will be a more inclusive and diverse region

B. Evaluating the Competitive Position of the Danville-Pittsylvania Area

1. COMMUNITY STRENGTHS AND WEAKNESSES ANALYSIS

A stakeholder group was jointly selected by the sponsors of this plan (Pittsylvania County, City of Danville and Danville Regional Foundation) to assist in providing feedback to the consultant team. This group included representation from regional economic development organizations and County and City elected leaders and staff. At a strategic plan's stakeholders meeting in January 2019, the group discussed the area's primary competitive advantages and competitive disadvantages related to economic development. These strengths and weaknesses are summarized below.

Strengths (Competitive Advantages)

- Leadership – bravery, and willingness to allow new leaders to participate – (2)
- Affordability (costs below the national average)
- Proximity to metropolitan areas
- Proximity to mountains and ocean
- Sense of place
- Workforce solutions/workforce training
- River District as an asset
- Diversity – of people and ideas
- City/County collaboration
- Flexible funding – sources such as DRF, Tobacco Commission, etc.

In addition, the consultant team suggested these items:
Overall proximity: one-day drive from two-thirds of the U.S. population
Improving workforce pipeline • Business-friendly, right-to-work communities
Competitive local incentives • Available sites with infrastructure (water, sewer, gas, broadband)

Weaknesses (Competitive Disadvantages)

- Where will the next generation of leaders come from? – (2)
- Intra-regional competition/lack of broad regional collaboration – (2)
- Weak self-image – (2)
- Negative image of crime, schools
- Negative data
- Lack of Interstate highway
- Too much searching for one big "magic bullet" solution
- Generational poverty
- Housing – weak demand
- Resistance to change

In addition, the consultant team suggested these items:
Population decline • Lack of workforce density • Lack of new, high-quality building product
Incentives at the state level

2. ANALYSIS OF ECONOMIC DEVELOPMENT ORGANIZATIONS – STRUCTURE AND FUNDING

Our team's analysis included a review of how economic development organizations across Virginia and the United States are structured and funded. This analysis is intended to shed light on whether the type of organization and funding stream affects the division of labor, level of communication and collaboration, and overall efficiency of economic development efforts. This topic is discussed in greater depth for the Danville-Pittsylvania area in Section 10 of the competitiveness analysis, Analysis of Critical Functions in the Economic Development System.

The organizations summarized in the charts later in this section carry out economic development activities for cities, counties, and regions ranging from a population of about 64,000 (Martinsville-Henry County, VA) to more than 350,000 (the Huntsville, AL area and the Charlottesville, VA region). Staffing levels vary from 2 to 27, with the largest staffs providing a wide range of services not necessarily tied to economic development – such as Chamber membership services and administration.

These economic development groups are structured in a variety of ways:

- Government-operated (city or county department);
- Established within a Chamber of Commerce business organization – in some areas the economic development function is given a distinct brand;
- Separate private organization, usually incorporated as a non-profit entity.

Although some local government departments are 100 percent publicly funded, the amount of private support for many organizations is notable. Private contributions to budgets come from Chamber memberships, business investors, and occasionally from program revenues such as from leasing or selling real estate. Augusta County, Virginia has a meals and lodging tax that funds its economic development and tourism functions. Total budgets vary tremendously, from around $400,000 annually to over $5,000,000 in Richmond, which includes housing and neighborhood revitalization activities as well as management of a coliseum.

In terms of the scope of economic development-related activities, all of the organizations undertake new business recruitment and existing business retention/expansion efforts. Other duties differ greatly from place to place, but they can include:

- Small business assistance and entrepreneur development, including operation of small business centers;
- Workforce development programming;
- Research and analysis;
- Tourism and outdoor recreation development;
- Neighborhood and community revitalization (especially in city government agencies);
- Land and building development, including property management. Often a separate Economic Development Authority is created for this purpose.

In a recent interview, Greater Dubuque's Rick Dickinson said, "the most important thing we do right now is workforce solutions." Combining economic development and workforce functions can also be a way to achieve broader political and community support. Across the country, other frequent economic development activities are downtown redevelopment and export assistance.

The charts later in this section offer a comparison of selected economic development organizations in Virginia, North Carolina, and elsewhere. Each organization is summarized by the population it serves, its staffing, budget, and notes about funding sources and activities.

Collaboration via the Guilford County Economic Development Alliance:

The Alliance is an initiative of the Greensboro Chamber, the cities of Greensboro and High Point, and Guilford County. The county had discussed starting its own county economic development agency – even though Greensboro & High Point already had their own. Instead, the groups collaborated to create a "virtual organization," a new effort without creating a new entity. The Alliance has no new physical address or office. Funds that the county contributes go toward shared marketing and research activities.

Greensboro has had a long, often bitter rivalry with High Point, but this initiative has gone a long way toward bringing them together. They share project leads now, and they've largely eliminated the potential for the two communities to be played off against one another. The Alliance has worked even though Greensboro economic development is a largely privately-funded Chamber activity and High Point is mainly public.

Having different economic development entities in close proximity can cause confusion, both internally (within the region) and for clients from outside the area. Given limited resources, it is important to work together, when possible, for the greatest impact. This Alliance helps economic developers to give the area a unified brand as Greensboro-High Point externally, though the official title is the Guilford County Alliance.

GREENSBORO HIGH POINT

you can make it here

2019 Economic Development Salary Survey

A new survey from North Carolina provides the following insights:

- Average staff salary of $86,200
- Chief Executive $109,100
- Asst. Director/VP $89,000
- Project Manager $66,200
- Entry Level Staff $53,000

Most common staff size: 2 to 4 full-time employees
Most common budget: $200,000 to $400,000

Most common activities after marketing & recruitment, business retention & expansion, and research & analysis:

- Property development/redevelopment 54%
- Workforce development 49%
- Small business development 44%

The average respondent was 47 years old with 14 years of economic development experience including 6.3 years in their current position.

- Source: 2019 NC Economic Development Salary Survey, NCEDA and Creative EDC

Economic Development Organization Comparison

Organization Name	Location	Communities Included	Total Population	Staffing	Approximate Budget	Funding Sources	Notes
City of Danville Economic Development	**Danville, VA**	**City of Danville**	**41,000**	**5**	**$787,000**	**City government funds**	**Budget includes expenditures for industry recruitment and River District improvements.**
Pittsylvania County Economic Development	**Chatham, VA**	**Pittsylvania County**	**61,000**	**2**	**$407,000**	**County government funds**	**Focus on industry recruitment (diverse) for the largest County (land) in Virginia.**
Southern Virginia Regional Alliance	**Danville, VA**	**3 counties, City of Danville**	**154,000**	**2**	**$600,000**	**State and participating localities**	**Started in 2011. Collaborates with member localities, and the State to market the Southern VA region (Patrick Co. to Halifax Co.).**
Central Virginia Partnership for Economic Development	Charlottesville, VA	8 counties, City of Charlottesville	353,000	7 incl. workforce & small business activities	$386,000	46% local govts, 41% private sector, 13% higher education	67 non-governmental investors. Activities include SBDC, workforce development.
Chesterfield County Economic Development	Chesterfield, VA	Chesterfield County	343,500	12	$2.2 million	County government funds	Incubator (Bizworks) coming into dept budget, about $175,000 extra. Budget does not include Econ Dev Authority.
Roanoke Regional Partnership	Roanoke, VA	4 counties, 3 cities, 1 town	330,000	8 - approx. 4 in economic & talent development	$1.3 million	50% public sector, 50% private sector	Started 1983. Approx. 120 non-governmental investors. RRP leads development of *Roanoke Outside* branding.
Lynchburg Regional Business Alliance	Lynchburg, VA	4 counties, 1 city, 3 towns	261,000	12 - approx. 4 dedicated to economic & small business development	$1.5 million	27% membership, 25% private contributions, 21% local govt, 28% other. 750 members with 85 "premium" level.	Activities include leadership development, young professionals, SBDC, partners in education
Chesapeake Economic Development	Chesapeake, VA	City of Chesapeake	240,000	11	$1.97 million	City govt funds. In past years, TIF district revenues paid some salaries.	Activities include managing 2 TIF districts created 2004-05. Also staffs Econ Devel Authority.

Organization Name	Location	Communities Included	Total Population	Staffing	Approximate Budget	Funding Sources	Notes
Richmond Dept. of Economic & Community Development	Richmond, VA	City of Richmond	227,000	15	$5.76 million	City government funds	Budget includes major expenditures for real estate management (coliseum), housing & neighborhood revitalization
Montgomery County Economic Development	Christiansburg, VA	1 county, 2 larger towns	98,500	4	$407,000	County govt funds	Regional group is Onward NRV - Montgomery Co funds @ $83,000/yr.
Augusta Co Economic Development & Tourism	Verona, VA	1 county with several small towns	75,000	2	$580,000: $307,000 for econ devel, $273,000 for tourism	County govt funds from meals & lodging tax	Staunton (24,500) and Waynesboro (22,000) have separate orgs
Martinsville-Henry Co EDC	Martinsville, VA	1 county, 1 city	64,300	8 incl. tourism & visitor services	$2.3 million	22% from county, 78% Harvest Foundation. City not currently funding the EDC.	EDC is a non-profit partnership of the city, county, chamber, and Harvest Foundation
Greensboro Chamber	Greensboro, NC	City of Greensboro	290,000	27 total - 3 dedicated to economic development	$2.0 million	Mostly private - recent fundraising campaign with 5-yr investor pledges	Collaborates with High Point EDC in Guilford Co Economic Development Alliance; cities + county fund joint activities
Durham Office of Economic & Workforce Development	Durham, NC	City of Durham	268,000	18	$3.84 million	City government funds	12 positions paid by city funds; 6 others are grant-funded
Alamance Chamber	Burlington, NC	1 county with 3 cities	162,000	8 total - approx. 5 dedicated to economic & workforce development	$800,000 (Chamber total)	75% private incl. member dues, 25% local governments.	Alamance Co Economic Development Foundation created in 2006. 60 private contributors for ED activities.
Catawba Co EDC	Hickory, NC	1 county with 4 cities	158,000	5	Approx. $630,000	$600,000 from public sector, remainder from 28 business supporters	Some private "Committee of 100" contributions are banked for future project use

Organization Name	Location	Communities Included	Total Population	Staffing	Approximate Budget	Funding Sources	Notes
Huntsville-Madison County Chamber	Huntsville, AL	1 county, 1 large city, 2 smaller cities	361,000	27 chamber total, 6 in econ development - other staff in workforce and small business	*did not respond*	*did not respond*	The City of Huntsville also has a Business Relations Office and an Urban & Economic Development department
Clarksville-Montgomery County EDC & Industrial Dev Bd	Clarksville, TN	1 county and 1 city	200,000	3	$1.4 million per county budget. *Staff did not respond.*	Aspire Clarksville started 1996 as a private community improvement program. 4 campaigns over the years.	Strong S. Korean investment. Ties attributed to nearby Ft. Campbell Army base & Korean War connections. Clarksville has sister city in S. Korea since 1999.
Golden Triangle Development LINK	Columbus, MS	3 counties. 2 of 3 cities fund via a county (Columbus withdrew 2018).	128,500	6	Approx. $2.5 million	70% public sector, 30% private sector.	Started 2003. TRUST private support program has about 80 investors.
Greater Dubuque Development Corp.	Dubuque, IA	1 county, 1 city	97,000	11	$2.1 million	110+ investors listed. Funding 60% private sector, 40% public sector	Initiatives in workforce, redevelopment & affordable housing, startups, sustainability
Tupelo Community Development Foundation	Tupelo, MS	1 county (Lee) with 4 cities	85,000	15 total - approx. 5 dedicated to economic & workforce development	Approximately $4 million. $3M goes to econ development-related activities	65% private sector, 35% public sector	1,200 members. CDF divisions are Chamber of Commerce, Economic Development, and Property Management.

Spotlight – Creation of the "Carolina Core"

NC CAROLINA CORE
YOUR NEXT BIG MOVE

The Carolina Core is a newly-designated area of central North Carolina, between Winston-Salem and Fayetteville, encompassing four business megasites with a total of 7,200 acres aimed at advanced manufacturing uses. The Piedmont Triad Partnership (PTP), which developed the Carolina Core concept, became interested in the untapped potential of the U.S. Highway 421 corridor in 2011.

For the Toyota-Mazda site competition in 2017, two of the corridor's megasites were under consideration, and one was a finalist. However, during the process almost no activities were done in concert between the two sites and their jurisdictions. Instead, the neighbors viewed one another only as competitors. PTP and its President Stan Kelly decided to take a leadership position to broaden stakeholders' understanding of who the region's competition is – competitors across the nation and the globe, not just the next county over.

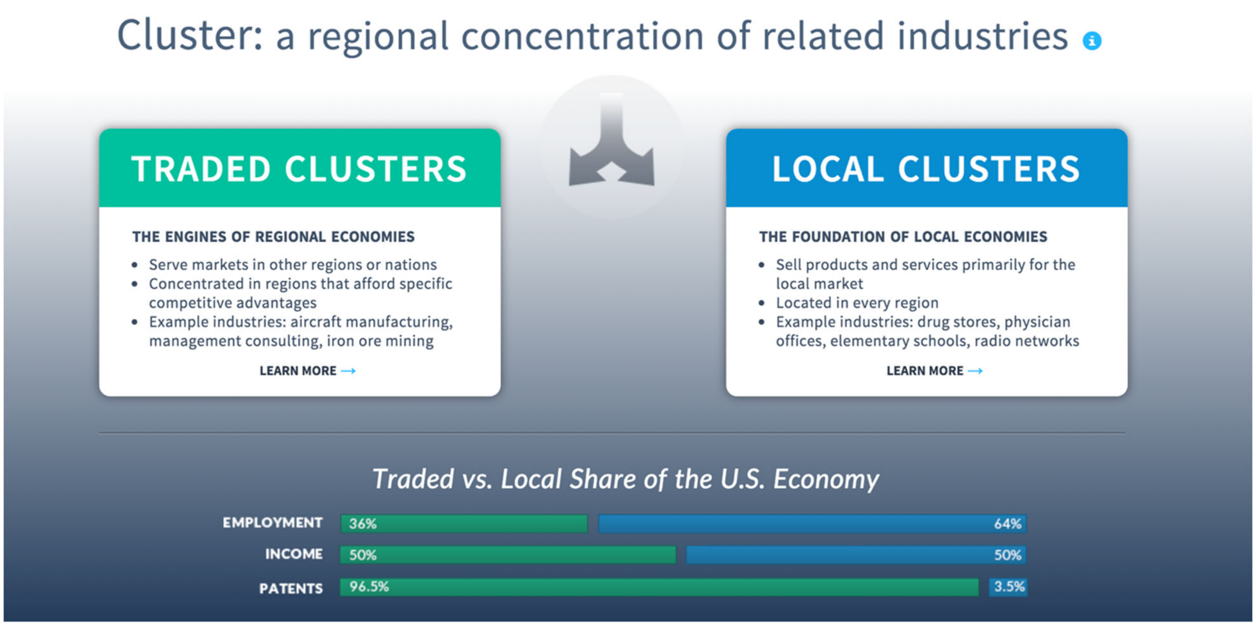
A branding initiative for the Carolina Core took off in August 2018. This new 'product' has been developed by PTP, largely within the organization's normal budget but with some additional business contributions. New York-based Development Counsellors International (DCI) was hired to help PTP develop the new brand. Thus far there has not been additional funding from other economic development organizations. PTP made this pivot – from talking just about the Triad to marketing the Carolina Core which is partly outside its region – because it believes it will ultimately benefit the Triad. When working to get collaboration with other jurisdictions and agencies (like NCDOT), a benefit that PTP promotes is its complimentary effort to get U.S. 421 designated as an Interstate.

After intra-regional awareness and marketing, the Carolina Core is now developing an external marketing program. They plan to employ a third party to manage it. As local partners elect to participate in external marketing, they will be expected to pay for whatever activities they choose. To free it from administrative duties, PTP anticipates local partners paying the third party directly, rather than paying anything to PTP.

3. INDUSTRY CLUSTER ANALYSIS

Traded or exporting clusters are groupings of industries that serve markets outside of a region (domestically and/or internationally). Clusters also contain a supply chain that supports an industry. Focusing on clusters in economic development strategy narrows efforts to those industries which are most likely to thrive in a region. This is particularly important as the competition for investment and jobs is intense, and resources are limited. Studies have shown that assets that support clusters are more efficient and cost effective than providing subsidies and assistance to individual companies.

"What makes clusters unique is not just that companies with similar or complementary interests, competencies, and needs congregate around each other. It's that an entire value chain exists within a cluster: suppliers, manufacturers, distributors, academic institutions, researchers, and workforce training, as well as those who provide relevant support services."
-Bloomberg



Source: US Cluster Mapping

Traded clusters often account for less than 40 percent of a region's employment, however, they are usually responsible for 50 percent or more of a region's income and innovation. Tradeable industries also account for 38 percent of living wage jobs for workers who do not have a bachelor's degree.

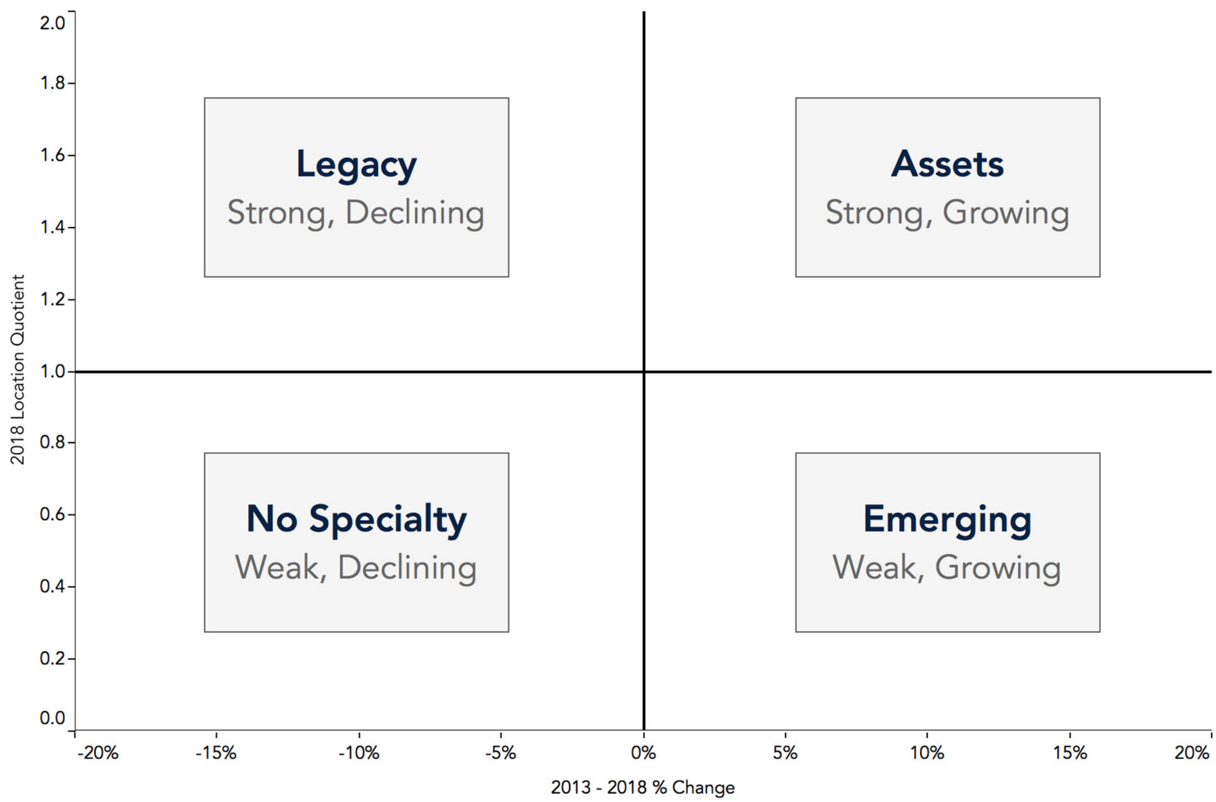
To determine the current state of traded clusters in Pittsylvania County and Danville City we collected employment and wage data for over 680 6-digit NAICS code industries. These industries were then grouped into 53 traded clusters. The cluster groupings are very closely related to those provide by US Cluster Mapping, a project of the Harvard Business School. Those cluster groupings have not been updated to reflect the most recent iteration of NAICS codes. Therefore, we used EMSI's conversion of the Harvard clusters to 2017 NAICS codes. A few tech related sectors were moved from the business services cluster to the technology cluster. A complete listing of which industries comprise each traded cluster is found in the appendix to this section.

These traded clusters were then evaluated on recent growth, location quotients, wages, and total employment. A cluster analysis of the greater labor shed was also conducted to understand where strengths could be aligned with the greater region.

In this analysis, the concentration and recent employment growth of clusters determine their significance. Location quotients (LQs) are the measure of employment concentration. LQs are the level of a cluster's employment in the region compared to national employment levels. A location quotient of 1.00 or greater demonstrates a higher concentration than the national average. This can reveal what clusters are strongest in Pittsylvania and Danville and generating money from outside of the region through exporting.

LQs when mapped alongside employment growth can show which clusters are thriving or declining. The chart below demonstrates where a cluster may fall on the map and how it corresponds to its strength and growth.

Example Chart for Cluster Mapping



Pittsylvania County and Danville City have six traded clusters that have higher concentrations than national levels. Three of these strong clusters saw employment decline in the last five years, while the other three saw employment growth. Furniture represents a regional legacy cluster that has been in decline in the area and regionally for decades. Tobacco and textiles are other legacy industries that do not employ enough people currently to even be displayed on the map.

Vulcanized and fired materials is the highest concentrated cluster and largest employer. This is predominately due to the Goodyear Tire plant that has operated in Danville for over 50 years. Jobs have showed stagnation in recent years in this cluster. In early 2019, Goodyear announced the reduction of 50 workers at their plant. The regional economy is quite dependent on this cluster's success.

Luckily there are other strong clusters that are experiencing growth. Plastics was the fastest growing major cluster with 38 percent employment growth. Although less concentrated and less unique, distribution and e-Commerce and business services have seen strong growth in the past five years.

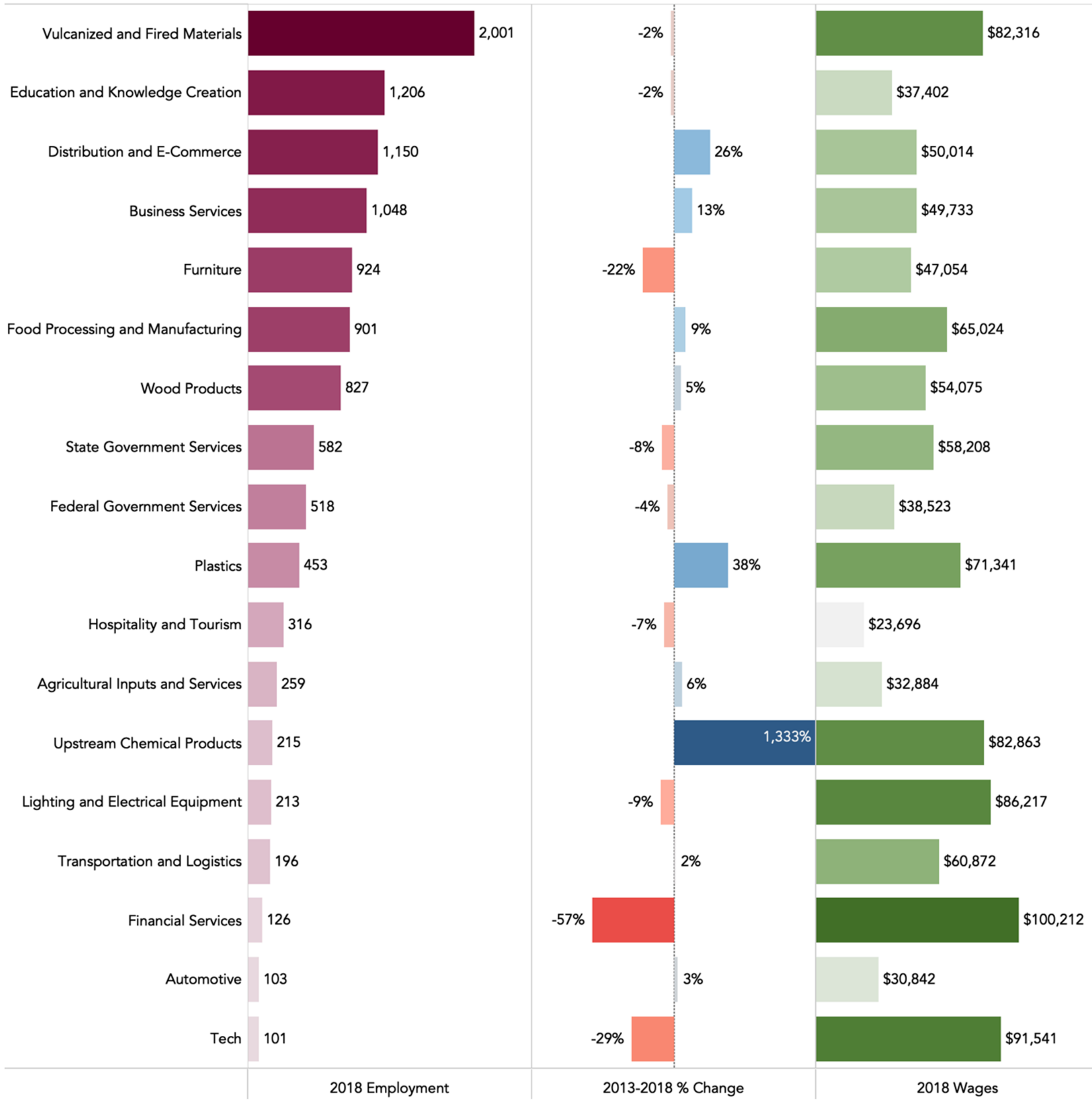
Pittsylvania and Danville Cluster Map

Source: EMSI 2019.1

Note: The size of each cluster bubble is determined by the size of 2018 employment levels.
The color of each cluster is determined by the employment growth from 2013 to 2018.
Clusters with less than 150 workers were removed from the chart.

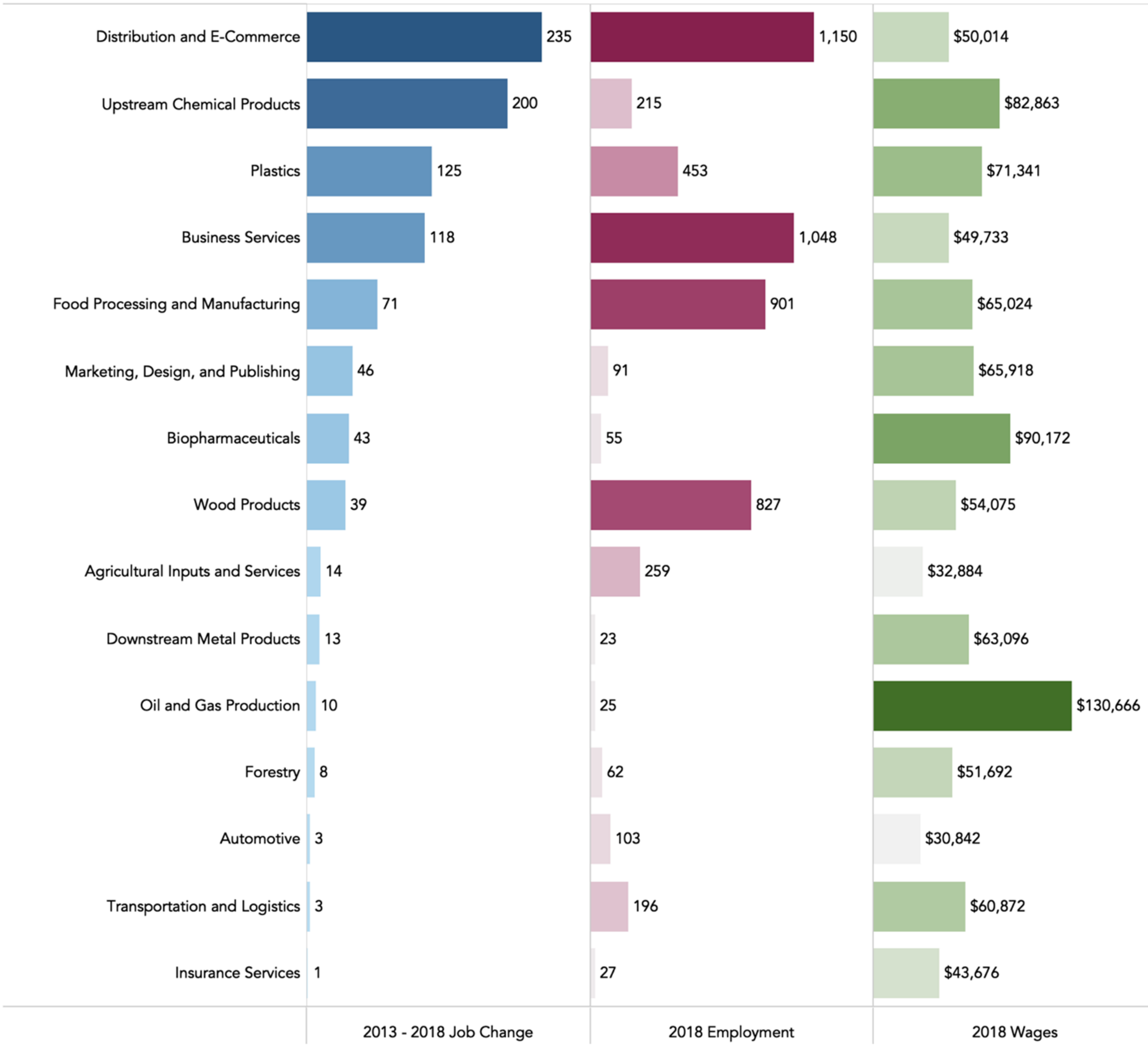
Education and knowledge creation is another major employer in the area, and like vulcanized and fired materials jobs have been stagnant in recent years. The chart below demonstrates that the earnings for this cluster are on the lower end of the scale. Food manufacturing is an asset cluster that offers higher earnings potential.

Top Traded Clusters by Employment in Pittsylvania County and Danville City



Source: EMSI 2019.1

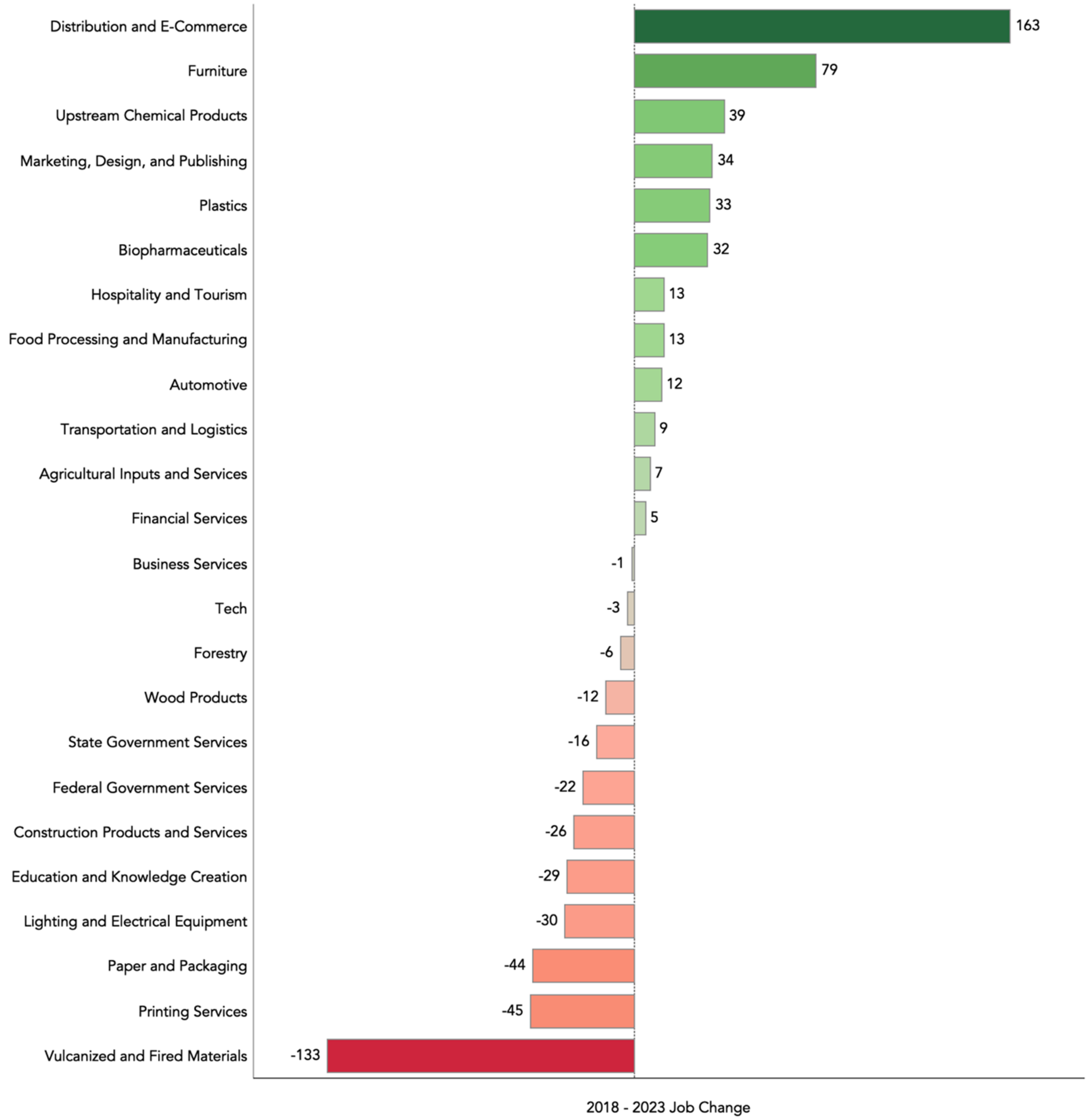
Fastest Growing Clusters in Pittsylvania County and Danville City



Source: EMSI 2019.1

Looking at the raw change in job numbers, distribution and e-commerce added the greatest number of jobs in the last five years. This is encouraging because it is a top employer in the region. Upstream chemical products saw a dramatic increase in recent years but remains a small employer. Looking into the future, job growth is predicted to be strong in many clusters. The future looks bright for distribution and e-commerce, upstream chemical products, furniture, and plastics. Job losses in strong clusters such as lighting and electrical equipment, vulcanized and fired materials, and wood products are expected in the next five years.

Predicted Employment Change in Pittsylvania County and Danville City

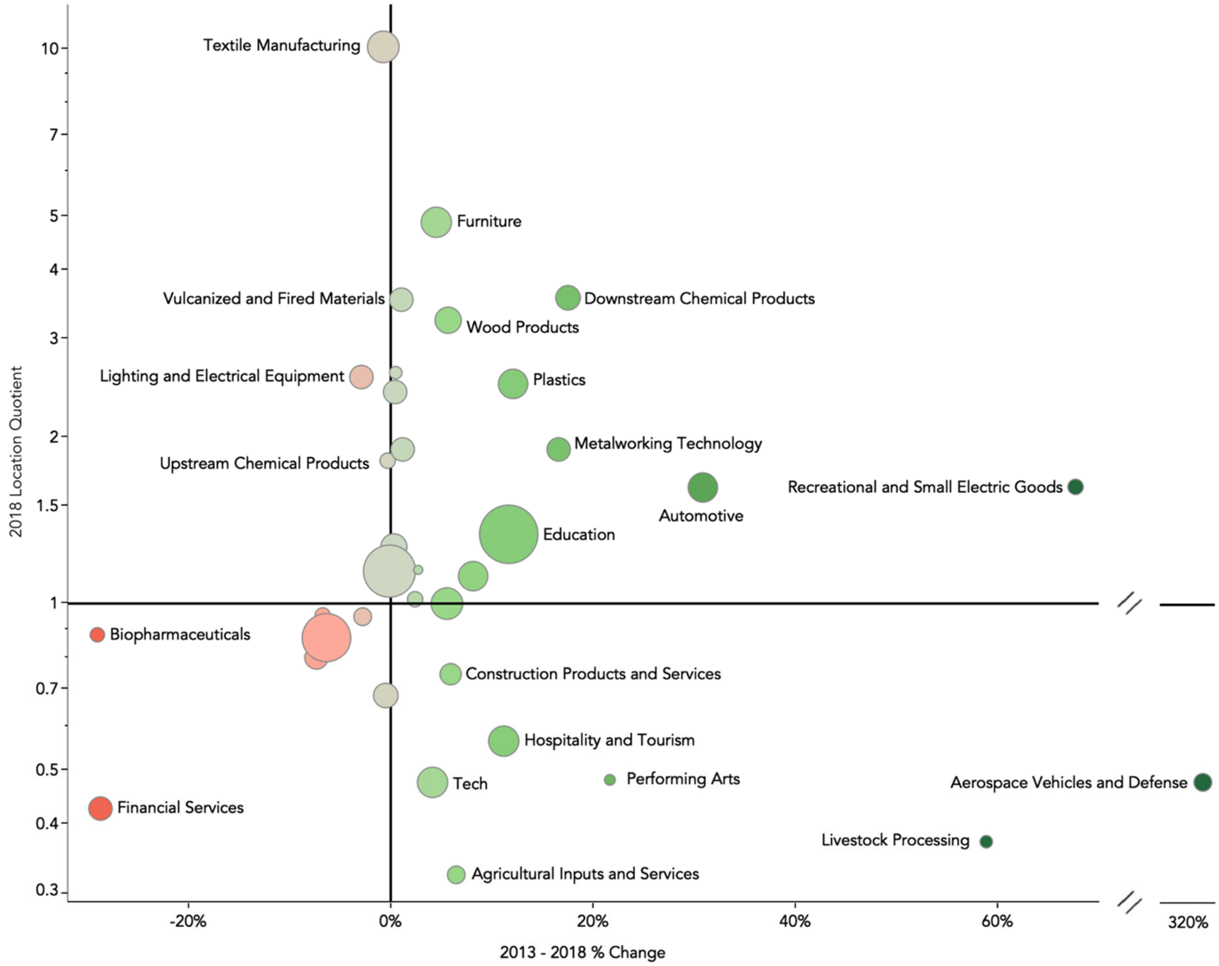


Source: EMSI 2019.1

Traded Clusters in the Regional Labor Shed

To put Pittsylvania and Danville's cluster analysis into perspective and to see where local priorities may align with regional priorities, a cluster analysis of the greater labor shed was conducted. The labor shed consists of the counties within a 60-minute drive time.

Cluster Map of Labor Shed



Source: EMSI 2019.1

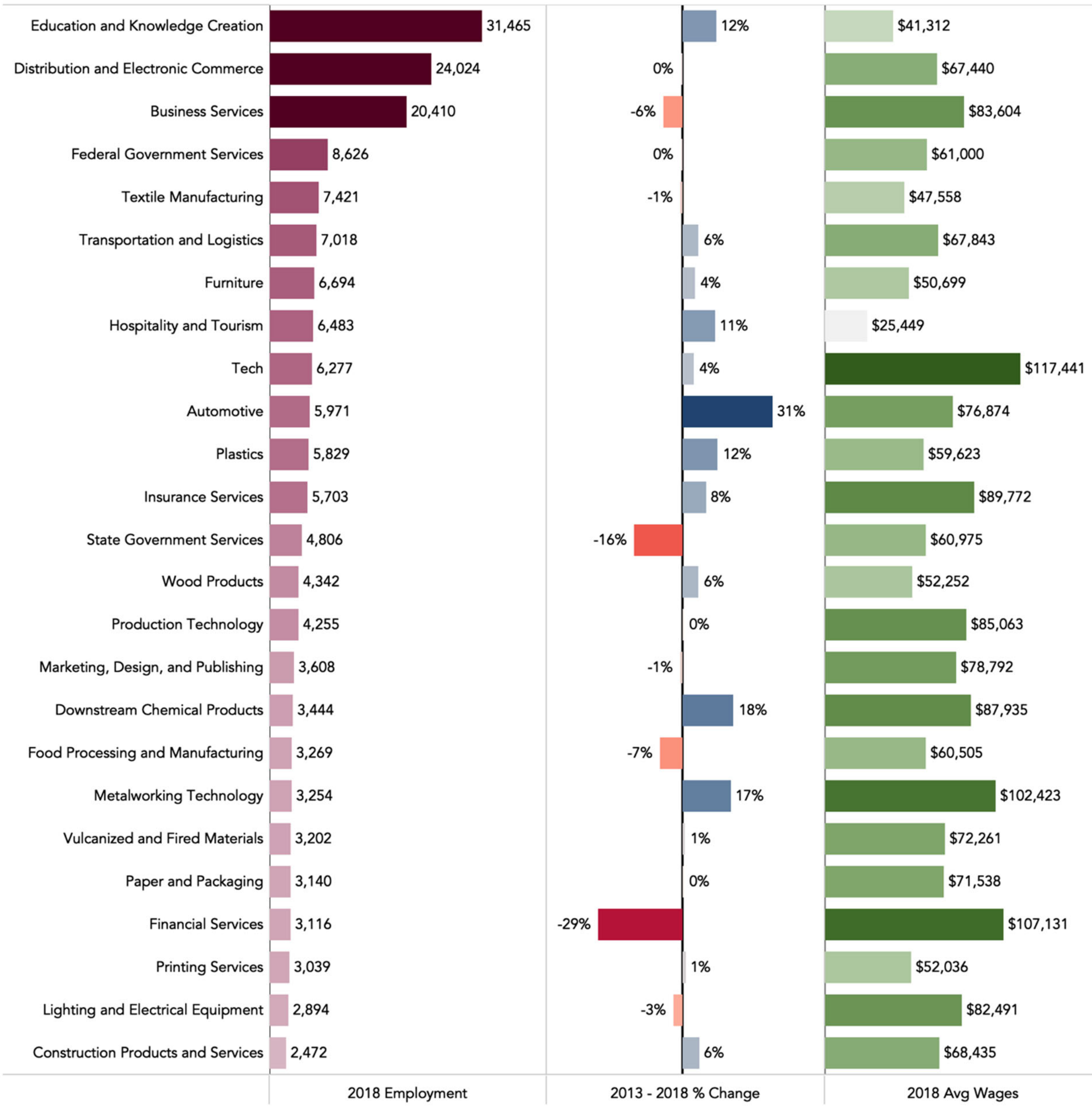
Note: The size of each cluster bubble is determined by the size of 2018 employment levels. The color of each cluster is determined by the employment growth from 2013 to 2018. Clusters with less than 550 employees were excluded from the chart. Tobacco had such a high LQ that skewed the chart; therefore it was removed.

The labor shed has 19 traded clusters that have a strong concentration and have experienced job growth in the last five years. Overall, many clusters in the labor shed have been prosperous in the past five years. Textiles which largely left the Danville-Pittsylvania area are still prevalent in the greater area, but job growth has been stagnant. Furniture is also a strong cluster in both Pittsylvania-Danville and the greater labor shed. Furniture jobs have been declining in Pittsylvania-Danville but have increased regionally. Perhaps there are opportunities to make regional connections to support that legacy cluster.

Food processing is excelling in Danville-Pittsylvania but declining regionally. Tech jobs are on the rise regionally but were a falling industry in Danville-Pittsylvania. Tech will continue to be a growth cluster nationally and another opportunity for regional partnership.

Upstream chemical products were a high-growth cluster for Danville and Pittsylvania, while downstream chemical products were one of the strongest asset clusters in the labor shed region. In the Danville-Pittsylvania area, business services and distribution clusters were emerging with strong growth in recent years, however, at the regional level those clusters had negative or stagnant job change.

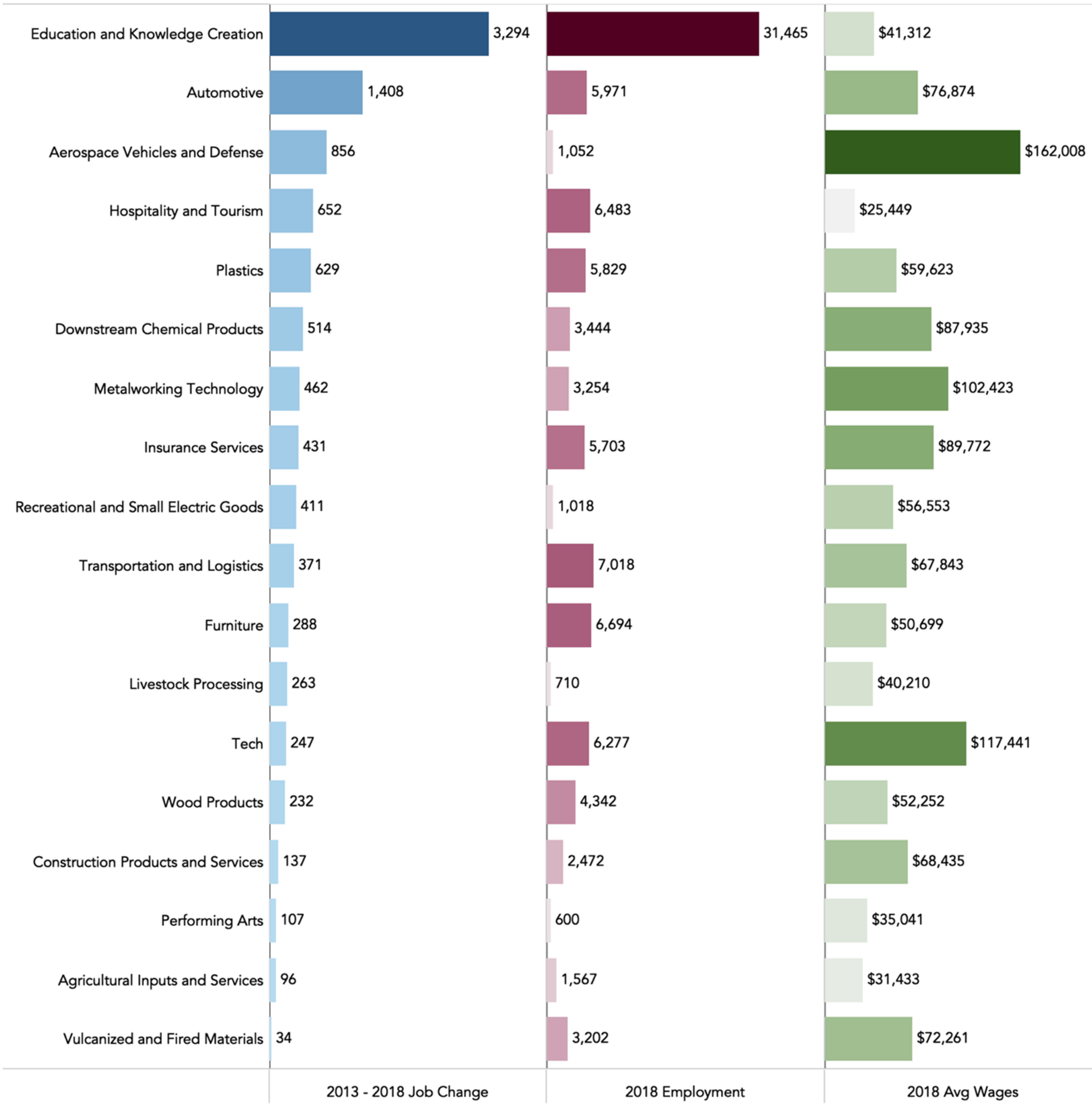
Top Traded Clusters by Employment in the Labor Shed



Source: EMSI 2019.1

Education is a top employer in the labor shed. Distribution and e-commerce and business are the next top employers, but have not seen employment growth in the last five years. Plastics is a strong cluster in Danville-Pittsylvania employing about 450 workers, and also a strong cluster in the labor shed with a total of 5,830 workers. This is a space where the region and Danville-Pittsylvania both have advantages and could promote themselves as a great location for plastics.

Fastest Growing Traded Clusters of the Labor Shed

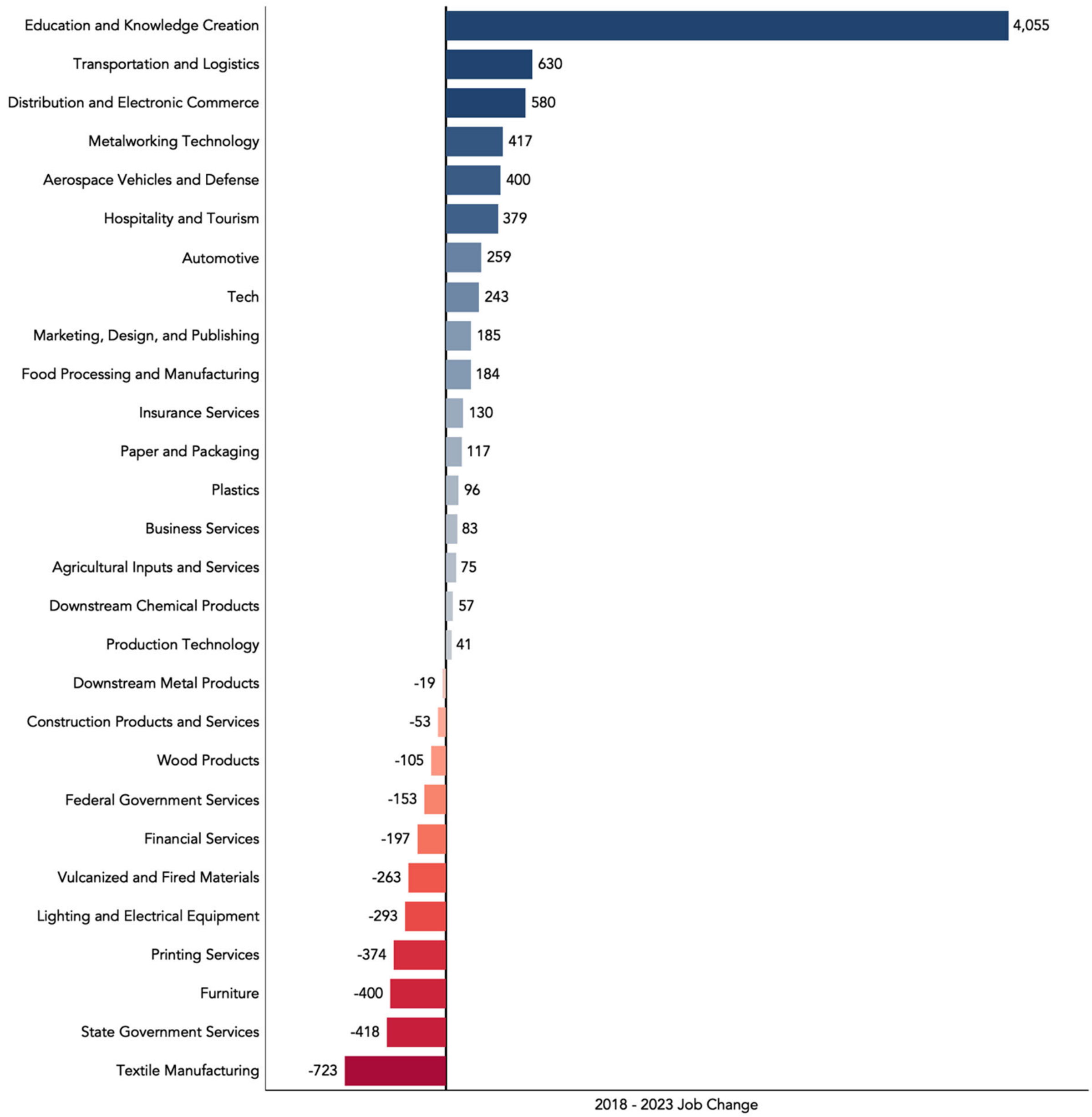


Source: EMSI 2019.1

Automotive manufacturing is up 31 percent in the labor shed. With the tire manufacturing strength in Danville this could be an opportunity for developing advanced manufacturing clusters. The regional growth of the aerospace cluster is also an opportunity to recruit a supplier to the OEMs in the labor shed. The automotive cluster had the second highest job growth in the labor shed in the last five years, while aerospace had the third highest growth in workers.

Looking to the future, the larger region is predicted to see continued growth in its largest cluster, education and knowledge creation. Business services and distribution and e-commerce are predicted to rebound and add jobs in the next five years. Metalworking technology, automotive, aerospace, food processing, paper and packaging, plastics, downstream chemical products, and production technology are all manufacturing-heavy clusters expected to gain jobs. Legacy clusters like furniture, textiles, and lighting equipment are expected to reduce employment in the next five years.

Labor Shed Predicted Future Employment Growth by Cluster



Source: EMSI 2019.1

Healthcare Local Cluster

Including healthcare in cluster analysis is a subject of debate among economists. Traditionally, it has been assumed that healthcare serves a local market and does not export or bring in outside money. Local economic developers tend to think of healthcare as a traded cluster, an industry that brings in people from more remote areas, pays high wages, and is a sector with strong national growth levels. Many local officials see their regional hospitals as anchors for the local economy. We did not include healthcare in the initial traded cluster analysis, but the trends from this local cluster will be discussed to help decision makers understand healthcare's role in the economy.

The healthcare cluster employs 5,935 workers in Pittsylvania and Danville. This concentration of employment is 27 percent higher than the national average, or an LQ of 1.27. Since 2013, jobs have increased by over 6 percent. The cluster's growth and its high concentration would rank as an asset cluster under our methodology for traded clusters.

Earnings are significantly lower in the Danville-Pittsylvania area compared with national figures. The average earnings per job in 2018 for healthcare was $49,350, almost $19,000 lower than the national average.

Healthcare job levels in the broader labor shed are on par with the national average with an LQ of 1.00. In the last five years, healthcare jobs in the labor shed increased by 3.4 percent. Average earnings are much higher in the labor shed at about $60,160. If mapped on the traded cluster chart, healthcare would have ranked as a modest asset cluster for the region. Registered nurses make up for about 13 percent of this cluster's employment. The top employer in the region is Moses Cone Memorial Hospital in Guilford County.

Strong healthcare clusters can also be important for recruiting quality talent to the region. Most workers list quality healthcare as a priority when deciding where to live and work.

Comparing Pittsylvania County and Danville City with Labor Shed

		Pittsylvania County and Danville City			
		Asset	**Emerging**	**Legacy**	**No Specialty**
Labor Shed	**Asset**	❖ Plastics ❖ Wood Products ❖ Forestry	❖ Automotive ❖ Distribution and E-Commerce	❖ Vulcanized and Fired Materials ❖ Furniture	❖ Education
	Emerging		❖ Transportation and Logistics		❖ Construction ❖ Tech ❖ Tourism ❖ Aerospace
	Legacy	❖ Upstream Chemical Products	❖ Agriculture	❖ Lighting and Electrical Equipment	❖ Textiles
	No Specialty	❖ Food Processing	❖ Business Services		❖ Financial Services

Some of the clusters align between Danville-Pittsylvania and the region because the clusters are so strong in Danville-Pittsylvania, like the vulcanized and fired materials cluster and upstream chemical products. Other clusters are assets in both because they are strong locally and regionally, such as the plastics and wood products clusters. Agricultural inputs are on the rise in Danville-Pittsylvania but also the labor shed region. The cluster is also highly related and linkable to the asset food processing cluster. Looking for local suppliers for food processing can be a great way to tie-in nearby rural areas with more urban economies.

Existing Clusters to be supported:

- Plastics
- Upstream chemical products
- Food processing
- Vulcanized and fired materials
- Wood products

Emerging Clusters to be explored:

- Automotive
- Distribution and e-commerce
- Business services
- Agricultural inputs and services

Cluster Descriptions

Plastics
This cluster includes any manufacturer of plastic products, materials or plastic machinery. This cluster saw triple digit growth in the last five years. It is also emerging regionally with strong growth in two other nearby counties. Plastics was the 10th employing cluster in the county and also pays high wages. Predicted future growth in plastics is the 6th highest among clusters in the county.

Industries included:

- Plastic Products
- Plastic Materials and Resins
- Plastics and Rubber Machinery

Top Company in Pittsylvania County and Danville City: Intertape Polymer Group

Upstream Chemical Products
Companies in this cluster are involved in the manufacturing of organic and inorganic chemicals and gases. These products are sold to other manufacturers who assemble more complex downstream products.

Industries included:

- Organic Chemicals
- Inorganic Chemicals

- Industrial Gas
- Agricultural Chemicals

Top Company in Pittsylvania County and Danville City: DanChem

Food Processing and Manufacturing
In this manufacturing cluster, raw food materials are transformed into food products for consumers. This includes processing such as milling and refining, it can also include breweries, distilleries, and wineries.

Industries included:
- Specialty Foods and Ingredients
- Baked Goods
- Candy and Chocolate
- Coffee and Tea
- Packaged Fruit and Vegetables
- Dairy Products
- Pet Foods
- Alcoholic Beverages
- Milling and Refining
- Glass Containers

Top Company in Pittsylvania County and Danville City: Nestle Food Co

Vulcanized and Fired Materials
In this cluster, manufacturers use extremely high temperatures to process earthen substances like clay, rubber, and sand into goods such as brick, glass, and tires.

Industries included:
- Clay Products and Refractories
- Glass Products
- Rubber Products
- Tire manufacturing

Top Company in Pittsylvania County and Danville City: Goodyear Tires

Wood Products
Given the strong historical presence of forestry in the region, establishments that could help process the timber also became prevalent in the industry. Movements to source and manufacturer locally, similarly to food, are starting in the furniture and woodworking sphere. The natural forests in the region offer a unique play for wood manufacturing companies.

Industries included:
- Wood Processing
- Wood Components and Products
- Prefabricated Wood Building

Top Company in Pittsylvania County and Danville City: Columbia Forest

Automotive
This cluster includes companies that encompass the entire value chain of manufacturing cars and trucks. It includes mills, foundries, part manufacturers, and the manufacturers of complete automobiles.

Industries included:
- Automotive Parts
- Gasoline Engine and Engine Parts
- Motor Vehicles
- Military Vehicles and Tanks
- Metal Mills and Foundries

Top Company in Pittsylvania County and Danville City: Amthor International Inc.

Distribution and Electronic Commerce
Traditional wholesalers and electronic merchants are the companies included in this cluster. These companies' primary functions are buying, warehousing, and distributing goods. Goods range across a variety of materials and uses. Also included in the cluster are companies that support wholesalers.

Industries included:
- Warehousing and Storage
- Electronic and Catalog Shopping
- Wholesale Trade Agents and Brokers
- Packaging and Labeling Services
- Wholesalers
- Rental and Leasing

Top Company in Pittsylvania County and Danville City: Essel Propack America

Business Services
This cluster refers to the support of business operations. This includes headquarters as well as professional services such as architecture or placement.

Industries included:
- Corporate Headquarters
- Consulting Services
- Business Support Services
- Employment Placement
- Engineering Services
- Architectural and Drafting Services
- Ground Passenger Transportation

Top Company in Pittsylvania County and Danville City: American National Bankshares

Agricultural Inputs and Services
This cluster involves groups involved in the preparation and cultivation of farming activities as well as farm support, labor suppliers, and pesticide producers.

Industries included:

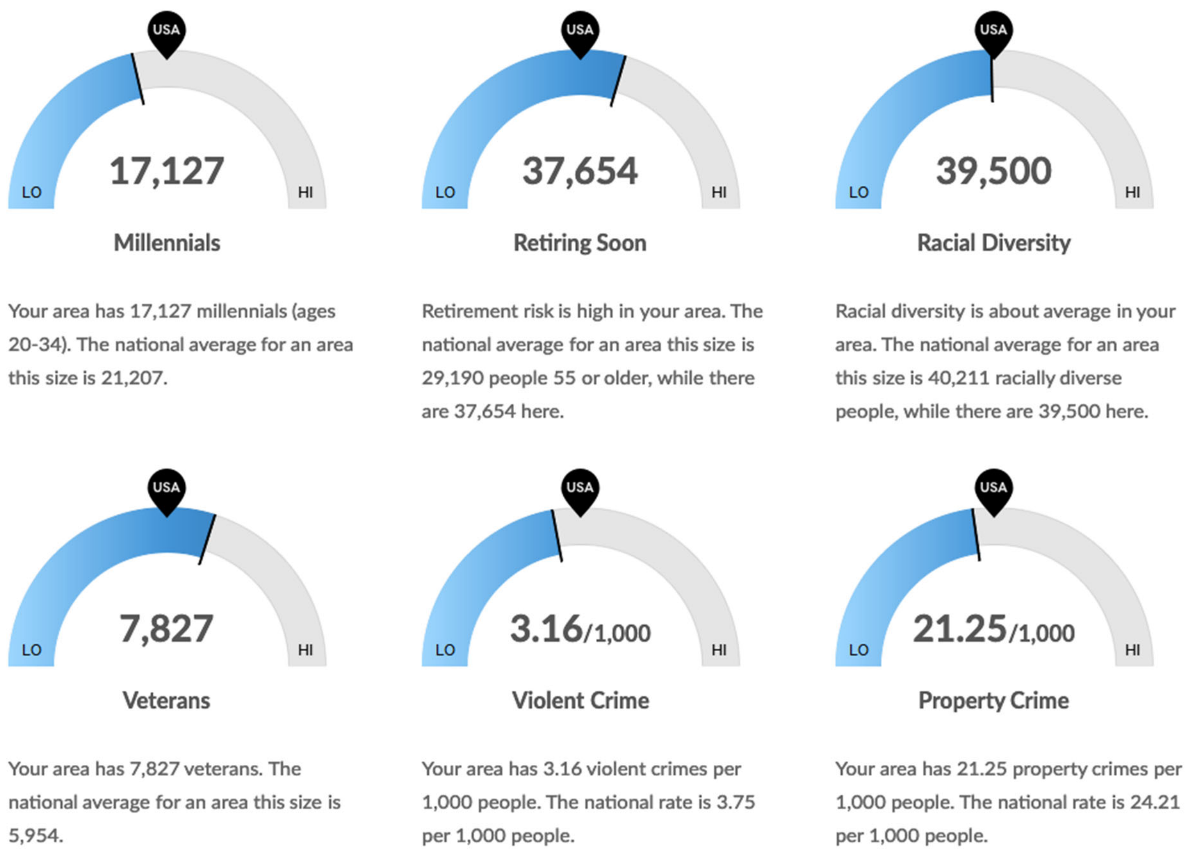
- Agricultural Services
- Farm Management and Labor Services
- Fertilizers

Top Company in Pittsylvania County and Danville City: Barts Enterprises Inc.

4. LABOR SUPPLY ANALYSIS

The City of Danville and Pittsylvania County are anchors of the Southside region's economy. The economic story of this area has featured dramatic changes in recent years. For a century, tobacco, textiles, and furniture industries operated in the area. This activity supported a thriving middle class where citizens could acquire a production job straight out of high school. Health concerns lead to the steady decline in tobacco while simultaneously global competition and trade policies exacerbated the regional decline in textiles. Dan River Mills closed in 2006 after decades of operations in Danville. Then the national economy went into recession. When the industries left, some young people left for work elsewhere and negative quality of life factors like crime and drug abuse swelled.

Pittsylvania County and Danville City Demographic Overview



Source: EMSI 2019.1

The generally accepted narrative of an area in decline persists. In a 2018 US Senate debate, a candidate categorized Danville as "boarded up." The truth is that the community has rallied in the wake of these changes to begin charting a new future. The downtown River District has been restored, the Institute for Advanced Learning and Research (IALR) is a model for workforce development and advanced learning for places without a four-year research university, and the IALR will soon build a state-of-the-art Center for Manufacturing Advancement.

The impacts of these investments are still to be determined. Anchor manufacturing companies, such as Goodyear Tires, have remained in the area. In 2018 and 2019 there were a series of positive announcements of expansion and relocation:

- Essel Propack announced an investment of $31.2 million to expand and add 45 jobs.
- BGF Industries is relocating from Greensboro, NC to Danville and investing $7 million.
- Harlow Group will build an $8 million precision engineering facility.
- PRA Group will create 300 new jobs at a call center, a $15.1 million investment.
- Litehouse, Inc. announced an investment of $46 million to acquire and expand Sky Valley Foods establishing its first East Coast production facility creating 160 jobs.
- Morgan Olson will invest $57.8 million to establish a new walk-in step van assembly operation creating 703 jobs.
- Dominion Energy announced plans to invest over $300 million on a new 500-megawatt combustion turbine "peaking" plant and $130 million for a new solar facility.

New economic opportunities may be on the horizon. A casino resort that could bring in over 2,000 jobs is under discussion by state and local governments. Given all these developments, it is important for leaders to step back and evaluate their region. What industries should economic developers focus on bringing to the region? What efforts will lead to livable wages for citizens? Does the area have a sufficient supply of workers for existing and relocating companies?

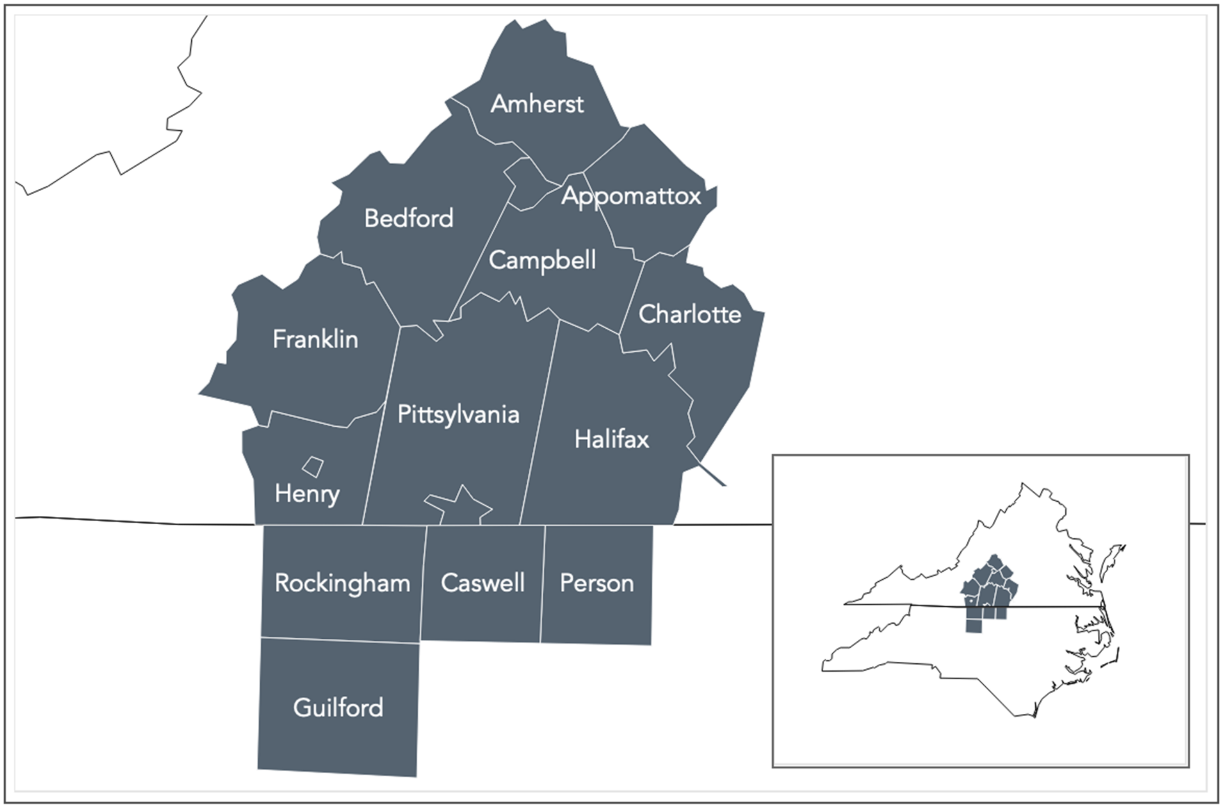
In this report we evaluate the data for Pittsylvania and Danville to help answer these questions. We attempt to quantify the labor supply in the area and the surrounding region. We measure job growth performance in traded industry clusters to see what sectors are emerging. Finally, we analyze the supply chains for existing industries to help refine recruitment efforts.

Labor Supply Methodology

While local economic developers are focused on bringing jobs to their specific geographic location, it is helpful to look at the greater region when evaluating labor availability. As the labor market tightens across the country, one of the ways to help with recruiting companies is to show that your region has a viable supply of labor. Here we quantify the elements of the labor supply inside Pittsylvania and Danville and we also look at the greater region to show a larger labor shed.

For this analysis, we define the greater labor shed of Pittsylvania and Danville by the counties that lie within a 60-minute drive time. This creates a labor shed of potential workers who could commute into Pittsylvania or Danville. Workers are not limited by borders in their commutes, so the inclusion of surrounding counties helps estimate realistic workforce availability.

Labor Shed of Pittsylvania County and Danville City



Labor Shed Overview

Pittsylvania County and Danville City are home to 101,940 people. Including the counties within a 60-minute drive, the population is over 1.2 million. While the population in Pittsylvania and Danville has declined by about five percent in the last 10 years, the population has increased in the greater labor shed.

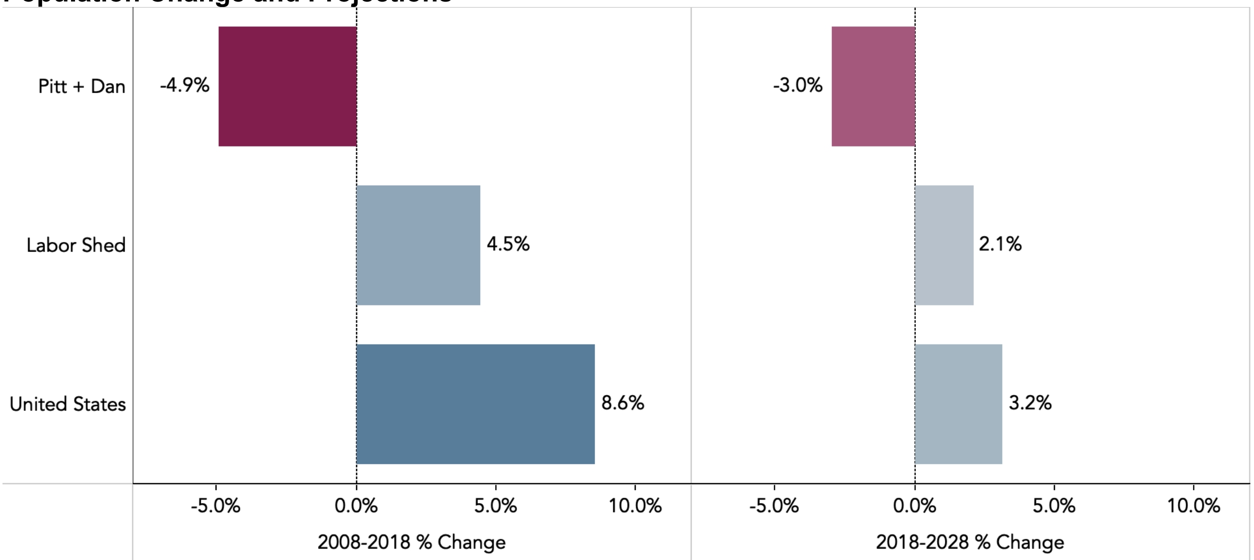
Population of County + City and Labor Shed

Population Type	Pittsylvania County and Danville City	Labor Shed
Current Population	101,940	1,215,920
Predicted 2028	98,925	1,241,650

Source: EMSI 2019.1

It's important to note that while the population is declining, the rate of decline is slowing. For comparison, during the 1990s Danville lost almost 9 percent of its population. While an improvement from those times, the economy has not improved enough to stop population loss.

Population Change and Projections



Source: EMSI 2019.1

Age Demographics

The population of Pittsylvania and Danville skews older. The largest proportion of the working age population is seasoned professionals, persons aged 45 to 64. This group is also set to retire soon. As the current population ages out of the workforce there will be fewer workers to replace them. The presence of young professionals locally is lower than national levels. Fortunately, within the labor shed there are higher levels of younger people who could commute into the area.

Age Demographics of the Population

Age Group	Pitt + Dan	Labor Shed	United States
15-24	11%	14%	13%
25-44	22%	24%	27%
45-64	28%	27%	26%
65-69	7%	6%	5%

Source: EL calculations based on EMSI 2019.1

Educational Attainment

One of the changes to the Danville-Pittsylvania area when legacy industries left was that many of the jobs that did not even require a high school diploma were no longer available. Now having some level of postsecondary education is critical for workers to find well-paying jobs. Education attainment in Pittsylvania and Danville is lower than national and regional averages. Bachelor's and graduate degrees levels are about half of the United States average. Within the 60-minute labor shed, there is access to a population with higher levels of postsecondary education.

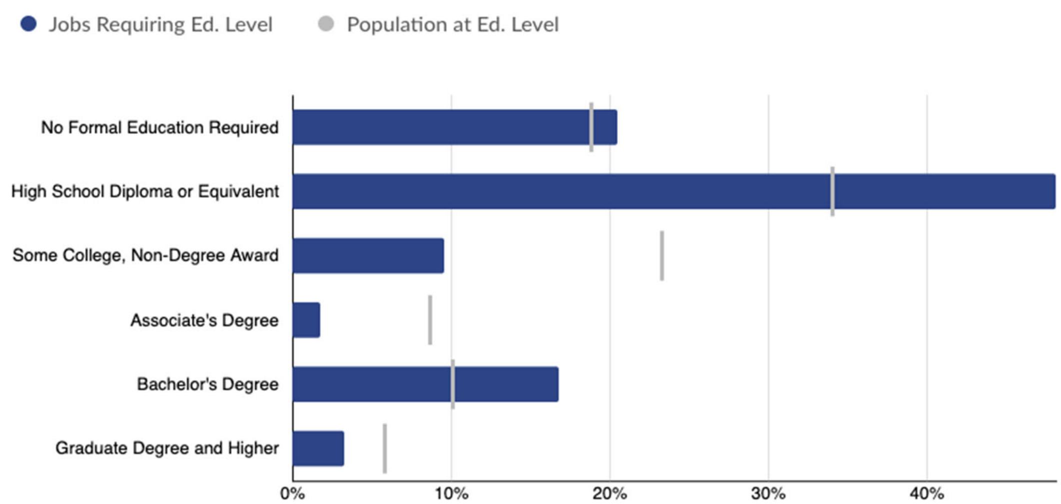
Educational Attainment of Population Over Age 25

Degree Type	Pitt + Dan	Labor Shed	United States
HS Diploma or Higher	81%	85%	86%
Associates Degree or Higher	24%	33%	38%
Bachelor's Degree or Higher	16%	25%	30%
Graduate Degree	6%	9%	11%

Source: EL calculations based on EMSI 2019.1

Another way to measure workforce preparedness is to compare the requirements of local jobs to the educational attainment of the population. Many of the jobs in Pittsylvania and Danville do not require formal training or only a high school diploma. The population with degrees exceeds the demand for some college, associate degree, and advanced degrees. This could mean some area workers are having to work below their education level or commute out for work. There is a higher demand for bachelor's degrees in the region than is currently supplied. Bringing higher skill jobs to the area could mean that fewer workers commute out of the area, and could earn higher wages.

Jobs by Educational Attainment Requirement, 2018

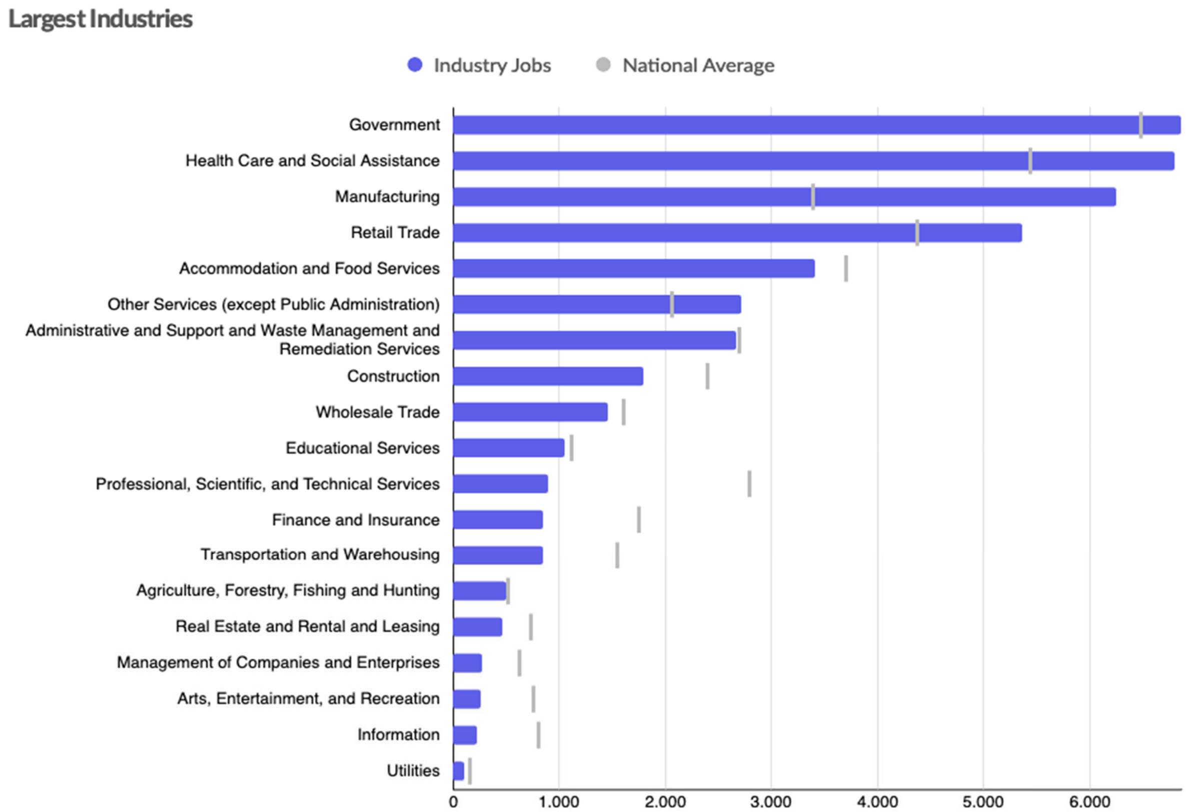


Source: EMSI 2019.1

Employment

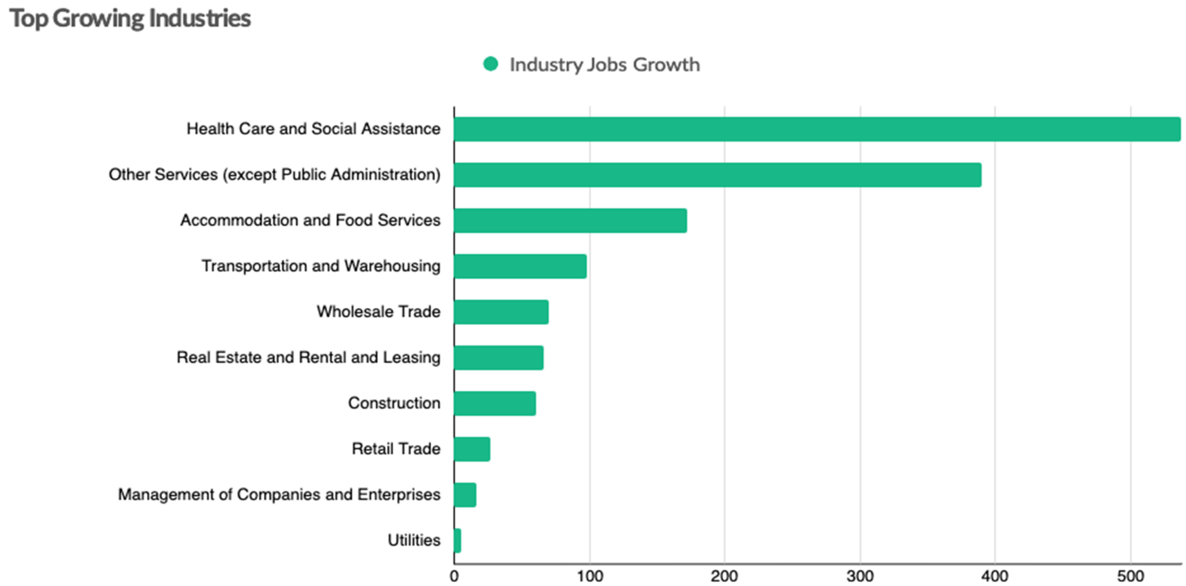
About 42,950 workers are employed in Danville and Pittsylvania. The unemployment rate of the area has declined steadily in the last five years, dropping by five percentage points to 3.8 percent. About 56.6 percent of the working age population participates in the labor force. Manufacturing remains a critical component of the economy as the third largest employing industry. Manufacturing levels in the area are twice as high as the national average. However, most of the job growth in the past five years has come from healthcare and other local service industries. With an aging workforce, even declining industries have major workforce needs due to retirements. For example, total production jobs are predicted to decline by 200 jobs in the next 10 years, but 5,082 workers will be needed during that time to replace workers who leave.

Largest Industries in Pittsylvania and Danville by Employment, 2018



Source: EMSI 2019.1

Top Growing Industries in Pittsylvania and Danville by Employment, 2018

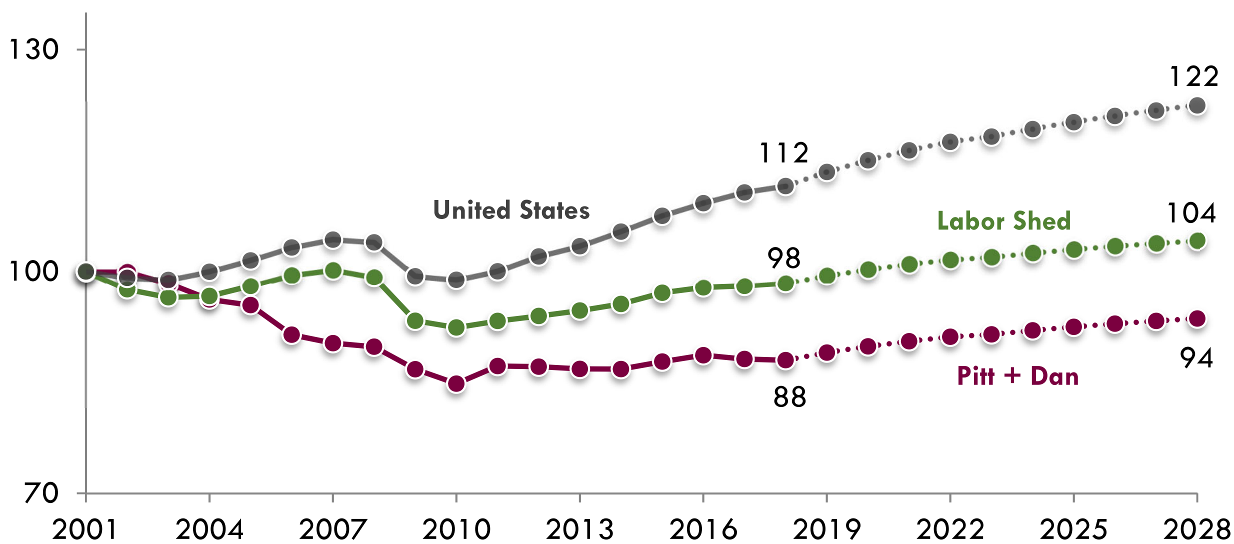


Source: EMSI 2019.1

The chart below measures jobs on an index where a value of 100 is the equivalent of the job total of an area in 2001. In 2018, employment in Pittsylvania and Danville was 12 percentage points lower than in 2001. The greater labor shed has also seen employment decline during this period. Since 2010, employment has stabilized. Current models predict that by 2028, employment will still not have returned to 2001 levels.

Employment Change from 2001 by Region

2001 Employment Level = 100



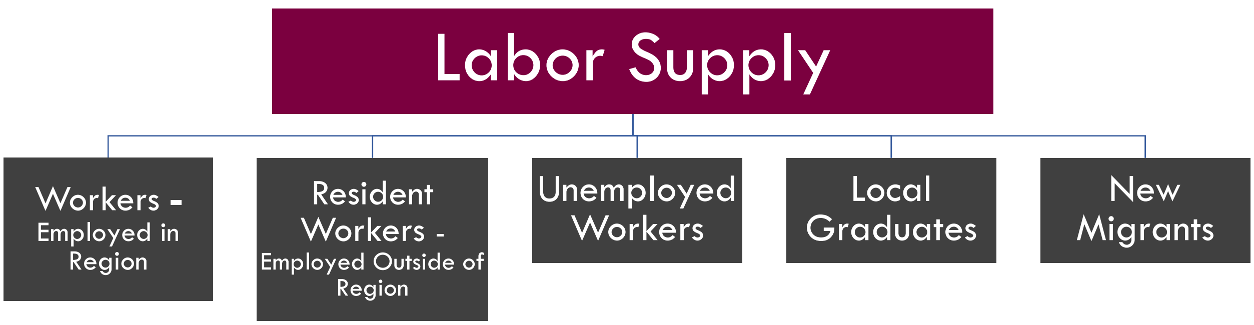
Source: EL calculations based on EMSI 2019.1

Measuring Labor Supply

Labor supply can come from many sources including resident workers, new residents and local graduates. We define the supply of talent by the following categories:

- *Region Jobs* – Those who already work within the region.
- *Resident Workers* – Workers who live within the region and may work within or outside of the region.
- *Net-commuters* – this refers to the difference between region jobs and resident workers. If negative then there are more workers commuting out of the region than workers employed in the region, making the region a net exporter of talent.
- *Local College Graduates & Migrants* – potential source of additional workers often not collected within employment data. We will attempt to calculate this portion of the labor force using migration data and educational program completions data from public sources.
- *Unemployed Workers* – shows the number of workers who are out of work and are currently looking for work.

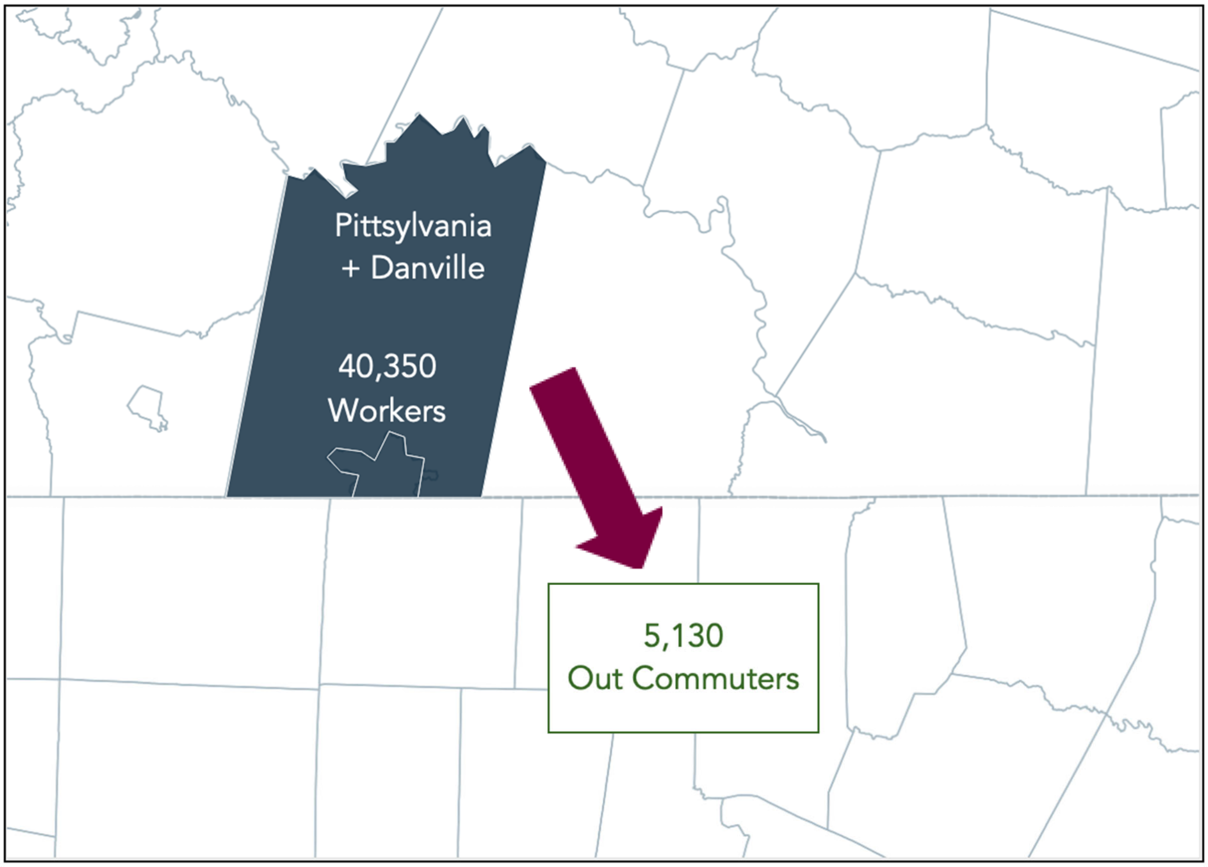
Sources of Labor



Workforce Supply – Currently Working

In Pittsylvania and Danville there are 45,480 residents that are employed. Within the county and city limits there are 40,350 jobs. This means that the area has 5,130 net commuters, meaning the area is a net exporter of talent. The existing workforce is an opportunity for companies settling in the area. Those who live in the area but commute outside of the area represent workers who might be recruited to work closer to their home. Given the close proximity to North Carolina and the cities of the Triad and Triangle, these areas likely pull resident workers away from working in Pittsylvania or Danville.

Commuting Patterns of Pittsylvania and Danville



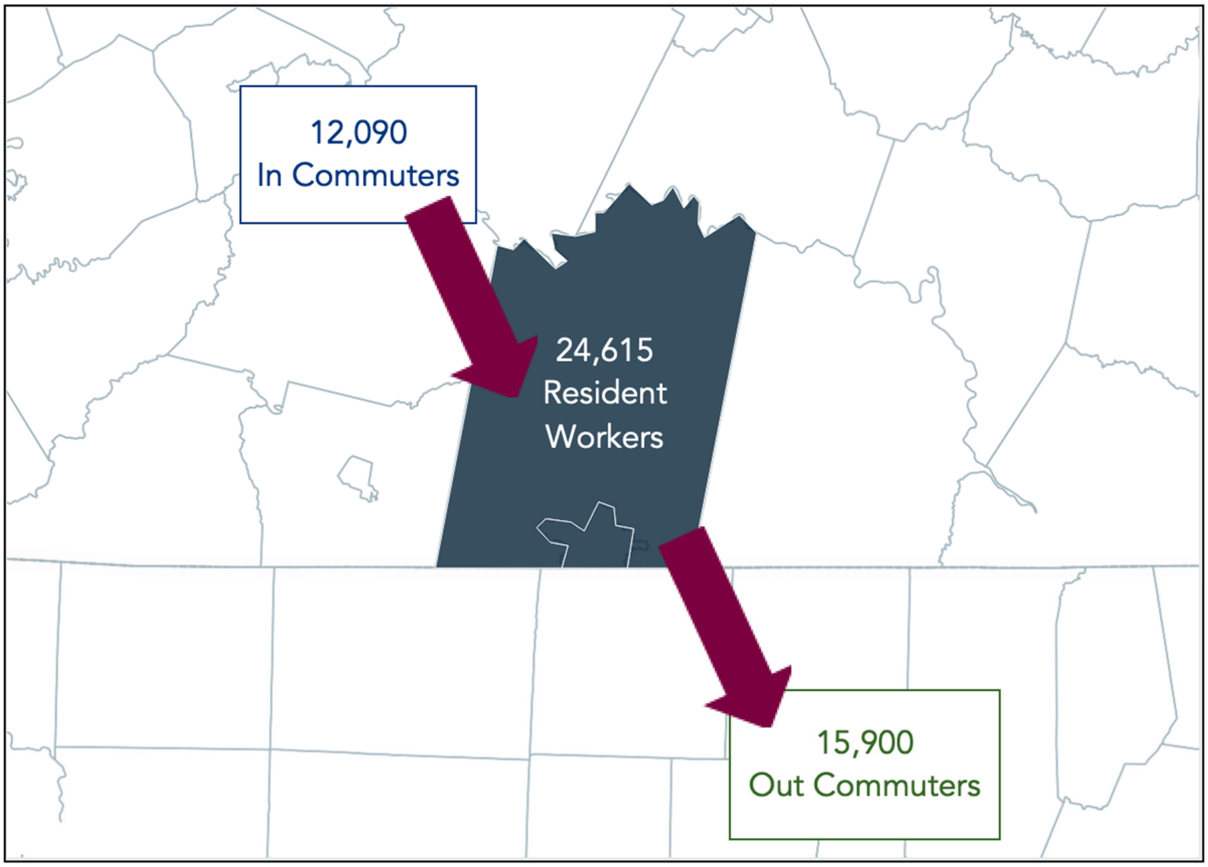
Source: EMSI 2019.1

Pittsylvania and Danville Commuting Demographics

To get more detailed information on the commuting patterns for area workers and residents we utilized the most recent data from the US Census Bureau. The data from 2015 reveals that there are in-commuters and out-commuters entering and leaving the area for employment, but the largest category is those who both live and work within the Pittsylvania – Danville area.

About 12,090 workers commuted into the area from outside. A larger number – about 15,900 workers who lived in the area – commuted to jobs outside of Pittsylvania and Danville. This data confirms that the area is exporting talent to other communities at a higher level than it imports talent. That leaves 24,614 people who live and work within the boundaries of the area.

Map of Pittsylvania and Danville Commuting Patterns, 2015



Source: US Census Bureau

The data was for a worker's primary job in 2015. The Census also provides demographic information for each category of commuter. The demographics of the three commuting categories did not have many stark differences. Out and In Commuters were more likely to be younger workers, while those who lived and worked in the community where more likely to be older workers. Wage data was comparable across all commuting categories.

Age Demographics of Workers

Demographic	Out Commuters	In Commuters	Live and Work
Aged 29 or younger	23%	25%	17%
Aged 30 to 54	53%	50%	52%
Aged 55 or older	24%	25%	30%

Source: US Census Bureau

Wages of Workers

Demographic	Out Commuters	In Commuters	Live and Work
Earning $1,250 per month or less	25%	28%	25%
Earning $1,251 to $3,333 per month`	43%	40%	44%
Earning More than $3,333 per month	32%	32%	32%

Source: US Census Bureau

The commuting data also breaks the workers into three industry groups. Those workers who lived outside and commuted in for work were less likely to work for goods-producing companies.

Type of Industry of Workers

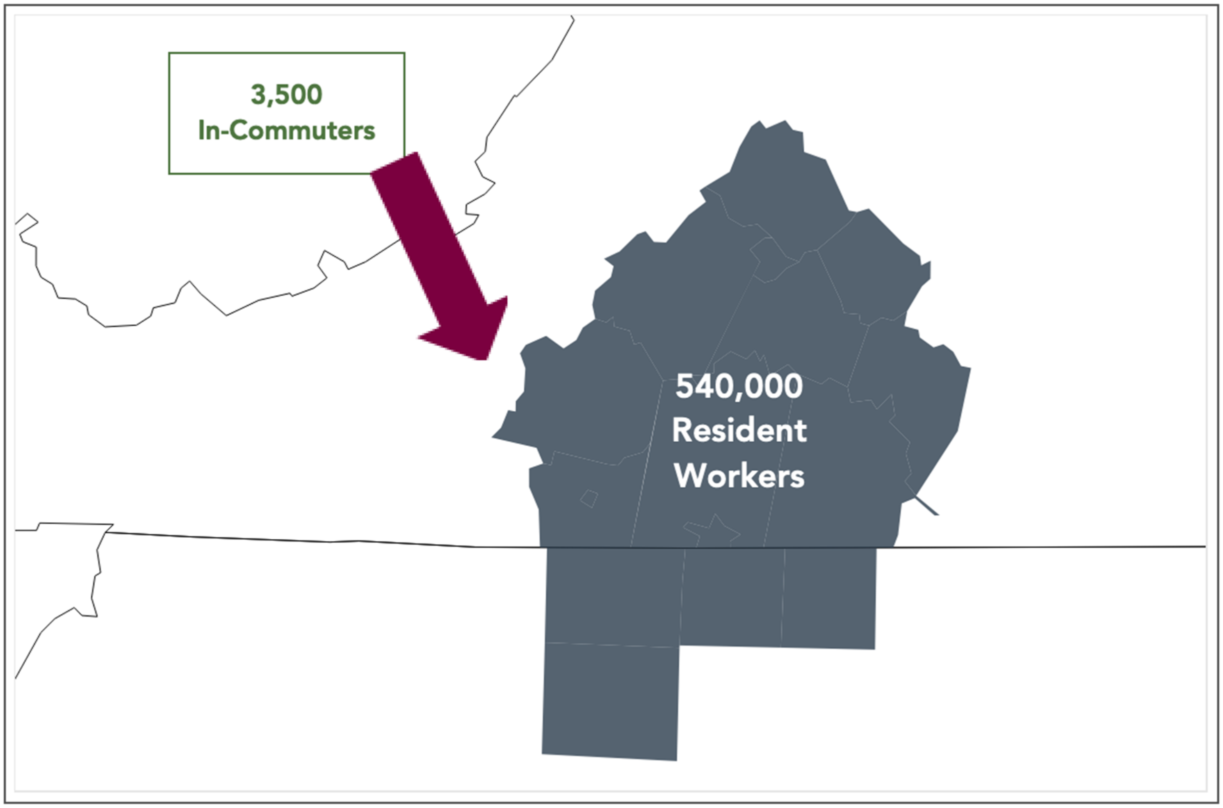
Demographic	Out Commuters	In Commuters	Live and Work
"Goods Producing" Industry	23%	19%	24%
"Trade, Transportation, and Utilities" Industry	26%	26%	16%
"All Other Services" Industry	51%	55%	60%

Source: US Census Bureau

Labor Shed Workforce

When looking at the greater labor shed, the number of workers living in the region jumps to 540,000. With 543,500 workers employed inside the labor shed, this means the region is a net importer of talent with 3,500 net in-commuters.

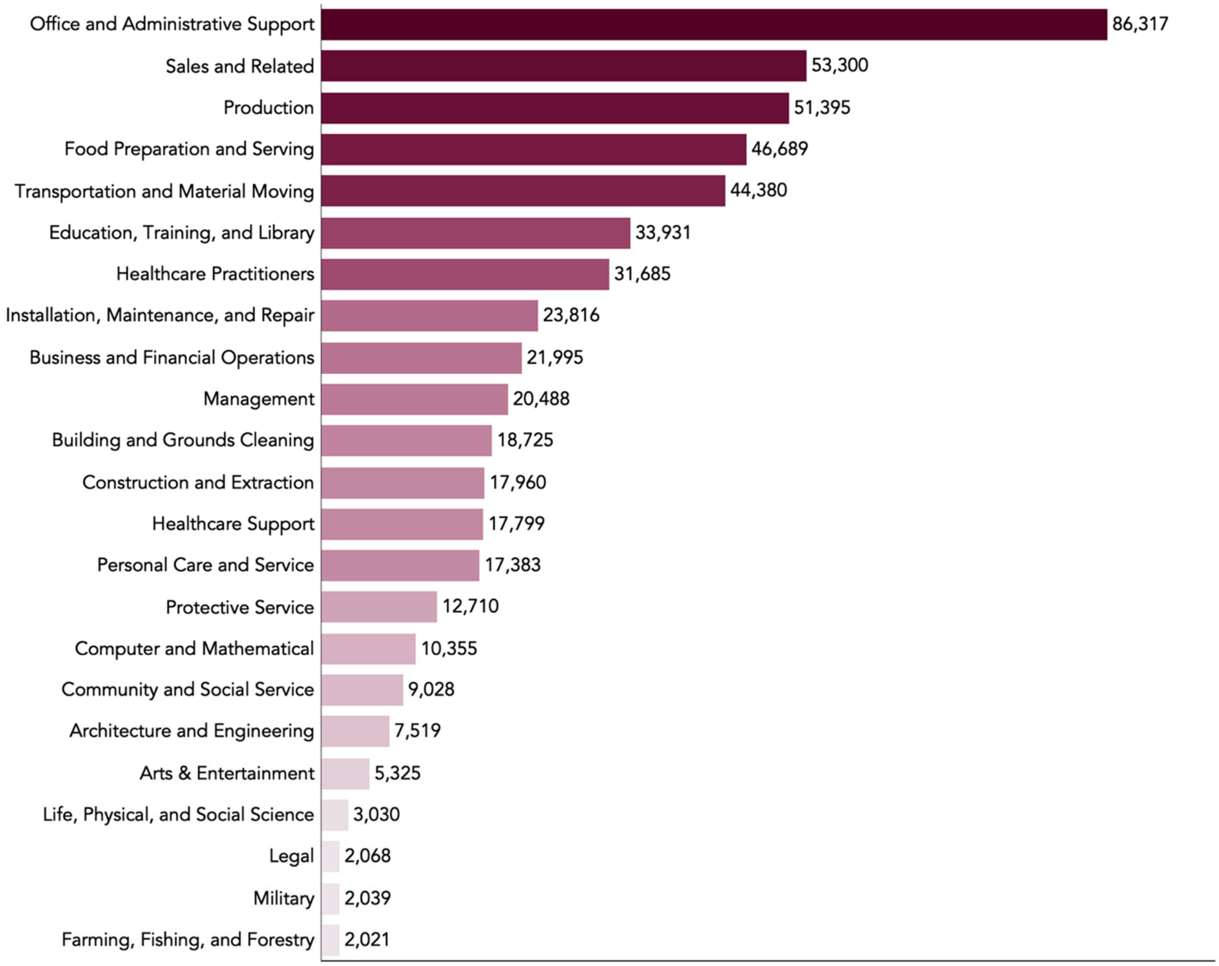
Labor Shed Commuting Patterns



Source: EMSI 2019.1

Looking deeper into the labor shed we can see what type of work that resident workers are conducting. The chart below shows the top employing occupation groups in the labor shed. This type of data can be helpful for prospective clients interested in the supply of a particular type of labor. The labor supply can also be broken down to more granular levels. The results show that the labor shed has a diverse labor supply across many fields, with a particular concentration of administrative, production, and sales workers.

Labor Shed Occupation Groupings of Resident Workers, 2018



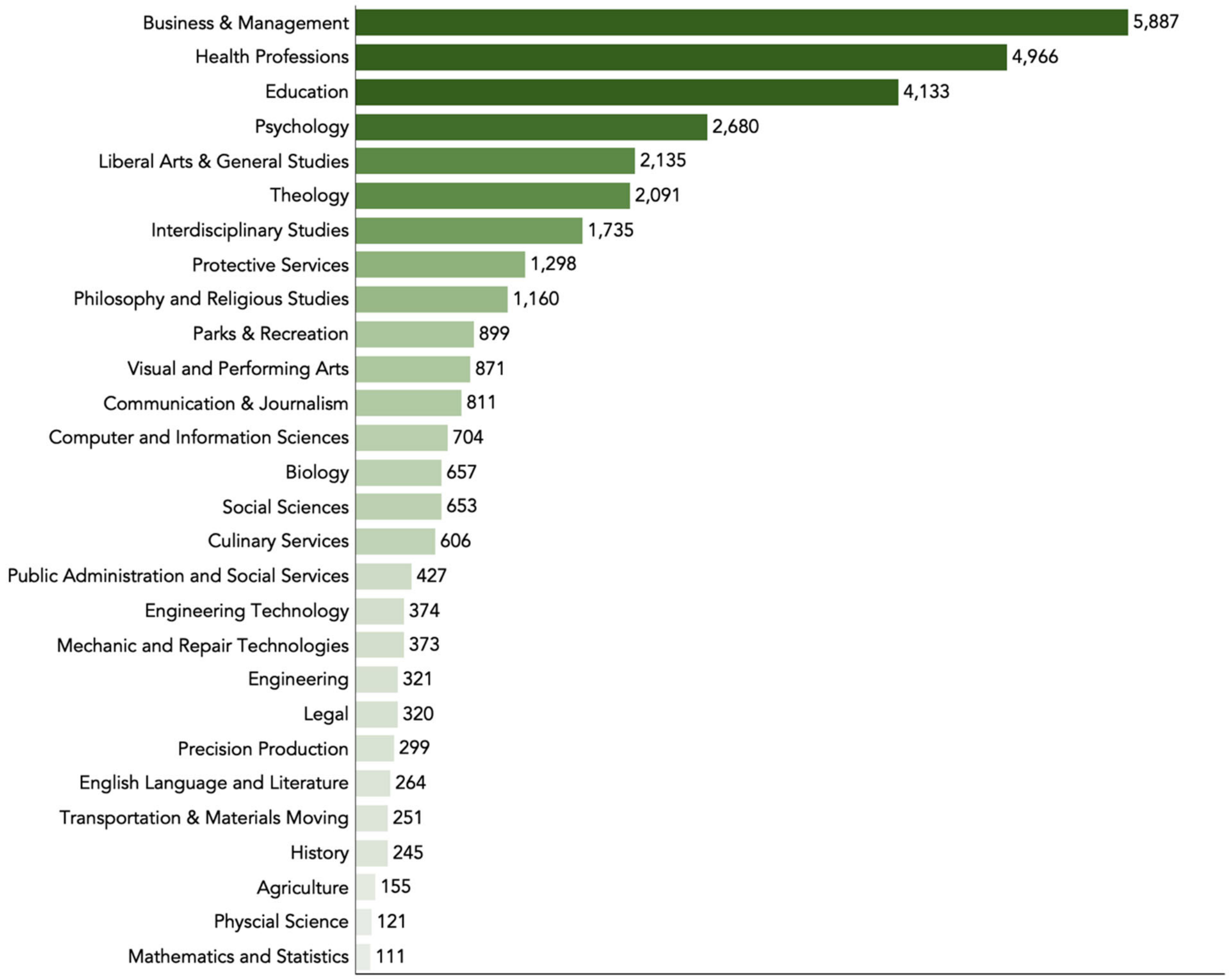
Source: EMSI 2019.1

Regional Graduates

Another source of labor is the students coming out of regional education and training programs each year. These students are an important part of the labor supply because they are usually looking for employment and are recently trained. Pittsylvania and Danville have two postsecondary institutions, Danville Community College and Averett University, that granted 1,156 degrees or certificates in 2017. The expanded labor shed provides more postsecondary options, with over 35,500 degrees and certificates awarded in 2017. Major Postsecondary Education Institutions in the Labor Shed:

- Averett University
- Danville Community College
- Liberty University
- University of North Carolina at Greensboro
- Guilford Technical Community college
- North Carolina A & T State University
- Central Virginia Community College
- High Point University

Labor Shed Top Education Programs Completed, 2017



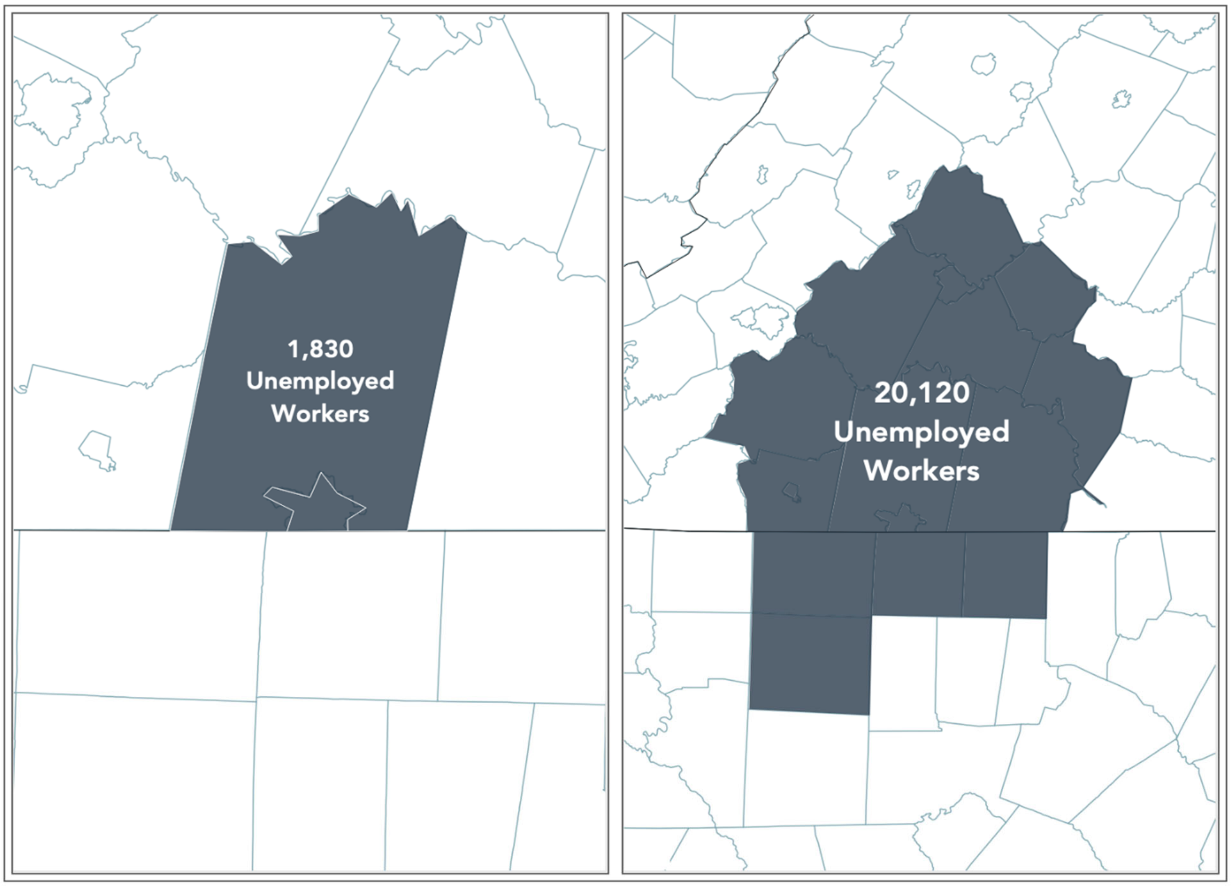
Source: EMSI 2019.1

Business and management programs are the top degrees and certificates completed by students in the labor shed. The region produces almost 5,900 graduates in business. Meanwhile there was an average annual 25,100 job openings in this field. This leaves a gap in business training of over 19,000 jobs. Health professions were the second most popular postsecondary training program with almost 5,000 completions in 2017. In the labor shed, there are over 9,600 jobs in this field, this means there is a training gap of over 4,600 jobs. With training gaps in the top two fields, it means that companies in the labor shed must recruit from outside the region to fill positions. The next five most popular programs have more annual completions than there are regional jobs available. This means that some students will have to leave the region to find jobs in their fields. With Liberty University in the labor shed, there is a large portion of degrees in theology and religious studies. Other programs with gaps in their completion rate compared to job openings were protective services, computer and information sciences, engineering, precision production, agriculture, and construction. The data indicates that trade and STEM programs could be increased to help improve the local supply of labor.

Unemployed Workers

In Pittsylvania County and Danville City there were 1,830 unemployed workers as of October 2018. In the labor shed, there were 20,120 unemployed workers. Of those unemployed workers, about 19 percent have work experience in office and administration support jobs, the highest percentage group.

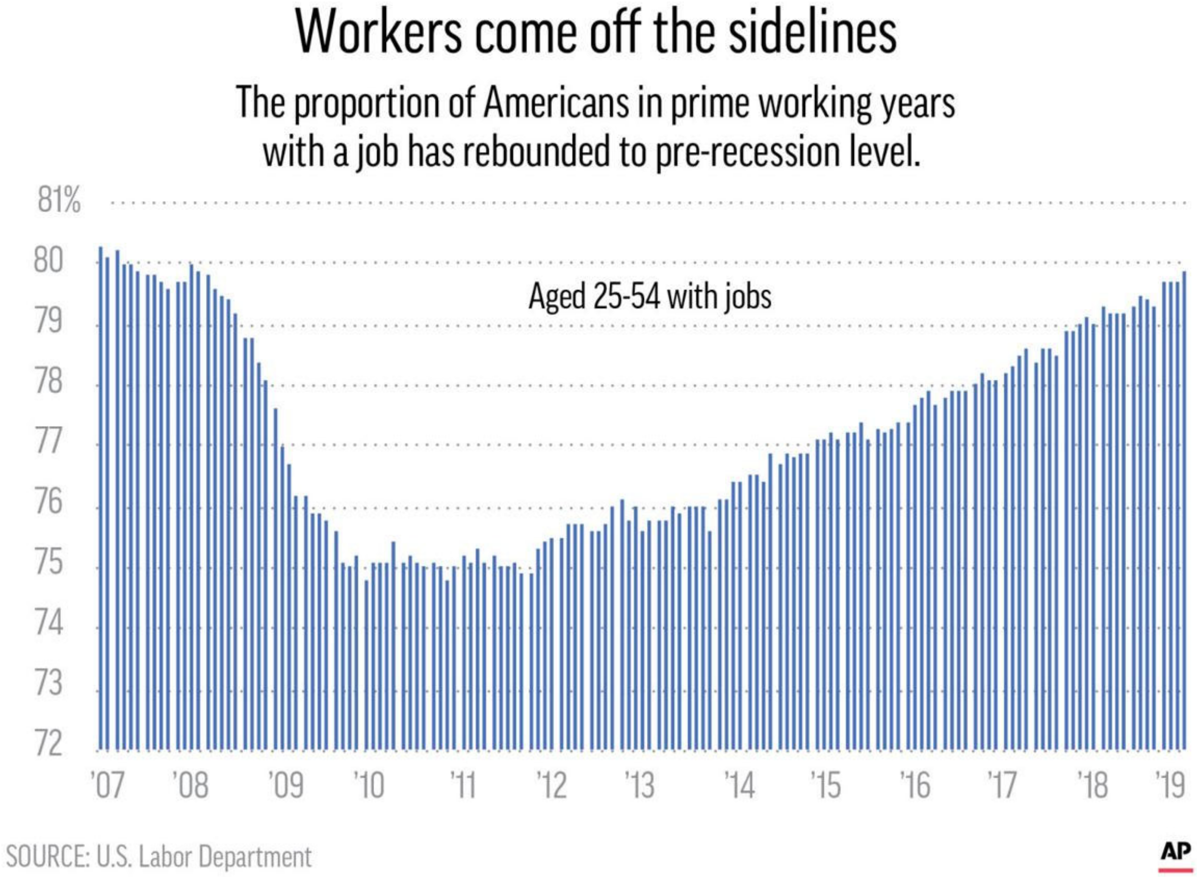
Unemployment by Region, October 2018



Source: EMSI 2019.1

The second highest percentage group is workers with experience in production occupations at 11 percent. The next highest group for unemployed workers is those with sales experience with nine percent. Typically, those with no work experience make up the largest portion of unemployed workers. This labor shed has higher percentages of unemployed workers with work experience.

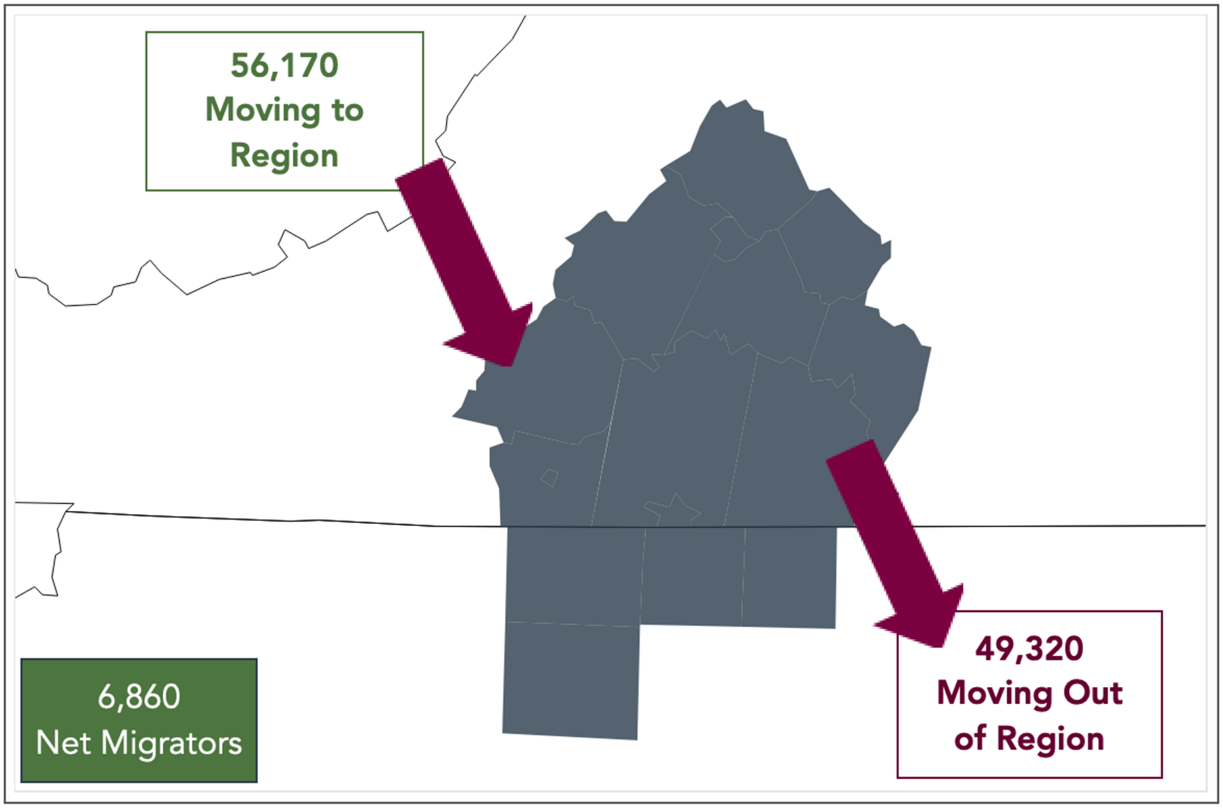
These are workers who are unemployed due to frictional unemployment, workers who are actively looking for work. This figure does not include workers who may be underemployed or discouraged job seekers. Including these people would increase the labor supply but estimates are less reliable. Research does suggest that increasingly people who left the labor force during the Great Recession are returning to the labor market at a consistent rate.



Migration Patterns

From 2012 to 2016, about 4,600 people moved to Pittsylvania and Danville. Meanwhile, 3,860 people moved away. This means the area had net in-migration of 740 people. Often when people move, they have work already lined up, but frequently spouses are looking for work once they arrive. Both are additions to the area's labor supply. Including the surrounding counties within a 60-minute drive, there has been in-migration of 56,170 people and an emigration of 49,320 people. The net migration for the labor shed was 6,860 net new residents.

Labor Shed Migration Patterns, 2012 to 2016



Source: US Census Bureau (2019)

Potential Sources of Labor

Labor Source Type	Pitt + Dan	Labor Shed
Resident Workers	45,480	540,000
Graduates	1,230	35,500
Unemployed Workers	1,830	20,120
Net New Residents	740	6,860

Source: EL calculations based on EMSI 2019.1 and US Census Bureau (2019)

Note: The labor shed includes Pittsylvania County and Danville City. Resident Worker data for 2018, graduation data from 2017, unemployment data for October 2018, and migration data from 2012-2016. Some duplicates may exist therefore results are not tallied across labor supply type.

As a micropolitan area, Danville and Pittsylvania have a smaller pool of labor, but including the labor supply in the counties within a 60-minute drive time expands the labor pool dramatically. Danville and Pittsylvania have many positives when it comes to access to labor. The knowledge that over 15,000 workers live in Danville and Pittsylvania but commute away demonstrates an attractive opportunity for hiring workers. While overall population may be declining, net migration to the area is positive. Graduates are produced from two and four-year institutions with a blend of liberal arts and skilled trade education. Several production technology education programs exist in the region and have high levels of annual graduates. A manufacturer can find its production workers as well as its management team from local education institutions. Regionally there's an opportunity to increase STEM programs and trade skills.

Sources:

Economic Modeling Specialist International (EMSI). 2019. "Analyst Tool: 2019.1 Class of Worker." https://e.economicmodeling.com/analyst

GoDanRiver. 2019. "A hot US job market is coaxing people in from the sidelines." https://www.godanriver.com/work_it_sova/news/a-hot-us-job-market-is-coaxing-people-in-from/article_d4001452-40ee-11e9-a7db-5b7120bb7749.html

US Census Bureau. 2019. "County-to-County Migration Flows: 2012-2016 ACS." https://www.census.gov/topics/population/migration/guidance/county-to-county-migration-flows.html

US Census Bureau. "On the Map Application." https://onthemap.ces.census.gov/

5. SUPPLY CHAIN ANALYSIS

To complement the research of the labor shed and the regional clusters of Pittsylvania County and the City of Danville, we dive deeper into the supply chains of top traded industries to help generate effective leads for economic development. Examining what goods and services are imported to the region shows where money is leaking outside of the region and offers potential supplier recruitment opportunities. If an anchor industry is having to import heavily from businesses in its supply chain, this could be an opportunity to bring more supplier companies to the region and keep money within the community. This approach can bring new companies to the area while simultaneously reducing costs for existing companies.

To generate specific target industries, we evaluated data based on the narrowest industry categories, 6-digit NAICS codes for traded (exporting) industries. These are the building blocks that were grouped together in the cluster analysis. We reviewed 2018 employment data for top traded industries in Pittsylvania and Danville. We looked at the supply chain requirements and spending of these top industries as well as the supply chain for all traded industries in Pittsylvania and Danville.

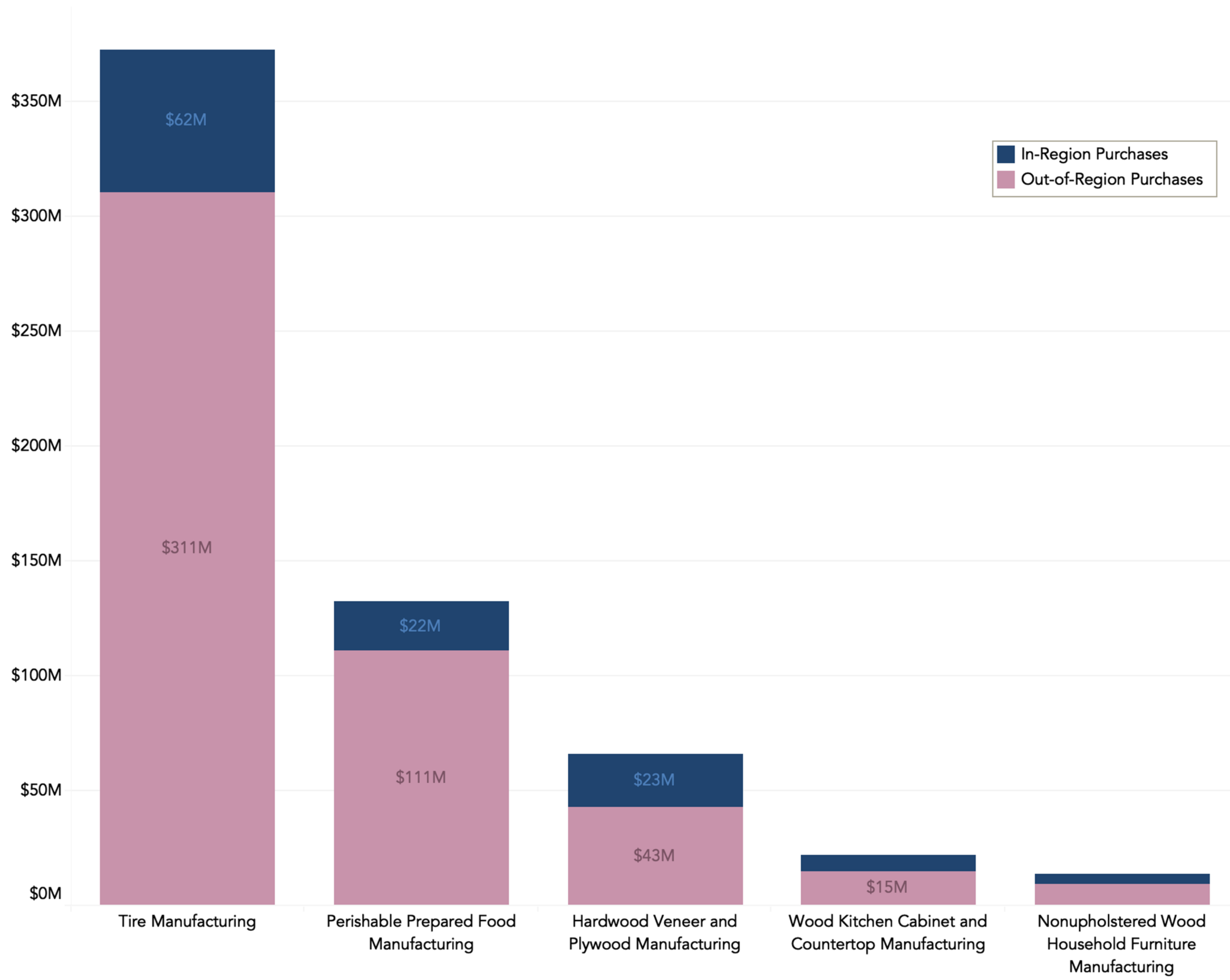
Top Traded Industries 6-Digit Level

450 employees or more + top exporting industry in 2018

- Tire Manufacturing (except Retreading)
- Perishable Prepared Food Manufacturing
- Hardwood Veneer and Plywood Manufacturing
- Wood Kitchen Cabinet and Countertop Manufacturing
- Nonupholstered Wood Household Furniture Manufacturing

For these top industries and all traded industries we reviewed data from EMSI that shows the amount of industry purchases from other industries. This spending is broken down by the portion spent within the region and out of the region. The industries with the highest value of out-of-region, or imported, purchases represent the largest supply chain opportunity for economic developers.

Supply Chain Purchases for Top Traded Industries



Source: EL calculations based on EMSI 2019.1

Tire Manufacturing

This industry was the top exporter in the region for 2018, it is also the top employing traded industry. Tire manufacturing is crucial for the success of the Pittsylvania-Danville economy. The tire industry in the region spent $373 million in 2018 on sourcing the goods and services it needs to operate. About 17 percent of that spending was procured locally, or about $62 million. The average for all traded clusters in the region is about 20 percent local sourcing.

Clearly an essential component of tire making is rubber products, but it is not the most expensive input. The most expensive input is basic inorganic chemicals and all of that sourcing comes from outside the region, to the tune of $27 million. Other chemical products are also crucial supply components in this industry including artificial and synthetic fibers, petrochemicals, and organic chemicals. Eight of the top suppling industries for tire manufacturing are sourced entirely outside of the region. With a large facility like the Goodyear plant that has been in the region for 50 years, targeting these suppliers could help benefit an anchor company and the region.

Top Supply Chain Needs for Tire Manufacturing

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
Other Basic Inorganic Chemical Manufacturing	$0	0%	$27,146,000	100%
Artificial and Synthetic Fibers and Filaments Manufacturing	$0	0%	$25,514,000	100%
Logging	$1,156,000	5%	$24,494,000	95%
Synthetic Rubber Manufacturing	$0	0%	$11,838,000	100%
Fiber, Yarn, and Thread Mills	$0	0%	$8,040,000	100%
General Warehousing and Storage	$3,127,000	29%	$7,824,000	71%
Rubber Product Manufacturing for Mechanical Use	$0	0%	$7,500,000	100%
Corporate, Subsidiary, and Regional Managing Offices	$243,000	3%	$6,878,000	97%
All Other Miscellaneous Textile Product Mills	$17,000	0%	$6,699,000	100%
All Other Rubber Product Manufacturing	$0	0%	$6,463,000	100%
Petrochemical Manufacturing	$0	0%	$5,331,000	100%
Textile Bag and Canvas Mills	$1,160,000	21%	$4,395,000	79%
All Other Basic Organic Chemical Manufacturing	$8,341,000	66%	$4,203,000	34%
Plastics Material and Resin Manufacturing	$309,000	7%	$4,027,000	93%
General Freight Trucking, Long-Distance, Truckload	$1,877,000	33%	$3,859,000	67%

Source: EMSI 2019.1

Perishable Prepared Food Manufacturing

The food processing cluster was a strong and growing cluster for Pittsylvania and Danville. Perishable prepared foods are the top employing industry in this cluster. This industry spends $133 million on sourcing its materials and services. About 16 percent is spent on local suppliers. Much of the supply chain for this industry is raw food materials from crops and animals. Some of this need is sourced locally, but the majority comes from outside the area. Packaging in the form of cardboard boxes and plastics were also top suppliers to this industry.

Top Supply Chain Needs for Perishable Prepared Food Manufacturing

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
Crop Production	$411,000	2%	$22,360,000	98%
Animal Production	$636,000	6%	$10,332,000	94%
Corporate, Subsidiary, and Regional Managing Offices	$308,000	3%	$8,709,000	97%
Flour Milling	$0	0%	$5,349,000	100%
Soybean and Other Oilseed Processing	$0	0%	$4,567,000	100%
Corrugated and Solid Fiber Box Manufacturing	$15,000	1%	$2,940,000	99%
Paper Bag and Coated and Treated Paper Manufacturing	$87,000	4%	$2,366,000	96%
General Line Grocery Merchant Wholesalers	$2,178,000	51%	$2,103,000	49%
General Freight Trucking, Long-Distance, Truckload	$831,000	33%	$1,707,000	67%
Rice Milling	$0	0%	$1,447,000	100%
All Other Miscellaneous Food Manufacturing	$20,000	2%	$1,178,000	98%
Fats and Oils Refining and Blending	$0	0%	$1,108,000	100%
General Freight Trucking, Local	$246,000	18%	$1,087,000	82%
General Freight Trucking, Long-Distance, Less Than Truckload	$117,000	10%	$1,046,000	90%
All Other Plastics Product Manufacturing	$304,000	23%	$1,002,000	77%

Source: EMSI 2019.1

Hardwood Veneer and Plywood Manufacturing

While still major employers, the following three top traded industries have much smaller supply chain spending. The hardwood veneer and plywood industry spent $66 million to source its material and services, with 35 percent coming from local suppliers. Since the region has a strong presence of forestry and wood products, many of the materials that this industry needs can be sourced nearby. Almost 70 percent of this industry's sawmill needs are met in the region.

The top suppliers chart demonstrates that there are still some wood product industries that are not being sourced at all from the region like wood preservation and window and door manufacturing. Recruiting a company in these industries would mean that there would be local customers. Plastics was also a major need, with only 15 percent sourced locally.

Top Supply Chain Needs for Hardwood Veneer and Plywood Manufacturing

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
Logging	$2,422,000	29%	$5,921,000	71%
Plastics Material and Resin Manufacturing	$427,000	15%	$2,427,000	85%
Sawmills	$4,824,000	69%	$2,195,000	31%
Softwood Veneer and Plywood Manufacturing	$0	0%	$2,037,000	100%

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
General Warehousing and Storage	$537,000	26%	$1,539,000	74%
Adhesive Manufacturing	$0	0%	$1,526,000	100%
Petroleum Refineries	$0	0%	$1,153,000	100%
Truss Manufacturing	$2,400,000	68%	$1,149,000	32%
Corporate, Subsidiary, and Regional Managing Offices	$23,000	2%	$1,065,000	98%
Wood Preservation	$0	0%	$879,000	100%
Wood Window and Door Manufacturing	$0	0%	$875,000	100%

Source: EMSI 2019.1

Wood Kitchen Cabinet and Countertop Manufacturing

This industry is a member of the furniture cluster, but is highly related to wood products and has a similar supply chain to veneer and plywood manufacturing. The industry spent $22 million on inputs with over 31 percent located locally. General warehousing and storage was the greatest supplier used by this industry, and only 27 percent was sourced locally. Several wood products industries are key to this industries success. Two of the top wood product supply needs – softwood veneer and plywood manufacturing and window and door manufacturing – have no purchases from within the region, a $1.3 million opportunity. Plastics and box manufacturing are also top suppliers to this industry.

Top Supply Chain Needs for Wood Kitchen Cabinet and Countertop Manufacturing

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
General Warehousing and Storage	$293,000	27%	$806,000	73%
Paint and Coating Manufacturing	$0	0%	$799,000	100%
Softwood Veneer and Plywood Manufacturing	$0	0%	$678,000	100%
Wood Window and Door Manufacturing	$0	0%	$613,000	100%
Laminated Plastics Plate, Sheet (except packaging), and Shape Manufacturing	$0	0%	$554,000	100%
Sawmills	$801,000	60%	$530,000	40%
Showcase, Partition, Shelving, and Locker Manufacturing	$0	0%	$436,000	100%
Corporate, Subsidiary, and Regional Managing Offices	$10,000	3%	$383,000	97%
Corrugated and Solid Fiber Box Manufacturing	$4,000	1%	$378,000	99%
Other Millwork (including Flooring)	$101,000	25%	$302,000	75%
Machine Shops	$57,000	17%	$273,000	83%
Truss Manufacturing	$914,000	77%	$271,000	23%

Source: EMSI 2019.1

Nonupholstered Wood Household Furniture Manufacturing

Another furniture manufacturing industry rounds out the top employers. Wood household furniture companies in the region spend about $14 million to source their materials and services, with about 31 percent coming from local suppliers. Like the kitchen cabinet manufacturers, this industry primarily requires warehousing and storage, at a level of $1.6 million. About 23 percent of those needs are addressed locally. Paint and adhesive manufacturing, both chemical manufacturing industries, were top suppliers with no local sourcing. Urethane and other plastic products are plastics cluster inputs that have little to no local sourcing. Wood products like trusses and wood preservation are also key suppliers for this furniture industry. Outside of truss manufacturing, there is an opportunity to expand local supply of wood products.

Top Supply Chain Needs for Wood Household Furniture Manufacturing

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
General Warehousing and Storage	$357,000	23%	$1,206,000	77%
Corporate, Subsidiary, and Regional Managing Offices	$4,000	1%	$605,000	99%
Paint and Coating Manufacturing	$0	0%	$495,000	100%
Corrugated and Solid Fiber Box Manufacturing	$8,000	2%	$377,000	98%
Truss Manufacturing	$180,000	33%	$368,000	67%
Showcase, Partition, Shelving, and Locker Manufacturing	$0	0%	$357,000	100%
Adhesive Manufacturing	$0	0%	$312,000	100%
Softwood Veneer and Plywood Manufacturing	$0	0%	$311,000	100%
Glass Product Manufacturing Made of Purchased Glass	$0	0%	$208,000	100%
Wood Preservation	$0	0%	$166,000	100%
Urethane and Other Foam Product (except Polystyrene) Manufacturing	$0	0%	$146,000	100%
Offices of Lawyers	$5,000	3%	$146,000	97%
All Other Plastics Product Manufacturing	$3,000	2%	$131,000	98%

Source: EMSI 2019.1

All Traded Industries

While the previous industries represent the highest employers of traded industries, there are many other traded industries in the area. To round out the analysis, we looked at the sourcing needed by all 680 traded industries. While a supplier company is most likely to be drawn by one of the top existing companies, it can be beneficial to show the full extent of potential from all traded industries in Pittsylvania and Danville.

For example, the tire manufacturing industry spends $7.8 million outside the region on warehousing and storage. A warehousing company might be most interested in working with Goodyear, but knowing that other local traded industries currently spend an additional $13.6 million on warehousing outside the region could be data that helps seal the deal.

The top import to the region is petrochemicals at $106 million in 2018. This is a result of petrochemicals being a crucial building block of many products, particularly the plastics cluster that is present in the region. The next largest sourcing need is corporate offices. Traded industries in the region spent $56 million in 2018 from corporate and management offices outside the region. If the region could recruit corporate jobs from one of their top employers to the region it would keep more investment in the area.

Most notably, there are several upstream chemical product industries in the top of the sourcing list, including petrochemicals, inorganic chemicals, organic chemicals, ethyl alcohol, and synthetic rubber. Pittsylvania and Danville has a presence in the organic chemical manufacturing space and that company captures some of that sourcing, but there are many other upstream chemical needs in the region that are not being met locally.

Top Supply Chain Needs for All Traded Industries

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
Petrochemical Manufacturing	$0	0%	$106,011,000	100%
Corporate, Subsidiary, and Regional Managing Offices	$1,359,000	2%	$56,461,000	98%
Crop Production	$1,082,000	2%	$45,323,000	98%
Logging	$6,722,000	15%	$39,011,000	85%
Other Basic Inorganic Chemical Manufacturing	$0	0%	$35,194,000	100%
All Other Basic Organic Chemical Manufacturing	$23,010,000	40%	$34,816,000	60%
Plastics Material and Resin Manufacturing	$6,713,000	17%	$33,224,000	83%
Petroleum Refineries	$0	0%	$29,536,000	100%
Artificial and Synthetic Fibers and Filaments Manufacturing	$0	0%	$26,150,000	100%
General Warehousing and Storage	$7,800,000	27%	$21,387,000	73%
Copper Rolling, Drawing, Extruding, and Alloying	$0	0%	$20,622,000	100%
Ethyl Alcohol Manufacturing	$0	0%	$13,409,000	100%
Animal Production	$1,032,000	8%	$12,494,000	92%
Synthetic Rubber Manufacturing	$0	0%	$12,140,000	100%
General Freight Trucking, Long-Distance, Truckload	$7,144,000	39%	$11,079,000	61%

Purchases from	In-region Purchases	% In-region Purchases	Imported Purchases	% Imported Purchases
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	$690,000	6%	$10,267,000	94%
Corrugated and Solid Fiber Box Manufacturing	$98,000	1%	$9,276,000	99%

Source: EMSI 2019.1

While only one plastics industry appears in the top suppliers list, there are several plastics industries a little further down the list. In total over $61 million is spent by traded industries to plastic industry companies outside of the region. Crop and animal production are two agricultural industries that appear in the top supplier industry list.

Take-Aways

Looking at the cluster analysis findings from earlier in the report we can make connections between the largest supplier recruitment opportunities and existing clusters.

- **Upstream Chemical Manufacturing**

Chemical product manufacturing consistently showed up as a top input for traded industries in the region. Tire manufacturing alone in the region spends $65 million outside the region on inorganic chemicals, synthetic fibers, and synthetic rubber. While petrochemicals is by far the largest input for the region's traded industries, it may not be the best play for recruitment. Since they are derived from fossil fuels these manufacturers tend to locate near existing energy extraction sites and major ports. A better play may be on inorganic chemicals; $35 million was imported to the region in 2018 with zero sourced locally. The region already has an organic chemical manufacturer and can use this and the presence of many customers for recruitment to build up this growing upstream chemical cluster.

Target industries:

- Other Basic Inorganic Chemical Manufacturing
- Synthetic Rubber Manufacturing
- Ethyl Alcohol Manufacturing

- **Plastics**

Targeting plastics manufacturers who supply top local companies could keep money in the region and continue to build upon the current growth in the plastics cluster in Pittsylvania and Danville. The region has a local plastics material and resin manufacturer, but this company only meets 17 percent of the sourcing needs for other traded industries in the region. Plastic bottles and plastic bag manufacturing are crucial inputs for the food processing cluster. There is no local sourcing for these inputs currently. Looking at all traded industries, there's a potential for a plastic bag and bottle manufacturer to capture over $9 million by supplying these needs.

Target industries:

- Plastics Material and Resin Manufacturing
- Unlaminated Plastics Film and Sheet Manufacturing
- Plastics Bottle Manufacturing
- Plastic Bag and Pouch Manufacturing

- **E-Commerce and Distribution**

Warehousing and storage was a prime need for top area employers, particularly for the wood product and furniture industries. All traded industries in the region spent $21.4 million outside the region for warehousing and storage. That is 73 percent that is leaking outside the region. This industry is part of the e-commerce and distribution cluster. In the region this cluster has been emerging in recent years with strong employment growth. While a manufacturer and not technically a member of the cluster, traded industries spent $9.3 million outside the region in 2018 on corrugated cardboard box manufacturers. There is money to be made and local customers to be gained for companies that can assist the top employers with their storage, packaging, and distribution needs.

Target industries:

- General Warehousing and Storage
- Corrugated and Solid Fiber Box Manufacturing

Foreign Direct Investment Opportunities

The analysis performed above focuses on suppliers who are outside of the Pittsylvania-Danville area. It does not differentiate between foreign and domestic suppliers. To learn more about the foreign suppliers to the region we utilized Datamyne US Import Bill of Lading data on foreign imports to the region. Looking at major foreign suppliers can help identify specific target companies for foreign direct investment.

Top Importing Companies of Pittsylvania and Danville, April 2018 – April 2019

Company Name	Metric Tons Imported	Import Value (million$)
EBI LLC	4,830	$23.8
ITG Brands	1,980	$13.7
Intertape Polymer Corp	2,810	$9.6
Erez USA Inc	94	$7.3
UT C LLC	384	$3.1
Infinity Global Packaging	441	$2.2
Essel Propack America	523	$2.1

Source: Datamyne (2019)

The chart above shows the companies in the region who import the most goods from abroad. These companies would be the best partners for recruiting foreign direct investment to the region. EBI LLC is an upholstered furniture company, and much of their imports come from Poland where their parent company is located. There are also major textile firms the company uses from China and Thailand. ITG Brands is a tobacco company that imports most of their tobacco from a Brazilian firm. Intertape acquired one of their major suppliers in 2016, Powerband of India, and most of their imports come from India. Intertape also imported from non-affiliated companies last year, including 265 metric tons from a film company, Cosmo Films Ltd, also based in India.

Infinity Global Packaging's second-most imports come from a cardboard bag manufacturer in China called Qingdao Perfect Luxury Packaging. The supplier sent almost 100 metric tons, about $500,000 worth of products to the Pittsylvania-Danville area last year. Targeting this company could bring a packaging manufacturer, a major need from the supply chain analysis of all traded clusters, to the area where it already has a customer.

According to the Datamyne data from April 2017 to 2018, all companies in Danville-Pittsylvania imported over 1,385 metric tons of plastics products from foreign sources. This was the largest category by weight of foreign imports. This confirms that recruiting plastics suppliers could be a strategic move for the area. That effort should focus on international companies as most of the plastic needs are imported from outside the country.

Connecting Existing Suppliers

Another effort that can be considered based on this information is ensuring that local companies are aware of local suppliers and making these connections. For example, there may be a local company spending money on a California web developer while there is an existing website development company five miles down the road. Usually these missed connections happen because of lack of awareness. Other times the supplier may need assistance getting their operations up to par with the demands of the buyer.

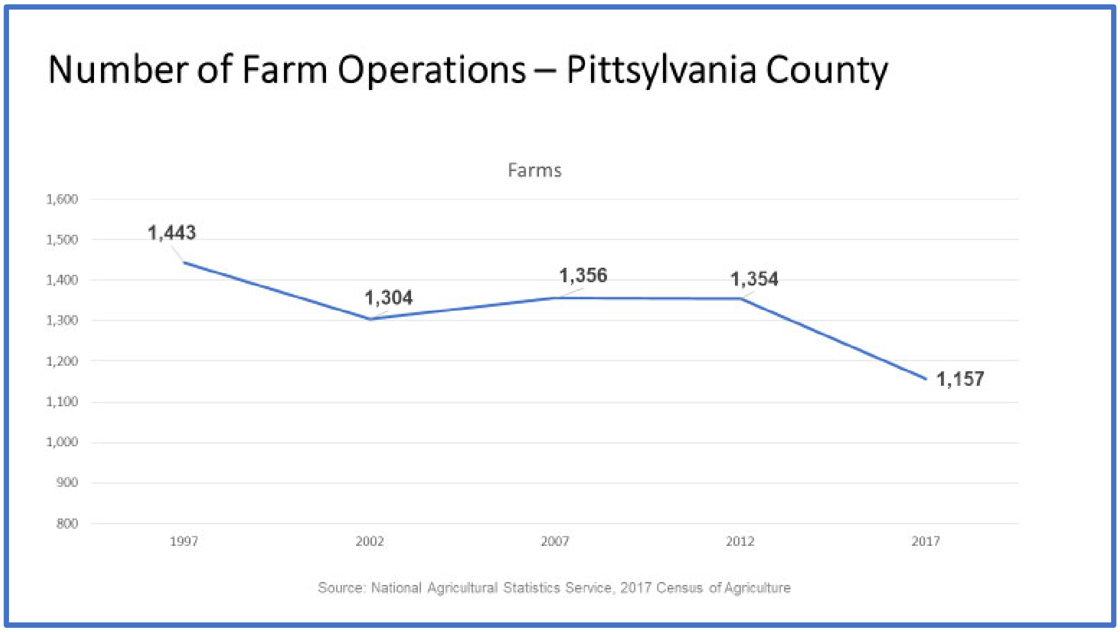
In Pittsylvania and Danville, animal production is the 6th largest traded industry in terms of exports with $126 million in 2018. It is a top input for traded industries in their supply chain, but only $1 million out of $13.5 million is spent locally. If there are gaps where a local animal producer could be meeting a local buyer's needs, then this could help keep money in the region and help bolster the food processing and agricultural inputs and services clusters.

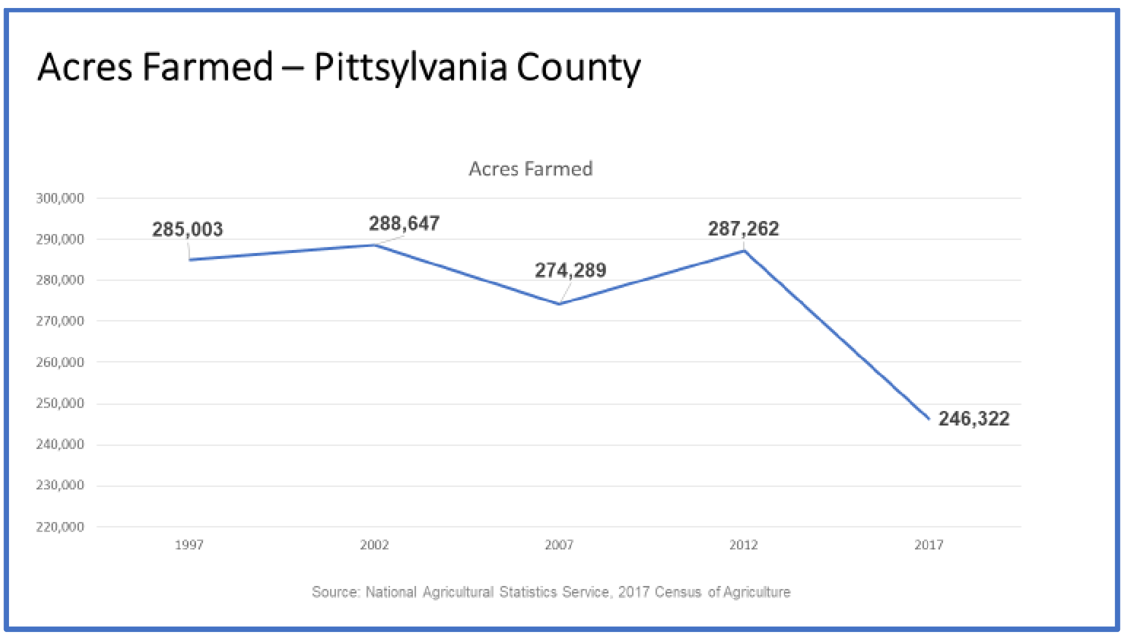
Some economic development organizations have taken on the task of helping make these connections. One method could be hosting supplier trade fairs where OEM supply chain managers can meet with local tier 1-3 suppliers like machine shops, copper rollers, or service providers such as data cloud hosts.

6. AGRICULTURE AND FORESTRY SECTOR ANALYSIS

The Status of Farming Locally

As is the case across most of America, the number of farm operations and farmed acreage has declined in Pittsylvania County. Between 1997 and 2017, the county experienced a 20 percent decline in the number of farm operations and a 14 percent drop in total acres farmed.





For forestry, Virginia's total of 16 million acres in forest land – 59 percent of the Commonwealth's land area – has remained steady since 2008.[i] Pittsylvania County has over 391,000 acres in forest land, representing 59.5 percent of the county's total land area.[ii] Nearly 98 percent of forest land in Pittsylvania is privately owned.[iii]

Federal Census of Agriculture profiles of farm operators are now dated (2012), but the data for Pittsylvania County provides some interesting information. The average age of principal farm operators in the county was 60.7. Fifty-seven percent of operators had farming as their primary occupation, while 43 percent indicated another occupation as their primary job.[iv]

Across Virginia, agriculture-related industry accounts for about 7.5 percent of the state's gross domestic product (GPD), with forestry-related industry contributing another 2 percent of GDP.[v] According to national data provider EMSI, agriculture and forestry accounts for 2 percent of the gross regional product (GRP) in Pittsylvania and Danville.[vi]

Pittsylvania County ranks 9th in the state in total farm sales receipts.[vii] Pittsylvania is a statewide production leader in several categories, including:

Category	Rank in Virginia
Flue-Cured Tobacco	1
Total Cropland	2
Other Hay	3
Beef Cows	4
Milk Cows	4
Cattle & Calves	6
Total Farms	6

Source: Virginia Agricultural Statistics, 2018 Annual Bulletin

Economic Impacts

According to a 2017 study by the University of Virginia's Weldon Cooper Center, the area ranks in the top 25 of Virginia communities for the economic impact and value-added product impact of agriculture and forestry. It is particularly strong in forestry, ranking in the top 10.

Pittsylvania + Danville Economic Output, 2015

	Direct $ Impact	Rank in Virginia	Total $ Impact	Rank in Virginia
Agriculture	$342,400,000	25	$412,900,000	23
Forestry	$394,700,000	6	$496,900,000	6
Combined	$737,100,000	15	$909,900,000	15

Source: The Economic Impact of Virginia's Agriculture and Forest Industries, Weldon Cooper Center, May 2017

Pittsylvania + Danville Value-Added Impact, 2015

	Direct $ Impact	Rank in Virginia	Total $ Impact	Rank in Virginia
Agriculture	$107,000,000	23	$143,000,000	21
Forestry	$118,000,000	5	$169,000,000	6
Combined	$225,000,000	17	$312,000,000	15

Source: The Economic Impact of Virginia's Agriculture and Forest Industries, Weldon Cooper Center, May 2017

Employment Impacts

As might be expected, farm employment constitutes a much greater percentage of total employment in Virginia's non-metro areas. Farm employment makes up 4.6 percent of all jobs in the Commonwealth's non-metro areas, versus just 0.7 percent in metropolitan areas.[viii] Combined agriculture and forestry employment for Pittsylvania plus Danville ranks among the top 10 statewide.

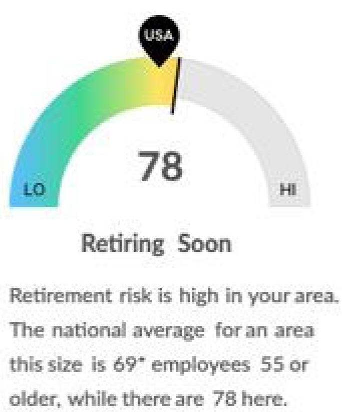
Pittsylvania + Danville Employment Impact, 2015

	Direct Employment	Rank in Virginia	Total Employment	Rank in Virginia
Agriculture	2293	13	2976	16
Forestry	1835	2	2697	3
Combined	4128	7	5673	10

Source: The Economic Impact of Virginia's Agriculture and Forest Industries, Weldon Cooper Center, May 2017

According to EMSI, the median wage in farming, forestry, and fishing in Pittsylvania and Danville is $25,610. When the cost of living is accounted for, this average wage is 14 percent higher than the national median.

A concern for the future of farming and forestry in the area is the average age of farm operators and employees. The graphic below shows that Pittsylvania and Danville have an above-average risk of retirements in the next 10 years.



Source: EMSI 2019.2

This does, however, create an opportunity for new workers to enter farming and forestry occupations. Despite EMSI's estimate that there will be no net job growth in this industry over the next 10 years, retirement and job-changers will create the need for 45 positions to be filled annually through 2029.[ix]

Increasing Value-Added Agriculture and Forestry

Agricultural and forestry production is strong in Pittsylvania-Danville. The cluster is also highly related and linkable to the asset food processing cluster. Looking for local suppliers for food processing can be a great way to connect nearby rural areas to more urban economies. A broader value-added agriculture and forestry effort could also be productive.

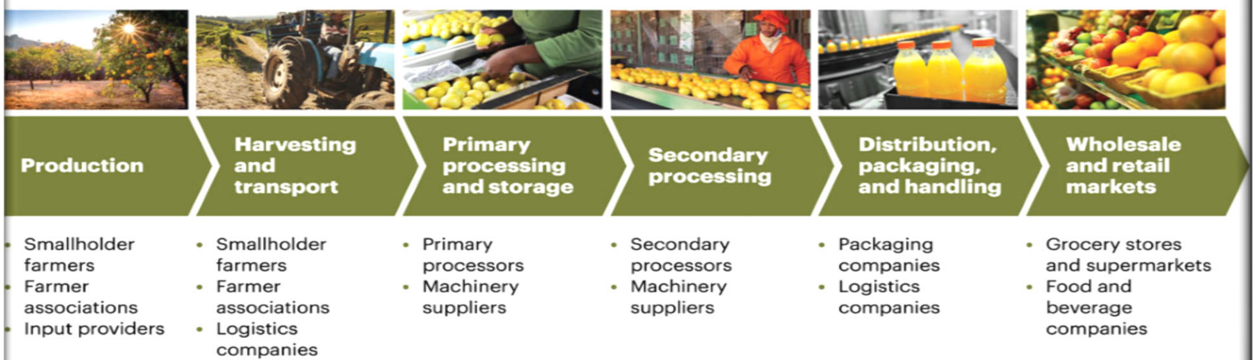
Traditionally, value-added agriculture or forestry is associated with taking raw materials and processing them into products with greater economic worth. The United State Department of Agriculture (USDA) definition of a value-added agricultural product (2015) is one that:

- Has undergone a change in physical state
- Was produced in a manner that enhances the value of the agricultural commodity
- Is physically segregated in a manner that results in the enhancement of the value of the agricultural commodity
- Is a source of farm- or ranch-based renewable energy
- Is aggregated and marketed as a locally-produced agricultural food product

The Agri-Life Extension of Texas A&M University describes: "*Value* is usually created by focusing on the benefits associated with the agribusiness product or service that arise from:
Quality - Does the product or service meet or exceed customer expectations?
Functionality - Does the product or service provide the function needed of it?
Form - Is the product in a useful form?
Place - Is the product in the right place?
Time - Is the product in the right place at the right time?
Ease - Is the product easy for the customer to obtain?"

This broader approach expands the potential for value-added gains in Pittsylvania-Danville and includes research, testing, and logistics as well as the more obvious processing opportunities. The graphic below from A.T. Kearney shows a typical agriculture value chain. Many of these components are already present in the region, indicating that additional operations might be possible.

Figure 3
The typical agricultural value chain



Source: A.T. Kearney analysis

Increasing the Economic Impact of Agriculture and Forestry in Pittsylvania-Danville

Virginia Tech Cooperative Extension experts in Southside Virginia shared their thoughts on opportunities for expanding the economic output of agriculture and forestry in the area. As shown earlier in this section, the area already ranks fairly high (particularly in forestry) in value-added production, but additional needs and ways to boost this sector's impact were identified.

Needs:

- More reliable **internet and cell phone service** outside of urban areas. For example, most farm record-keeping programs are cloud-based, making reliable coverage a necessity.

  Washing and packing infrastructure for fresh fruits and vegetables. The small scale of most local fruit and vegetable farmers makes it difficult for individual farmers to afford these facilities. **Cold and frozen storage facilities**. Because more densely populated end-user markets are farther away, cold and frozen storage capacity is an important asset.

  In forestry, there is a continual need for more **landowner education**, particularly among property heirs and new owners. During transitions to heirs and other new owners, there is frequently an inclination to divest of forest land, divide large tracts into smaller parcels, or harvest trees without replanting. In addition, few forest landowners have current management plans which could be passed down to new owners. The longer harvest cycles for timber present a challenge for owners that are financially stressed or demanding a quicker return on investment.

Opportunities:

- Attraction of more middle-level and final **food and forest product processing** firms. For example, a poultry processor would be a natural fit given the existing number of poultry growers. More aggressive pursuit of state Agriculture and Forestry Industries Development (AFID) Fund grants could help attract a processor. The Pittsylvania County area has need of an additional pine sawmill. In Southside Virginia, past AFID grants have been used to help establish sawmills in Halifax and Buckingham counties.

- Using a co-operative or government-led model for development of **shared cold and frozen storage facilities**. With better storage, growers could diversify offerings and better serve urban markets in proximity to Pittsylvania-Danville.

  Expand education programs such as the Virginia Department of Forestry and Cooperation Extension's **Generation NEXT** workshops to educate local forest landowners. Currently, just 18 percent of Virginia forest owners have a written management plan and only two percent have a succession or estate plan.[x] Education and planning can help keep forest tracts intact and economically viable. Increased use of professional consultation (whether from government, university, or private sector advisors) is likely to result in better decision-making and management of forest lands.

  Because of concern that not enough members of the public will take advantage of programs like Generation Next, interviewees also stressed broader education efforts. This could include a requirement (and enforcement of the requirement) for a forest management plan in order to qualify for land use taxation status; an annual report to elected officials on the economic impact of forestry and agriculture; and more forestry and agriculture education programming in public schools.

- Development or attraction of **wholesale markets** in the area. Given the distance to large end-user markets such as the Triangle and Triad in North Carolina and Roanoke in Virginia, having more local wholesale buyers would be a significant boost for area farmers.

- Development of **shared commodity crop storage**. The current lack of commodity crop storage makes local growers subject to the whims of rapidly changing market prices.

- Promote the growth of **hardwood forests**, which products have strong demand particularly in the export market. The longer harvesting cycles for hardwoods are the biggest deterrent for most landowners.

- Continue to explore **new uses of timber products and attraction of related industries** to locate in Pittsylvania-Danville. Examples include Swedwood's local production of particleboard and high-density fiberboard for IKEA; markets for wood pellets (particularly in Europe) and other bio-fuels for power generation; and new uses for wood ash and other byproducts.

7. ENTREPRENEURIAL ECOSYSTEM ANALYSIS

The Challenging Picture Nationally

In a recent article, the Economic Innovation Group's Kenan Fikri writes that the primary "paradox of this era of breathless (or so we're told) innovation is that it has actually been marked by a steep decline in entrepreneurship across every sector."[xi] New business formation has been on a downward trend since 1978, and despite recent upticks it remains "roughly half of where it was a generation ago," according to the Kauffman Foundation.[xii]

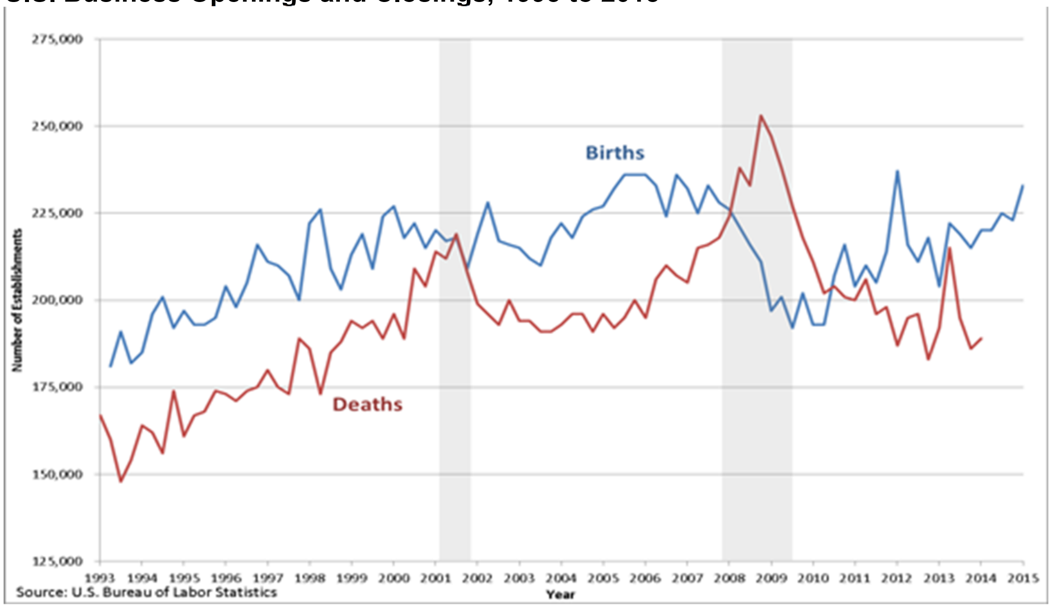
Fikri believes that hopes of technology spreading economic prosperity across more of America and more equitably across groups in society "were overly optimistic," and instead the innovation economy has created more of a "winner takes all" environment with innovation concentrated into a "small number of superstar hubs."[xiii]

Data trends underscore the fact that business formation and small business employment are challenged across the United States:

- Before the Great Recession, only about 20 percent of U.S. metro areas saw more business 'deaths' than 'births' in a given year. After the recession, close to 60 percent of metros have experienced more business closings than new openings.[xiv]
- Between 1999 and 2015, jobs created by firms less than one year old declined by 36 percent.[xv]
- About 75 percent of all U.S. workers are employed in firms at least 16 years old, compared with 60 percent of workers 25 years ago.[xvi]
- In the mid-1990s, 125 U.S. counties accounted for half of all new business establishments created. In the early 2000s, half of all the new establishments could be found in only 64 counties. By the early 2010s following the Great Recession, half of new business startups were concentrated in just 20 U.S. counties.[xvii]
- The United States ranked 12th among developed countries in business startup activity in 2015.[xviii]
- The mobility rate in the United States (people moving within or across state lines) has declined by nearly 50 percent since the 1960s, which may be another indication of aversion to risk-taking in search of economic gain.

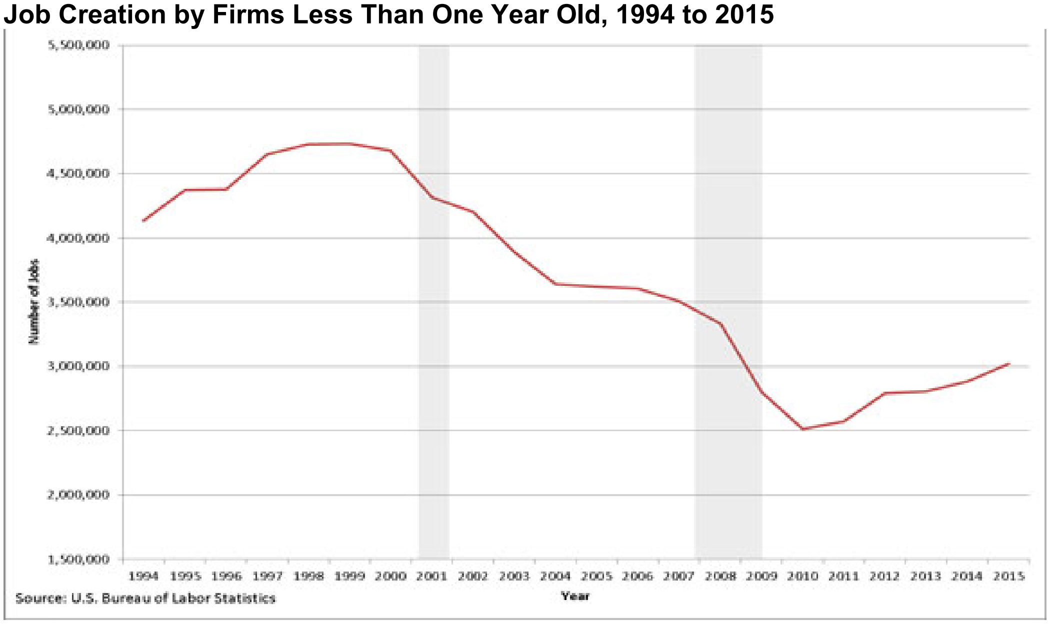
New business formations are increasing in recent years, but it is yet unclear whether this represents a reversal of the long-term trend.

U.S. Business Openings and Closings, 1993 to 2015



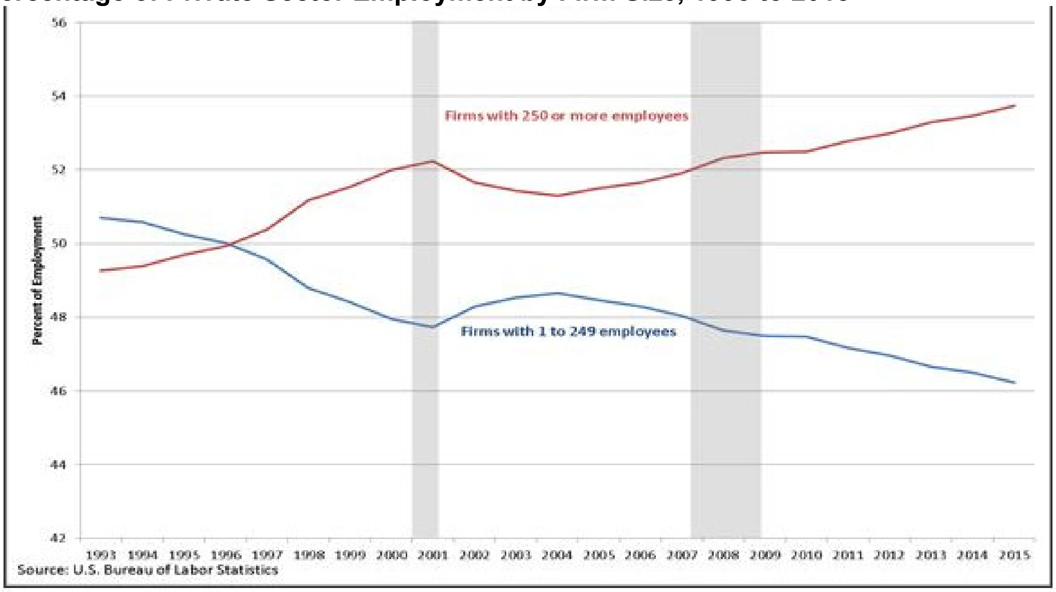
Employment by newer firms continues a long-term slide. Job creation by new companies has declined by 36 percent since the late 1990s.

Job Creation by Firms Less Than One Year Old, 1994 to 2015



Meanwhile, an increasing percentage of Americans are employed by larger companies, as illustrated by the following chart.

Percentage of Private Sector Employment by Firm Size, 1993 to 2015



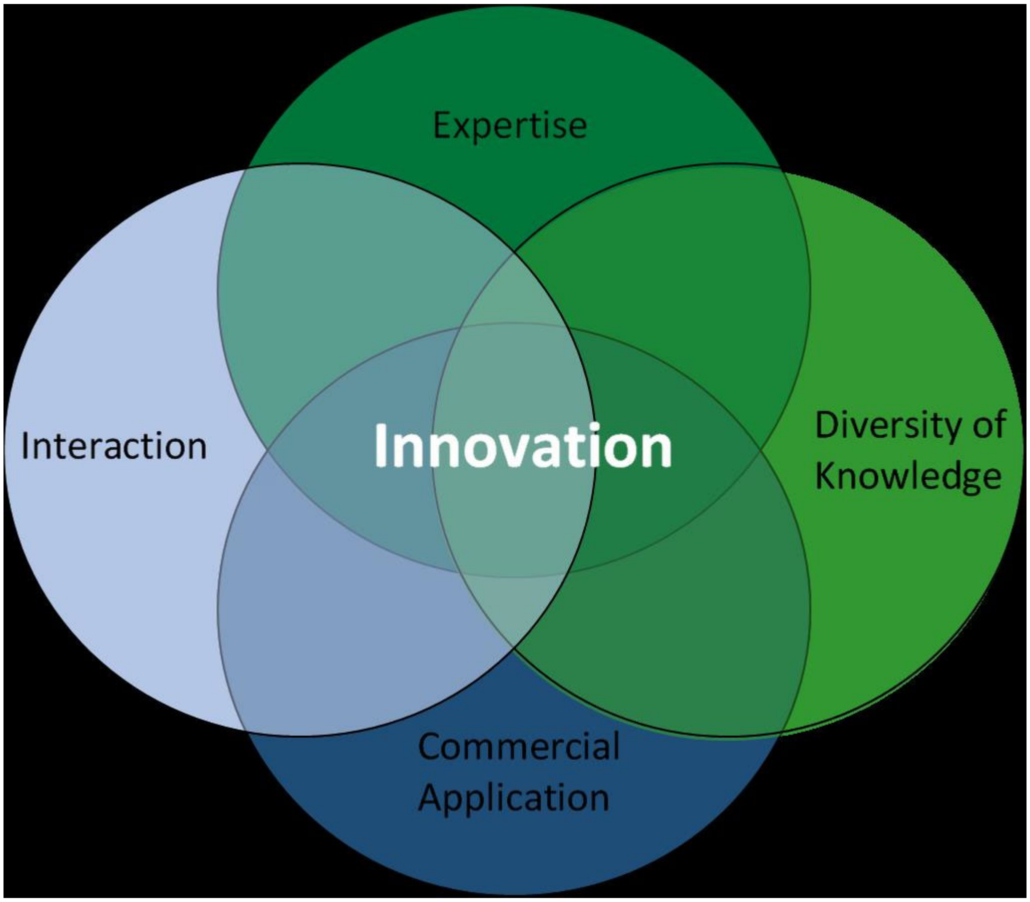
Numerous researchers have suggested reasons for the decline in entrepreneurship and small business employment, and the increasing geographic concentration of innovation. These reasons include:

1. An aging population with Baby Boomers no longer in their prime business-starting years.
2. Reduced household wealth and home equity following the Great Recession.
3. Student debt load and general risk aversion among Millennials.
4. Government regulation and compliance costs, at all levels of government.
5. Fewer community banks and very few new bank startups.
6. An education gap between large metropolitan areas and non-metros that continues to grow.
7. Connectivity gaps in digital infrastructure (broadband internet and cellular coverage) and physical infrastructure (such as airline service) across much of America.
8. Tighter immigration limits and enforcement.

Basic Elements of Entrepreneurial Ecosystems

Entrepreneurial ecosystems have been studied extensively. While attempts to replicate the outcomes of Silicon Valley have had limited success, places like Ireland, Singapore and parts of Germany have achieved good results by focusing on specific local clusters.

The Financial Times reported that, *"According to D. Isenberg, Professor of Entrepreneurship Practice, Babson Executive Education, and founding executive director of the Babson Entrepreneurship Ecosystem Project, an entrepreneurial ecosystem consists of elements that can be grouped into six domains: a conducive culture (e.g. tolerance of risk and mistakes, positive social status of entrepreneur); facilitating policies and leadership (e.g. regulatory framework incentives, existence of public research institutes); availability of dedicated finance (e.g. business angels, venture capital, micro loans); relevant human capital (e.g. skilled and unskilled labor, serial entrepreneurs, entrepreneurship training programs); venture-friendly markets for products (e.g. early adopters for prototypes, reference customers), and a* *wide set of institutional and infrastructural supports (e.g. legal and accounting advisers, telecommunications and transportation infrastructure, entrepreneurship promoting associations).”*[xix]



Development of the basic knowledge economy assets and innovation and entrepreneurial ecosystems requires strong leadership and institutional capacity, with a commitment to multi-party collaboration and practical human and physical infrastructure.

Those studying entrepreneurship across the United States have recommendations for regions to improve their entrepreneurial ecosystems. Among the most commonly-cited suggestions for strengthening the climate for small business success:

A. **Continue to invest in education as the best way to create a culture of innovation.** As Kenan Fikri notes, “if you know the education attainment rate of a community, you can know with near certainty how it performs on a host of other metrics” related to innovation, health, and economic success.[xx]
B. **Focus on local strengths, especially existing, higher-growth sectors and firms** in a region. Initiatives borrowed from elsewhere may not be suited to local and regional conditions.
C. **Bring building of the entrepreneurial ecosystem up to a level equal with other economic development strategies**, such as recruitment and retention of larger businesses.
D. **Reduce regulatory, bureaucratic, and legal burdens and costs.** The costs and time delays imposed by regulation can be a significant deterrent to undertaking a start-up enterprise.

E. **Encourage high-skilled immigration.** Data shows that foreign immigrants are more likely to start a business than native-born Americans.
F. **Boost small business participation by under-represented groups, such as minorities and women.** Nationally, the current entrepreneurial community is about 80 percent white and 65 percent male.
G. **Increase connections and engagement between the private sector and governments, schools, and non-profits.** Partnerships outside of established 'silos' are crucial for building a community ethic of innovation and risk-taking.
H. **Assist small businesses with exporting**. According to the U.S. Department of Commerce's International Trade Administration, the percentage of American firms that export is the lowest among all developed nations.[xxi]
I. **Connect small businesses (suppliers) with larger companies within the region.** Entrepreneurs are too often unaware of the opportunities for supplying established firms in their region.
J. **Address student loan debt among small business owners and potential entrepreneurs.** Some places, such as the state of Rhode Island, are instituting student loan repayment or loan deferment programs for young entrepreneurs.

The Entrepreneurial Landscape in Southside Virginia and Pittsylvania-Danville

Southside Virginia (GO Virginia's Region 3) has seen encouraging trends for small business and new companies since the end of the Great Recession. The region's share of job creation coming from smaller firms (less than 20 employees) and newer firms (5 years old or less) is trending upward. Also, the percentage of total employment from sole proprietorships is higher in the region than in Virginia as a whole. Slower job creation by larger, older firms likely accounts for some of small business' relative success.

Key Players in the Entrepreneurial Ecosystem

For a micropolitan region, Danville and Pittsylvania County have an impressive array of small business service providers. Discussions with individuals active in economic and small business development yielded consensus around the main players within the area's entrepreneurial ecosystem:

- The Launch Place
- The City of Danville's Office of Economic Development
- Longwood Small Business Development Center (SBDC)
- The River District Association
- The Danville Pittsylvania County Chamber of Commerce
- Danville Community College and its Barkhouser Center
- The Institute for Advanced Learning and Research (IALR)
- The Dan River Business Development Center (incubator in the county)
- The Southern Piedmont Technology Council (SPTC)
- The Olde Dominion Agricultural Foundation

Past and Potential Funders:

- Danville Regional Foundation (DRF)
- GO Virginia
- Center for Innovative Technology (CIT)

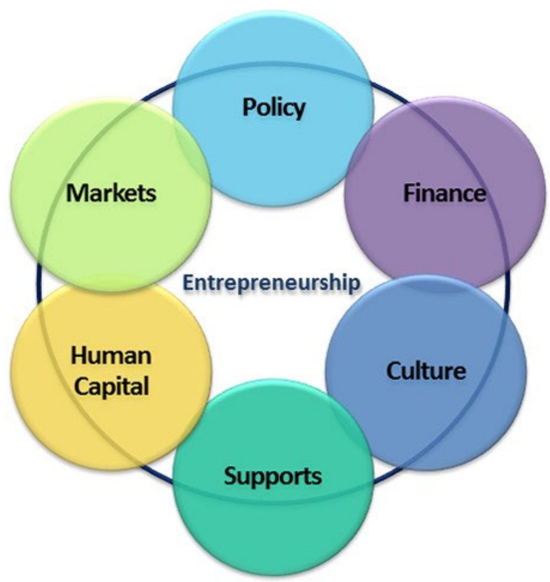
The Most Important Needs and Challenges for Entrepreneurs in Danville and Pittsylvania

When community leaders were interviewed about small business needs in Southside Virginia for the GO Virginia Region 3 analysis in 2017, the two greatest challenges were clear – access to **financial capital** and **human capital** (talented employees). Leaders in this arena agree that these concerns are still paramount. During the process of creating this regional strategy, participants added several more important needs and challenges facing area entrepreneurs. The key issues were identified as:

- Access to financial capital – and flexibility in the lending system
- Human capital – locating and keeping talented workers
- The ability of small businesses to scale up in a less densely-populated area
- Connecting innovators across the city, county, and possibly a wider region
- Providing positive modeling of small business success for young people
- Creating a culture/climate that values self-employment and risk-taking vs. working for a larger employer
- Area residents valuing and paying for the expertise that small business owners provide
- Continuing infrastructure needs, especially broadband internet
- Impacts and costs of regulation, including healthcare insurance

Does Danville-Pittsylvania Have an Entrepreneurial Ecosystem – and if so, How Does it Function?

Economic development professionals and other community leaders agree that the players listed above and the services they provide do constitute an effective entrepreneurial ecosystem for the area. For an area of this size, providers offer a good breadth of expertise and services for existing small business owners and potential entrepreneurs. New initiatives such as the River District Association's Dream Launch competitive grants continue to expand the available offerings and increase community energy around entrepreneurship. The Launch Place and other partners have applied for a $450,000 Kauffman Foundation grant that would include funding for a full-time staff person to develop a regional work plan for service providers.



Babson Entrepreneurship Ecosystem Project

This does not mean, however, that the ecosystem is without flaws and gaps. The most often-cited shortcomings of the existing system are:

- It is not clear that potential entrepreneurs and the general public **understand what is available to them, and how and where to access it**.
- The lack of a written **work plan, overall strategy, or framework for cooperation** leading to **duplication of services**.
- There is not a **full-time point person** focused on small business assistance.

Other weak points in the system include a) the difficulty of scaling up services across a spread-out area; and b) an orientation among services providers toward activities in the city, not the county. This leads to a lack of appreciation of farmers, foresters, and machinery repair experts as being entrepreneurs.

Suggestions for Strengthening the Danville-Pittsylvania Entrepreneurial Ecosystem

The following ideas can help make the existing entrepreneurial ecosystem operate more efficiently and effectively.

- Hire an **experienced, full-time individual** to a) develop a work plan for the entire ecosystem, and/or b) serve as point person for assessment and triage of clients, directing them to the appropriate service provider(s). Having a separate, full-time person in charge of each duty above would be preferable.
- Create a written **strategy, work plan, or memorandum** laying out the roles and responsibilities of all service providers in the small business sphere. This does not need to be a binding, legal, or 'official' document, but does require buy-in from all players to agree on how each will communicate, collaborate, and divide the provision of client services. If the parties can agree on these points and follow a work plan, duplication of services and gaps in services will be reduced.
- Roll out and publicize a new **public website** that is being created to guide interested area residents to the appropriate service provider(s) and entry points for accessing services.

Additional suggestions for building a more comprehensive entrepreneurial ecosystem:

- Increase communication and involvement with the K-12 school systems regarding student exposure to entrepreneurship and the importance of small businesses in the region's economy.
- Increase mentoring of younger entrepreneurs.
- Stress inclusion of area farmers and foresters as entrepreneurs and key contributors to the local economy.

Incorporating these improvements will increase the ability of each service provider to contribute effectively to the overall system, as well as enhance the public's understanding of what entrepreneurship support services are available, and how and where to access them.

8. COMMERCIAL REAL ESTATE PRODUCT ANALYSIS

As Danville and Pittsylvania County continue to recruit industry and position the region for economic growth and development, it is important to maintain accurate documentation of the current inventory of assets available to serve this need. The following sections provide an overall assessment of the region's product, which includes existing sites and buildings to support future development. For purposes of concentrating the assessment on product that will support a larger impact to the economy, known sites in excess of 15 acres and buildings in excess of 15,000 SF were included. It is the intent of this Product Assessment to be utilized as a tool for internal knowledge, external marketing, and a consolidated resource for economic development.

The existing target industries to be supported and emerging industries to be explored, as recommended by Economic Leadership, were generally assessed for fitness at the industrial sites within the region. Utilizing high level online research, existing local industry consumption data, current and past prospect inquiry activity, VEDP resources and information provided by Danville and Pittsylvania County, and our professional experience the sites were evaluated based on existing assets and the required resource demand by such industries. This information is presented in a consolidated table that illustrates where certain sites may stand as more favorable than others while pursuing inquiries, as well as provides insight to where additional attention may be needed to bring sites to a more advantageous marketing position.

Sites

All known sites publically marketed by VEDP and the Region 15 acres and larger are included in this report. Appendix B includes general fact sheets of all existing and readily available infrastructure and assets at these industrial sites. Capacity information provided is total reserve capacity available in the system for future development (i.e. water, sewer, power, gas).

Buildings

The inventory table in Appendix C, provided by the City and County, lists buildings 15,000 SF and larger currently being marketed. Overall, the existing buildings are primarily located within the City, mostly within the River District. Repurposing of these buildings will be influenced by the future planning for redevelopment of the River District. Generally, there are not many available existing buildings located within the region's industrial parks.

The vast majority of the existing building stock was built to serve legacy industries, which leave strong foundations and infrastructure for redevelopment. These buildings are a valuable asset to those industry clusters seeking existing buildings for reduce startup time and cost. Since many of these buildings have been vacant for a long period of time, proper condition assessment and clean-up will be required to fully determine the upfit necessary to serve potential prospects.

VALUATION OF EXISTING SITES TO SERVE TARGETED INDUSTRY CLUSTERS

Based on the findings from the Economic Leadership report, namely Section 3 – Industry Cluster Analysis, there are a total of nine (9) market sectors identified as potential growth areas within the Danville-Pittsylvania County region. These are:

Existing Clusters to be Supported

- Plastics
- Upstream Chemical Products
- Food Processing
- Vulcanized and Fired Materials
- Wood Products

Emerging Clusters to be Explored

- Automotive
- Distribution and E-Commerce
- Business Services
- Agricultural Inputs and Services

For purposes of evaluating the existing industrial sites for site readiness to serve these market sectors, each of the industries listed above were categorized and evaluated by general resource capacity needs as defined below. The following definitions of high, medium and low resource capacity availability and/or need are provided:

Total Site Acreage:
High = 100+ acres
Medium = 25 to 100 acres
Low = 0 to 25 acres

Water:
High = 0.75+ MGD
Medium = 0.25 to 0.75 MGD
Low = 0 to 0.25 MGD

Sewer:
High = 0.75+ MGD
Medium = 0.25 to 0.75 MGD
Low = 0 to 0.25 MGD

Electricity:
High = 15+ MW
Medium = 5 to 15 MW
Low = 0 to 5 MW

Gas:
High = 400+ MCFH
Medium = 150-400 MCFH
Low = 0-150 MCFH

Major Highway Access:
High = 0-0.5 miles away
Medium = 0.5-1.5 miles away
Low = 1.5+ miles away

Rail:
High = onsite
Medium = 0-0.25 miles away
Low = 0.25+ miles away

Table 1: Resource Availability at Industrial Sites

Sites	Resources: Total Acreage	Water	Sewer	Electricity	Gas	Highway Access	Rail
SoVA Megasite at Berry Hill	High	High	High	High	High	High	High
Cane Creek Centre	High	High	High	High	Medium	High	High
Brosville Industrial Park	Medium	Medium	Medium	High	Low	High	Low
Ringgold West Industrial Park	Low	High	Medium	High	Medium	Low	High
Ringgold East Industrial Park	Medium	High	Medium	High	Medium	Low	High
Blairs Crossing	High	Medium	Low	Medium	Medium	High	Low
Cherrystone Industrial Park	High	High	Medium	Medium	Low	Medium	High
Gretna Industrial Park	Medium	High	High	Medium	Low	Medium	Low
Southern Virginia Multimodal Park (SVMP)	High	Medium*	High	Medium	Medium	Low	High
Cyber Park	High	High	High	Low	Medium	High	Low
Airside Industrial Park	Medium	Medium	Low	High	Medium	Medium	Low
Riverview Industrial Park	Medium	High	High	Medium	High	Medium	Low
Danville Expressway	High	Medium	Low	Low	Medium	High	Low
Coleman Site	High	High	High	Low	High	Medium	High
Dan River Technology Park Schoolfield Site	Medium	High	High	High	Medium	Low	High
995 Piney Forest Road	Low	High	Medium	High	Medium	Low	Low
Long Mill Site Property	Medium	High	High	High	Medium	High	Low
661 Kentuck Road	Medium	Medium	High	High	Medium	Medium	High

**Additional 6 MGD of non-potable water available.*

Based on high level online research, existing local industry consumption data, current and past prospect inquiry activity, VEDP resources, information provided by Danville and Pittsylvania County, and our professional experience, Table 2 below indicates general resource capacity needs for each industry cluster. Based on these capacity needs and the availability of resources at each of the sites shown above in Table 1, the sites equipped to serve these target industry clusters are summarized in Table 3.

Table 2: Industry Cluster Resource Needs

Industry Cluster	Site	Water	Sewer	Elec	Gas	Major Highway Access	Rail
Plastics	Low	Medium	Low	Medium	Low	Medium	Medium
Upstream Chemical Products	Low	Medium	Low	Medium	Low	Low	Medium
Food Processing	Medium	Low	Low	Low	Medium	Medium	Low
Vulcanized and Fired Materials	Low	Medium	Medium	Medium	Medium	Low	Medium
Wood Products	Medium	Medium	Low	Low	Medium	High	Medium
Automotive	High	High	High	High	Medium	High	Medium
Distribution and E-Commerce	Medium	Low	Low	Low	Medium	High	Low
Business Services	Low	Low	Low	Low	Low	Low	Low
Agricultural Inputs and Services	Medium	Medium	Low	Low	Low	Low	Low

Table 3: Industrial Sites Ready to Serve Target Industry Clusters

Sites	Clusters								
	Existing					Emerging			
	Plastics	Upstream Chemical Products	Food Processing	Vulcanized and Fired Materials	Wood Products	Automotive	Distribution and E-Commerce	Business Services	Agricultural Inputs and Services
SoVA Megasite at Berry Hill	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cane Creek Centre	✓	✓	✓	✓	✓	✓	✓	✓	✓
Brosville Industrial Park								✓	✓
Ringgold West Industrial Park		✓		✓				✓	
Ringgold East Industrial Park		✓		✓				✓	✓
Blairs Crossing			✓				✓	✓	✓
Cherrystone Industrial Park	✓	✓						✓	✓
Gretna Industrial Park								✓	✓
Southern Virginia Multimodal Park (SVMP)		✓		✓				✓	✓
Cyber Park			✓				✓	✓	✓
Airside Industrial Park			✓					✓	✓
Riverview Industrial Park			✓					✓	✓
Danville Expressway			✓				✓	✓	✓
Coleman Site			✓					✓	✓
Dan River Technology Park Schoolfield Site		✓		✓				✓	✓
995 Piney Forest Road								✓	
Long Mill Site Property*			✓				✓	✓	✓
661 Kentuck Road	✓	✓	✓	✓				✓	✓

**The Long Mill Site is unique in that it is located in the River District. The ED team should market this site to fit within the River District development masterplan.*

OBSERVATIONS

Considering the existing product and assets to serve future target industries, the following observations can be made from the above analysis and ongoing economic development efforts:

- Currently, sites are available to support each targeted existing and emerging industry cluster.
- SoVA Megasite at Berry Hill and Cane Creek Centre are the region's most resourceful sites, due to their size and utility capacities.
- The Cyber Park has emerged as the site of choice for industries that desire close proximity to the Region's workforce training.
- Food Processing, Business Services and Agricultural Inputs and Services are the most versatile industries and can be served by the most available sites existing in Danville and Pittsylvania County.
- Existing buildings and shell buildings equip the region with a valuable marketing tool to expedite start up time for potential industries.
- Those sites capable of serving only a few targeted clusters should be marketed and strategically reserved for such clusters, unless additional capital investment is planned to meet minimum resource needs of other targeted clusters.
- Presently, the City and County are exploring options for constructing industrial shell buildings within the Region. These buildings should be planned to accommodate identified industry clusters and designed to be flexible.
- To aid in marketing sites, information on resource availability should be current and consistent across vested parties including SVRA and VEDP.
- Key infrastructure improvements will be advantageous at certain sites to prevent inability to serve targeted industry clusters. Foreseeable setbacks include:
    - Electricity limitations at Cyber Park.
    - Water and sewer limitations at Southern Virginia Multimodal Park.
- To expedite stormwater permitting for development, Pittsylvania County should establish a local Virginia Stormwater Management Program (VSMP) or enter an agreement with the City of Danville which has an approved VSMP.
- Available data may not reflect the current prospect activity and related industry clusters in the Cyber Park as a result of the ongoing Advanced Manufacturing Training initiative.

Sources:

VEDP Website:
https://sites.vedp.org/

City of Danville GIS:
https://danvillegis.maps.arcgis.com/home/index.html

Pittsylvania County GIS:
https://www.pittsylvaniacountyva.gov/247/Real-Estate-GIS

Southern Virginia Regional Alliance Website:
https://www.gosouthernvirginia.com/sites-buildings/sites-buildings

Strategies for Today's U.S. Plastics Industry Site Selection:
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https://www.areadevelopment.com/consultant-insights/Q2-2019/current-food-industry-dynamics-influencing-site-selection.shtml

How New Age Distribution Centers are Affecting Site Selection
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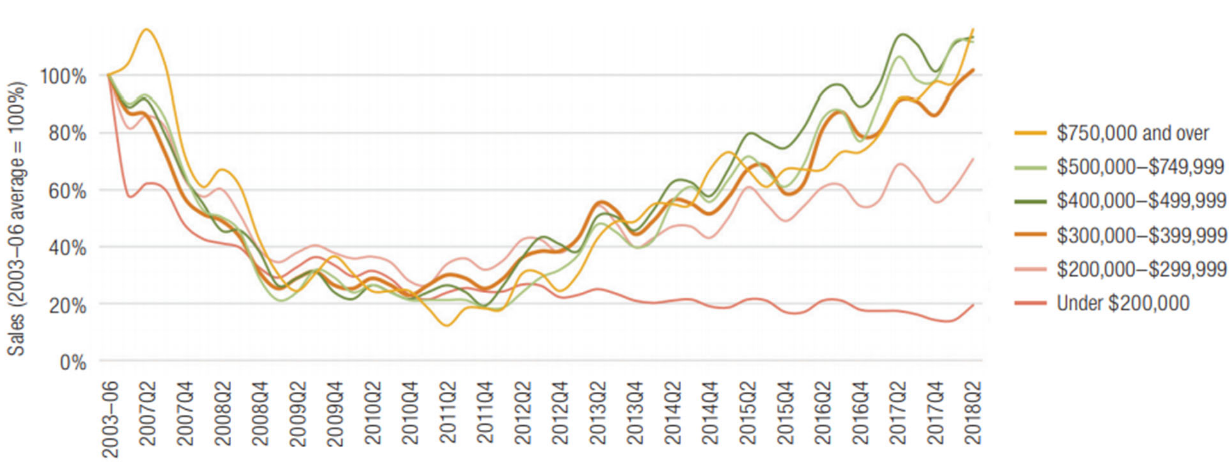
9. HOUSING MARKET ANALYSIS

Local housing challenges are heavily influenced by national trends. Every day we see headlines about America's housing shortage and rising prices for both buyers and renters. The nationwide problem of housing supply and affordability is intensified by the converging trends of household income stagnation, homebuilders targeting higher-income buyers to improve margins, and new consumer preferences. Housing continuing to increase in square footage and expected amenities, while the average household size continues to shrink. The chart below shows that new home sales by price range tracked together through the recession, and then diverged sharply in the recovery. Home sales under $200,000 have languished at just 20 percent of pre-recession volume, with home sales between $200,000 and $299,000 at about 70 percent of pre-recession volume, and higher-priced homes reaching full pre-recession levels.

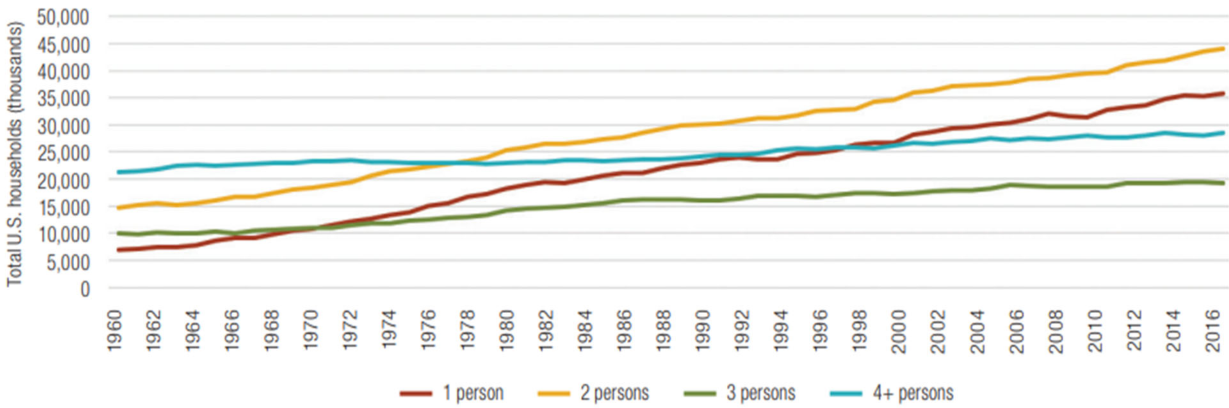
New Home Sales by Prices Relative to Pre-Recession Levels



Source: U.S. Census Bureau.
Note: Prices not adjusted for inflation.

Today's household occupants are also markedly different from prior generations. The chart below shows the growth in smaller household sizes since 1960. While the number of three- and four+ person households has remained relatively flat, the number of two-person households has tripled and the number of single-person households is close to five times the 1960 figure.

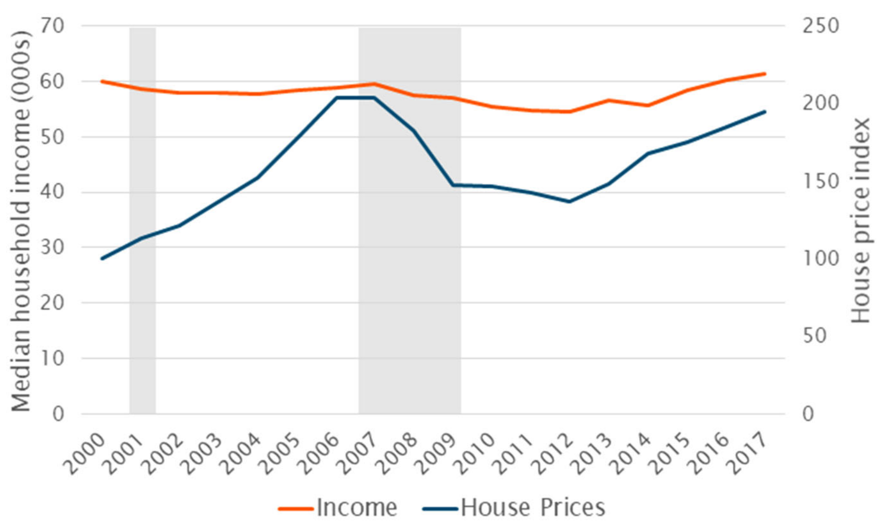
U.S. Household Growth by Number of Household Residents



Sources: U.S. Census Bureau; RCLCO.

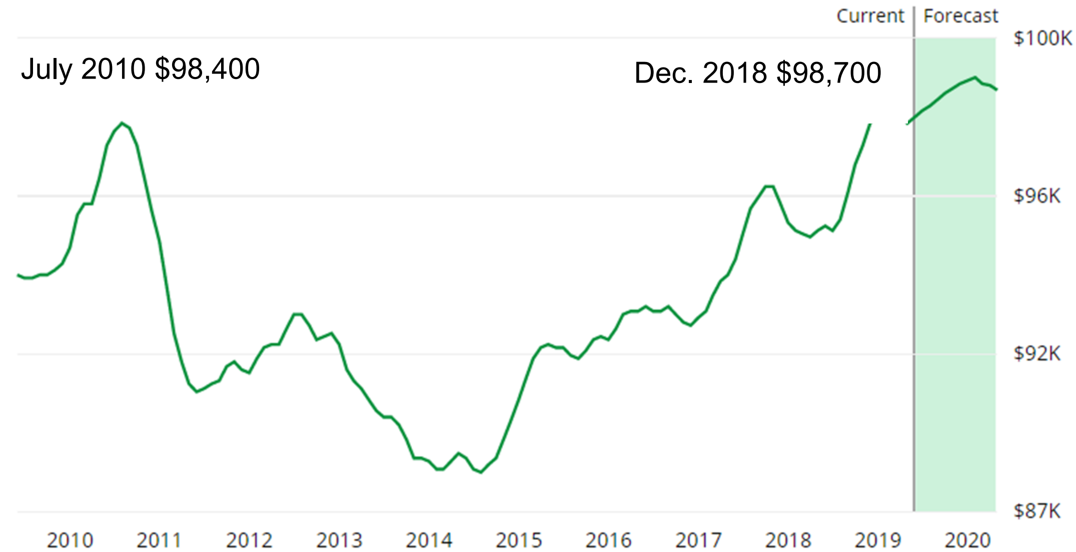
Two specific issues are hurting housing affordability. First, in the United States and locally, median household income has barely kept pace with rising costs. From 2010 to 2017, median household income in Pittsylvania County rose by 13.1 percent. Inflation between 2010 and 2017 was 12.4 percent, meaning that household incomes were effectively stagnant. In Danville City median household income increased by 16.8 percent between 2010 and 2017. Meanwhile, housing prices nationally are increasing much faster than inflation. In Pittsylvania County, the average single-family home value in 2010, after adjusting for inflation, was $110,601 compared to the December 2018 home value of $98,400. This shows that the county has not fully recovered from the price drops experienced during the recession.

Housing prices have risen faster than income
Real median household income & house price index



Source: Brookings Institution 2019

Pittsylvania County Average Home Value

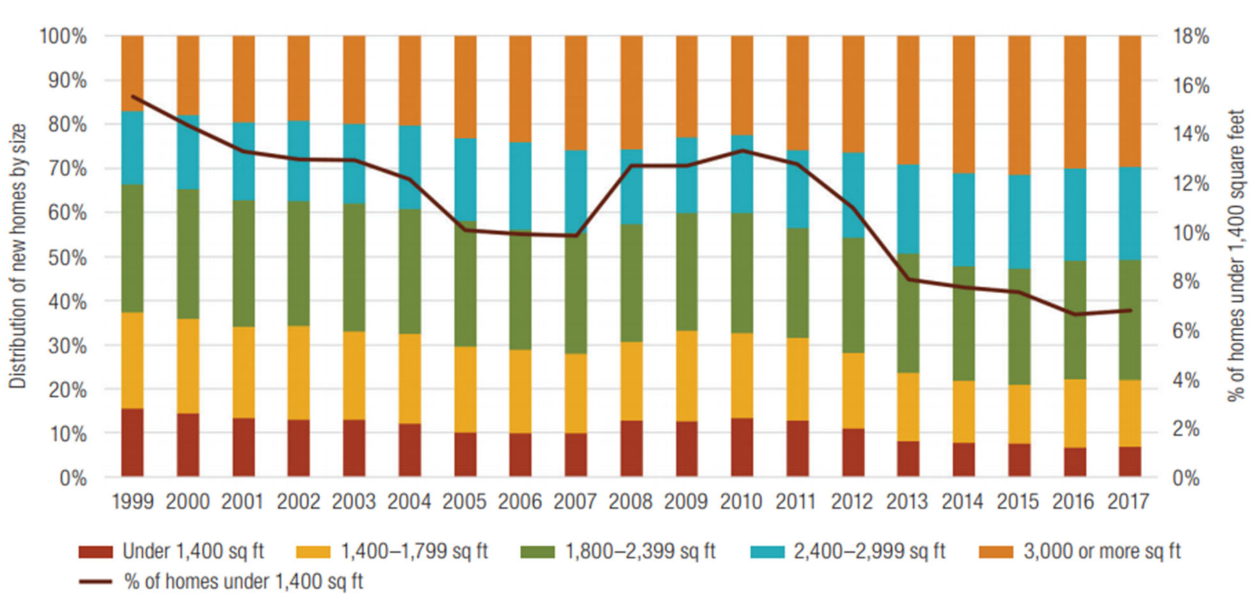


Source: Zillow Home Value Index, All Homes, data through April 2019

The rising price of housing is a product of many factors. New construction housing has continued to increase in square footage. Three-bedroom homes accounted for two-thirds of new housing in 1977; by 2017 that figure had dropped to less than half, with almost half of new homes having four or more bedrooms.

Overall square footage of new housing continues to increase with a higher percentage of new homes in excess of 2,400 square feet.

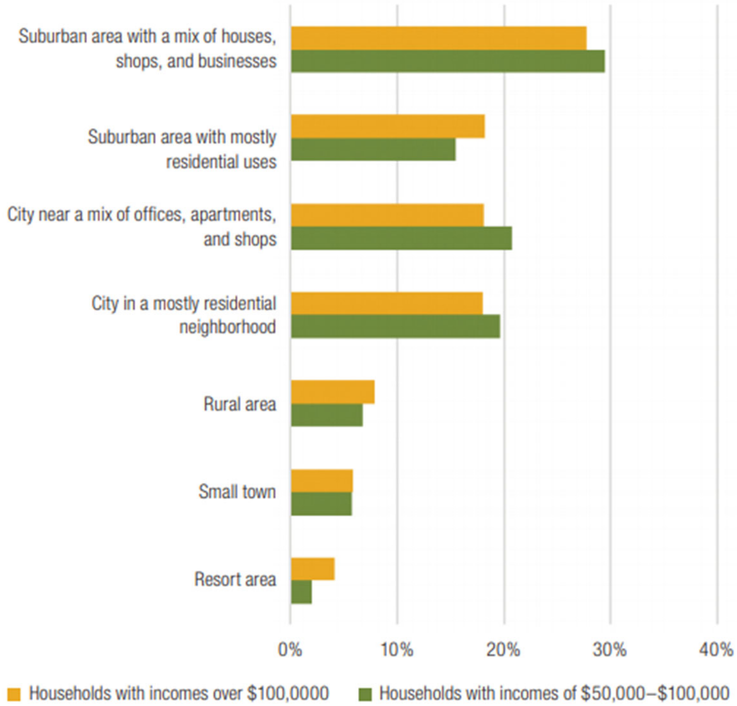
Distribution of U.S. New Homes by Size, 1999–2017



Sources: U.S. Census Bureau; RCLCO.

One of the trends impacting every industry is "customers in control". Younger consumers are more particular about their purchases and expect to be able to get exactly what they want. In a recent survey by RCLCO Real Estate Advisors, home buyers at all income levels want essentially the same things. Many homebuyers want a short commute, and to live close to shops, restaurants and other service businesses. This bodes well for smaller cities and micropolitans like Danville, who can offer less traffic congestion and ease of access, but the available housing must also meet the rest of buyers' wish lists.

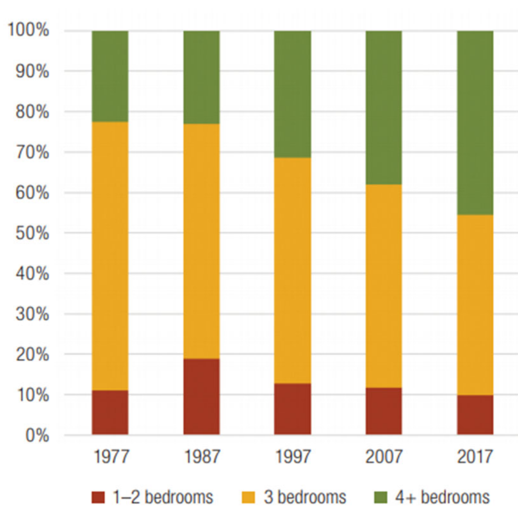
Consumer Preferences for Location



Source: 2018 RCLCO Housing Consumer Preference Survey.

Amenities such as pools, hiking/biking trails, fitness centers, and access to additional "community" services are rising in importance to home buyers of all income levels. These types of amenities are often found in multifamily products, often rental. In our focus groups over the past few years, younger buyers have also expressed preferences for open concept homes, with hardwood floors, gourmet kitchens, walk-in closets, and outdoor living spaces. These are features common to new housing, but almost unheard-of prior to 2000. This gives a huge advantage to communities that have experienced significant new home building. In high-demand locations younger buyers are more likely to buy for location and will renovate older homes, but this is less likely in less-than-prime locations.

New Construction by Bedroom Count, 1977–2017

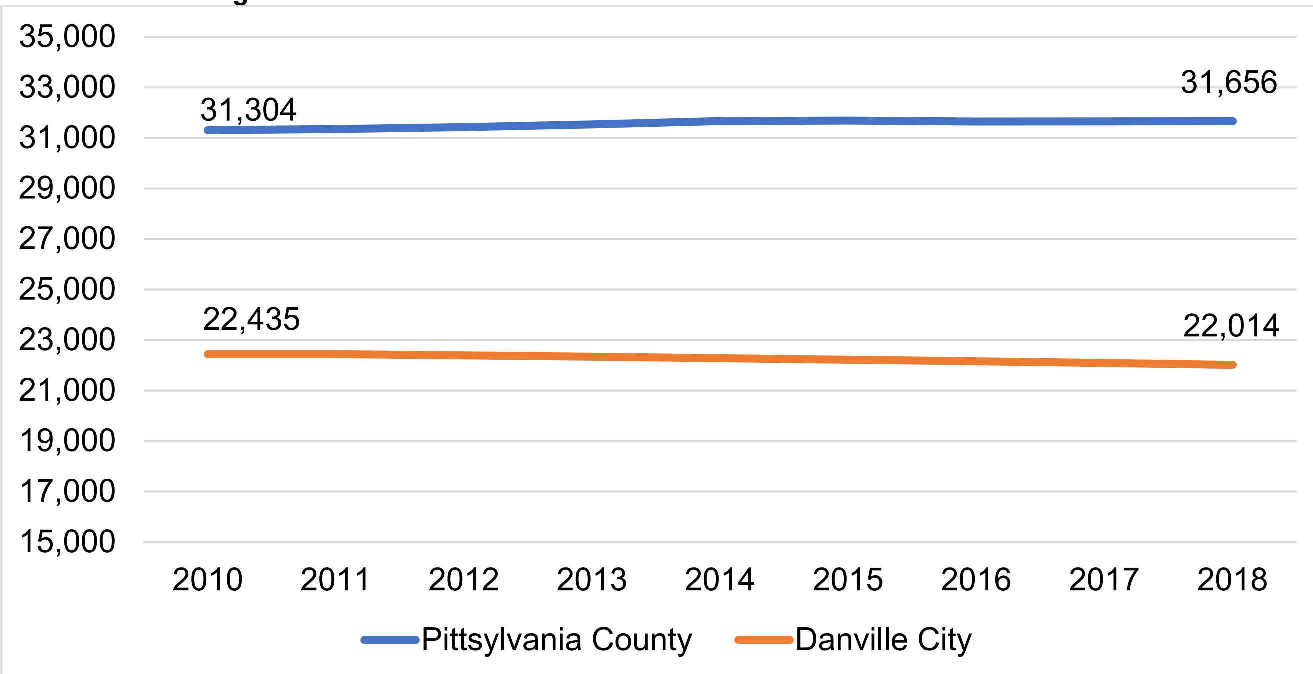


Sources: U.S. Census Bureau; RCLCO.

Pittsylvania County + Danville City Housing Assessment

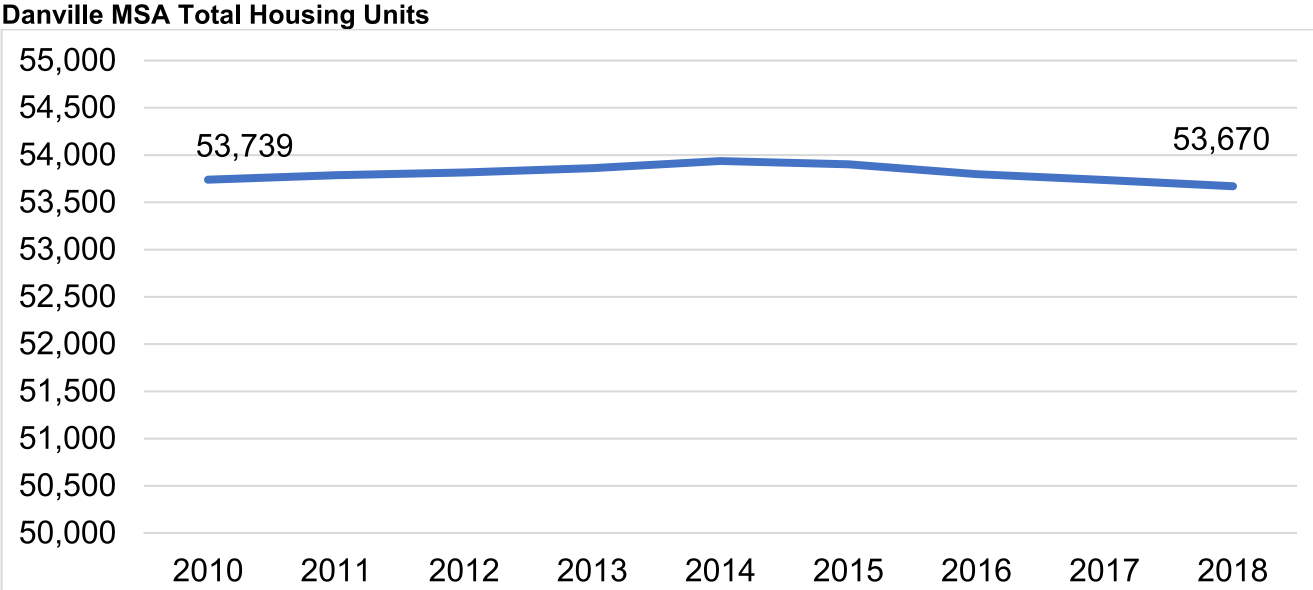
Pittsylvania County had 31,656 housing units in 2018 (US Census, Annual Estimates of Housing Units). Danville City had 22,014 housing units in 2018, for a combined total of 53,670 in the Danville MSA. **The area had a slight loss in the number of housing units from 2010 through 2018.** Housing unit growth from 2010-2018 in Virginia was 5.1 percent tracking the U.S. growth of 5.1 percent.

Number of Housing Units



Source: US Census, 2018. Annual Estimate of Housing Units

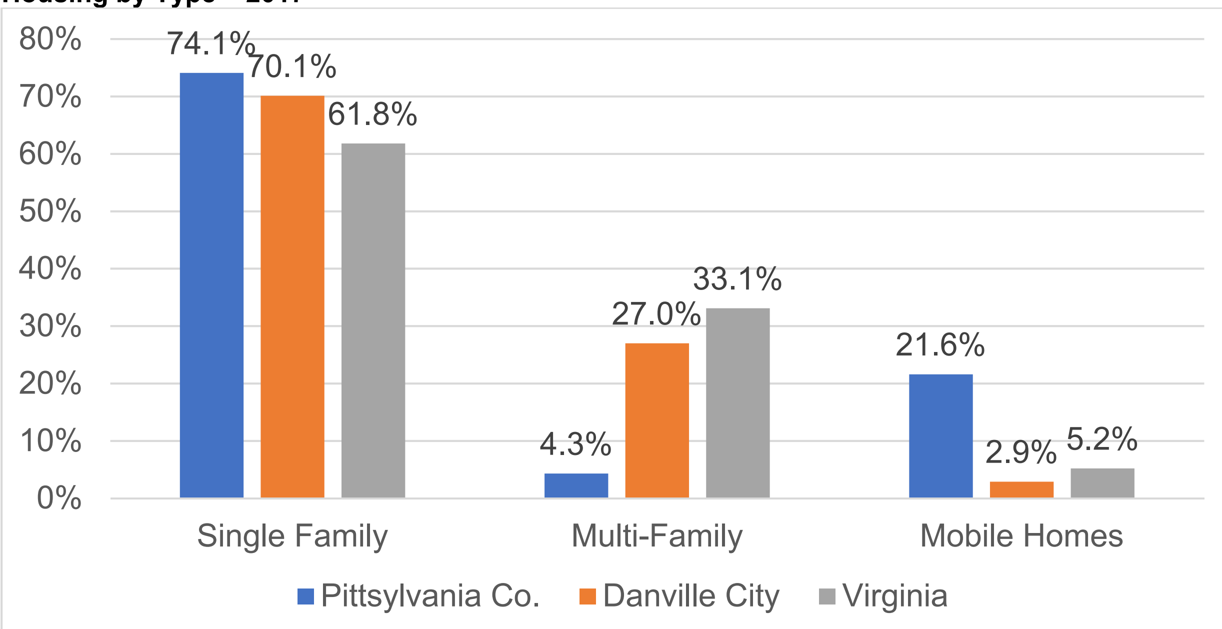
Danville MSA Total Housing Units



Source: US Census, 2018. Annual Estimate of Housing Units

The most recent census breakdown of housing units by type and financial characteristics is for 2017. Of the 53,000 housing units in 2017, almost three-quarters (72.5%) are single-family detached, which is greater than Virginia where 61.8 percent are single-family detached. 13.6 percent of the MSA housing stock is multi-family units, with most of them in Danville City. Mobile homes are a greater part of the county housing stock at 26.1 percent while accounting for 13.9 percent of the MSA housing. Renter-occupied housing accounts for 24.8 percent of total county housing units and 46.8% of city housing for a combined 33.8 percent in the MSA. The owner-occupancy rate is higher in the county at 75.2 percent. About half of housing in the city is owner-occupied at 53.2 percent. Virginia's owner-occupancy rate of 66.2 percent is the same as that of the Danville MSA.

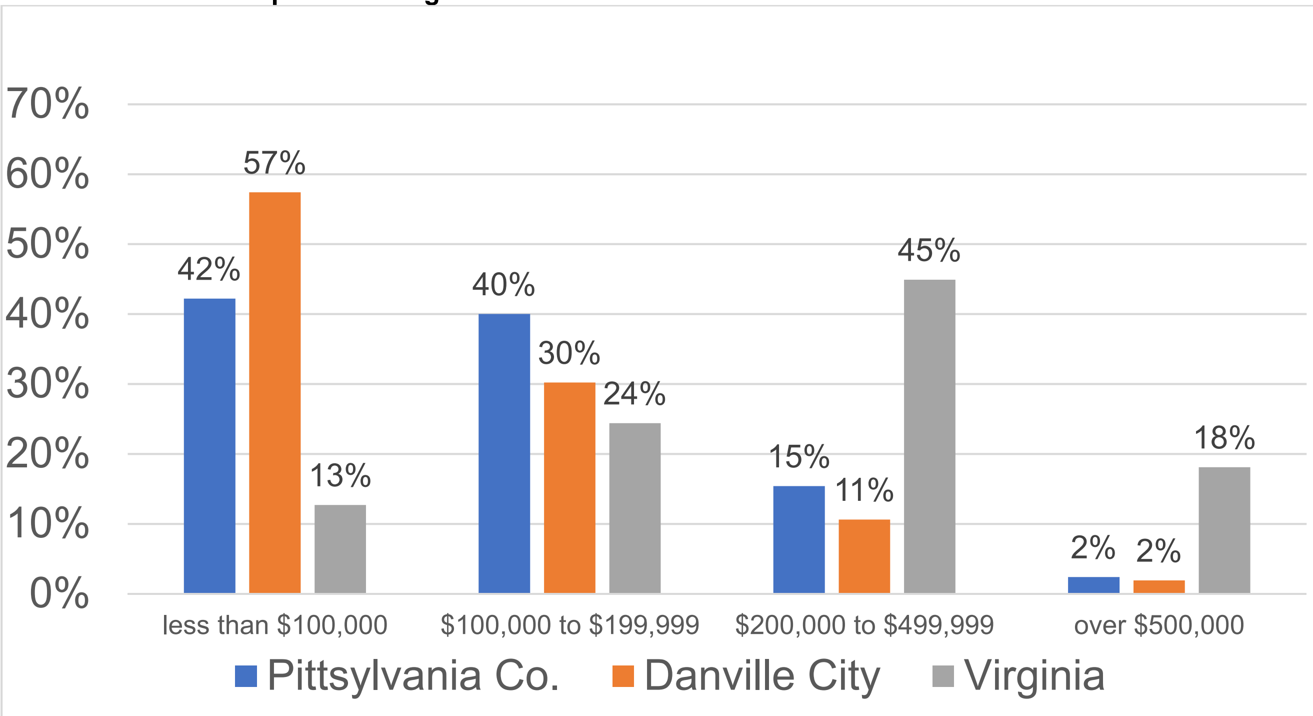
Housing by Type – 2017



Source: US Census, ACS 5 YR 2017

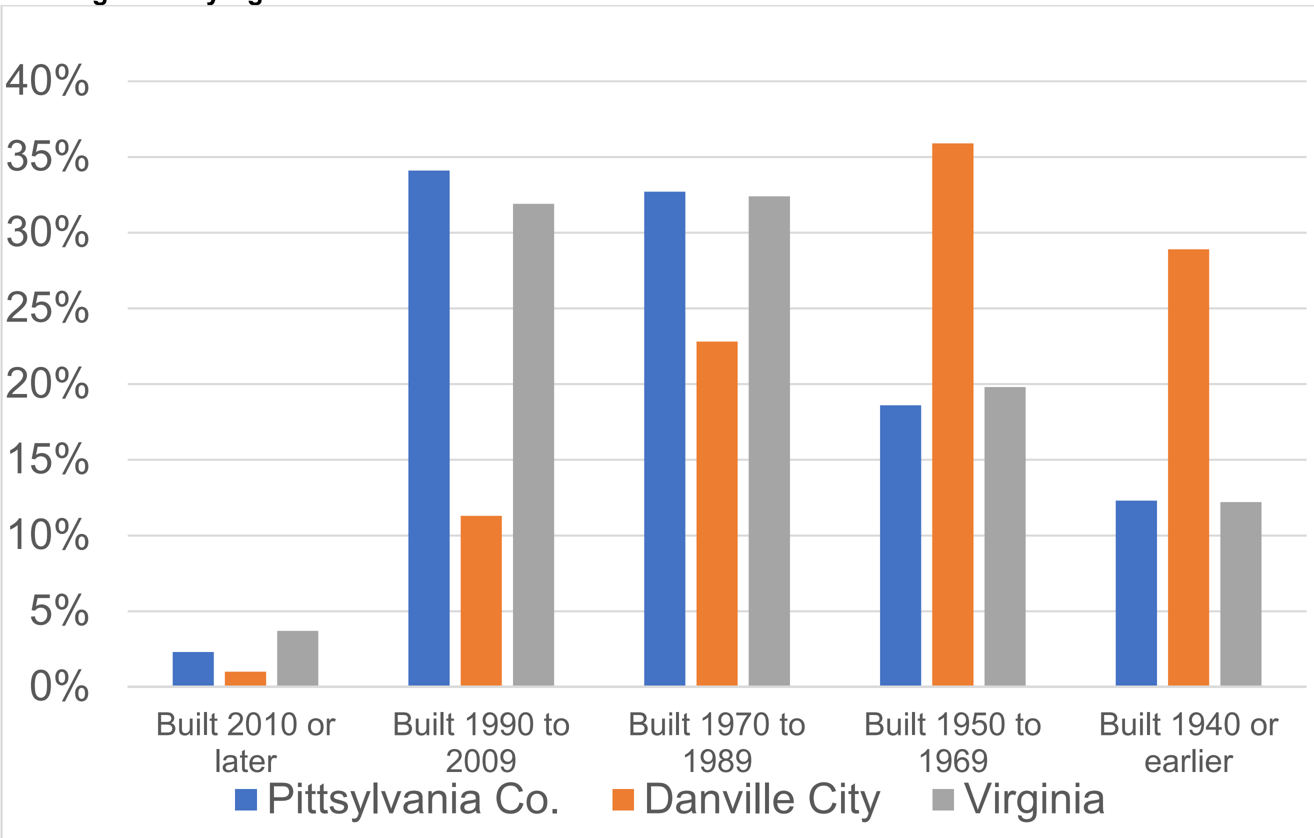
Information from Zillow research for property sales during 2018 shows that there were 1,426 sales of single-family houses, condos & townhouses in Danville City and 805 in Pittsylvania County. As of March 2019, the average price in Danville City was $69,700 and $120,900 in Pittsylvania County. Based on financial norms, these average price homes are affordable for a family earning under $45,000 a year. Almost 24 percent of Danville MSA households have an annual income between $25,000 and $45,000.

Value of Owner-Occupied Housing Units



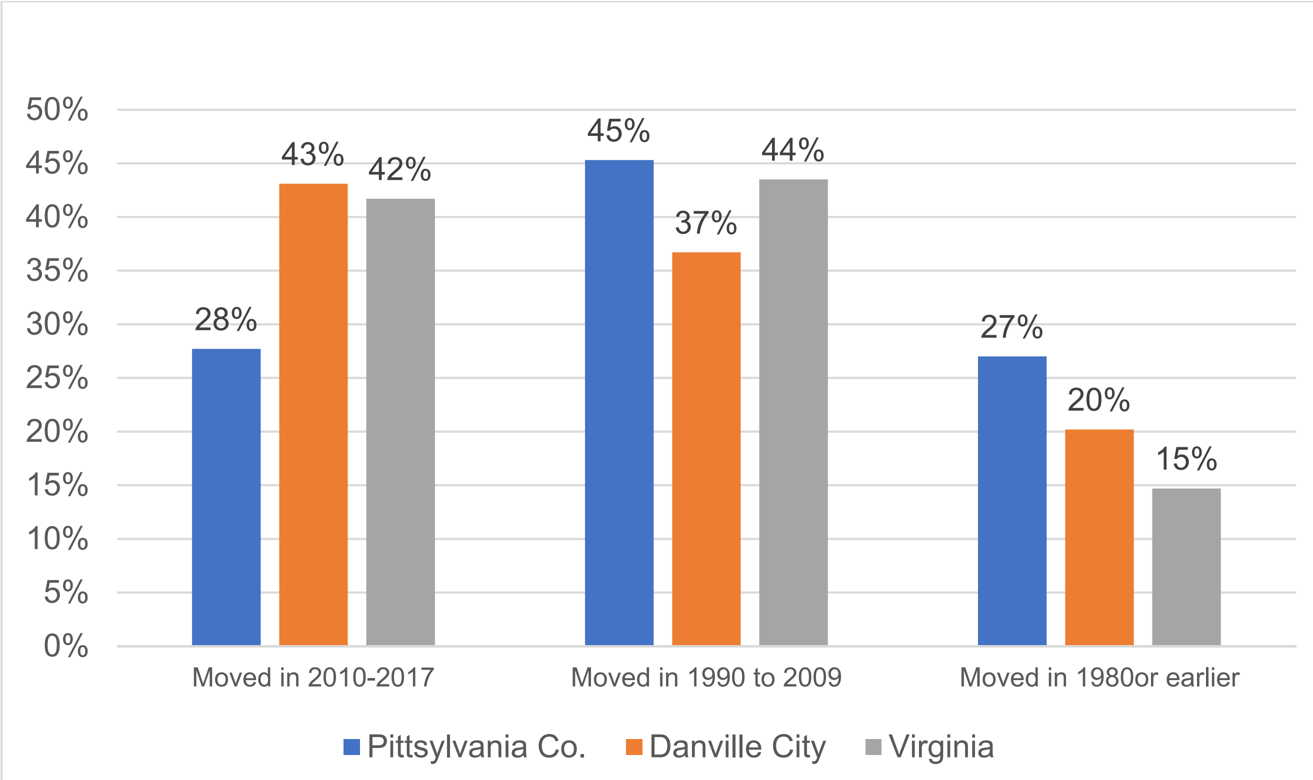
Source: US Census, ACS 5 YR 2017

Housing Units by Age



Source: US Census, ACS 5 YR 2017

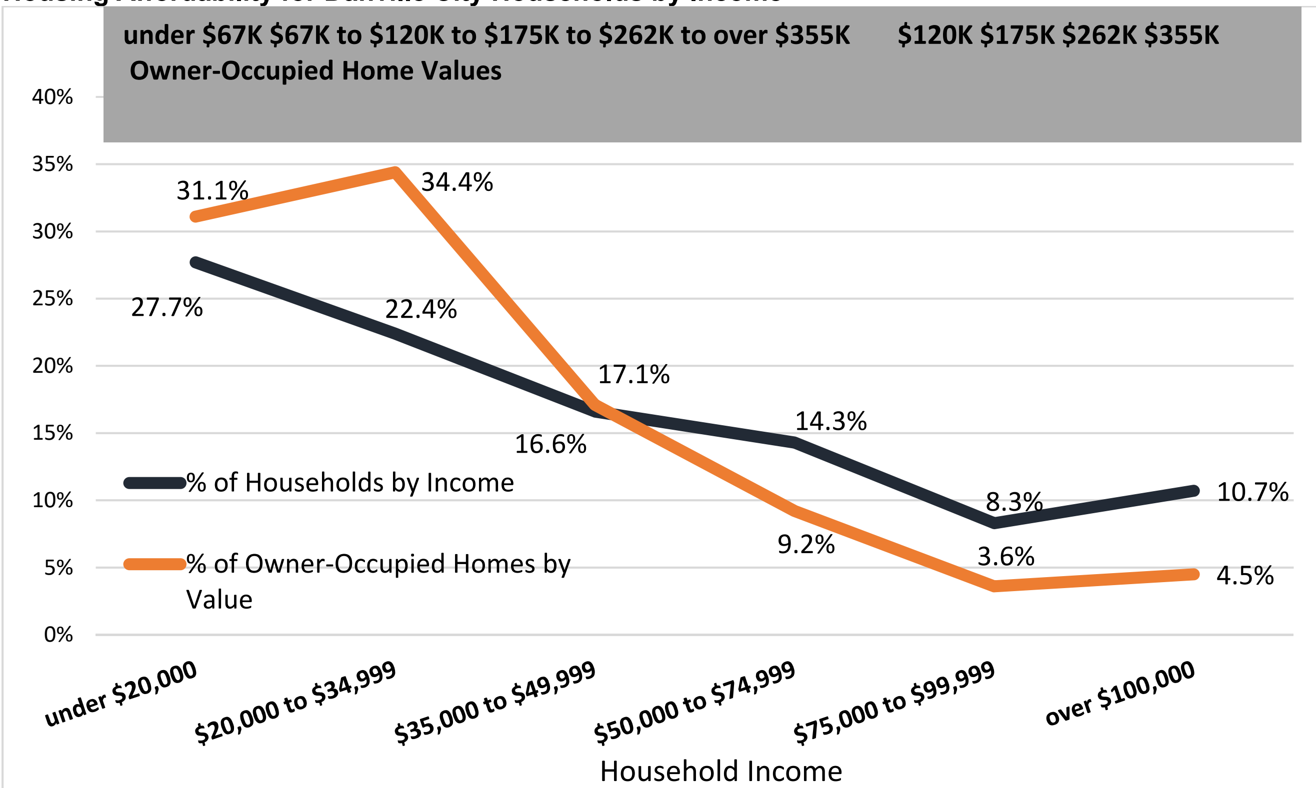
Year Householders Moved into Their Home



Source: US Census, ACS 5 YR 2017

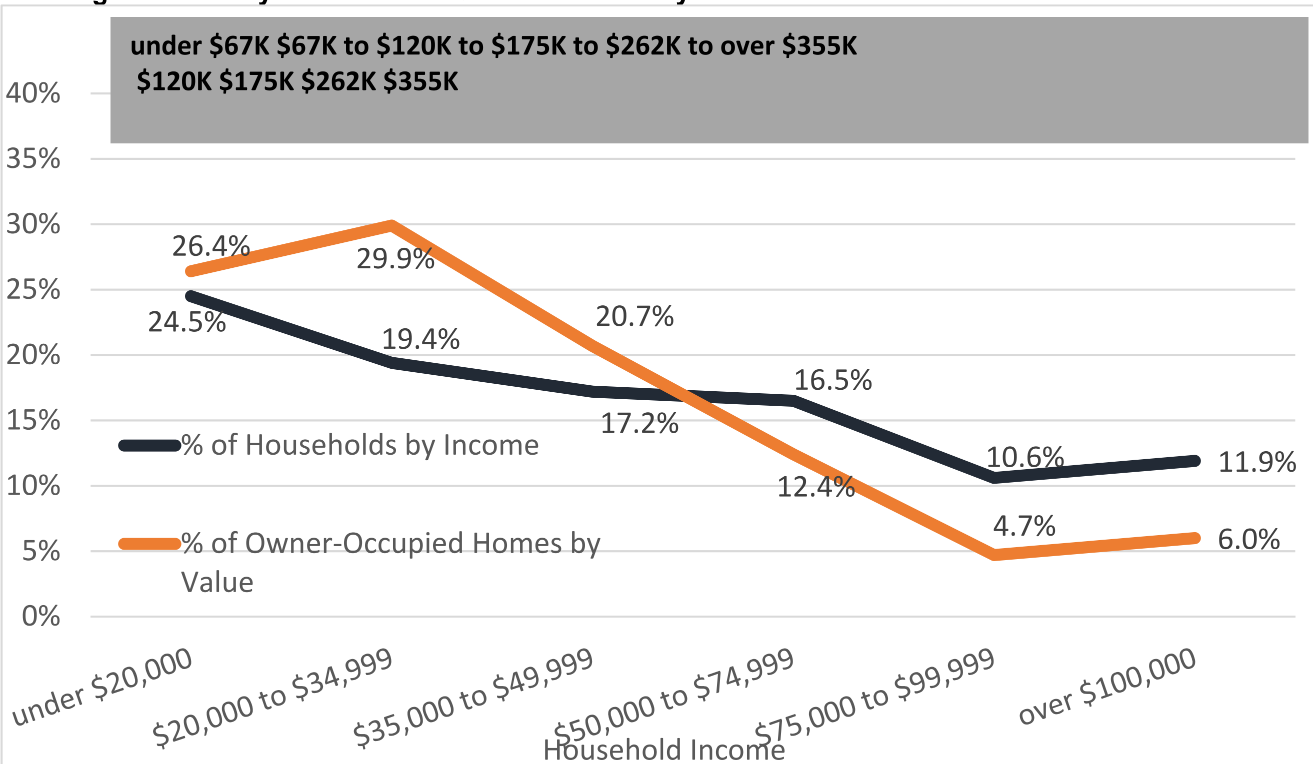
Housing affordability for owner-occupants in the Danville MSA is strong across all income levels. The chart below shows housing affordability at various income levels by the income needed to qualify for a conventional 30-year mortgage with a five percent down payment. 50.1 percent of Danville MSA households have incomes between $30,000 and $100,000 and can qualify for houses priced between $110,000 to $355,000. With a median owner-occupied home value in 2017 of $105,200, most Danville and Pittsylvania households can find affordable housing, but there is less choice at the upper end of the housing spectrum to attract more affluent families.

Housing Affordability for Danville City Households by Income



Source: US Census, ACS 5 YR 2017

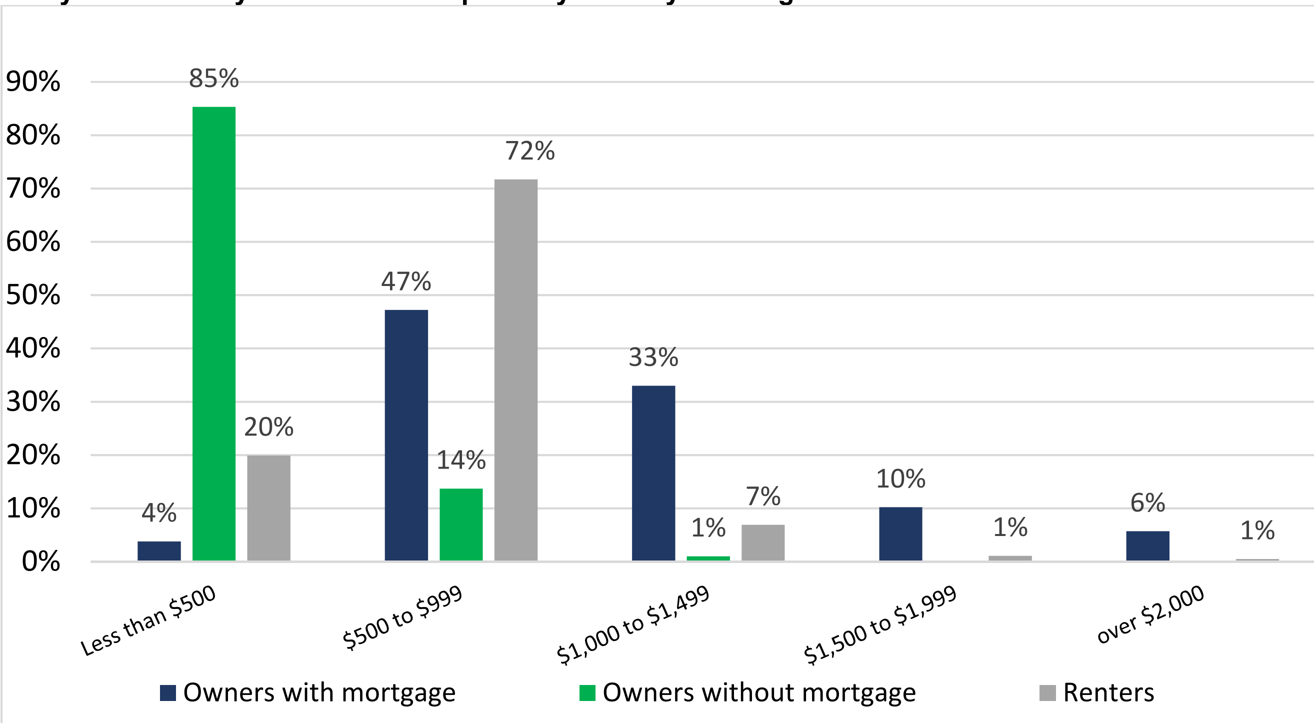
Housing Affordability for Danville MSA Households by Income



Source: US Census, ACS 5 YR 2017

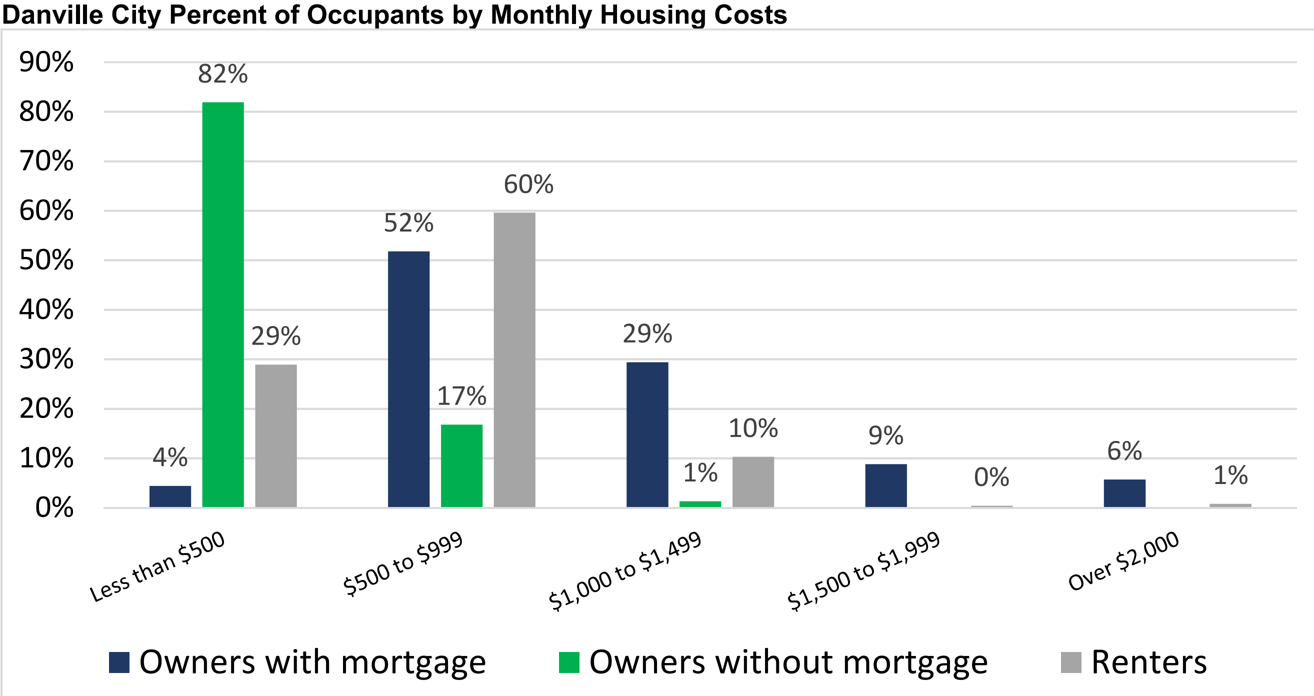
As the charts below show, renters tend to spend more of their income on housing costs than do all owner-occupants, while owner-occupants with a mortgage spend more in actual dollars. About half (47%) of all owner-occupants in the Danville MSA do not have a mortgage.

Pittsylvania County Percent of Occupants by Monthly Housing Costs



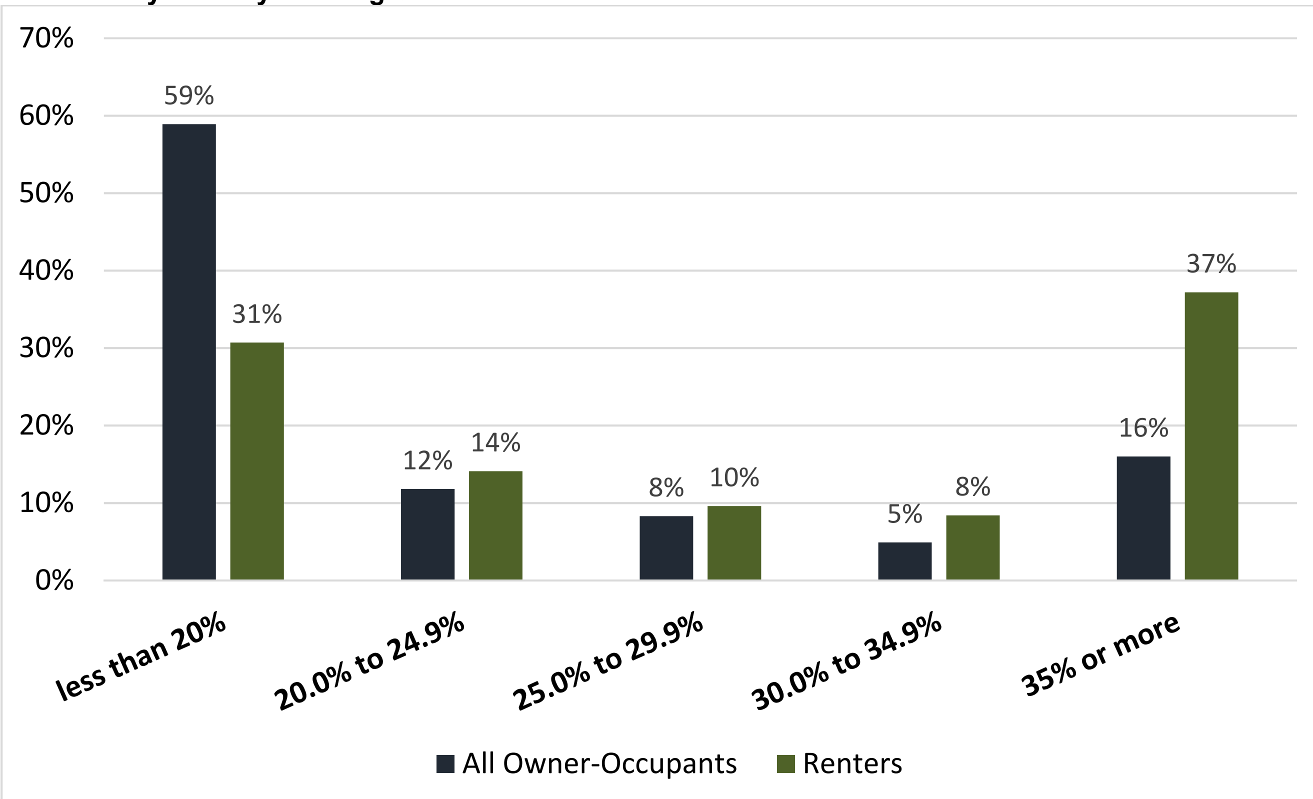
Source: US Census, ACS 5 YR 2017

Danville City Percent of Occupants by Monthly Housing Costs



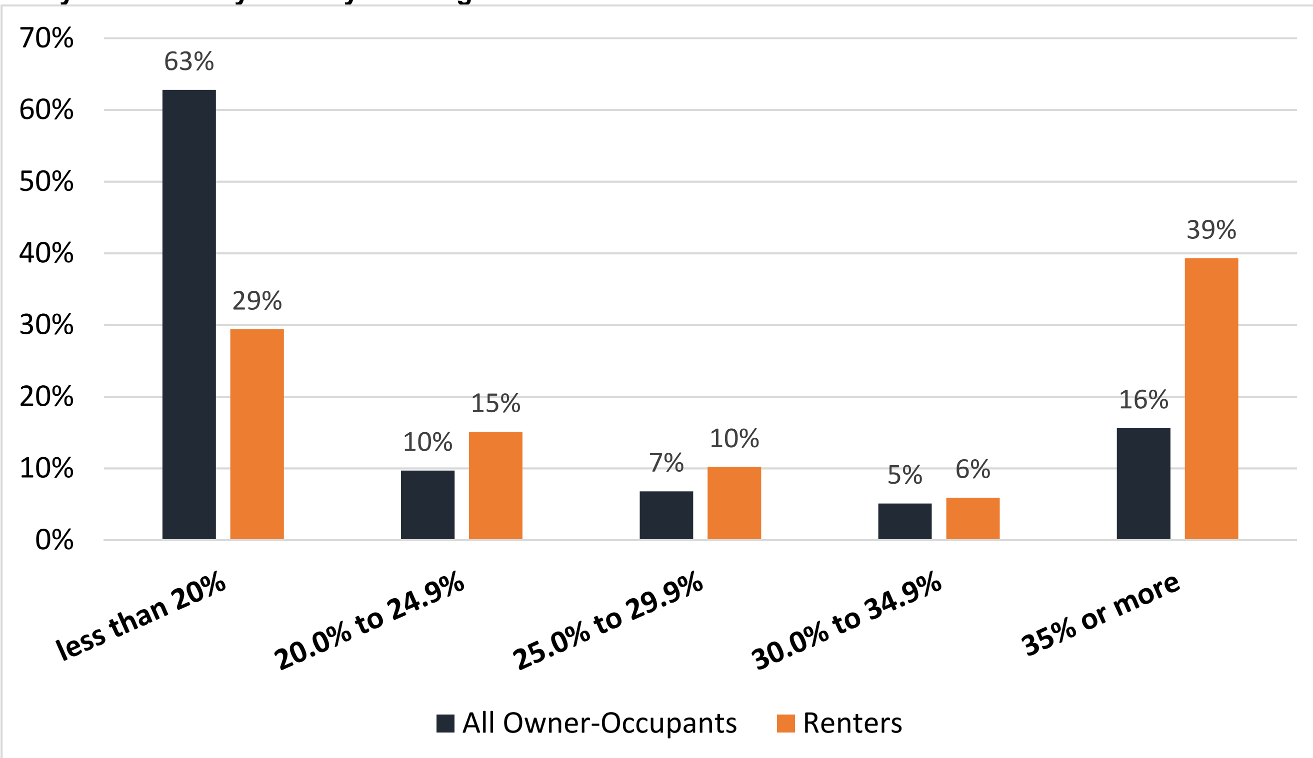
Source: US Census, ACS 5 YR 2017

Danville City Monthly Housing Cost as a Percent of Household Income



Source: US Census, ACS 5 YR 2017

Pittsylvania County Monthly Housing Cost as a Percent of Household Income



Source: US Census, ACS 5 YR 2017

Only 33.8 percent of Danville MSA occupied housing units are renter-occupied. Rental housing is more concentrated in Danville City at 46.8 percent of housing units, while Pittsylvania County has 24.8% of its housing units available for rent. According to the U.S. Census ACS 5 YR 2017 survey, the rental vacancy rate in the MSA was 5.6 percent, and the median rent for occupied units was $643. The chart below shows the monthly rental rate by unit size.

Danville City Rental Rates by Unit Size

Rental Rates	Studio/No Bedroom	One Bedroom	Two Bedroom	3 Bedroom
Less than $300	**31.9%**	**25.9%**	2.9%	6.0%
$300 to $499	**32.7%**	**40.9%**	17.6%	6.4%
$500 to $749	**28.3%**	**25.6%**	**56.4%**	**27.0%**
$750 to $999	7.1%	3.9%	14.8%	**32.0%**
$1,000 to $1,499	0%	0.9%	4.5%	18.5%
$1,500 or more	0%	1.3%	1.7%	2.2%
No cash rent	0%	1.5%	2.2%	7.8%

Source: www.towncharts.com based on US Census, ACS 1 YR 2017

Pittsylvania County Rental Rates by Unit Size

Rental Rates	Studio/No Bedroom	One Bedroom	Two Bedroom	3 Bedroom
Less than $300	**41.9%**	5.3%	3.6%	1.9%
$300 to $499	4.1%	**45.9%**	17.2%	10.0%
$500 to $749	**54.1%**	**25.1%**	**56.4%**	**27.3%**
$750 to $999	0%	6.6%	9.1%	**30.8%**
$1,000 to $1,499	0%	2.0%	1.6%	7.6%
$1,500 or more	0%	2.0%	1.0%	1.0%
No cash rent	0%	13.2%	11.1%	21.4%

Source: www.towncharts.com based on US Census, ACS 1 YR 2017

10. ANALYSIS OF CRITICAL FUNCTIONS IN THE ECONOMIC DEVELOPMENT SYSTEM

There is no single successful model for the structure of economic development organizations or how they are funded. They can be established as public government departments, arms of Chambers of Commerce, and other private or non-profit organizations. Funding can be purely public, purely private, or increasingly a mix of the two.

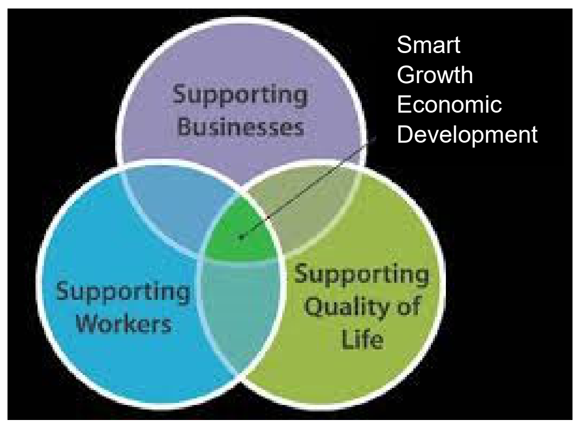
However, there is greater consensus around the major economic development activities that are undertaken within a given region. Nationally, the most common activities are:

1. Business Recruitment
2. Existing Business Retention & Expansion (BRE)
3. Workforce Development & Training
4. Small Business & Entrepreneurship Development
5. Tourism Development

To this list, a few other endeavors are frequently added:

- Land & building product development
- Downtown, neighborhood, and/or community revitalization
- Data research & analysis

In some locations, many or all of these duties are handled by one economic development agency. In others, different groups handle such duties as workforce development, small business assistance, and tourism development. The Danville-Pittsylvania County area is one in which many groups are involved in providing critical economic development services. Taken as a whole, how well are these most important duties being done? Where are the gaps and room for improvement in the system?



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Responsibility for Critical Economic Development Functions in the Region

The table below indicates those organizations most responsible for each of seven important economic development activities in the Danville-Pittsylvania area.

Activity	Responsible Parties
Business Recruitment	City, County, Southern Virginia Regional Alliance (SVRA)
Business Retention & Expansion	City, County, SVRA, Chamber
Workforce Development	Dan River Region Collaborative, West Piedmont Workforce Investment Board, Chamber, The Institute for Advanced Learning and Research, Danville Community College

Activity	Responsible Parties
Small Business & Entrepreneurship Development	The Launch Place, Small Business Development Center (SBDC), River District Association (RDA), City, Chamber, Danville Community College, Dan River Business Development Center incubator
Tourism Development	Experience Danville Pittsylvania County, Dan River State Crossings
Land & Building Product Development	City + County Regional Industrial Facility Authority (RIFA), RDA
Downtown Revitalization	RDA, City

Strengths of the Current Division of Economic Development Activities

Economic development professionals in the region believe that the current division of labor allows many talented organizations and individuals to **focus their expertise** as service providers, which benefits clients from inside and outside of the area. Interviewees also see very **good working relationships** among several of the key players. They believe that the energy, enthusiasm, and willingness to work together of current leaders in the city and county (and in their economic development offices) has created **better collaboration** than has existed in many years. One example given was leadership from the city and county's economic development offices to support additional funding for workforce development efforts, even though those activities are outside their purview.

Other strengths involve particular economic development initiatives within the region. One is the focus in **workforce training** on **precision machining**, which has put the region on the map when it comes to having an available, skilled workforce for related occupations. Another strength cited by interviewees is in **land product development**, with the Southern Virginia Megasite at Berry Hill considered to be competitive on a regional and national basis.

Weaknesses and Gaps in the Current Economic Development System

Interviewees expressed that while several key functions have been covered well, others have languished.

Tourism:

As one economic development leader noted, tourism in particular "has been a struggle." Virtually all participants agreed with the assessment that tourism efforts have generally not achieved their potential impact on the area's economy. Issues hindering the success of tourism efforts include:

- Tourism development duties have been shifted to different organizations too many times, which "slows progress" and slows the learning curve of staff.
- Efforts have suffered from insufficient funding and the lack of a dedicated funding source, making it a "political football."
- Tourism development goals have often been stand-alone, rather than integrated into an overall economic development program.

As one observer expressed, the area needs to "get serious about tourism," or perhaps not do it at all. Other weaknesses and gaps noted in existing efforts:

Workforce development – worker training and education programs feature large bureaucracies at the state and federal levels, making it confusing for those at the local level to understand. Implementation of the Workforce Innovation and Opportunity Act (WIOA) in particular has been passed around to different responsible parties, so that economic development partners have difficulty knowing who is in charge. Interviewees praise local players for trying to improve transparency in the system. However, it appears that efforts need to be increased to make the system understandable to the business community and economic development partners.

Marketing as a region – one partner believes that the area has done an “abysmal” job of economic development marketing with a unified voice, so that those outside the region still don’t have a good understanding of Danville-Pittsylvania’s assets and strengths. Improved broadcasting of the area’s positive realities via a clear, unified message could help match the right economic development prospects with local opportunities.

Communication and collaboration – although strong in some areas, there are gaps in working relationships. For example, Observers were uncertain what role the Chamber of Commerce has in business retention and economic development matters.

Joint strategy – the lack of a written plan outlining the roles and relationships of economic development partners can lead to duplication of efforts. A jointly-approved strategy could also include more specific, measurable outcomes across all of the critical functions within economic development, so that the region can better track its progress.

Suggestions for Improving Critical Economic Development Functions

A. Convene a **summit** to make decisions about the **future of tourism development efforts**, including all tourism and economic development players. Topics could include
a) the political and community will to invest sufficient resources into tourism development and make a long-term commitment; b) the most appropriate home for tourism efforts and staff; and c) how to tie tourism development activities and goals into the broader economic development program and its goals.

B. Create a **document** outlining the **roles, strategies for communication and collaboration, and measurable outcomes** for all critical economic development functions and the organizations carrying them out. This does not need to be a legal document or contract, but should have broad agreement from all parties. The document could be reviewed and updated every one to two years.

C. Improve the transparency of business incentive deliberations and decision-making in Danville and Pittsylvania by developing and implementing an **incentive project scoresheet**. This will provide a standard way to measure project impacts and their fit with community priorities, and provide for easier comparison between various projects. A scoresheet is intended to assist elected officials with evaluating incentive requests, but should in no way bind them to a particular decision or course of action.

D. Improve workforce development by
    a) Using organizations such as the Dan River Region Collaborative, Danville Community College (DCC), and the Institute for Advanced Learning and Research (IALR) to help the business community better understand how to access workforce training resources. The advanced manufacturing training programs developed by IALR and DCC have become national models. These organizations can facilitate greater transparency of local, state, and federal workforce programs and communication between economic development, workforce development, and private sector partners.
    b) Developing a strategy to **broaden workforce training success** in precision machining **to other in-demand fields**, understanding that resources are limited.
    c) Strengthening **communication with four-year universities** (such as Averett and Virginia Tech) to **develop career pathways requiring more education**. The training system has strong relationships with other entities helping to develop career pathways that are in demand regionally, but has not achieved the same level of collaboration with four-year schools.

In general, the Danville-Pittsylvania area is doing a good job of covering the most important economic development functions, operating under a model that utilizes a dispersed set of organizations. However, this loose alliance carries a greater risk that inefficiencies or service gaps might occur. It requires a more concerted effort to agree on roles and responsibilities, more frequent communication and collaboration. Improved communication will result in increased efficiency and better provision of client services.

C. Incentive Program Best Practices

Business incentive programs are widely used the United States. The vast majority of states, counties, and municipalities either use or will consider using incentives for business attraction, expansion, and retention efforts. However, incentives are also frequently criticized, with detractors pointing to weaknesses such as:

- Policies that are non-existent, vague, or not clearly tied to the community's goals;
- Incentives that are only used for large projects, not benefitting small or medium-sized businesses even if they are growing rapidly;
- Overall policies and individual project transactions that aren't transparent to the public;
- Insufficient reporting on and evaluation of incentive deals after the fact.

This section will explore best practices in the use of business incentives and suggest ways for the Pittsylvania-Danville area to improve its use of incentives.

Any high-quality incentive program will likely have been developed along this outline:

A. Make a Plan. That is, have elected officials adopt a written incentive policy that details what community goals the program hopes to achieve.

B. Measure the Impact. Larger incentive requests should undergo a fiscal impact analysis or broader economic impact analysis. Over time, the entire program should be reviewed at regular intervals to mark progress toward its stated goals.

C. Inform Policy Choices. The program and its policies should be adjusted as needed to improve performance.

<u>Five Leading Best Practices for Incentive Programs</u>

Looking at evaluations of incentive programs around the nation, these stand out as important best practices to consider.

1. Incentivize growing companies in growing industries. Particularly favor those projects that will improve existing, strong industry clusters within the region. Arlington County, Virginia uses Gazelle Grants for fast-growing companies in exporting sectors that are expanding. In Kentucky the Bluegrass Economic Advancement Movement makes grants to help small businesses begin exporting.

2. Promote small and mid-sized business growth. The number of new jobs created may be relatively small, but for smaller regions hitting singles and doubles rather than swinging for the fences can be more productive. Campbell County, Virginia's main incentive program requires only 25 new, full-time jobs, and its small business incentive requires just 5 new jobs. Chesterfield County, VA's expansion grant program is only for local businesses with less than 250 employees and less than $20 million in annual revenues.

3. Tie incentives to job training and skills improvement. No matter how well a particular company performs, improved workforce skills will represent a win for the local community. Writing cooperation with the community college into an incentive agreement and encouraging internships, site visits, job fairs, and other work exposure opportunities will provide a lasting benefit to the region.

4. Connect businesses to the community. Many companies new to an area are so busy that they miss opportunities to plug into the community and take advantage of regional assets. Required monitoring of agreements and regular follow-up discussions can help uncover issues that hinder a firm's progress.

Some places provide a free chamber of commerce membership as part of an incentive, and they introduce new firms to school leaders and community organizations.

5. Develop a transparent, written incentive policy that guides elected officials but does not bind them. The process of creating a policy should be public and transparent. The policy itself should be available to the public and the local business community.

Increasingly, local governments are using a scorecard or project evaluation matrix that helps officials see how each project stacks up compared with the community's priorities. Criteria can include wage levels, employee benefits, location, industry cluster, and expanding vs. new business. All incentive payments should be made only after annual project goals are met. Examples of project scorecards are provided below.

Transylvania County, NC

New Jobs in County	Total	Points
5-10	20	
11-25	25	
26 or above	30	
Total Possible	**30**	
Level of Capital Investment	**Total**	**Points**
Under $500,000	20	
$500,000 - $2,999,999	30	
$3,000,000 - $6,999,999	40	
$7,000,000 and above	50	
Total Possible	**50**	
Industry Cluster Business Type	**Total**	**Points**
Complimentary to Existing Business	5	
Company Headquarters	5	
Expansion of Existing Business	10	
Total Possible	**20**	

Total Score

Qualifying Categories

Minimum Score	Year Range	% of New Tax Revenue
60	2-4	50-70%
70	2-5	70-85%
80	2-6	80-90%

Chatham County, NC

Number of Jobs*					
N	**R**	**Total**	**Points**	**Quality of New Jobs**	**Points**
		10-20	2	Partial Employer Paid Health Insurance	1
		21-50	5	Entire Employer Paid Health Insurance	3
		51-75	7	Retirement Benefits	2
		76-100	9	Profit Sharing	2
		101-150	12	Employer Paid Vacation	2
		150-200	15	Employee-Owned Company	3
		200+	20	**Total Possible Points**	**10**
Total Possible Points			**20**		

Level of Capital Investment	Points	Wage Level of New Jobs	Points
Under $500,000	1	Less than County Average	0
$500,000 - $4,999,999	5	County Average	1
$5,000,000 - $14,999,999	10	Greater than County Average, But Less than State Average	4
$15,000,000 - $24,999,999	15	State Average	8
$25,000,000 and above	20	Above State Average	10
Total Possible Points	**20**	**Total Possible Points**	**10**

Number of Existing County Residents Hired	Points	Environmental Impact	Points
10-20	1	Reuse of Existing Building	4
21-50	3	Location in Downtown Area	3
51-75	5	Locations in Existing Industrial Area, not Central Carolina Business Campus	3
76-100	7	Location in Central Carolina Business Campus	5
101-200	9	Location in LEED Certified Building	4
200+	10	Other Sustainable Features (recycling, water reuse, etc.)	4
Total Possible Points	**10**	**Total Possible Points**	**15**

Industry Cluster/Business Type	Points
Presence in Identified Attraction Industry Cluster	6
Presence in Identified Retention Industry Cluster	3
Company Headquarters	6
Verified Supply-Chain/Sourcing Relationship with Existing Chatham County	3
Total Possible Points	**15**

Raleigh, NC

Criteria	Maximum Points
Number of Net New Full-Time Jobs • 1 – 5 (25 points) • 6 – 10 (15 points) • 11 or more (10 points)	25
Average Yearly Wage of Net New Full-Time Jobs • $28,630 - $35,999 (25 points) • $36,000 - $49,999 (10 points) • $50,000 or more (5 points)	25
Level of Capital Investment • $5,000 - $24,999 (25 points) • $25,000 - $49,999 (10 points) • $50,000 or more (5 points)	25
Company is an Eligible Business Sector	5
Within *Targeted Areas for Economic Development*	15
Located in a designated transit route or corridor (within a ¼ mile of transit stop)	5
Total Possible Points	**100**

Incentive Policy Suggestions for Pittsylvania County and Danville

The localities can create a more transparent and defensible incentive process by following the format of ***Make a Plan*** ➔ ***Measure the Impact*** ➔ ***Inform Policy Choices***. That is, the elected bodies could each adopt a written policy explaining the goals and broad guidelines for an incentive program, including project monitoring. They could require a fiscal or economic impact study for projects above a certain size, and regular evaluation (say, every 5 years) of the entire program. The evaluations should then be used to adjust incentive programs to better meet community goals and improve the jurisdiction's economic competitiveness.

In addition, the localities should explore use of a written **scorecard or matrix** for evaluating each project in relation to community goals. The scorecard's format would ideally be available to the public and existing local businesses, but could be confidential if desired.

Finally, for joint projects considered under the Regional Industrial Facility Authority (RIFA), Danville and Pittsylvania should agree on a **shared incentive policy and project scorecard**. This would ensure consistency of decision-making and improve communication with business prospects who will appreciate the local governments speaking with one voice.

D. Recommendations

The recommendations listed below are based on two future scenarios. The first set can be implemented with the current level of funding for economic development activities. The second set envisions what could be achieved with at least some increase in available resources.

Strategies Assuming the Current Level of Resources:

- For the entire range of existing economic development activities in Pittsylvania-Danville, **improve the regional partners' structure for working together by creating a formal alliance**. This should include all of the responsible parties listed in Section 10, carrying out programming from business recruitment to workforce development to tourism. This **alliance** could jointly develop a staff-level work plan or more formal document outlining the **scope of work, division of duties, basic strategies, and measurable goals** that can be agreed upon by all organizations involved. A joint council comprised of staff members could be formed to develop the work plan and meet perhaps twice a year to review progress.

- Strive to achieve even closer **collaboration** between **economic development and workforce development** service providers, with the goal of providing seamless client service for a business need that is likely to remain of greatest importance for years to come. Economic and workforce development staff should jointly develop and distribute a biannual, area-wide labor force and employment data update targeted to the business community.

- In workforce development, use current resources to **target existing residents** who commute outside of Pittsylvania-Danville. Improve existing residents' awareness of job opportunities within the local area.

- Focus business attraction efforts on the list of **targeted existing and emerging industry** clusters found in section 3. Stakeholders suggest prioritizing those sectors that are most resilient to economic fluctuations.

- Improve the transparency of business incentive deliberations and decision-making in Danville and Pittsylvania by developing **written incentives policies**, including a **shared policy** agreed on by both jurisdictions for use with Regional Industry Facility Authority (RIFA) projects. Use of an **incentive project scoresheet or matrix** will provide a standard way to measure project impacts and their fit with community priorities, and provide for easier comparison between various projects. A scoresheet is intended to assist elected officials with evaluating incentive requests, but should in no way bind them to a particular decision or course of action.

- Use **supply chain data** to connect local firms, and to target new supplier firms. Develop a phone call outreach program to top area employers and implement a targeted visitation program. Stakeholders suggest exploring the defense sector supply chain to take advantage of a resilient sector that is already strong across Virginia.

- To boost the agriculture and food processing sectors, explore development of **shared cold and frozen storage facilities**. Pursue grant funds for this purpose.

- Improve **education opportunities for forest landowners** (on topics such as forest land stewardship and management) by providing an information packet and offering of Generation NEXT workshops to any landowner newly applying for land use taxation status.

- Convene a **summit** to chart a new course and pursue consensus on a higher level of commitment for **tourism development**. An updated tourism plan should focus on bringing in more outside dollars to the area. Moving tourism activities to Danville's Office of Economic Development and integrating them into the department's other programs appears to be the most logical fit.

- Continue to focus on improvement of **broadband internet access and cell phone coverage** throughout the entire area. Pursue state and federal funding to expand these systems and control costs for end users.

- Roll out and publicize a public **website** providing a road map of services available to current and potential **entrepreneurs**. Include a portal to this website on every partner's web home page.

- Consider **housing** incentives and other policy changes to promote new construction, including higher-range single-family homes and attached housing products. Target outreach to developers of mixed-use, planned communities.

- In addition to housing, collaborate with regional organizations to elevate community discussions and actions to improve these important **quality of life issues**:
  Public school education
  Early childhood development
  Healthcare
  Poverty
  Childcare

- **Development sites** capable of serving only a few targeted clusters should be marketed and **strategically reserved for such clusters**, unless additional capital investment is planned to meet minimum resource needs of other targeted clusters.

- Recruitment efforts for the **SoVA Megasite** at Berry Hill should be focused on industries with significant acreage and utility needs.

- The Megasite area within Berry Hill should be reserved for **transformative projects** with large investment and employment.

- Conduct additional planning to determine the full build-out and expansion potential of the **Cyber Park** as it has emerged as the site of choice for industries that desire close proximity to the Region's workforce training cluster.

- To aid in **marketing sites and buildings**, ensure product information and "messaging" is current and consistent across all platforms and with all vested parties (i.e. VEDP, SVRA, utility providers, etc.).

- To **expedite stormwater permitting for development**, Pittsylvania County should establish a local Virginia Stormwater Management Program (VSMP) or enter an agreement with the City of Danville which has an approved VSMP.

Strategies Assuming Some Increase in Resources:

- For the economic development alliance work plan described above, creation of a **shared dashboard** for internal use by all economic development partners would increase the ability to measure progress toward agreed-upon goals.

- To improve reporting on the status of the workforce to the business community, elected officials and the general public, collaboration between economic and workforce development offices could include **joint funding and publication of an annual employer survey and labor shed analysis**, and hosting of a **public/private workforce summit** every two years.

- To target residents commuting outside of Pittsylvania-Danville, use new resources for **social media, online, and billboard campaigns** promoting local, available jobs.

- Increase **joint marketing of the region** with one, unified message. The message should be a positive narrative of a region already transforming its economy and its future, targeted to economic development influencers and business clients outside the region.

- Pursue a **dedicated funding stream for tourism development** programming. Danville levies lodging and meals taxes but uses these revenues for numerous purposes unrelated to tourism. Dedicating a portion of this revenue annually to professional tourism development efforts would be an important positive step.

- Fund and hire an **experienced, full-time point person** to coordinate a shared strategy for improving the **entrepreneurial ecosystem**.

- Establish a new, **annual economic information event** co-sponsored by the City of Danville and Pittsylvania County to bring together elected and appointed leaders from both jurisdictions. Focus on evaluation of economic progress metrics for the entire area.

- Improve **electrical infrastructure at the Cyber Park** to increase capacity for continued growth.

- Invest in selected building and site improvements at the **Schoolfield** and **Southern Virginia Multimodal Park (SVMP)** sites to **improve attractiveness**.

- Coordinate with Norfolk-Southern to **improve rail infrastructure** serving **SVMP** and the **SoVA Megasite** at Berry Hill.

Surpassing all of the area-specific recommendations above, perhaps the greatest challenge is achieving communication and cooperation when numerous economic development partners are participating in the same ecosystem. There are many approaches to aligning the efforts of multiple players, but one helpful framework is the Collective Impact Model, originally developed at Stanford University. Collective Impact occurs when a group of actors from different sectors commits to a common agenda in order to solve a specific problem. This structure for collaboration requires buy-in on five principles:

6. A common agenda;
7. Shared measurement systems;
8. Mutually reinforcing activities;
9. Continuous communication;
10. One or more backbone support organization(s).

Regardless of the specific model that is used, Pittsylvania-Danville's varied economic development activities can benefit from clear and mutually agreed-upon goals, defined roles and duties for each group, metrics to evaluate program success, and open channels of communication.

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Appendix A

Traded Cluster Industry Groupings

Appendix A – Traded Cluster Industry Groupings

Industry	Traded Cluster Grouping
Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	Aerospace Vehicles and Defense
Aircraft Manufacturing	Aerospace Vehicles and Defense
Aircraft Engine and Engine Parts Manufacturing	Aerospace Vehicles and Defense
Other Aircraft Parts and Auxiliary Equipment Manufacturing	Aerospace Vehicles and Defense
Guided Missile and Space Vehicle Manufacturing	Aerospace Vehicles and Defense
Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing	Aerospace Vehicles and Defense
Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing	Aerospace Vehicles and Defense
Crop Production	Agricultural Inputs and Services
Animal Production	Agricultural Inputs and Services
Cotton Ginning	Agricultural Inputs and Services
Soil Preparation, Planting, and Cultivating	Agricultural Inputs and Services
Crop Harvesting, Primarily by Machine	Agricultural Inputs and Services
Postharvest Crop Activities (except Cotton Ginning)	Agricultural Inputs and Services
Farm Labor Contractors and Crew Leaders	Agricultural Inputs and Services
Farm Management Services	Agricultural Inputs and Services
Support Activities for Animal Production	Agricultural Inputs and Services
Nitrogenous Fertilizer Manufacturing	Agricultural Inputs and Services
Fertilizer (Mixing Only) Manufacturing	Agricultural Inputs and Services
All Other Miscellaneous Textile Product Mills	Apparel
Cut and Sew Apparel Contractors	Apparel
Men’s and Boys’ Cut and Sew Apparel Manufacturing	Apparel
Women’s, Girls’, and Infants’ Cut and Sew Apparel Manufacturing	Apparel
Other Cut and Sew Apparel Manufacturing	Apparel
Apparel Accessories and Other Apparel Manufacturing	Apparel
Iron Foundries	Automotive
Steel Investment Foundries	Automotive
Steel Foundries (except Investment)	Automotive
Nonferrous Metal Die-Casting Foundries	Automotive
Aluminum Foundries (except Die-Casting)	Automotive

Other Nonferrous Metal Foundries (except Die-Casting)	Automotive
Custom Roll Forming	Automotive
Automobile Manufacturing	Automotive
Light Truck and Utility Vehicle Manufacturing	Automotive
Heavy Duty Truck Manufacturing	Automotive
Motor Vehicle Body Manufacturing	Automotive
Motor Vehicle Gasoline Engine and Engine Parts Manufacturing	Automotive
Motor Vehicle Electrical and Electronic Equipment Manufacturing	Automotive
Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing	Automotive
Motor Vehicle Brake System Manufacturing	Automotive
Motor Vehicle Transmission and Power Train Parts Manufacturing	Automotive
Motor Vehicle Seating and Interior Trim Manufacturing	Automotive
Motor Vehicle Metal Stamping	Automotive
Other Motor Vehicle Parts Manufacturing	Automotive
Military Armored Vehicle, Tank, and Tank Component Manufacturing	Automotive
All Other Transportation Equipment Manufacturing	Automotive
Medicinal and Botanical Manufacturing	Biopharmaceuticals
Pharmaceutical Preparation Manufacturing	Biopharmaceuticals
In-Vitro Diagnostic Substance Manufacturing	Biopharmaceuticals
Biological Product (except Diagnostic) Manufacturing	Biopharmaceuticals
Taxi Service	Business Services
Limousine Service	Business Services
All Other Transit and Ground Passenger Transportation	Business Services
Passenger Car Leasing	Business Services
Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	Business Services
All Other Legal Services	Business Services
Payroll Services	Business Services
Architectural Services	Business Services
Landscape Architectural Services	Business Services
Engineering Services	Business Services
Drafting Services	Business Services
Administrative Management and General Management Consulting Services	Business Services
Human Resources Consulting Services	Business Services

Process, Physical Distribution, and Logistics Consulting Services	Business Services
Other Management Consulting Services	Business Services
Other Scientific and Technical Consulting Services	Business Services
Translation and Interpretation Services	Business Services
All Other Professional, Scientific, and Technical Services	Business Services
Offices of Bank Holding Companies	Business Services
Offices of Other Holding Companies	Business Services
Corporate, Subsidiary, and Regional Managing Offices	Business Services
Facilities Support Services	Business Services
Employment Placement Agencies	Business Services
Executive Search Services	Business Services
Professional Employer Organizations	Business Services
Telephone Answering Services	Business Services
Telemarketing Bureaus and Other Contact Centers	Business Services
Convention and Trade Show Organizers	Business Services
Bituminous Coal and Lignite Surface Mining	Coal Mining
Bituminous Coal Underground Mining	Coal Mining
Anthracite Mining	Coal Mining
Support Activities for Coal Mining	Coal Mining
Telephone Apparatus Manufacturing	Communications Equipment and Services
Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	Communications Equipment and Services
Other Communications Equipment Manufacturing	Communications Equipment and Services
Primary Battery Manufacturing	Communications Equipment and Services
Cable and Other Subscription Programming	Communications Equipment and Services
Wireless Telecommunications Carriers (except Satellite)	Communications Equipment and Services
Satellite Telecommunications	Communications Equipment and Services
All Other Telecommunications	Communications Equipment and Services
Water Supply and Irrigation Systems	Construction Products and Services
Steam and Air-Conditioning Supply	Construction Products and Services

Industrial Building Construction	Construction Products and Services
Oil and Gas Pipeline and Related Structures Construction	Construction Products and Services
Power and Communication Line and Related Structures Construction	Construction Products and Services
Other Heavy and Civil Engineering Construction	Construction Products and Services
Asphalt Paving Mixture and Block Manufacturing	Construction Products and Services
Asphalt Shingle and Coating Materials Manufacturing	Construction Products and Services
Cement Manufacturing	Construction Products and Services
Concrete Block and Brick Manufacturing	Construction Products and Services
Concrete Pipe Manufacturing	Construction Products and Services
Lime Manufacturing	Construction Products and Services
Gypsum Product Manufacturing	Construction Products and Services
Cut Stone and Stone Product Manufacturing	Construction Products and Services
Mineral Wool Manufacturing	Construction Products and Services
All Other Miscellaneous Nonmetallic Mineral Product Manufacturing	Construction Products and Services
Power Boiler and Heat Exchanger Manufacturing	Construction Products and Services
Metal Tank (Heavy Gauge) Manufacturing	Construction Products and Services
Plumbing Fixture Fitting and Trim Manufacturing	Construction Products and Services
Fabricated Pipe and Pipe Fitting Manufacturing	Construction Products and Services
Furniture Merchant Wholesalers	Distribution and Electronic Commerce
Home Furnishing Merchant Wholesalers	Distribution and Electronic Commerce
Photographic Equipment and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Office Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Computer and Computer Peripheral Equipment and Software Merchant Wholesalers	Distribution and Electronic Commerce
Other Commercial Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Ophthalmic Goods Merchant Wholesalers	Distribution and Electronic Commerce
Other Professional Equipment and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Metal Service Centers and Other Metal Merchant Wholesalers	Distribution and Electronic Commerce

Coal and Other Mineral and Ore Merchant Wholesalers	Distribution and Electronic Commerce
Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Household Appliances, Electric Housewares, and Consumer Electronics Merchant Wholesalers	Distribution and Electronic Commerce
Other Electronic Parts and Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Construction and Mining (except Oil Well) Machinery and Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Farm and Garden Machinery and Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Industrial Machinery and Equipment Merchant Wholesalers	Distribution and Electronic Commerce
Industrial Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Service Establishment Equipment and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers	Distribution and Electronic Commerce
Sporting and Recreational Goods and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Toy and Hobby Goods and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers	Distribution and Electronic Commerce
Printing and Writing Paper Merchant Wholesalers	Distribution and Electronic Commerce
Stationery and Office Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Industrial and Personal Service Paper Merchant Wholesalers	Distribution and Electronic Commerce
Drugs and Druggists' Sundries Merchant Wholesalers	Distribution and Electronic Commerce
Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers	Distribution and Electronic Commerce
Men's and Boys' Clothing and Furnishings Merchant Wholesalers	Distribution and Electronic Commerce
Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers	Distribution and Electronic Commerce
Footwear Merchant Wholesalers	Distribution and Electronic Commerce

Poultry and Poultry Product Merchant Wholesalers	Distribution and Electronic Commerce
Fish and Seafood Merchant Wholesalers	Distribution and Electronic Commerce
Meat and Meat Product Merchant Wholesalers	Distribution and Electronic Commerce
Fresh Fruit and Vegetable Merchant Wholesalers	Distribution and Electronic Commerce
Other Farm Product Raw Material Merchant Wholesalers	Distribution and Electronic Commerce
Plastics Materials and Basic Forms and Shapes Merchant Wholesalers	Distribution and Electronic Commerce
Other Chemical and Allied Products Merchant Wholesalers	Distribution and Electronic Commerce
Petroleum Bulk Stations and Terminals	Distribution and Electronic Commerce
Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)	Distribution and Electronic Commerce
Wine and Distilled Alcoholic Beverage Merchant Wholesalers	Distribution and Electronic Commerce
Farm Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Book, Periodical, and Newspaper Merchant Wholesalers	Distribution and Electronic Commerce
Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Tobacco and Tobacco Product Merchant Wholesalers	Distribution and Electronic Commerce
Paint, Varnish, and Supplies Merchant Wholesalers	Distribution and Electronic Commerce
Other Miscellaneous Nondurable Goods Merchant Wholesalers	Distribution and Electronic Commerce
Business to Business Electronic Markets	Distribution and Electronic Commerce
Wholesale Trade Agents and Brokers	Distribution and Electronic Commerce
Electronic Shopping and Mail-Order Houses	Distribution and Electronic Commerce
General Warehousing and Storage	Distribution and Electronic Commerce
Refrigerated Warehousing and Storage	Distribution and Electronic Commerce

Farm Product Warehousing and Storage	Distribution and Electronic Commerce
Other Warehousing and Storage	Distribution and Electronic Commerce
Commercial Air, Rail, and Water Transportation Equipment Rental and Leasing	Distribution and Electronic Commerce
Construction, Mining, and Forestry Machinery and Equipment Rental and Leasing	Distribution and Electronic Commerce
Office Machinery and Equipment Rental and Leasing	Distribution and Electronic Commerce
Other Commercial and Industrial Machinery and Equipment Rental and Leasing	Distribution and Electronic Commerce
All Other Business Support Services	Distribution and Electronic Commerce
Packaging and Labeling Services	Distribution and Electronic Commerce
Petroleum Lubricating Oil and Grease Manufacturing	Downstream Chemical Products
Synthetic Dye and Pigment Manufacturing	Downstream Chemical Products
Paint and Coating Manufacturing	Downstream Chemical Products
Adhesive Manufacturing	Downstream Chemical Products
Soap and Other Detergent Manufacturing	Downstream Chemical Products
Polish and Other Sanitation Good Manufacturing	Downstream Chemical Products
Surface Active Agent Manufacturing	Downstream Chemical Products
Toilet Preparation Manufacturing	Downstream Chemical Products
Explosives Manufacturing	Downstream Chemical Products
Custom Compounding of Purchased Resins	Downstream Chemical Products
Photographic Film, Paper, Plate, and Chemical Manufacturing	Downstream Chemical Products
All Other Miscellaneous Chemical Product and Preparation Manufacturing	Downstream Chemical Products
Metal Kitchen Cookware, Utensil, Cutlery, and Flatware (except Precious) Manufacturing	Downstream Metal Products
Saw Blade and Handtool Manufacturing	Downstream Metal Products
Prefabricated Metal Building and Component Manufacturing	Downstream Metal Products
Fabricated Structural Metal Manufacturing	Downstream Metal Products
Metal Window and Door Manufacturing	Downstream Metal Products
Sheet Metal Work Manufacturing	Downstream Metal Products
Ornamental and Architectural Metal Work Manufacturing	Downstream Metal Products
Metal Can Manufacturing	Downstream Metal Products
Other Metal Container Manufacturing	Downstream Metal Products

Hardware Manufacturing	Downstream Metal Products
Small Arms Ammunition Manufacturing	Downstream Metal Products
Ammunition (except Small Arms) Manufacturing	Downstream Metal Products
Small Arms, Ordnance, and Ordnance Accessories Manufacturing	Downstream Metal Products
All Other Miscellaneous Fabricated Metal Product Manufacturing	Downstream Metal Products
Research and Development in Nanotechnology	Education and Knowledge Creation
Research and Development in Biotechnology (except Nanobiotechnology)	Education and Knowledge Creation
Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	Education and Knowledge Creation
Research and Development in the Social Sciences and Humanities	Education and Knowledge Creation
Junior Colleges	Education and Knowledge Creation
Colleges, Universities, and Professional Schools	Education and Knowledge Creation
Business and Secretarial Schools	Education and Knowledge Creation
Computer Training	Education and Knowledge Creation
Professional and Management Development Training	Education and Knowledge Creation
Flight Training	Education and Knowledge Creation
Apprenticeship Training	Education and Knowledge Creation
Language Schools	Education and Knowledge Creation
Exam Preparation and Tutoring	Education and Knowledge Creation
All Other Miscellaneous Schools and Instruction	Education and Knowledge Creation
Educational Support Services	Education and Knowledge Creation
Professional Organizations	Education and Knowledge Creation
Colleges, Universities, and Professional Schools (State Government)	Education and Knowledge Creation
All Other Schools and Educational Support Services (State Government)	Education and Knowledge Creation
Colleges, Universities, and Professional Schools (Local Government)	Education and Knowledge Creation
All Other Schools and Educational Support Services (Local Government)	Education and Knowledge Creation
Hydroelectric Power Generation	Electric Power Generation and Transmission
Fossil Fuel Electric Power Generation	Electric Power Generation and Transmission
Nuclear Electric Power Generation	Electric Power Generation and Transmission
Solar Electric Power Generation	Electric Power Generation and Transmission
Wind Electric Power Generation	Electric Power Generation and Transmission

Geothermal Electric Power Generation	Electric Power Generation and Transmission
Biomass Electric Power Generation	Electric Power Generation and Transmission
Other Electric Power Generation	Electric Power Generation and Transmission
Electric Bulk Power Transmission and Control	Electric Power Generation and Transmission
Hazardous Waste Collection	Environmental Services
Other Waste Collection	Environmental Services
Hazardous Waste Treatment and Disposal	Environmental Services
Solid Waste Combustors and Incinerators	Environmental Services
Other Nonhazardous Waste Treatment and Disposal	Environmental Services
Materials Recovery Facilities	Environmental Services
All Other Miscellaneous Waste Management Services	Environmental Services
US Postal Service	Federal Government Services
Federal Government, Civilian, Excluding Postal Service	Federal Government Services
Federal Government, Military	Federal Government Services
Monetary Authorities-Central Bank	Financial Services
Savings Institutions	Financial Services
Other Depository Credit Intermediation	Financial Services
Credit Card Issuing	Financial Services
Sales Financing	Financial Services
Consumer Lending	Financial Services
Real Estate Credit	Financial Services
International Trade Financing	Financial Services
Secondary Market Financing	Financial Services
All Other Nondepository Credit Intermediation	Financial Services
Mortgage and Nonmortgage Loan Brokers	Financial Services
Financial Transactions Processing, Reserve, and Clearinghouse Activities	Financial Services
Other Activities Related to Credit Intermediation	Financial Services
Investment Banking and Securities Dealing	Financial Services
Securities Brokerage	Financial Services
Commodity Contracts Dealing	Financial Services
Commodity Contracts Brokerage	Financial Services

Securities and Commodity Exchanges	Financial Services
Miscellaneous Intermediation	Financial Services
Portfolio Management	Financial Services
Investment Advice	Financial Services
Trust, Fiduciary, and Custody Activities	Financial Services
Miscellaneous Financial Investment Activities	Financial Services
Open-End Investment Funds	Financial Services
Other Financial Vehicles	Financial Services
Credit Bureaus	Financial Services
Finfish Fishing	Fishing and Fishing Products
Shellfish Fishing	Fishing and Fishing Products
Other Marine Fishing	Fishing and Fishing Products
Seafood Product Preparation and Packaging	Fishing and Fishing Products
Dog and Cat Food Manufacturing	Food Processing and Manufacturing
Other Animal Food Manufacturing	Food Processing and Manufacturing
Flour Milling	Food Processing and Manufacturing
Rice Milling	Food Processing and Manufacturing
Malt Manufacturing	Food Processing and Manufacturing
Wet Corn Milling	Food Processing and Manufacturing
Soybean and Other Oilseed Processing	Food Processing and Manufacturing
Fats and Oils Refining and Blending	Food Processing and Manufacturing
Breakfast Cereal Manufacturing	Food Processing and Manufacturing
Beet Sugar Manufacturing	Food Processing and Manufacturing
Cane Sugar Manufacturing	Food Processing and Manufacturing
Nonchocolate Confectionery Manufacturing	Food Processing and Manufacturing
Chocolate and Confectionery Manufacturing from Cacao Beans	Food Processing and Manufacturing
Confectionery Manufacturing from Purchased Chocolate	Food Processing and Manufacturing
Frozen Fruit, Juice, and Vegetable Manufacturing	Food Processing and Manufacturing
Frozen Specialty Food Manufacturing	Food Processing and Manufacturing
Fruit and Vegetable Canning	Food Processing and Manufacturing
Specialty Canning	Food Processing and Manufacturing
Dried and Dehydrated Food Manufacturing	Food Processing and Manufacturing
Fluid Milk Manufacturing	Food Processing and Manufacturing

Creamery Butter Manufacturing	Food Processing and Manufacturing
Cheese Manufacturing	Food Processing and Manufacturing
Dry, Condensed, and Evaporated Dairy Product Manufacturing	Food Processing and Manufacturing
Ice Cream and Frozen Dessert Manufacturing	Food Processing and Manufacturing
Frozen Cakes, Pies, and Other Pastries Manufacturing	Food Processing and Manufacturing
Cookie and Cracker Manufacturing	Food Processing and Manufacturing
Dry Pasta, Dough, and Flour Mixes Manufacturing from Purchased Flour	Food Processing and Manufacturing
Tortilla Manufacturing	Food Processing and Manufacturing
Roasted Nuts and Peanut Butter Manufacturing	Food Processing and Manufacturing
Other Snack Food Manufacturing	Food Processing and Manufacturing
Coffee and Tea Manufacturing	Food Processing and Manufacturing
Flavoring Syrup and Concentrate Manufacturing	Food Processing and Manufacturing
Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing	Food Processing and Manufacturing
Spice and Extract Manufacturing	Food Processing and Manufacturing
Perishable Prepared Food Manufacturing	Food Processing and Manufacturing
All Other Miscellaneous Food Manufacturing	Food Processing and Manufacturing
Soft Drink Manufacturing	Food Processing and Manufacturing
Bottled Water Manufacturing	Food Processing and Manufacturing
Ice Manufacturing	Food Processing and Manufacturing
Breweries	Food Processing and Manufacturing
Wineries	Food Processing and Manufacturing
Distilleries	Food Processing and Manufacturing
Glass Container Manufacturing	Food Processing and Manufacturing
Grain and Field Bean Merchant Wholesalers	Food Processing and Manufacturing
Leather and Hide Tanning and Finishing	Footwear
Footwear Manufacturing	Footwear
Timber Tract Operations	Forestry
Forest Nurseries and Gathering of Forest Products	Forestry
Logging	Forestry
Support Activities for Forestry	Forestry
Manufactured Home (Mobile Home) Manufacturing	Furniture
Wood Kitchen Cabinet and Countertop Manufacturing	Furniture
Upholstered Household Furniture Manufacturing	Furniture

Nonupholstered Wood Household Furniture Manufacturing	Furniture
Metal Household Furniture Manufacturing	Furniture
Household Furniture (except Wood and Metal) Manufacturing	Furniture
Institutional Furniture Manufacturing	Furniture
Wood Office Furniture Manufacturing	Furniture
Office Furniture (except Wood) Manufacturing	Furniture
Showcase, Partition, Shelving, and Locker Manufacturing	Furniture
Mattress Manufacturing	Furniture
Dental Laboratories	Local Health Services
Pharmacies and Drug Stores	Local Health Services
Optical Goods Stores	Local Health Services
Home Health Equipment Rental	Local Health Services
Offices of Physicians (except Mental Health Specialists)	Local Health Services
Offices of Physicians, Mental Health Specialists	Local Health Services
Offices of Dentists	Local Health Services
Offices of Chiropractors	Local Health Services
Offices of Optometrists	Local Health Services
Offices of Mental Health Practitioners (except Physicians)	Local Health Services
Offices of Physical, Occupational and Speech Therapists, and Audiologists	Local Health Services
Offices of Podiatrists	Local Health Services
Offices of All Other Miscellaneous Health Practitioners	Local Health Services
Family Planning Centers	Local Health Services
Outpatient Mental Health and Substance Abuse Centers	Local Health Services
HMO Medical Centers	Local Health Services
Kidney Dialysis Centers	Local Health Services
Freestanding Ambulatory Surgical and Emergency Centers	Local Health Services
All Other Outpatient Care Centers	Local Health Services
Medical Laboratories	Local Health Services
Diagnostic Imaging Centers	Local Health Services
Home Health Care Services	Local Health Services
Blood and Organ Banks	Local Health Services
All Other Miscellaneous Ambulatory Health Care Services	Local Health Services
General Medical and Surgical Hospitals	Local Health Services

Psychiatric and Substance Abuse Hospitals	Local Health Services
Specialty (except Psychiatric and Substance Abuse) Hospitals	Local Health Services
Nursing Care Facilities (Skilled Nursing Facilities)	Local Health Services
Residential Intellectual and Developmental Disability Facilities	Local Health Services
Residential Mental Health and Substance Abuse Facilities	Local Health Services
Continuing Care Retirement Communities	Local Health Services
Assisted Living Facilities for the Elderly	Local Health Services
Other Residential Care Facilities	Local Health Services
Funeral Homes and Funeral Services	Local Health Services
Cemeteries and Crematories	Local Health Services
Hospitals (State Government)	Local Health Services
Hospitals (Local Government)	Local Health Services
Hunting and Trapping	Hospitality and Tourism
Art Dealers	Hospitality and Tourism
Scenic and Sightseeing Transportation, Land	Hospitality and Tourism
Scenic and Sightseeing Transportation, Water	Hospitality and Tourism
Scenic and Sightseeing Transportation, Other	Hospitality and Tourism
Recreational Goods Rental	Hospitality and Tourism
Travel Agencies	Hospitality and Tourism
Tour Operators	Hospitality and Tourism
Convention and Visitors Bureaus	Hospitality and Tourism
All Other Travel Arrangement and Reservation Services	Hospitality and Tourism
Sports Teams and Clubs	Hospitality and Tourism
Racetracks	Hospitality and Tourism
Other Spectator Sports	Hospitality and Tourism
Museums	Hospitality and Tourism
Historical Sites	Hospitality and Tourism
Zoos and Botanical Gardens	Hospitality and Tourism
Nature Parks and Other Similar Institutions	Hospitality and Tourism
Amusement and Theme Parks	Hospitality and Tourism
Amusement Arcades	Hospitality and Tourism
Casinos (except Casino Hotels)	Hospitality and Tourism
Other Gambling Industries	Hospitality and Tourism

Skiing Facilities	Hospitality and Tourism
Marinas	Hospitality and Tourism
All Other Amusement and Recreation Industries	Hospitality and Tourism
Hotels (except Casino Hotels) and Motels	Hospitality and Tourism
Casino Hotels	Hospitality and Tourism
Bed-and-Breakfast Inns	Hospitality and Tourism
All Other Traveler Accommodation	Hospitality and Tourism
RV (Recreational Vehicle) Parks and Campgrounds	Hospitality and Tourism
Recreational and Vacation Camps (except Campgrounds)	Hospitality and Tourism
Rooming and Boarding Houses, Dormitories, and Workers' Camps	Hospitality and Tourism
Semiconductor Machinery Manufacturing	Information Technology and Analytical Instruments
Photographic and Photocopying Equipment Manufacturing	Information Technology and Analytical Instruments
Electronic Computer Manufacturing	Information Technology and Analytical Instruments
Computer Storage Device Manufacturing	Information Technology and Analytical Instruments
Computer Terminal and Other Computer Peripheral Equipment Manufacturing	Information Technology and Analytical Instruments
Audio and Video Equipment Manufacturing	Information Technology and Analytical Instruments
Bare Printed Circuit Board Manufacturing	Information Technology and Analytical Instruments
Semiconductor and Related Device Manufacturing	Information Technology and Analytical Instruments
Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	Information Technology and Analytical Instruments
Electronic Connector Manufacturing	Information Technology and Analytical Instruments
Printed Circuit Assembly (Electronic Assembly) Manufacturing	Information Technology and Analytical Instruments
Other Electronic Component Manufacturing	Information Technology and Analytical Instruments
Electromedical and Electrotherapeutic Apparatus Manufacturing	Information Technology and Analytical Instruments
Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	Information Technology and Analytical Instruments
Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	Information Technology and Analytical Instruments

Totalizing Fluid Meter and Counting Device Manufacturing	Information Technology and Analytical Instruments
Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	Information Technology and Analytical Instruments
Analytical Laboratory Instrument Manufacturing	Information Technology and Analytical Instruments
Irradiation Apparatus Manufacturing	Information Technology and Analytical Instruments
Other Measuring and Controlling Device Manufacturing	Information Technology and Analytical Instruments
Blank Magnetic and Optical Recording Media Manufacturing	Information Technology and Analytical Instruments
Software and Other Prerecorded Compact Disc, Tape, and Record Reproducing	Information Technology and Analytical Instruments
Software Publishers	Information Technology and Analytical Instruments
Custom Computer Programming Services	Information Technology and Analytical Instruments
Computer Systems Design Services	Information Technology and Analytical Instruments
Computer Facilities Management Services	Information Technology and Analytical Instruments
Other Computer Related Services	Information Technology and Analytical Instruments
Data Processing, Hosting, and Related Services	Information Technology and Analytical Instruments
Direct Life Insurance Carriers	Insurance Services
Direct Health and Medical Insurance Carriers	Insurance Services
Direct Property and Casualty Insurance Carriers	Insurance Services
Direct Title Insurance Carriers	Insurance Services
Other Direct Insurance (except Life, Health, and Medical) Carriers	Insurance Services
Reinsurance Carriers	Insurance Services
Claims Adjusting	Insurance Services
All Other Insurance Related Activities	Insurance Services
Pension Funds	Insurance Services
Health and Welfare Funds	Insurance Services
Other Insurance Funds	Insurance Services
Trusts, Estates, and Agency Accounts	Insurance Services
Jewelry and Silverware Manufacturing	Jewelry and Precious Metals

Textile Bag and Canvas Mills	Leather and Related Products
Women's Handbag and Purse Manufacturing	Leather and Related Products
All Other Leather Good and Allied Product Manufacturing	Leather and Related Products
Electric Lamp Bulb and Part Manufacturing	Lighting and Electrical Equipment
Residential Electric Lighting Fixture Manufacturing	Lighting and Electrical Equipment
Commercial, Industrial, and Institutional Electric Lighting Fixture Manufacturing	Lighting and Electrical Equipment
Other Lighting Equipment Manufacturing	Lighting and Electrical Equipment
Power, Distribution, and Specialty Transformer Manufacturing	Lighting and Electrical Equipment
Motor and Generator Manufacturing	Lighting and Electrical Equipment
Switchgear and Switchboard Apparatus Manufacturing	Lighting and Electrical Equipment
Relay and Industrial Control Manufacturing	Lighting and Electrical Equipment
Storage Battery Manufacturing	Lighting and Electrical Equipment
Fiber Optic Cable Manufacturing	Lighting and Electrical Equipment
Other Communication and Energy Wire Manufacturing	Lighting and Electrical Equipment
Current-Carrying Wiring Device Manufacturing	Lighting and Electrical Equipment
Noncurrent-Carrying Wiring Device Manufacturing	Lighting and Electrical Equipment
Carbon and Graphite Product Manufacturing	Lighting and Electrical Equipment
All Other Miscellaneous Electrical Equipment and Component Manufacturing	Lighting and Electrical Equipment
Animal (except Poultry) Slaughtering	Livestock Processing
Meat Processed from Carcasses	Livestock Processing
Rendering and Meat Byproduct Processing	Livestock Processing
Poultry Processing	Livestock Processing
Livestock Merchant Wholesalers	Livestock Processing
Periodical Publishers	Marketing, Design, and Publishing
Book Publishers	Marketing, Design, and Publishing
Directory and Mailing List Publishers	Marketing, Design, and Publishing
All Other Publishers	Marketing, Design, and Publishing
News Syndicates	Marketing, Design, and Publishing
Libraries and Archives	Marketing, Design, and Publishing
Internet Publishing and Broadcasting and Web Search Portals	Marketing, Design, and Publishing
All Other Information Services	Marketing, Design, and Publishing
Interior Design Services	Marketing, Design, and Publishing
Industrial Design Services	Marketing, Design, and Publishing

Graphic Design Services	Marketing, Design, and Publishing
Other Specialized Design Services	Marketing, Design, and Publishing
Marketing Consulting Services	Marketing, Design, and Publishing
Advertising Agencies	Marketing, Design, and Publishing
Public Relations Agencies	Marketing, Design, and Publishing
Media Buying Agencies	Marketing, Design, and Publishing
Media Representatives	Marketing, Design, and Publishing
Outdoor Advertising	Marketing, Design, and Publishing
Direct Mail Advertising	Marketing, Design, and Publishing
Advertising Material Distribution Services	Marketing, Design, and Publishing
Other Services Related to Advertising	Marketing, Design, and Publishing
Marketing Research and Public Opinion Polling	Marketing, Design, and Publishing
Optical Instrument and Lens Manufacturing	Medical Devices
Surgical and Medical Instrument Manufacturing	Medical Devices
Surgical Appliance and Supplies Manufacturing	Medical Devices
Dental Equipment and Supplies Manufacturing	Medical Devices
Ophthalmic Goods Manufacturing	Medical Devices
Iron Ore Mining	Metal Mining
Gold Ore Mining	Metal Mining
Silver Ore Mining	Metal Mining
Copper, Nickel, Lead, and Zinc Mining	Metal Mining
Uranium-Radium-Vanadium Ore Mining	Metal Mining
All Other Metal Ore Mining	Metal Mining
Support Activities for Metal Mining	Metal Mining
Abrasive Product Manufacturing	Metalworking Technology
Plate Work Manufacturing	Metalworking Technology
Precision Turned Product Manufacturing	Metalworking Technology
Bolt, Nut, Screw, Rivet, and Washer Manufacturing	Metalworking Technology
Metal Heat Treating	Metalworking Technology
Metal Coating, Engraving (except Jewelry and Silverware), and Allied Services to Manufacturers	Metalworking Technology
Electroplating, Plating, Polishing, Anodizing, and Coloring	Metalworking Technology
Industrial Mold Manufacturing	Metalworking Technology
Special Die and Tool, Die Set, Jig, and Fixture Manufacturing	Metalworking Technology

Cutting Tool and Machine Tool Accessory Manufacturing	Metalworking Technology
Machine Tool Manufacturing	Metalworking Technology
Rolling Mill and Other Metalworking Machinery Manufacturing	Metalworking Technology
Power-Driven Handtool Manufacturing	Metalworking Technology
Welding and Soldering Equipment Manufacturing	Metalworking Technology
Music Publishers	Music and Sound Recording
Sound Recording Studios	Music and Sound Recording
Record Production and Distribution	Music and Sound Recording
Other Sound Recording Industries	Music and Sound Recording
Dimension Stone Mining and Quarrying	Nonmetal Mining
Crushed and Broken Limestone Mining and Quarrying	Nonmetal Mining
Crushed and Broken Granite Mining and Quarrying	Nonmetal Mining
Other Crushed and Broken Stone Mining and Quarrying	Nonmetal Mining
Construction Sand and Gravel Mining	Nonmetal Mining
Industrial Sand Mining	Nonmetal Mining
Kaolin and Ball Clay Mining	Nonmetal Mining
Clay and Ceramic and Refractory Minerals Mining	Nonmetal Mining
Potash, Soda, and Borate Mineral Mining	Nonmetal Mining
Phosphate Rock Mining	Nonmetal Mining
Other Chemical and Fertilizer Mineral Mining	Nonmetal Mining
All Other Nonmetallic Mineral Mining	Nonmetal Mining
Support Activities for Nonmetallic Minerals (except Fuels) Mining	Nonmetal Mining
Crude Petroleum Extraction	Oil and Gas Production and Transportation
Natural Gas Extraction	Oil and Gas Production and Transportation
Drilling Oil and Gas Wells	Oil and Gas Production and Transportation
Support Activities for Oil and Gas Operations	Oil and Gas Production and Transportation
Petroleum Refineries	Oil and Gas Production and Transportation
All Other Petroleum and Coal Products Manufacturing	Oil and Gas Production and Transportation
Oil and Gas Field Machinery and Equipment Manufacturing	Oil and Gas Production and Transportation

Pipeline Transportation of Crude Oil	Oil and Gas Production and Transportation
Pipeline Transportation of Natural Gas	Oil and Gas Production and Transportation
Pipeline Transportation of Refined Petroleum Products	Oil and Gas Production and Transportation
All Other Pipeline Transportation	Oil and Gas Production and Transportation
Geophysical Surveying and Mapping Services	Oil and Gas Production and Transportation
Pulp Mills	Paper and Packaging
Paper (except Newsprint) Mills	Paper and Packaging
Newsprint Mills	Paper and Packaging
Paperboard Mills	Paper and Packaging
Corrugated and Solid Fiber Box Manufacturing	Paper and Packaging
Folding Paperboard Box Manufacturing	Paper and Packaging
Other Paperboard Container Manufacturing	Paper and Packaging
Paper Bag and Coated and Treated Paper Manufacturing	Paper and Packaging
Stationery Product Manufacturing	Paper and Packaging
Sanitary Paper Product Manufacturing	Paper and Packaging
All Other Converted Paper Product Manufacturing	Paper and Packaging
Theater Companies and Dinner Theaters	Performing Arts
Dance Companies	Performing Arts
Musical Groups and Artists	Performing Arts
Other Performing Arts Companies	Performing Arts
Promoters of Performing Arts, Sports, and Similar Events with Facilities	Performing Arts
Promoters of Performing Arts, Sports, and Similar Events without Facilities	Performing Arts
Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	Performing Arts
Independent Artists, Writers, and Performers	Performing Arts
Plastics Material and Resin Manufacturing	Plastics
Plastics Bag and Pouch Manufacturing	Plastics
Plastics Packaging Film and Sheet (including Laminated) Manufacturing	Plastics
Unlaminated Plastics Film and Sheet (except Packaging) Manufacturing	Plastics
Unlaminated Plastics Profile Shape Manufacturing	Plastics
Plastics Pipe and Pipe Fitting Manufacturing	Plastics

Laminated Plastics Plate, Sheet (except Packaging), and Shape Manufacturing	Plastics
Polystyrene Foam Product Manufacturing	Plastics
Urethane and Other Foam Product (except Polystyrene) Manufacturing	Plastics
Plastics Bottle Manufacturing	Plastics
Plastics Plumbing Fixture Manufacturing	Plastics
All Other Plastics Product Manufacturing	Plastics
Broom, Brush, and Mop Manufacturing	Plastics
Commercial Printing (except Screen and Books)	Printing Services
Commercial Screen Printing	Printing Services
Books Printing	Printing Services
Support Activities for Printing	Printing Services
Printing Ink Manufacturing	Printing Services
Greeting Card Publishers	Printing Services
Industrial Valve Manufacturing	Production Technology and Heavy Machinery
Fluid Power Valve and Hose Fitting Manufacturing	Production Technology and Heavy Machinery
Other Metal Valve and Pipe Fitting Manufacturing	Production Technology and Heavy Machinery
Ball and Roller Bearing Manufacturing	Production Technology and Heavy Machinery
Farm Machinery and Equipment Manufacturing	Production Technology and Heavy Machinery
Lawn and Garden Tractor and Home Lawn and Garden Equipment Manufacturing	Production Technology and Heavy Machinery
Construction Machinery Manufacturing	Production Technology and Heavy Machinery
Mining Machinery and Equipment Manufacturing	Production Technology and Heavy Machinery
Food Product Machinery Manufacturing	Production Technology and Heavy Machinery
Sawmill, Woodworking, and Paper Machinery Manufacturing	Production Technology and Heavy Machinery
Printing Machinery and Equipment Manufacturing	Production Technology and Heavy Machinery
Other Industrial Machinery Manufacturing	Production Technology and Heavy Machinery
Other Commercial and Service Industry Machinery Manufacturing	Production Technology and Heavy Machinery

Industrial and Commercial Fan and Blower and Air Purification Equipment Manufacturing	Production Technology and Heavy Machinery
Heating Equipment (except Warm Air Furnaces) Manufacturing	Production Technology and Heavy Machinery
Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing	Production Technology and Heavy Machinery
Turbine and Turbine Generator Set Units Manufacturing	Production Technology and Heavy Machinery
Speed Changer, Industrial High-Speed Drive, and Gear Manufacturing	Production Technology and Heavy Machinery
Mechanical Power Transmission Equipment Manufacturing	Production Technology and Heavy Machinery
Other Engine Equipment Manufacturing	Production Technology and Heavy Machinery
Air and Gas Compressor Manufacturing	Production Technology and Heavy Machinery
Measuring, Dispensing, and Other Pumping Equipment Manufacturing	Production Technology and Heavy Machinery
Elevator and Moving Stairway Manufacturing	Production Technology and Heavy Machinery
Conveyor and Conveying Equipment Manufacturing	Production Technology and Heavy Machinery
Overhead Traveling Crane, Hoist, and Monorail System Manufacturing	Production Technology and Heavy Machinery
Industrial Truck, Tractor, Trailer, and Stacker Machinery Manufacturing	Production Technology and Heavy Machinery
Packaging Machinery Manufacturing	Production Technology and Heavy Machinery
Industrial Process Furnace and Oven Manufacturing	Production Technology and Heavy Machinery
Fluid Power Cylinder and Actuator Manufacturing	Production Technology and Heavy Machinery
Fluid Power Pump and Motor Manufacturing	Production Technology and Heavy Machinery
Scale and Balance Manufacturing	Production Technology and Heavy Machinery
All Other Miscellaneous General Purpose Machinery Manufacturing	Production Technology and Heavy Machinery
Railroad Rolling Stock Manufacturing	Production Technology and Heavy Machinery
Gasket, Packing, and Sealing Device Manufacturing	Production Technology and Heavy Machinery

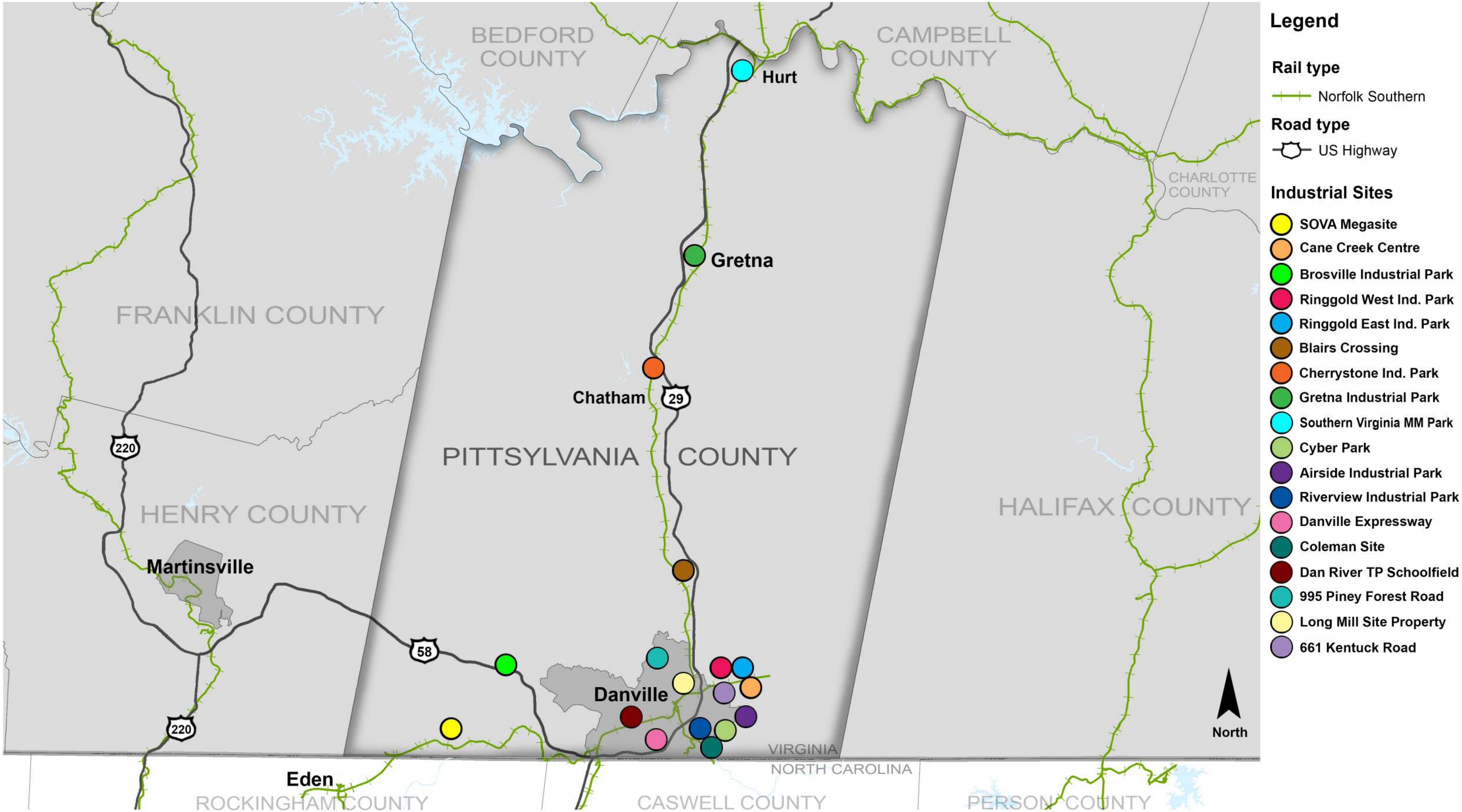
Small Electrical Appliance Manufacturing	Recreational and Small Electric Goods
Motorcycle, Bicycle, and Parts Manufacturing	Recreational and Small Electric Goods
Blind and Shade Manufacturing	Recreational and Small Electric Goods
Sporting and Athletic Goods Manufacturing	Recreational and Small Electric Goods
Doll, Toy, and Game Manufacturing	Recreational and Small Electric Goods
Office Supplies (except Paper) Manufacturing	Recreational and Small Electric Goods
Musical Instrument Manufacturing	Recreational and Small Electric Goods
Fastener, Button, Needle, and Pin Manufacturing	Recreational and Small Electric Goods
All Other Miscellaneous Manufacturing	Recreational and Small Electric Goods
State Government, Excluding Education and Hospitals	State Government Services
Fiber, Yarn, and Thread Mills	Textile Manufacturing
Broadwoven Fabric Mills	Textile Manufacturing
Narrow Fabric Mills and Schiffli Machine Embroidery	Textile Manufacturing
Nonwoven Fabric Mills	Textile Manufacturing
Knit Fabric Mills	Textile Manufacturing
Textile and Fabric Finishing Mills	Textile Manufacturing
Fabric Coating Mills	Textile Manufacturing
Carpet and Rug Mills	Textile Manufacturing
Curtain and Linen Mills	Textile Manufacturing
Rope, Cordage, Twine, Tire Cord, and Tire Fabric Mills	Textile Manufacturing
Hosiery and Sock Mills	Textile Manufacturing
Other Apparel Knitting Mills	Textile Manufacturing
Artificial and Synthetic Fibers and Filaments Manufacturing	Textile Manufacturing
Tobacco Manufacturing	Tobacco
Major Household Appliance Manufacturing	Trailers, Motor Homes, and Appliances
Truck Trailer Manufacturing	Trailers, Motor Homes, and Appliances
Motor Home Manufacturing	Trailers, Motor Homes, and Appliances

Travel Trailer and Camper Manufacturing	Trailers, Motor Homes, and Appliances
Burial Casket Manufacturing	Trailers, Motor Homes, and Appliances
Scheduled Passenger Air Transportation	Transportation and Logistics
Scheduled Freight Air Transportation	Transportation and Logistics
Nonscheduled Chartered Passenger Air Transportation	Transportation and Logistics
Nonscheduled Chartered Freight Air Transportation	Transportation and Logistics
Other Nonscheduled Air Transportation	Transportation and Logistics
Rail transportation	Transportation and Logistics
General Freight Trucking, Long-Distance, Truckload	Transportation and Logistics
General Freight Trucking, Long-Distance, Less Than Truckload	Transportation and Logistics
Specialized Freight (except Used Goods) Trucking, Long-Distance	Transportation and Logistics
Interurban and Rural Bus Transportation	Transportation and Logistics
Charter Bus Industry	Transportation and Logistics
Air Traffic Control	Transportation and Logistics
Other Airport Operations	Transportation and Logistics
Other Support Activities for Air Transportation	Transportation and Logistics
Support Activities for Rail Transportation	Transportation and Logistics
Other Support Activities for Road Transportation	Transportation and Logistics
Freight Transportation Arrangement	Transportation and Logistics
Packing and Crating	Transportation and Logistics
All Other Support Activities for Transportation	Transportation and Logistics
Postal Service	Transportation and Logistics
Petrochemical Manufacturing	Upstream Chemical Products
Industrial Gas Manufacturing	Upstream Chemical Products
Other Basic Inorganic Chemical Manufacturing	Upstream Chemical Products
Ethyl Alcohol Manufacturing	Upstream Chemical Products
Cyclic Crude, Intermediate, and Gum and Wood Chemical Manufacturing	Upstream Chemical Products
All Other Basic Organic Chemical Manufacturing	Upstream Chemical Products
Synthetic Rubber Manufacturing	Upstream Chemical Products
Phosphatic Fertilizer Manufacturing	Upstream Chemical Products
Pesticide and Other Agricultural Chemical Manufacturing	Upstream Chemical Products
Iron and Steel Mills and Ferroalloy Manufacturing	Upstream Metal Manufacturing

Iron and Steel Pipe and Tube Manufacturing from Purchased Steel	Upstream Metal Manufacturing
Rolled Steel Shape Manufacturing	Upstream Metal Manufacturing
Steel Wire Drawing	Upstream Metal Manufacturing
Alumina Refining and Primary Aluminum Production	Upstream Metal Manufacturing
Secondary Smelting and Alloying of Aluminum	Upstream Metal Manufacturing
Aluminum Sheet, Plate, and Foil Manufacturing	Upstream Metal Manufacturing
Other Aluminum Rolling, Drawing, and Extruding	Upstream Metal Manufacturing
Nonferrous Metal (except Aluminum) Smelting and Refining	Upstream Metal Manufacturing
Copper Rolling, Drawing, Extruding, and Alloying	Upstream Metal Manufacturing
Nonferrous Metal (except Copper and Aluminum) Rolling, Drawing, and Extruding	Upstream Metal Manufacturing
Secondary Smelting, Refining, and Alloying of Nonferrous Metal (except Copper and Aluminum)	Upstream Metal Manufacturing
Iron and Steel Forging	Upstream Metal Manufacturing
Nonferrous Forging	Upstream Metal Manufacturing
Powder Metallurgy Part Manufacturing	Upstream Metal Manufacturing
Metal Crown, Closure, and Other Metal Stamping (except Automotive)	Upstream Metal Manufacturing
Spring Manufacturing	Upstream Metal Manufacturing
Other Fabricated Wire Product Manufacturing	Upstream Metal Manufacturing
Motion Picture and Video Production	Video Production and Distribution
Motion Picture and Video Distribution	Video Production and Distribution
Drive-In Motion Picture Theaters	Video Production and Distribution
Teleproduction and Other Postproduction Services	Video Production and Distribution
Other Motion Picture and Video Industries	Video Production and Distribution
Tire Manufacturing (except Retreading)	Vulcanized and Fired Materials
Tire Retreading	Vulcanized and Fired Materials
Rubber and Plastics Hoses and Belting Manufacturing	Vulcanized and Fired Materials
Rubber Product Manufacturing for Mechanical Use	Vulcanized and Fired Materials
All Other Rubber Product Manufacturing	Vulcanized and Fired Materials
Pottery, Ceramics, and Plumbing Fixture Manufacturing	Vulcanized and Fired Materials
Clay Building Material and Refractories Manufacturing	Vulcanized and Fired Materials
Flat Glass Manufacturing	Vulcanized and Fired Materials
Other Pressed and Blown Glass and Glassware Manufacturing	Vulcanized and Fired Materials
Glass Product Manufacturing Made of Purchased Glass	Vulcanized and Fired Materials
Ground or Treated Mineral and Earth Manufacturing	Vulcanized and Fired Materials

Ship Building and Repairing	Water Transportation
Boat Building	Water Transportation
Deep Sea Freight Transportation	Water Transportation
Deep Sea Passenger Transportation	Water Transportation
Coastal and Great Lakes Freight Transportation	Water Transportation
Coastal and Great Lakes Passenger Transportation	Water Transportation
Inland Water Freight Transportation	Water Transportation
Inland Water Passenger Transportation	Water Transportation
Port and Harbor Operations	Water Transportation
Marine Cargo Handling	Water Transportation
Navigational Services to Shipping	Water Transportation
Other Support Activities for Water Transportation	Water Transportation
Sawmills	Wood Products
Wood Preservation	Wood Products
Hardwood Veneer and Plywood Manufacturing	Wood Products
Softwood Veneer and Plywood Manufacturing	Wood Products
Engineered Wood Member (except Truss) Manufacturing	Wood Products
Truss Manufacturing	Wood Products
Reconstituted Wood Product Manufacturing	Wood Products
Wood Window and Door Manufacturing	Wood Products
Cut Stock, Resawing Lumber, and Planing	Wood Products
Other Millwork (including Flooring)	Wood Products
Wood Container and Pallet Manufacturing	Wood Products
Prefabricated Wood Building Manufacturing	Wood Products
All Other Miscellaneous Wood Product Manufacturing	Wood Products

Appendix B
Sites



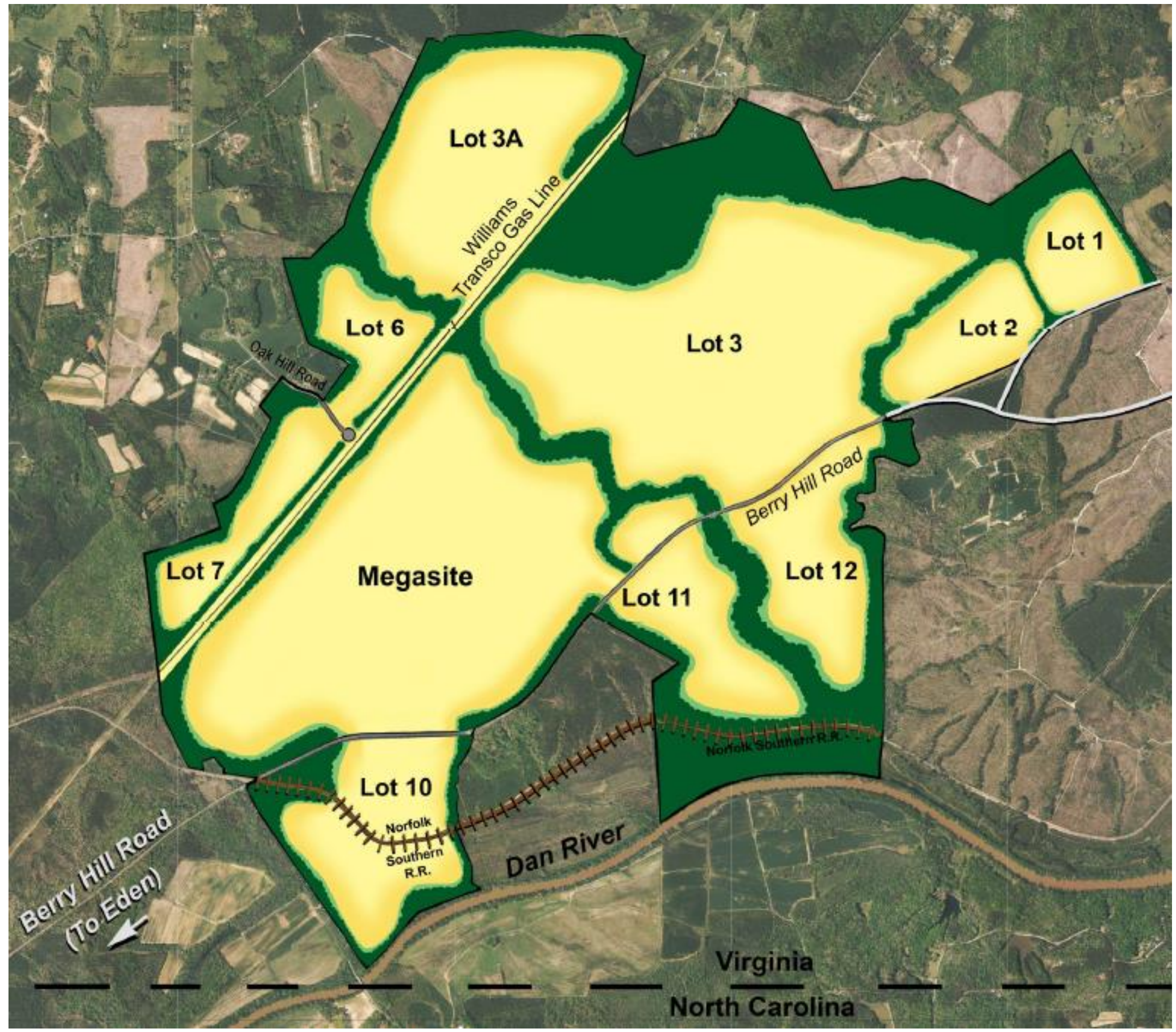
Sources:
NCDOT (2016) GIS/Mapping/Roads/Railroads
VDOT (2016) GIS/Mapping/Roads/Railroads
USGS (2016) Economic Information
US Census (2016) US Rails

Danville - Pittsylvania County Industrial Sites

Dewberry

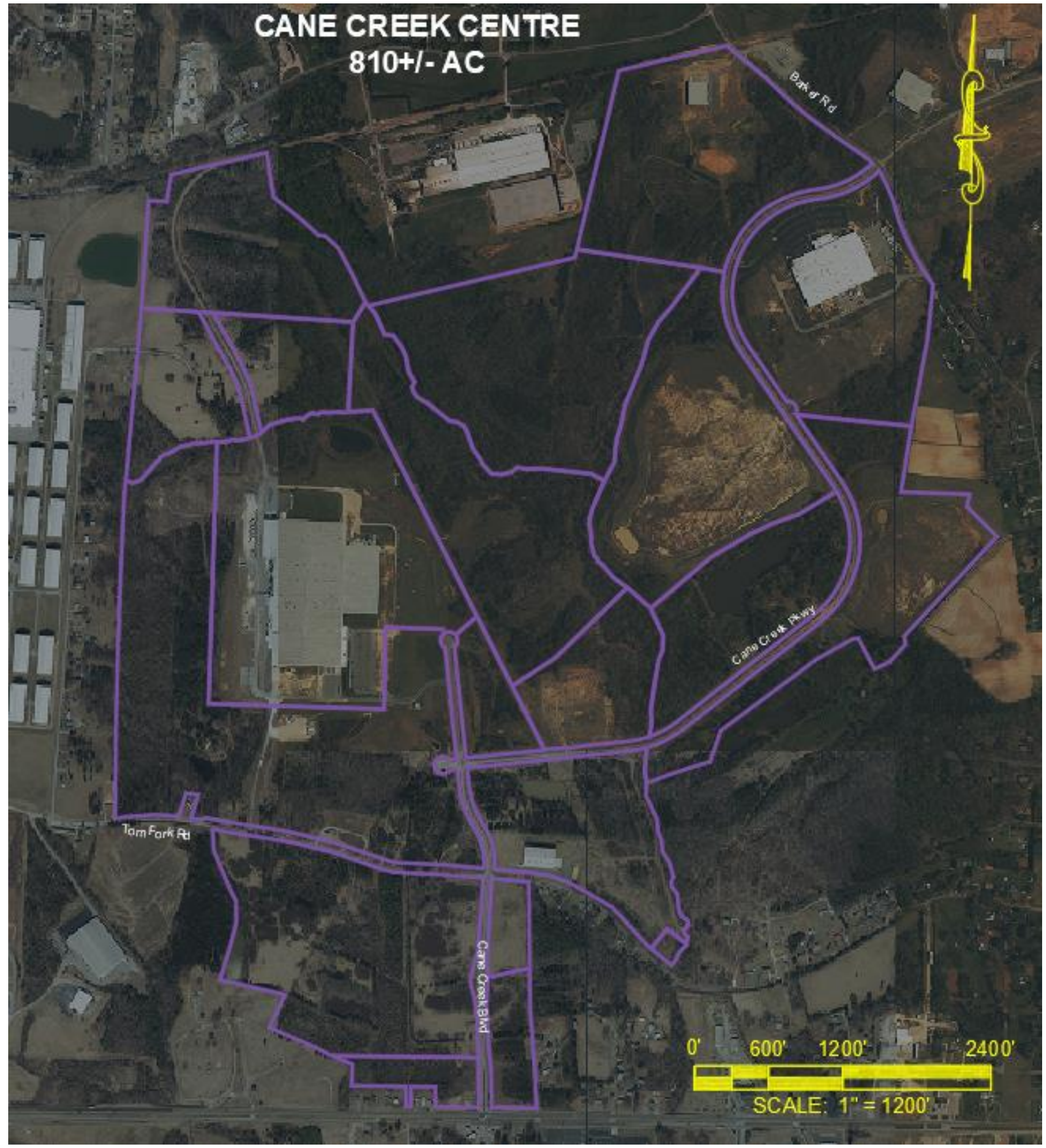
SoVA Megasite at Berry Hill

Location	US HWY 311 (Berry Hill Rd.), Tunstall, VA 23124
Owner	Danville Pittsylvania Regional Industrial Facility Authority (DPRIFA)
Total Acreage	3,528 acres
Available Acreage	3,528 acres
Zoning / Land Use	M-2, Heavy Industrial
Distance to 4-Lane Arterial	US HWY 58 / 4.6 mi.; Connector Road project underway giving direct access.
Distance to Interstate	I-785 / 35.2 mi.
Rail	Available (Norfolk-Southern)
Water Provider	Danville Utilities – 16 in. and 20 in.
Water Capacity	4 MGD, Expandable to 7 MGD
Sewer Provider	Danville Utilities – 16 in.
Sewer Capacity	2 MGD, Expandable to 4 MGD
Natural Gas Provider	SW Virginia Gas
Natural Gas Capacity	Per customer demand. Gas gate exists on Transco Interstate pipeline.
Power Provider	American Electric Power (AEP)
Power Capacity	10 MW (300 MW Future)
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes
Certification	VEDP Tier 4 Classification



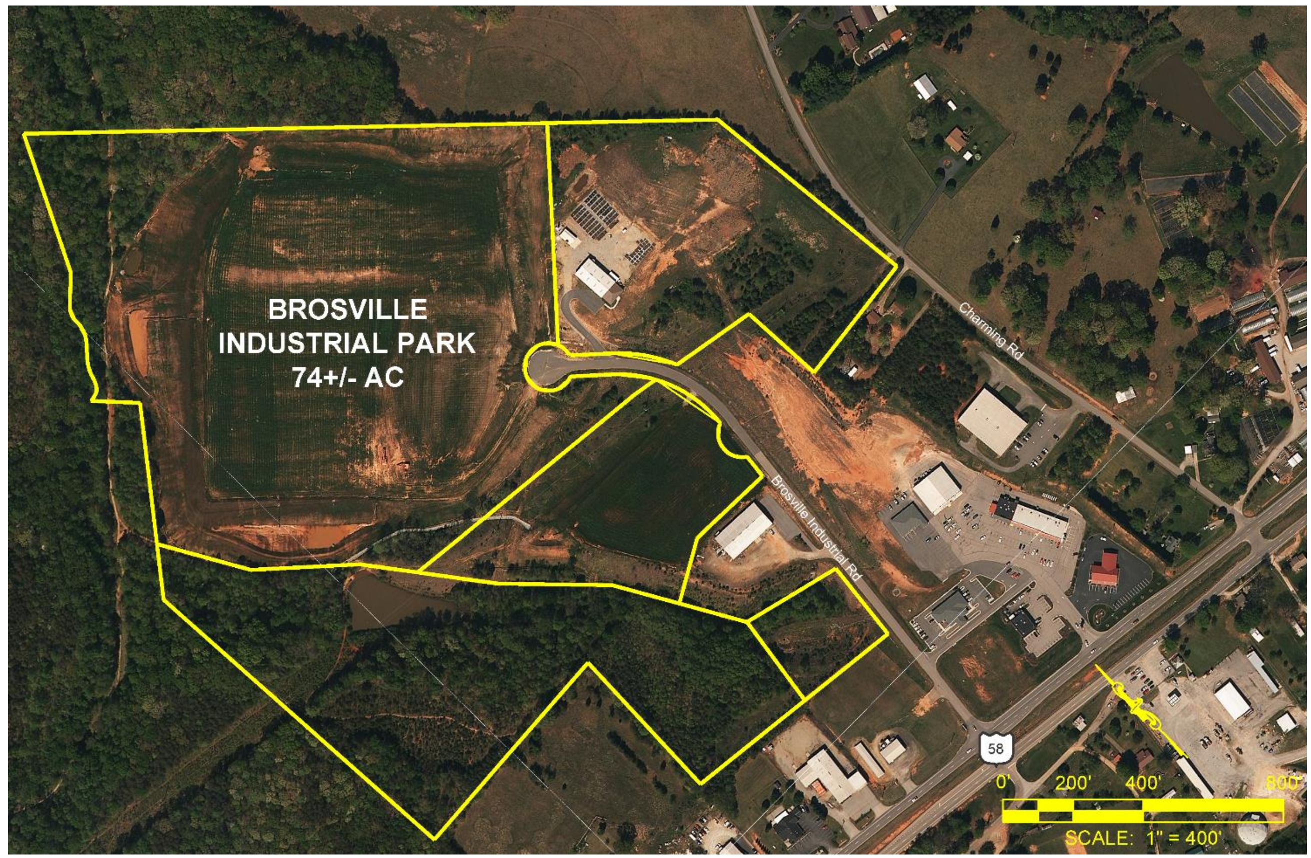
Cane Creek Centre

Location	Cane Creek Pkwy., Ringgold, VA 24586
Owner	DPRIFA
Total Acreage	810 acres
Available Acreage	417 acres
Zoning / Land Use	M-1, Light Industrial
Distance to 4-Lane Arterial	US HWY 360/58 - Adjacent
Distance to Interstate	I-785 / 43.2 mi.
Rail	Available (Norfolk-Southern)
Water Provider	PCSA – 16 in.
Water Capacity	1.0 MGD
Sewer Provider	PCSA – 24 in.
Sewer Capacity	1.0 MGD
Natural Gas Provider	City of Danville – 12 in.
Natural Gas Capacity	300 MCFH
Power Provider	City of Danville
Power Capacity	30 MW (69KV transmission is available on site)
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes
Certification	Lot 3 - VEDP Tier 4 Classification



Brosville Industrial Park

Location	Charming Rd and Martinsville HWY, Danville, VA 24541
Owner	Pittsylvania County
Total Acreage	74 acres
Available Acreage	66.5 acres
Zoning / Land Use	M-1, Light Industrial
Distance to 4-Lane Arterial	US HWY 360/58 - Adjacent
Distance to Interstate	I-785 / 42.4 mi.
Rail	Not Available
Water Provider	PCSA – 12 in.
Water Capacity	0.5 MGD
Sewer Provider	PCSA – 10 in.
Sewer Capacity	0.5 MGD
Natural Gas Provider	Not Available
Natural Gas Capacity	-
Power Provider	City of Danville
Power Capacity	4-6 MW (Transmission Available)
Telecom	Mid-Atlantic Broadband
Enterprise Zone	No



Ringgold West Industrial Park

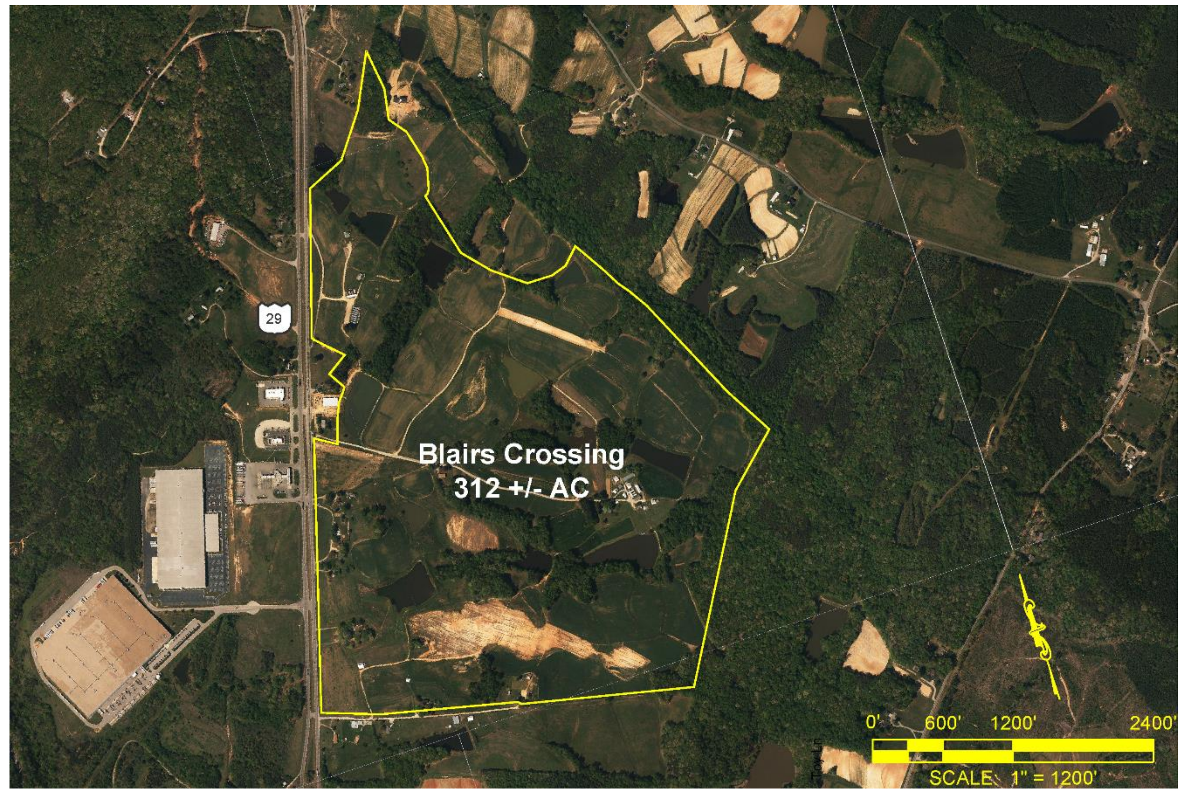
Location	Ringgold Industrial Pkwy and Kentuck Rd., Ringgold, VA 24586
Owner	Pittsylvania County
Total Acreage	79 acres
Available Acreage	19 acres
Zoning / Land Use	M-1, Light Industrial
Distance to 4-Lane Arterial	US HWY 360/58 – 2.1 mi.
Distance to Interstate	I-785 / 43.6 mi.
Rail	Available (Norfolk-Southern)
Water Provider	PCSA
Water Capacity	0.5 – 1.0 MGD
Sewer Provider	PCSA
Sewer Capacity	0.25 – 0.5 MGD
Natural Gas Provider	City of Danville
Natural Gas Capacity	200 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW (Transmission Available)
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes

Ringgold East Industrial Park

Location	Barker Road, Ringgold, VA 24586
Owner	Pittsylvania County
Total Acreage	113 acres
Available Acreage	38 acres
Zoning / Land Use	M-1, Light Industrial
Distance to 4-Lane Arterial	US HWY 360/58 – 2.1 mi.
Distance to Interstate	I-785 / 45.2 mi.
Rail	Available (Norfolk-Southern)
Water Provider	PCSA – 12 in.
Water Capacity	1.0 MGD
Sewer Provider	PCSA – 6 in. FM
Sewer Capacity	0.25 MGD
Natural Gas Provider	City of Danville – 10 in.
Natural Gas Capacity	200 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW (Transmission Available)
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes

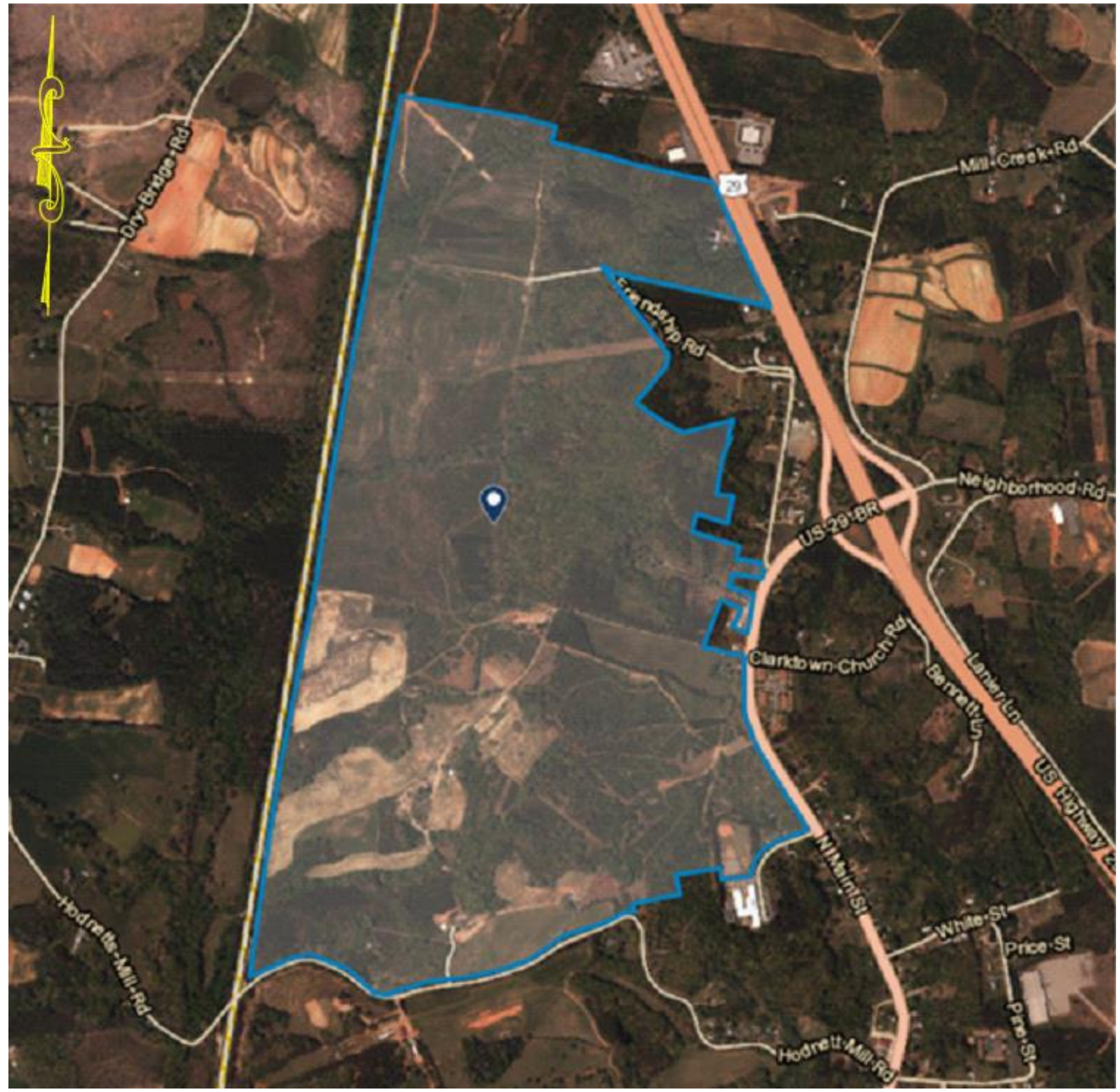
Blairs Crossing

Location	US HWY 29, Blairs, VA 24527
Owner	Private
Total Acreage	312 acres
Available Acreage	312 acres
Zoning / Land Use	M-2/A-1 Heavy Industrial/Agricultural
Distance to 4-Lane Arterial	US HWY 29 / Adjacent
Distance to Interstate	I-785 / 51.3 mi.
Rail	Not Available
Water Provider	PCSA
Water Capacity	0.5 MGD
Sewer Provider	PCSA
Sewer Capacity	0.25 MGD
Natural Gas Provider	Columbia Gas of Virginia
Natural Gas Capacity	283 MCFH @ 25 psi/customer (2.5 mile extension needed)
Power Provider	Dominion Energy
Power Capacity	-
Telecom	Mid-Atlantic Broadband
Enterprise Zone	No



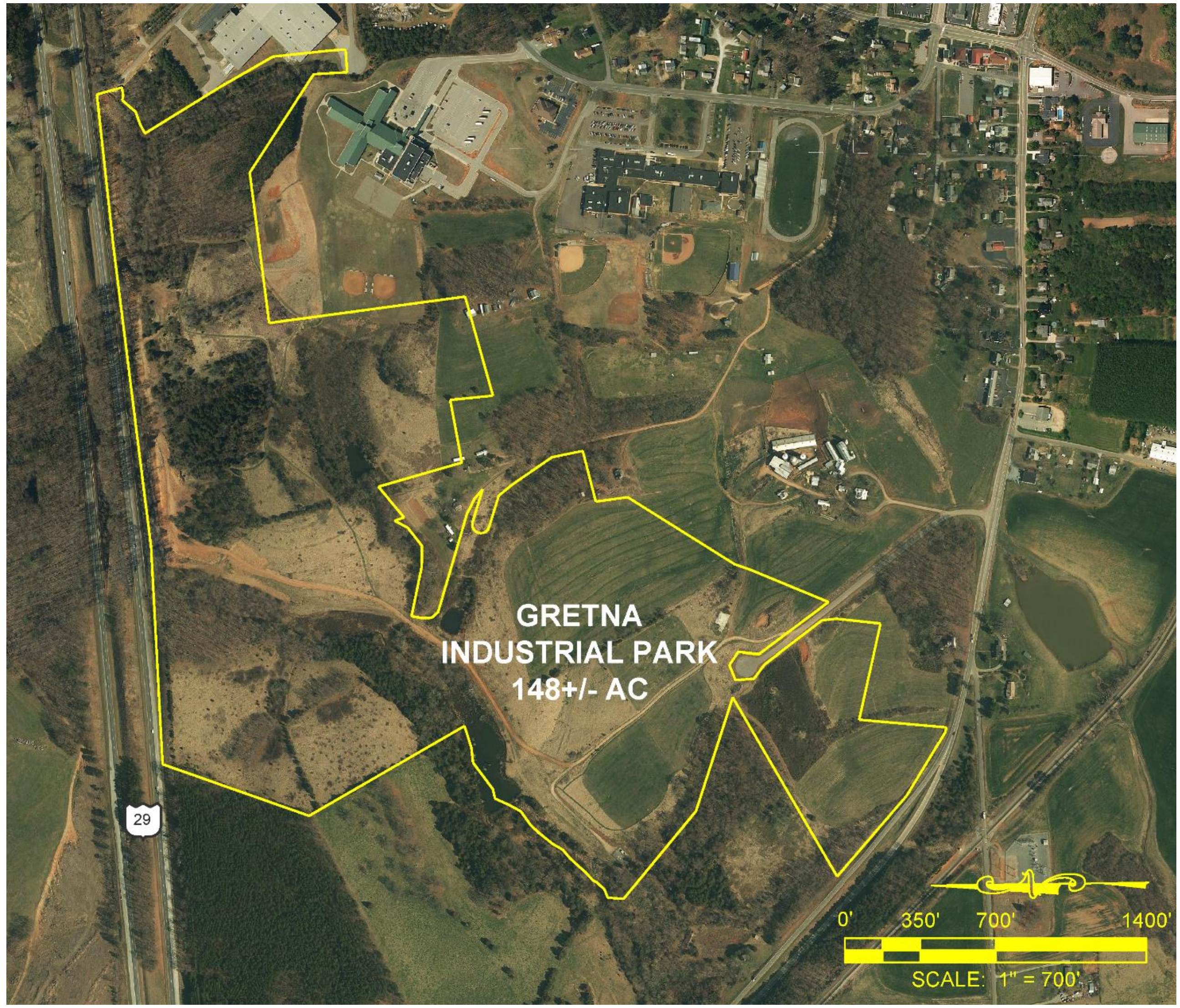
Cherrystone Industrial Park

Location	N Main St. and US HWY 29, Chatham, VA 24531
Owner	Private
Total Acreage	300 acres
Available Acreage	257 acres
Zoning / Land Use	M-1, Light Industrial
Distance to 4-Lane Arterial	US HWY 29 / 1.0 mi.
Distance to Interstate	I-785 / 61.0 mi.
Rail	Available (Norfolk-Southern)
Water Provider	PCSA
Water Capacity	1.0 MGD
Sewer Provider	Town of Chatham
Sewer Capacity	0.5 MGD
Natural Gas Provider	Columbia Gas of Virginia
Natural Gas Capacity	34 MCFH @ 60 psi
Power Provider	Dominion Energy
Power Capacity	-
Telecom	Mid-Atlantic Broadband
Enterprise Zone	No



Gretna Industrial Park

Location	Industrial Drive at Toney St, Gretna, VA 24557
Owner	Town of Gretna
Total Acreage	148 acres
Available Acreage	70 acres
Zoning / Land Use	M-1, Light Industrial
Distance to 4-Lane Arterial	US HWY 29 / 1.0 mi.
Distance to Interstate	I-581 / 49.8 mi.
Rail	Not Available
Water Provider	PCSA – 10 in.
Water Capacity	1.0 MGD
Sewer Provider	Town of Gretna – 8 in.
Sewer Capacity	1.0 MGD
Natural Gas Provider	Not Available
Natural Gas Capacity	-
Power Provider	Mecklenburg Electric Cooperative
Power Capacity	3-Phase Line Adjacent
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes



Southern Virginia Multimodal Park (SVMP)

Location	767 Main St, Hurt, VA 24563
Owner	Staunton River Regional Industrial Facility Authority (SRRIFA)
Total Acreage	685 acres
Available Acreage	685 acres
Zoning / Land Use	M
Distance to 4-Lane Arterial	US HWY 29 / 1.5 mi.
Distance to Interstate	I-581 / 47.7 mi.
Rail	Available (Norfolk-Southern)
Water Provider	Town of Hurt
Water Capacity	0.5 MGD Potable 6.0+ MGD Non-potable
Sewer Provider	On-Site Treatment Plant
Sewer Capacity	6.0+ MGD
Natural Gas Provider	Columbia Gas of Virginia
Natural Gas Capacity	225 MCFH @ 60 psi 2.25 mile Extension needed
Power Provider	Dominion Energy
Power Capacity	7 MW
Telecom	Comcast Business Communications
Enterprise Zone	Yes
Certification	VEDP Tier 2 Classification

Cyber Park

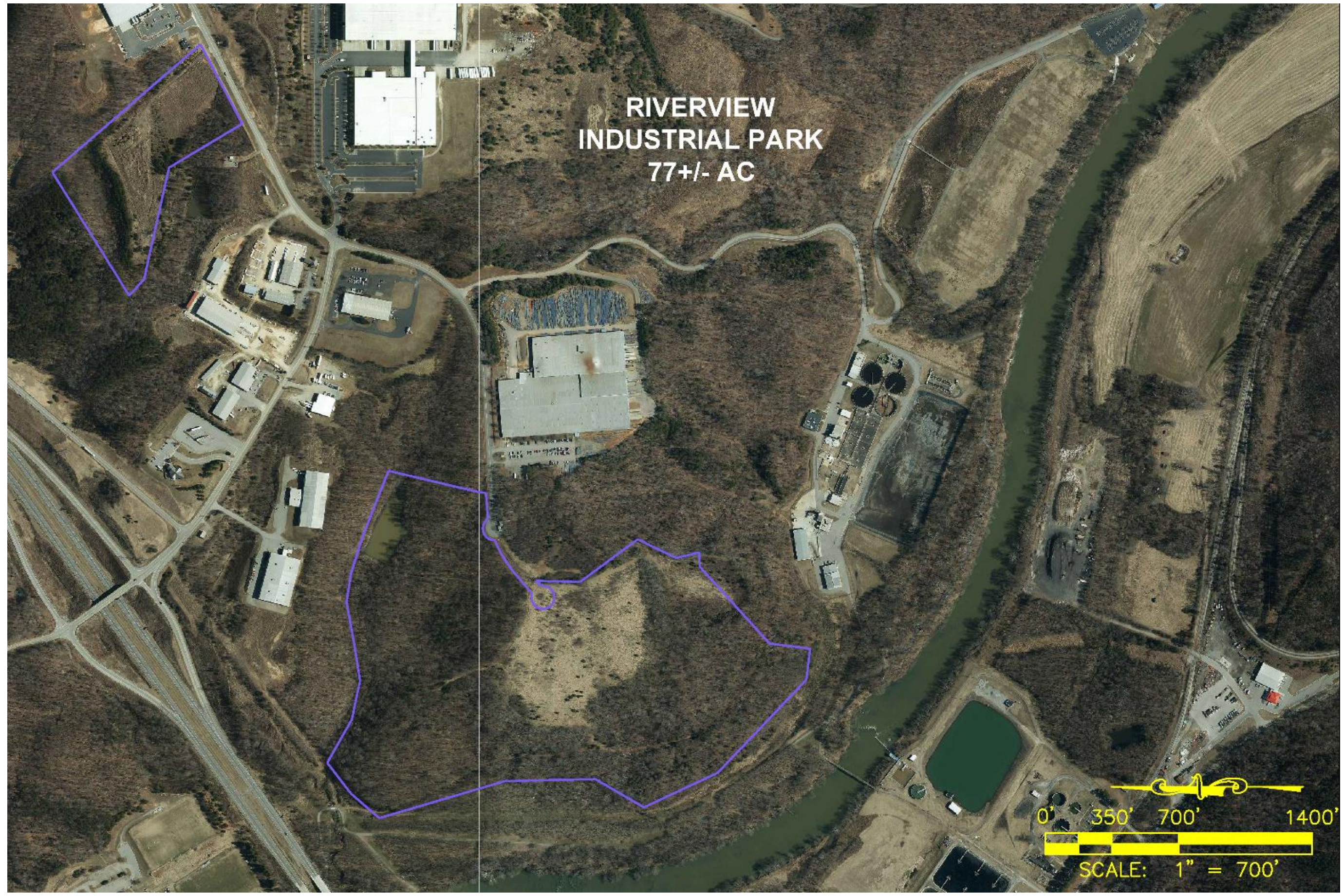
Location	Stinson Drive, Danville, VA 24540
Owner	DPRIFA
Total Acreage	363 acres
Available Acreage	128 acres
Zoning / Land Use	CP1 Cyber Park One District
Distance to 4-Lane Arterial	US HWY 29 / 0.5 mi.
Distance to Interstate	I-785 / 39.9 mi.
Rail	Not Available
Water Provider	City of Danville – 12 in.
Water Capacity	1.0 MGD
Sewer Provider	City of Danville – 8 in.
Sewer Capacity	0.5 - 1.0 MGD
Natural Gas Provider	City of Danville
Natural Gas Capacity	200 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes

Airside Industrial Park

Location	175 Airside Drive, Danville, VA 24540
Owner	City of Danville
Total Acreage	51 acres
Available Acreage	51 acres
Zoning / Land Use	LEDI Light Economic Development
Distance to 4-Lane Arterial	US HWY 360/58 - 0.7 mi.
Distance to Interstate	I-785 / 44.3 mi.
Rail	Not Available
Water Provider	City of Danville – 12 in.
Water Capacity	0.25 – 0.5 MGD
Sewer Provider	City of Danville – 8 in.
Sewer Capacity	0.1 MGD
Natural Gas Provider	City of Danville – 6in.
Natural Gas Capacity	150 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW (Transmission Available)
Telecom	Verizon
Enterprise Zone	Yes

Riverview Industrial Park

Location	Stinson Drive, Danville, VA 24540
Owner	City of Danville
Total Acreage	77 acres
Available Acreage	77 acres
Zoning / Land Use	LEDI Light Economic Development
Distance to 4-Lane Arterial	US HWY 29 - 0.7 mi.
Distance to Interstate	I-785 / 40.4 mi.
Rail	Not Available
Water Provider	City of Danville – 12 in.
Water Capacity	1.0 MGD
Sewer Provider	City of Danville – 12 in.
Sewer Capacity	1.0+ MGD
Natural Gas Provider	City of Danville
Natural Gas Capacity	400 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	5-8 MW
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes

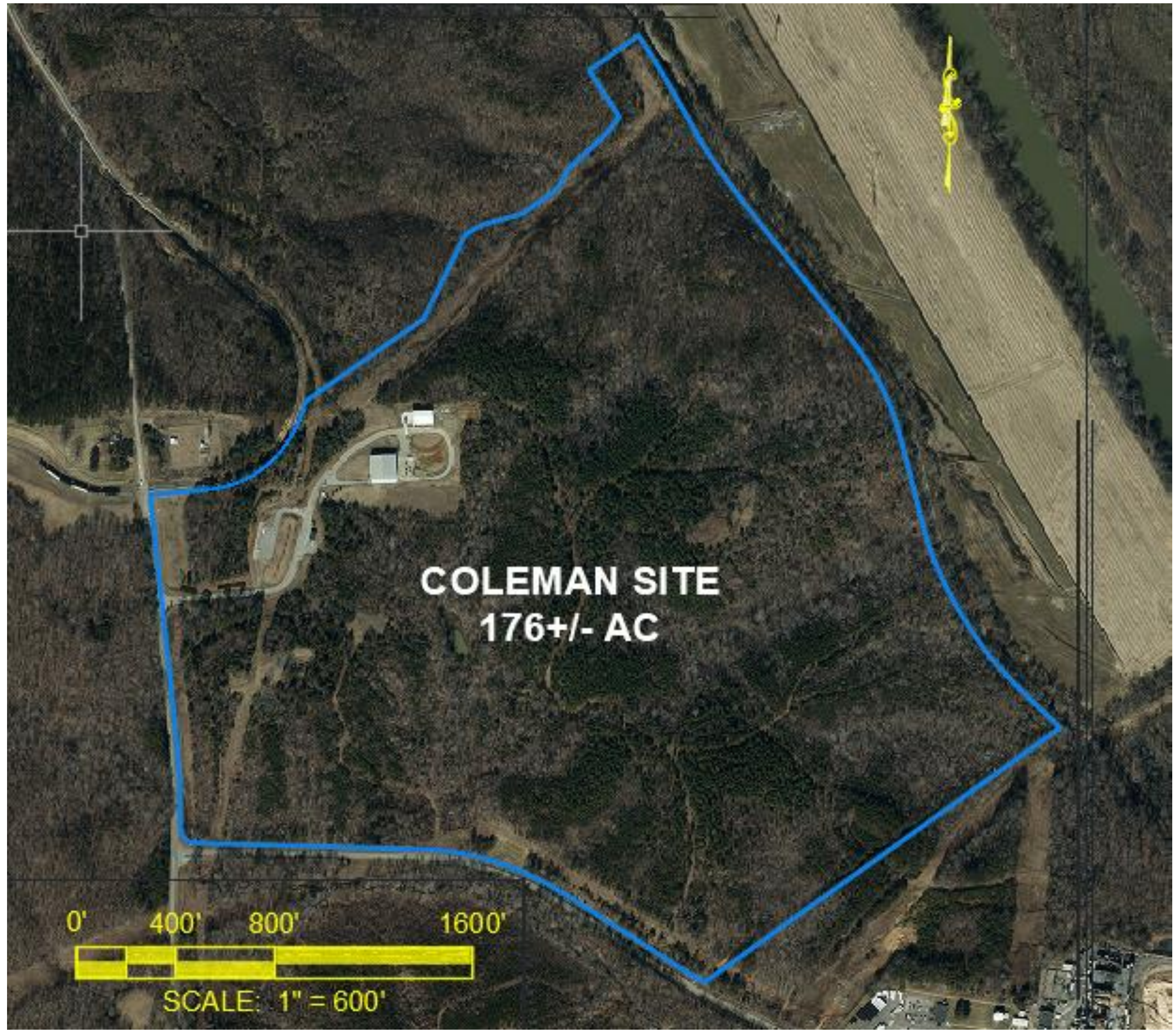


Danville Expressway

Location	US Hwy 29 and S Main St, Danville, VA 24541
Owner	Private
Total Acreage	109 acres
Available Acreage	109 acres
Zoning / Land Use	LEDI Light Economic Development
Distance to 4-Lane Arterial	US HWY 29 / Adjacent
Distance to Interstate	I-785 / 36.1 mi.
Rail	Not Available
Water Provider	City of Danville – 12 in.
Water Capacity	0.5 MGD
Sewer Provider	City of Danville
Sewer Capacity	0 – 10,000 GPD 16 in. FM ¼ mile away
Natural Gas Provider	City of Danville
Natural Gas Capacity	150 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	1-2 MW
Telecom	nDanville
Enterprise Zone	Yes

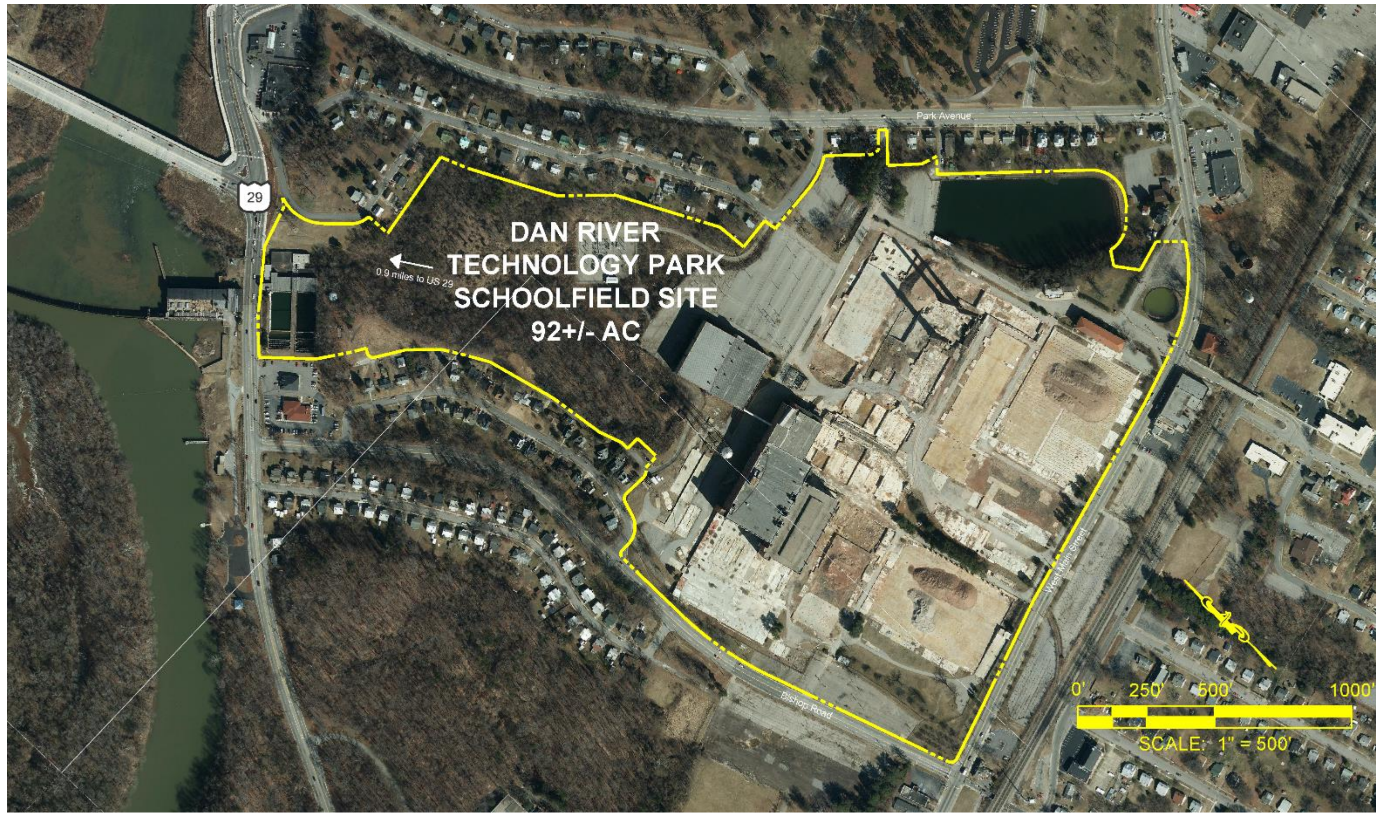
Coleman Site

Location	Gypsum Road, Danville, VA 24541
Owner	City of Danville
Total Acreage	176 acres
Available Acreage	176 acres
Zoning / Land Use	IM Manufacturing District
Distance to 4-Lane Arterial	US HWY 29 – 1.4 mi.
Distance to Interstate	I-785 / 40.7 mi.
Rail	Available (Norfolk-Southern)
Water Provider	City of Danville – 12 in.
Water Capacity	1.0+ MGD
Sewer Provider	City of Danville – 10 in.
Sewer Capacity	1.0 MGD
Natural Gas Provider	City of Danville – 12 in.
Natural Gas Capacity	400 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW
Telecom	Verizon
Enterprise Zone	Yes



Dan River Technology Park Schoolfield Site

Location	West Main St., Danville, VA 24541
Owner	City of Danville
Total Acreage	92 acres
Available Acreage	92 acres
Zoning / Land Use	IM Manufacturing District
Distance to 4-Lane Arterial	US HWY 29 – 2.9 mi.
Distance to Interstate	I-785 / 36.6 mi.
Rail	Available (Norfolk-Southern)
Water Provider	City of Danville – 12 in.
Water Capacity	1.0+ MGD
Sewer Provider	City of Danville – 36 in.
Sewer Capacity	1.0+ MGD
Natural Gas Provider	City of Danville
Natural Gas Capacity	150 MCFH @ 58 psi
Power Provider	American Electric Power
Power Capacity	73 MW
Telecom	Mid-Atlantic Broadband
Enterprise Zone	Yes



995 Piney Forest Road

Location	995 Piney Forest Rd, Danville, VA 24540
Owner	Private
Total Acreage	19.32 acres
Available Acreage	19.32 acres
Zoning / Land Use	Various
Distance to 4-Lane Arterial	US HWY 29 – 3.3 mi.
Distance to Interstate	I-785 / 40.8 mi.
Rail	Not Available
Water Provider	City of Danville
Water Capacity	1.0+ MGD
Sewer Provider	City of Danville – 8 in.
Sewer Capacity	0.5 MGD
Natural Gas Provider	City of Danville
Natural Gas Capacity	150 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW (Transmission Available)
Telecom	nDanville
Enterprise Zone	No

Long Mill Site Property

Location	109 Main St, Danville, VA 24540
Owner	Private
Total Acreage	26.74 acres
Available Acreage	26.74 acres
Zoning / Land Use	Commercial / TWC Tobacco Warehouse
Distance to 4-Lane Arterial	US HWY 360/58 – 0.1 mi.
Distance to Interstate	I-785 / 39.3 mi.
Rail	Not Available
Water Provider	City of Danville
Water Capacity	1.0+ MGD
Sewer Provider	City of Danville – 12 in.
Sewer Capacity	1.0+ MGD
Natural Gas Provider	City of Danville
Natural Gas Capacity	150 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	2-3 MW (Transmission Available)
Telecom	Verizon
Enterprise Zone	Yes

661 Kentuck Road

Location	661 Kentuck Rd, Danville, VA 24540
Owner	Norfolk Southern Corporation
Total Acreage	58 acres
Available Acreage	35 acres
Zoning / Land Use	IM Manufacturing
Distance to 4-Lane Arterial	US HWY 360/58 – 1.2 mi.
Distance to Interstate	I-785 / 42.5 mi.
Rail	Available (Norfolk-Southern)
Water Provider	City of Danville – 12 in.
Water Capacity	0.5 MGD
Sewer Provider	City of Danville – 18 in.
Sewer Capacity	2 MGD
Natural Gas Provider	City of Danville – 8 in.
Natural Gas Capacity	150 MCFH @ 58 psi
Power Provider	City of Danville
Power Capacity	4-6 MW (Transmission Available)
Telecom	Verizon
Enterprise Zone	Yes

Appendix C

Buildings

Building Name	Location	Total SF	Parking Spaces	Water	Sewer	Electric	Natural Gas	Fiber	Nearest Major Highway
Corning Building	265 Corning Drive	16,000	300	City of Danville	City of Danville	City of Danville	City of Danville	Verizon and Comcast	<1 mile from HWY 58
Former Allergease Warehouse	110 Newton St.	16,600		City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	VA HWY 293 - 0.2 mile
Former McGee Furniture	203 Piney Forest Rd.	18,000		City of Danville	City of Danville	City of Danville	City of Danville	Verizon and Comcast	<1 mile from HWY 58
609 Keen Street	609 Keen St.	19,462	60	City of Danville	City of Danville	City of Danville	City of Danville	nDanville	<1 mile from HWY 58
Econmets Building	1 Econmets Way	20,164	84	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	US HWY 360 - 0.1 mile
Former Leggett Building	816 Monument St.	18,000 - 24,000		City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	1 mile from HWY 58
Maplewood Warehouse	116 Maplewood Ave.	24,675		City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 29
Former US Green Eng	1350 Barker Rd.	27,000		PCSA	PCSA	City of Danville	City of Danville	nDanville	US HWY 360 - 1.8 miles
Davis Storage Waterhouse	553 Lynn St.	30,666	Open Area	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
Coleman Marketplace	165 Holt Garrison Pkwy	1,200 - 32,020		City of Danville	City of Danville	City of Danville	City of Danville	Verizon and Comcast	<1 mile from HWY 29
Patton Street Building	201 Patton St.	39,332	20	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
Dan River Plaza	1340 W Main St.	4,220 - 45,185	100	City of Danville	City of Danville	City of Danville	City of Danville	Verizon and Comcast	US-29-BR - 0.3 mile
Register & Bee Building	700 Monument St.	46,644	26	City of Danville	City of Danville	City of Danville	City of Danville	nDanville	1.1 mile from HWY 29
RJR Building	401 Bridge St.	55,000		City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
High Bay Warehouse	1076 W Main St/Bishop Rd.	62,000		City of Danville	City of Danville	City of Danville	City of Danville	nDanville	<1 mile from HWY 29
Rick Barker Storage	1746 South Main St, A&B	64,000 - 77,800	5	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
South Boston Road Warehouse	1241 South Boston Rd.	81,780	Yes	City of Danville	City of Danville	City of Danville	City of Danville	nDanville	0 mile from HWY 58
Cahill Court Warehouse	812 Cahill Ct.	100,000		City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 29
Riverside Shopping Center	3230 Riverside Dr.	400 - 109,833	Designated	City of Danville	City of Danville	City of Danville	City of Danville	Yes	0 mile from HWY 58
125 Martha Street	125 Martha St.	110,000	Yes	City of Danville	City of Danville	City of Danville	City of Danville	nDanville	US HWY 29 - 1.1 miles
Robertson Warehouse	2117 Halifax Rd.	58,700 - 112,000	Designated	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
Piedmont Warehouse	301 Trade St.	125,000	12	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
Imperial Warehouse	501 Craghead St + 539	166,640	25	City of Danville	City of Danville	City of Danville	City of Danville	nDanville and Verizon	<1 mile from HWY 58
Dunham's Sport	325 Piedmont Dr.	36,031 - 173,412	Common	City of Danville	City of Danville	City of Danville	City of Danville	Verizon and Comcast	<1 mile from HWY 58
Former Corning Glass	265 Corning Dr.	234,044	300	City of Danville	City of Danville	City of Danville	City of Danville	Verizon and Comcast	<1 mile from HWY 29/HWY 58
White Mill	424 Memorial Dr.	657,307	Open Area	City of Danville	City of Danville	City of Danville	City of Danville	nDanville	0.4 mile from HWY 58
Masonic Temple	105 S Union St.			City of Danville	City of Danville	City of Danville	City of Danville	nDanville	0.4 mile from HWY 58
Cane Creek Centre Advanced Manufacturing Complex	100 IKEA Dr.	925,000		PCSA	City of Danville	City of Danville	City of Danville	Verizon	0.7 mile from HWY 58

Appendix D

Corporate Perspective on Competitive Positioning - JLL

Research Memorandum
Jones Lang LaSalle Incorporated

City of Danville-Pittsylvania County, Virginia

Corporate Perspective on Competitive Position

Gary Yates
gary.yates@am.jll.com

This document generally highlights the strengths and weakness/challenges of the City of Danville and Pittsylvania County, Virginia (Region) from the perspective of a corporate site selector. Recent site selection research performed by JLL combined with knowledge of targeted sectors/clusters was used as background to reflect most recent actions and trends. Maps of population growth and occupation growth are included to illustrate the corporate interpretation of workforce availability.

Site selectors represent a broad range of clients, all with unique requirements. There is no single factor or component that is true for all projects. However, we can bucket our projects and with some high-level drivers. All projects will have a blend of the following requirements: Workforce/Talent, Logistics (input/output access), and Infrastructure (process inputs, delivery systems, facility). Several general project types are noted below with their standard requirements.

	Must have	Nice to have
Distribution (automated DC)	Interstate access (multi-direction) Specialty maintenance talent Low cost workforce Large flat site	Rail Large workforce
Distribution (traditional DC)	Interstate access (multi-direction) Large workforce Large flat site	Rail No competition for workforce
Manufacturing (raw materials driven)	Proximity to raw materials	Infrastructure Access (rail or interstate) Workforce Large flat site
Manufacturing (output/delivery driven)	Proximity to customers Interstate access	Infrastructure Workforce Large flat site
Manufacturing R&D	Engineering talent	Infrastructure Access (rail or interstate) Large flat site

Our typical client search is a process of elimination; we eliminate locations that don't meet our "Must Have" requirement. Most manufacturing and distribution projects are not truly "national" searches, but regional searches. However, the region can be very large (4-5 states) and easily include 200+ communities. The process to move from 200+ communities down to three means removing all communities that don't meet the "Must Have" criteria. Most clients require only one location in a region, so the process of elimination is quick to remove 90% of the locations. Some of those 90% may have a mitigating factor that would makes it worthy of further consideration, but with 20 remaining locations that can work, efficiency demands research only on the remaining 20.

The perceived assets and challenges for the City of Danville and Pittsylvania County, Virginia (Region) from the Site Selectors view point:

Assets	Challenges
• Limited competition for Talent • Low pay rates • Low cost of living • Access to three airports • Workforce training is organized and established • Proximity to state border (VA may be more attractive for some companies) • Megasite is an attractive asset for a large user	• Talent availability (see occupation heat maps) • Interstate access (especially notable for the "emerging" cluster of Distribution/E-commerce which often requires multi-directional interstates – not a cul-de-sac) • Quality of life (amenities for executives who may be relocated internationally) • Distance to airports • Proximity to border (NC may be more attractive for some companies) • Megasite – such an attractive asset for a large user may scare away small to mid-size users who can't compete with a megasite user

Recommendations

The following recommendations are made from the perspective of a location consulting professional. The *less than optimal* opportunities may find success in the Region, but the likelihood of a consultant recommending the Region to a *less than optimal* user is very low.

Optimal opportunities to pursue

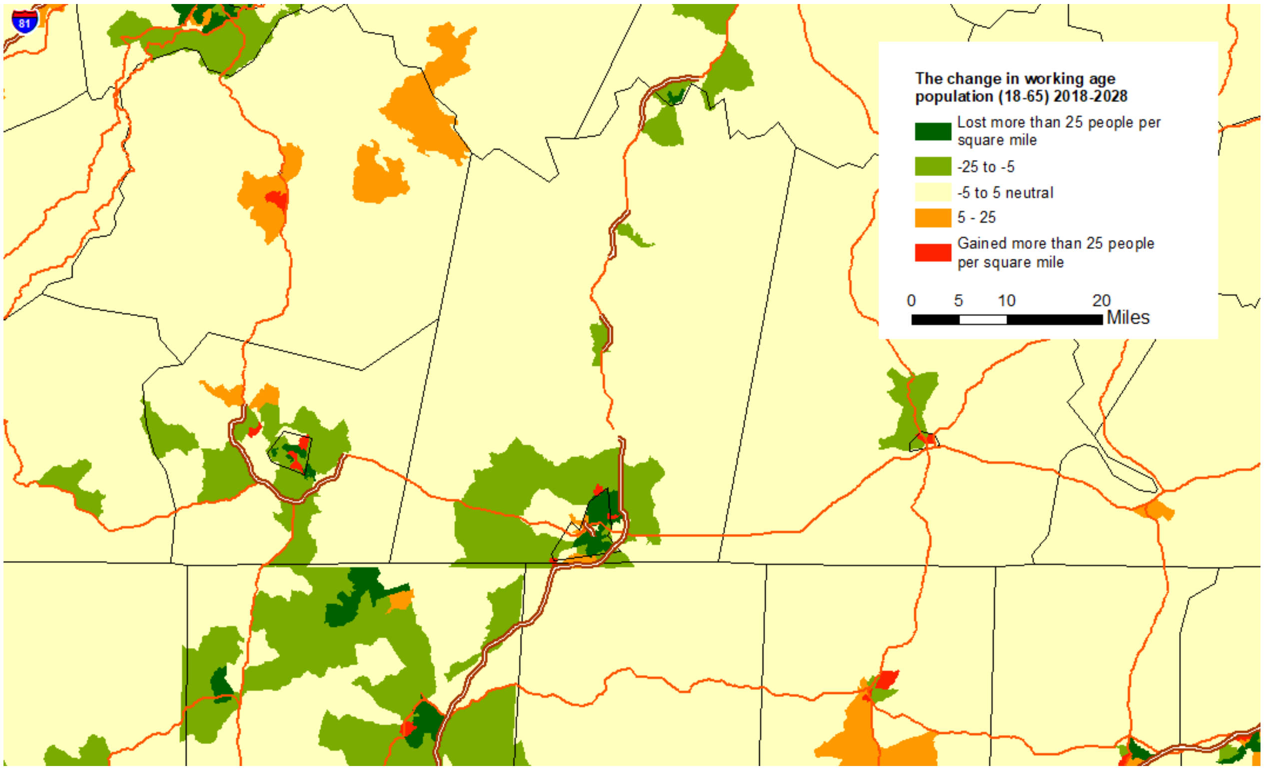
- Distribution operation serving a sub-region (e.g. a company seeking a location from which to serve customers from Asheville to Raleigh may find the Region a good fit)
- Manufacturing operations that draw on the local/regional raw materials are good pursuit opportunities (e.g. wood products, food processing)
- Manufacturing operations that deliver products in a small region (e.g. automotive suppliers, plastics, vulcanized materials)

Less than optimal opportunities

- Distribution operation serving a multi-state region (e.g. a company seeking to serve customers from Atlanta to Harrisburg is much less likely to consider the Region)
- Manufacturing operations with large quantities of inputs/outputs by truck
- Any operation that needs to hire 500+ people in one year *or* has seasonal employment in excess of 500

The following maps illustrate where workforce resides and where jobs are located.

Working Age Population (18-65) Growth 2018-2028



Popstats, Synernogis Technologies Inc., December 2018

The map illustrates a flat or decline in the working age population. This can happen for the following reasons:

- An aging population larger than new workforce entrants
- The relocation of HS and college graduates out of area

The corporate site location project is not deterred by a flat or slightly declining workforce (this is a broad, national issue), but will require a clear path to workforce (some residential growth, school pipeline, etc.).

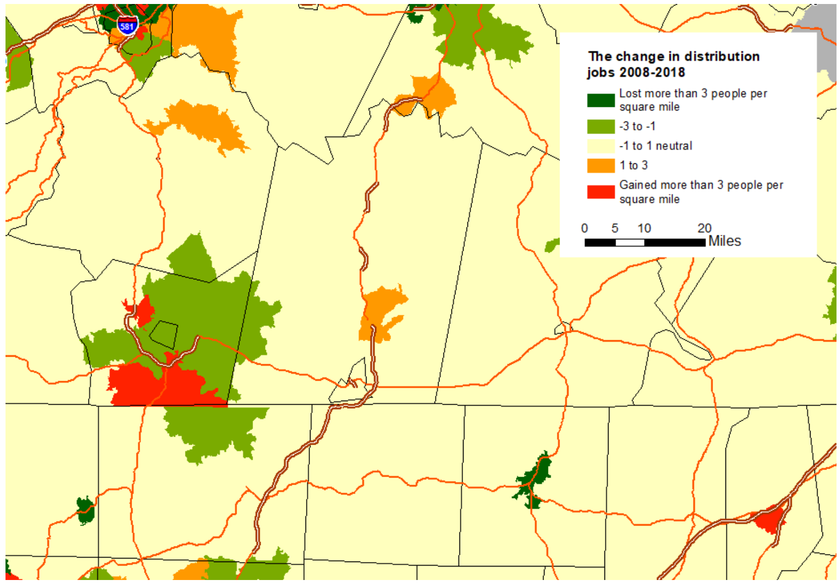
Distribution Occupations: Where people work vs where people live

The series of maps at right show a growth in Distribution Jobs but no corresponding growth in Distribution Workers.

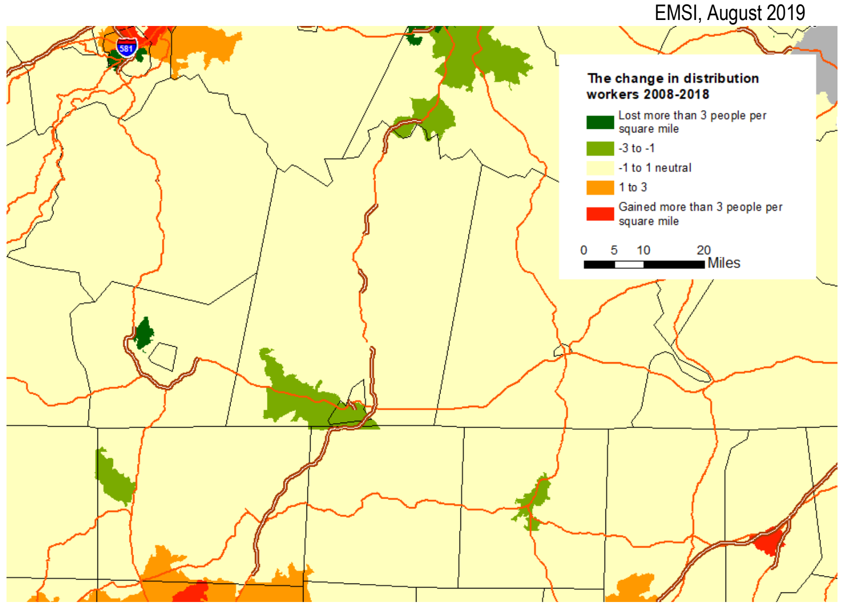
This mapping result will drive some concern for corporate clients and require an in-depth analysis of "compatible" occupations.

Occupations included in "Distribution" are as follows:

- Driver/Sales Workers and Truck Drivers
- Conveyor Operators and Tenders
- Industrial Truck and Tractor Operators
- Laborers and Material Movers, Hand
- Tank Car, Truck, and Ship Loaders
- Stock Clerks and Order Fillers



EMSI, August 2019



EMSI, August 2019

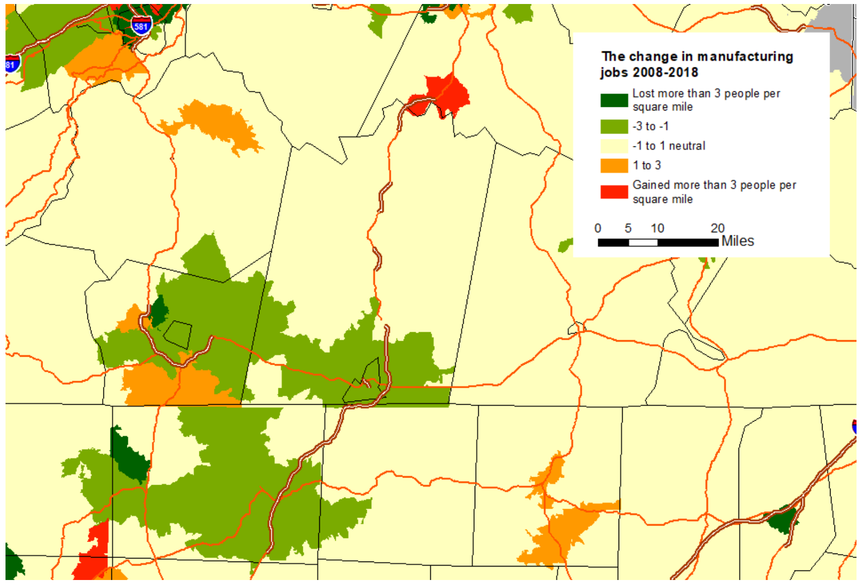
Manufacturing Occupations: Where people work vs where people live

The series of maps at right show a growth in Manufacturing Jobs but no corresponding growth in Manufacturing Workers.

This mapping result is positive (decline in the number of jobs means less competition) and negative (decline in the number of workers). Further analysis would be required to determine what's behind the change and what alternative workers or "compatible" workers are available.

Occupations included in "Manufacturing" are as follows:

- Supervisor of Production Workers
- Production Occupations
- Installation, Maintenance, and Repair Occupations
- Plant and System Operators



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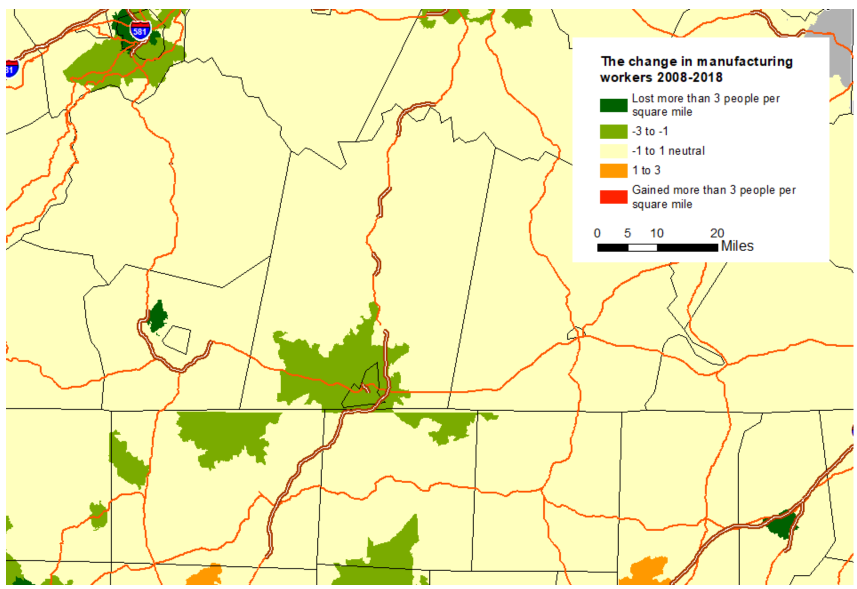

EMSI, August 2019

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