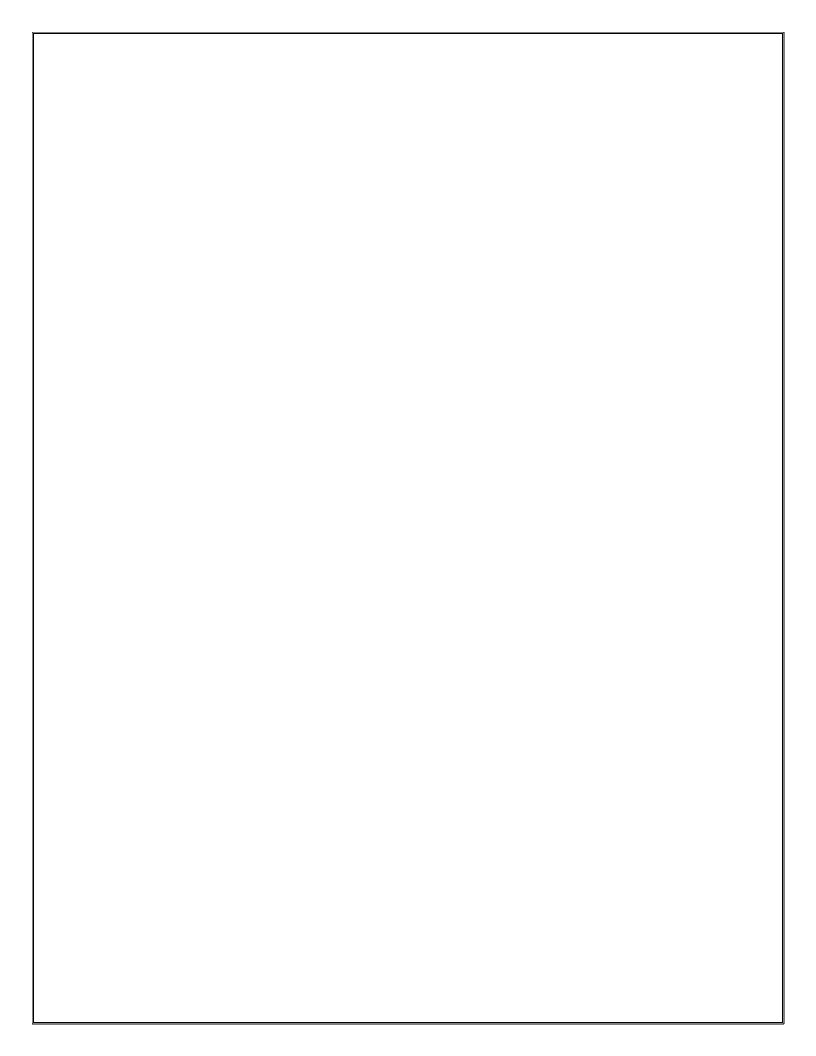
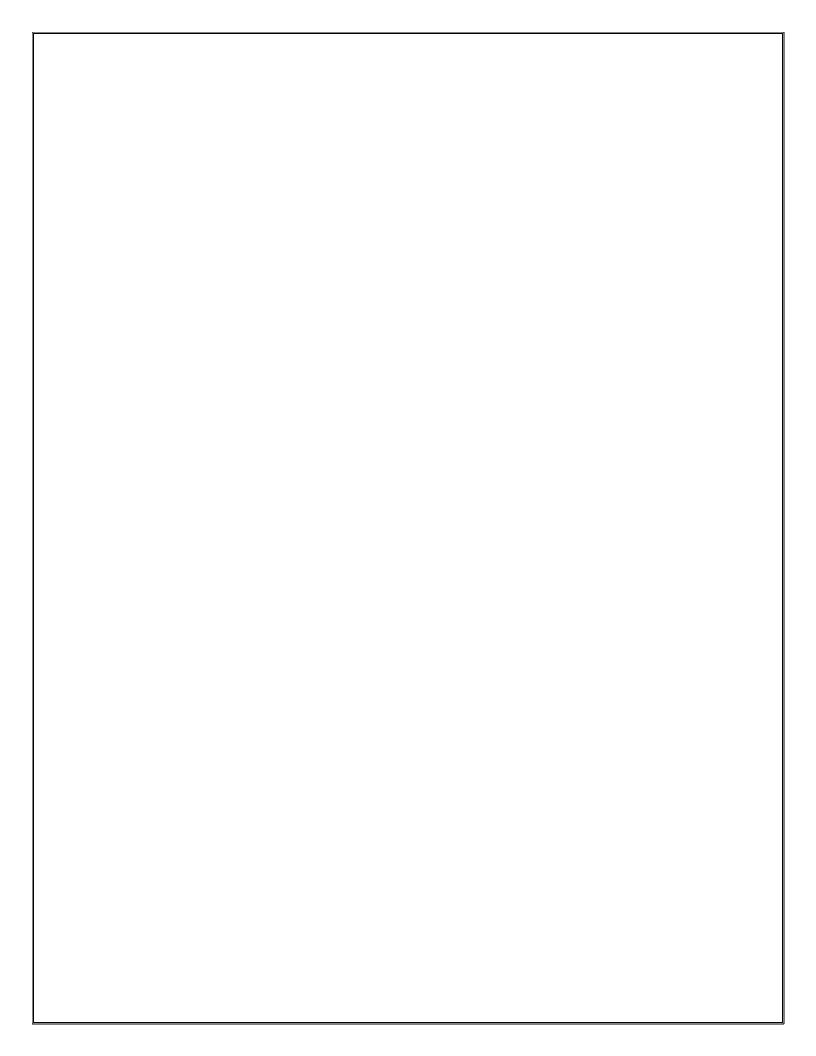
LaGrange Community Analysis Summary

Community Planning
Land and Urban Economics
Auburn University
Fall 2016





LaGrange Community Analysis Summary	
Community Planning Land and Urban Economics Auburn University Fall 2016	



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Introduction

During the fall of 2016, Auburn's master of community planning program partnered with the city of LaGrange, GA to provide a comprehensive analysis and review of its developmental plan in four categories: demographics, economics, housing, and image. Led by Dr. Jay Mittal, his land and urban economics class of eighteen students conducted a semester-long project that culminated in a final presentation for the city, with the results of the study compiled in this report. This process consisted of meetings with city officials, site visits, GIS analysis, and US Census data. Students incorporated class concepts such as location quotients, Huff's model of retail gravitation, and growth poles.



Executive Summary

To capitalize on the student diversity and individual capabilities, students reported customized ideas to the city of LaGrange. The results revealed a wide variety of concepts and implantation ideas for the city and emphasized creative ways for it to expand on its growth capabilities. Topics included sustainability, transportation, social equity, real estate development, and education.

Reports on sustainability encompassed ideas promoting additional park spaces, alternative energy, maximizing use of state parks, and city challenges. The collected idea with these concepts is to attract specific demographics such as recent college graduates and white collar professionals. Emphasizing sustainability is not only a way to tap into those potential fields, but also a way to promote smart city growth.

These concepts also tie in several transportation ideas, including walkability, bicycling, and mass transit. Transforming how residents are moving through the city can leave a lasting impact on citizen health, traffic flow, accessibility, and economy. It also connects to other reports dealing with improving downtown appeal and other city departments. Social equity and real estate development recommendations discuss improvement options for the downtown region, mixed use and retail possibilities. Each report contains a set of suggestions for specified city areas.

School statistics and the educational system was addressed by a few students. These reports discuss alternative possibilities for educational and recreational facilities and environment changes. Students also investigated how the education has potential to impact local industries and increase its connectivity with the community.

Mapping out the underlying themes of the individual reports would reveal the interconnectedness of solutions and untapped possibilities. Although each report recognizes an idea or existing complication, each student provided complex recommendations and suggestions reaching over into several sectors of society and government. With each report comes a glimpse of the city that each student idealizes as their potential future home.

History

LaGrange is a city rich in southern tradition. Characterized in the old south as a mill town, the city grew out of the textile industry. Cotton was the lifeblood of Lagrange and other cities in the Chattahoochee Valley, and as the cotton industry grew, so did the export potential. In the 1840s, Coweta Falls and Troup Factory established the significance of the textile industry. The first textile plant opened on Morgan Street in 1889. By 1915, Hillside Mills, built by the Callaway Family, became the 7th mill built in Lagrange.

The textile industry grew out of the enormous demand for cotton in the 19th century. Before and after the Civil War, Lagrange established itself among other mill towns in the southeast. Throughout the late 19th and early 20th century, the mills grew in economic strength and textile corporations began to form.

Throughout the 1920s, the textile industry acquired a large workforce and local business grew around it. The population of Troup County grew by 74%. In 1923, Dunson Mills doubled its capacity. The post-World War II years saw a population explosion, reaching close to 50,000 residents. In 1950s, Pepperell, a northern textile giant, had entered the market through its purchase of Dunson Mills. For 100 years, the textile industry dominated the local economy.

By the early 1980s, the rise in textile imports created a sharp economic decline for the local economy and the industries it supported. Through this decade, Milliken, which had bought Callaway Mills operation back in the 1960s, laid off a quarter of its workforce. By 1991, 58% of the fabric and apparel industry was imported. The industry which created jobs and employment for thousands of people in the Chattahoochee Valley now struggled to compete in a global market. In 2004, West Point Stephens filed bankruptcy. A recession throughout the first part of the 21st century further dampened growth for the city of LaGrange.

The stage is set for economic revival in the region. New industry has found a willing labor force, and property conveniently located next to major travel arteries. Foreign companies now consider

development on a large scale, and this is indicated by the establishment of KIA motors and Sentury Tires. Fortune 500 companies enjoy a presence, but the challenge has been to keep this wealth locally, which is a significant part of revitalization efforts. This has been recognized through a stagnation in population. While LaGrange has maintained consistency throughout the decades, families and residents have opted to work in Troup County but live or shop in neighboring Coweta and Lee Counties. Auburn, AL and Newnan, GA, two nearby cities that are comparable in size, have experienced a much faster growth rate than LaGrange.

Demographics

LaGrange has maintained a consistent and steady growth rate over the past century. Per the 2015 US Census estimate, LaGrange is home to 30,695 residents with a median household income of \$30,653. Of the 30,695 residents, 48.0% are Black, 44.7% White, 4.7% Hispanic/Latino, 2.5% Asian, and 2.1% other.

Four key demographic issues are outlined, based off both citizen input and spatial data to identify areas for improvement: housing, residency, segregation, and poverty.

Housing

The first housing analysis concerned concentrations of vacant houses in LaGrange. Vacancy classification covers buildings that are uninhabited, including boarded up buildings. Vacancy was calculated by taking the total number of vacant properties on the census tract and dividing it by the total number of houses on the same tract.

The city center is an area of concern due to its high percentage of vacant houses. The southwest census tract also has a very high percentage of vacancies. This tract is home to two of the three Interstate 85 corridors. These two are also the least developed of the group. The census tract is zoned as light industry and single-family homes. Vacancies inhibit growth and attraction of an area. Considering how this tract sees the largest amount of traffic into the city from the south, this is an area of concern.

The second housing analysis considers the number of units per acre. The housing density analysis showed interesting results when compared to the vacancy map. Despite a high number of vacancies along the southwestern portion of LaGrange, there is less development as well. The city center, however, has a high amount of housing development despite its high number of vacancies. All the Interstate 85 corridors have a low amount of housing units per acre, highlighting a possible area for improvement and development in these areas. The northwestern tracts, by West Point Lake, also have a low concentration of housing. It is worth noting, however, that development around recreational lakes can negatively impact the quality of recreation at the facilities. (For clarification,

the Supreme Court case of Tahoe-Sierra Preservation Council, Inc. v. Tahoe Regional Planning Agency)

Residency

There is a disparity between residential density and commuter concentrations within LaGrange. The community believes this is largely due to competition with the surrounding cities of Auburn, Alabama and Newnan, Georgia.

The first residency analysis depicts the concentration of residents within LaGrange. The city center maintains the highest number of residents per acre and this concentration decreases radially from the center. The three Interstate 85 corridor census tracts fall into the lowest bracket of resident density at less than 1 resident per acre. To the northwest, the housing density directly matches with the population density-low. The southwestern corridor tract, however, also has a high amount of vacancies, indicating a prominent candidate for development efforts in the future.

The northern Interstate 85 corridor, despite having a lower population density, has a higher concentration of commuters within its census tract. There is a high correlation between education, income, and commuters within LaGrange. Single-family residents are primarily working at home but there are some key areas where commuters are prevalent. The second residency analysis display a disparity between residency and employment within the area.

Segregation

The first segregation analysis shows a very clear picture of where ethnicities are concentrated within the city limit. The core has a very high concentration of minorities as residents (80-99%). Conversely, the northern Interstate 85 corridor has the lowest concentration of minorities (7-22%). The two less developed Interstate 85 corridors (at Whitesville Road and Hamilton Road) have a higher concentration of minorities as residents. The West Point Lake area most closely located to the country club also is one of the lowest concentrated areas of minorities.

Median age was another analysis area for segregation. The second segregation analysis focuses on the segregation of age groups within the city limits. This visual was created by separating the data into three age groups: 24-28, 29-41, and 42-50. These age groups were selected because they closely correlated with young adults, families with children, and older families with adult children. Median age implies a wide range of possible ages present in the census tract. A low median age, however, implies a high concentration of residents around the given value.

The core of the city, which had a high concentration of minorities, also has a high concentration of the young adult age bracket. The census tract located near West Point Lake and the country club is home to the eldest age group as well as the lowest concentration of minorities.

The segregation analyses identify the main areas of LaGrange where segregation is a key identifier. The city center has a high concentration of young minorities. The West Point Lake census tract is classified as older, Caucasian citizens. These areas will come into play again with other key issues.

<u>Poverty</u>

The first poverty analysis views median household income by separating the values into economic classes. The US Bureau of Labor and Statistics definitions for social classes were used to select the four classes for analysis. The four classes were low income, lower middle class, upper middle class, and upper class. As with the median age analysis, a spread of data values is inherent for the census tract, but this analysis only considered the mean of the data.

This analysis shows that there is an issue with poverty in the city center. The zone delineated by red identifies citizens living below the poverty line. The northern Interstate 85 corridor is majority Caucasian and it has the highest median household income.

Education is another indicator of poverty and is a major problem for a city that is rapidly growing in the industrial and the technical industry. The second poverty analysis visually represents the distribution of education within LaGrange. The term "educated" represents all the citizens that hold an associate's degree or higher, as represented by US Census data. Those considered outside of "educated" classification have a maximum of a high school education and are very unlikely to have technical skills relevant for industrial jobs. The data displayed in in this analysis was found by dividing the "educated" population by the total population.

The city center is a recurring component of each of these key issues, and the city center has an almost negligible concentration of citizens with a degree. The highest concentration of degreed residents lies in the census tracts closes to the lake. Single-family homes fall into the lower end of the distribution.

Conclusion

LaGrange has maintained a consistent growth rate over the past century. The growth rate itself, however, is not exceptionally high. The investigations indicated that there are a few crucial areas for development and investment within LaGrange. The city center is concentrated with young, uneducated minorities that live in highly developed yet vacant census tracts. The southwestern census tract with two Interstate 85 corridors is also prime for development. This census tract is highly vacant yet low in population and housing densities. Development of this property would drastically improve the attractiveness of these single-family homes and detract from Auburn and Newnan, its looming contenders. LaGrange is doing well and improvements in these areas would push it over the precipice into regional prominence.

Economic Trends of Manufacturing

Employment data for Troup County and the surrounding counties show that the major employers tend to cluster in the urban cores of the prominent cities in the region (LaGrange, Auburn, Newnan, Columbus, West Point). Looking at the spatial distribution of businesses across varying employment thresholds, manufacturing industries stand out as the major employers for Troup County. Most manufacturing employers are located along the I-85 corridor between the cities.

Recognizing that the broad economic trends for Troup County point towards manufacturing as the main base economic activity in the region, there is opportunity for economic growth with the city's assistance. Regional stakeholders need to understand the significance that manufacturing plays in the area so that they can focus efforts on bolstering the region's key industry.

Location Quotients

Troup County maintains a very successful manufacturing economy. The surrounding counties also utilize their land and other incentives to attract companies to the area. Troup County has welcomed several large companies over the last decade and is still bringing in new companies. These companies add to the highly competitive manufacturing region that already exists, particularly automotive industry. Comparing Troup County with the surrounding counties involves some economic analysis using location quotients. Location quotients (LQ) allow economists to quantify the competitiveness of an industry compared to the region, based off the number of employees per industry. Industries with an LQ > 1 are considered basic, which means that it is an export for the region while industries with an LQ < 1 are non-basic are an import for the region.

Troup County has an LQ of 1.41 in manufacturing which is second only to Chambers County in Alabama with an LQ of 1.50. This comparison does not include new companies such as Sentury Tires, which is coming to Troup County in 2017. Once these jobs are secured in the region another analysis should show even closer margins if Troup County does not exceed Chambers county at that point. There are several other basic industries in LaGrange and Troup County including: retail (1.10), utilities (1.03), real estate (1.13), health (1.14), food (1.03) and other (1.06). The Finance industry has a LQ of .99, which means that it is very stable. While many other industries may not be

basic, LaGrange and Troup County preform very well compared to neighboring cities and counties. Production technology is one industry that Troup County does not have a high LQ but outperforms the surrounding area. Manufacturing and production technology are linked industries which share other industry linkages. These links allow for future development and expansion into those areas.

Comparable Micropolitan Areas

LaGrange, Georgia is classified as a micropolitan area. A micropolitan area is defined as a labor market area centered on an urban cluster with a population of at least 10,000 but less than 50,000. In the United States, there are a total of 576 identified micropolitan areas. While micropolitan areas have less economic significance compared to metropolitan areas, many micropolitan areas are acquiring more manufacturing industry because of land availability and lower land costs. These new developments make these areas more significant in the scope of economy.

Among the 576 highest performing micropolitan cities in the United States, Lagrange ranks 16th. This report will compare LaGrange to the top four performing micropolitan cities, which are Findlay, Ohio; Cullman, Alabama; Wooster, Ohio; and Tupelo, Mississippi. Although the remaining Micropolitan cities perform higher in overall combined manufacturing, LaGrange has a strong automotive manufacturing base which should be further capitalized on. Providing support and creating a strategy for automotive manufacturing recruitment might be a worthwhile opportunity for the city and county. It is also important to note that Lagrange is competitive with Cullman, Alabama and outpaces the other three top cities in automotive manufacturing. However, compared to the top four micropolitan areas, Lagrange's production technology industry is lacking, but has a small effect on regional employment. This small effect could make a difference with the diversity of the manufacturing industry.

Industry Linkage

A major export industry often attracts related industries to that area as well. The process for determining these related industries is called cluster mapping and this is used as a guide to determine an area's strengths and potential weaknesses. Based on the cluster map data for LaGrange, it shows that LaGrange could benefit from expanding on its production technology because it relates directly to the automobile industry.

<u>Automotive & Production Technology Growth Poles</u>

To determine potential growth for production technology, a growth pole study was conducted to analyze growth between linked industries. A growth pole refers to the agglomeration of linked industries around a core industry. **Figure 1** illustrates the growth of industries linked to automotive manufacturing around the Kia manufacturing plant. This growth has occurred mainly along the I-85 corridor, as the interstate provides easy access to Kia.

As agglomeration matures, linked industries can form their own growth pole, attracting even more diverse types of businesses. For example, US Cluster Mapping indicates that production technology firms are closely linked to recreational goods, lighting, downstream metals and medical device manufacturing. To develop a more diverse economy, it is important to expand these linked industries. Production technology firms in Troup County are sparse, but Piedmont Mechanical stands as the dominant business in this industry. A mechanical contracting firm, Piedmont Mechanical, employs over 110 people and services local manufacturing businesses. Studying Piedmont as a growth pole indicates that very few industries linked to production technology have begun to establish firms in Troup County. With the presence of manufacturing, the potential to expand this industry remains. Proper investment in this industry will serve to diversify industry and create quality, high-paying jobs.

<u>Investment in Regional Higher Education</u>

Creating jobs in the engineering and production technology industries is the most important strategy in diversifying the economy in Troup County. However, filling those positions with young, quality, educated employees is a looming challenge. Young professionals are an important demographic because they provide enthusiasm and make a strong footprint on local economies. Troup County struggles to retain and attract young engineers because the higher education systems do not encourage graduates to stay. West Georgia Technical College offers trade skill programs, rather than an engineering diploma. Lagrange College offers an engineering pre-professional program, stating that students must finish their degree at Auburn or Georgia Tech. Lagrange must invest and help these universities establish 4-year engineering degrees to retain these students. In

addition, working with firms in the county to develop internship programs will help attract graduates from outside the county.

Recommendations and Suggestions

LaGrange already has a strong automotive manufacturing market and should continue to build on this industry. This naturally will attract manufacturers in related economies such as plastics and metalworking. The next step would be to also invest in production technology to attract engineering firms while supporting regional colleges to improve their engineering programs. This would potentially attract and retain young professionals, increase the median income, improve workforce quality, and develop a more knowledge-driven community.

Housing Market Trends

Lagrange has experienced a growth in housing units between 2000 and 2010; however, this increase has stagnated since then and has even decreased in 2013 and 2014 (US Census Bureau, 2010). This can be addressed by focusing housing redevelopment efforts on high priority areas. These areas are determined by looking at several factors, including median household income, housing unit vacancy rates, employment location hotspots, crime report locations, assumed age of housing units, proximity to pull factors, accessibility to needs, and the overall character of the area.

Figure 1 illustrates the median household income within Troup County at the Census Tract level. There is a clustering of lower incomes near central and south-central LaGrange, with much of the higher incomes located toward West Point Lake. The inset map represents the percentage above or below Troup County median income (\$41,906). Median income levels are an indicator of which areas of Troup County or LaGrange might have less capital to maintain their properties.

Figure 2 illustrates the housing unit vacancy rates for Troup County. These rates were broken up into 3 categories, with rates below 10% being considered normal, rates between 10-19% being intermediate, and rates greater than 20% being considered critical. The inset map represents the specific vacancy rate for each tract in central LaGrange. Higher vacancy rates appear near southcentral LaGrange and in the north-west near West Point Lake.

Figure 3 illustrates employment hotspots across Troup County. Hotspots are based on number of people employed per business. There is a large presence of employment opportunities near the downtown area of LaGrange. This is significant because there is a mismatch between the location of jobs and where people are choosing to live. Significant employment clusters appear along transportation corridors in LaGrange. Many of the high employment areas are also higher in residential vacancies.

Figure 4 shows the crime report information for the past 6 months in LaGrange. Looking at the spatial patterns of crime in LaGrange, most crime clusters in the downtown, and gradually tapers outward. The higher amounts of crimes reported in the central LaGrange area, which can significantly affect potential resident's desire to live there.

Figure 5 compares LaGrange high schools with its competitors, Auburn, AL and Newnan, GA. Auburn and Newnan schools have consistently performed better than LaGrange, which is significant because it can be an important factor for why people choose to live outside of LaGrange. Based on graduation rates, LaGrange High Schools have consistently performed lower than its competitors for the previous four years. Strong school districts in neighboring cities are a major pull factor from residency in LaGrange.

Figure 6 represents the median year that structures were built within each census tract. Although these are not exact years for specific housing units, it still illustrates that there is a concentration of older structures near central LaGrange and these areas might be in more need of repair.

Considering the criteria, there is a need for beneficial urban redevelopment in high priority areas. The central and south-central areas of LaGrange are considered high priority for redevelopment efforts. There were three census tracts that were decided to be high priority for improving housing conditions. Although these are census tracts, they illustrate the common trends in their areas. Each of the tracts tended to have older homes, lower incomes, and higher vacancy rates. By considering each areas character and development, proposed site-specific strategies are presented to improve their conditions.

Central LaGrange could benefit from focused beautification efforts, walkability improvements, and emphasis on preserving the historic character of the older neighborhoods. A combination of refurbishing blighted properties, improving accessibility and implementing small-scale parks will improve the overall housing conditions for the area. There is even opportunity to incorporate "The Thread" in revitalizing these areas, since several lines of the trail pass through these high priority areas.

There does not appear to be one single reason for the housing conditions currently, so there is not a single solution. By focusing on several strategies in combination these areas should be able to attract more residents. Our primary strategy proposed is to focus on temporary solutions first, such as utilizing vacant properties as community gardens or parks, and then gradually transition into

long-term strategies. Long-term strategies would include promoting the sense of community ownership by residents, focusing on infill development as opposed to sprawl development, and lastly adjust code enforcement as necessary for blighted properties.

Need for Community Engagement & Involvement

- Survey Residents in High Priority Areas
- Promote sense of ownership in community
- Create shared public spaces
- Implement small-scale community garden(s)
- Gauge residents' suggestions on "The Thread"
- Generate involvement with local schools
- Determine common "vision" for each community

Proposals/Strategies to Improve Housing Status

- Assess code enforcement for blighted properties
- Incorporate micro-parks, community gardens, & cost-effective solutions for vacant properties
- Improve sense of community ownership with residents
- Focus more efforts on infill redevelopment, less on sprawl development
- Promote resident involvement in redevelopment process

Image Building

LaGrange has a dynamic mix of industry, public involvement, and location with the potential for a burgeoning growth in population and real estate. However, this has not yet become apparent with a steady decline of new housing unit construction over the years. This unfortunate trend demonstrates how despite Troup County's wealth of economic opportunity, its workforce is choosing to live elsewhere.

Assets & Partners

LaGrange has amenities and initiatives that most cities its size is not able to sustain. With assistance from numerous partners, LaGrange can offer a thriving arts community, a growing historic downtown, and numerous outdoor activities. One of its most important assets is its location, situated just 68 miles away from Atlanta, GA and 96 miles away from Montgomery, AL. In addition, LaGrange is situated along the busy Interstate 85 corridor at its intersection with Interstate 185. The Callaway Gardens, Franklin D. Roosevelt's Little White House, and the upcoming Great Wolf Lodge provide excellent tourist destinations for vacationers.

One of the most prominent features in LaGrange is West Point Lake, spanning 525 miles of shoreline with 35 miles falling directly in Troup County and an annual economic impact estimated to be \$82 million (USACE). LaGrange offers two commercial marinas for hunting, fishing, camping, and other family activities. The Army Core of Engineers manages the lake, offering a unique park experience for visitors looking for a more nature oriented lake experience. Troup County Parks and Recreation manages eight different facilities and offers 15 different fitness programs. The city is committed to further encouraging an active lifestyle by offering state-of-the-art outdoor facilities including tennis courts, a 27-mile thread trail, and an outdoor amphitheater.

In addition to rebuilding and sustaining the existing landscape, LaGrange is also working with the Georgia Department of Economic Development, The Chamber of Commerce, surrounding counties, and existing industry to grow its job opportunities and economic footprint. LaGrange has an active economic development office that has succeeded in recruiting KIA and Sentury Tires, offering much

needed employment alternatives for the surrounding areas. The Chamber of Commerce contributes to small businesses by offering workshops, training, and guidance so that potential business owners have additional support opening businesses of their own. They also facilitate relationships between businesses, both industrial and small, while connecting those businesses with community events and citizens. The Strategic Planning Initiative is an effort by the city to address social topics that are often ignored, which will allow for open dialogue with the community.

City Entrances

There are seven main entrances into the city: US 27 and State Route 219 from the north; US 29 and State Route 109 from the east; US 27 and State Route 219 from the south; US 29 from the west. State Route 109 connects to U.S. Interstate 85 at exit 18 and is most frequently used by people traveling from Columbus, Newnan, and Atlanta. It houses many of the city's retail properties like the LaGrange Mall. US 27 is on exit 14 and is only a mile away from State Route 219's exit 13. Both roads would be primarily used by travelers from Columbus, West Point, and Lee County. They are both an interspersed mix of residential, commercial, and light industrial. Both have many areas of disrepair and present the traveler with scenes such as the ones pictured below.

Retail

The lack of retail in Troup County is a significant detractor from residential incentives. It also misrepresents the opportunities of the community. Improving the retail market will have a profound impact on LaGrange. Current retail in LaGrange is centered in and around LaGrange Mall, a 233,000-square foot shopping center located on Georgia Highway 109 just east of downtown. Regional contemporaries include Coweta County, roughly 40 miles northeast, and Lee County, roughly 40 miles southwest. These counties are also home for many of Troup County's employees. By comparison, both counties dramatically outpace Troup County in terms of available retail.

Newnan, GA is roughly halfway between LaGrange and Atlanta, and home to 138,427 residents (US Census Bureau, 2015). Its primary retail centers are clustered near or around the intersection of Georgia Highway 34 and US Interstate 85. Centers here include: Newnan Crossing, 453,648 square feet; Ashley Park, 554,364 square feet; Newnan Pavilion, 468,223 square feet; Merchants Crossing,

174,059 square feet; and Newnan Crossing II; 433,232 square feet. The sum of these five developments equals 2,082,526 square feet of retail shops and services.

On the opposite side of LaGrange is Lee County, Alabama, home to 156,993 residents (2015 U.S. Census Bureau) and contains the cities of Auburn and Opelika. Retail in Lee County is focused primarily around the Tiger Town shopping center at the intersection of U.S. Highway 280 and U.S. Interstate 85, with other malls interspersed within the two main cities. They include: Tiger Town, 901,880 square feet; Auburn Mall, 524,097 square feet; Pepperell Corners 234,817 square feet; Midway Plaza (now Saugahatchee Square), 210,000 square feet; and The Shoppes at Cary Creek, 62,500 square feet. Together, these five developments total 1,933,294 square feet of retail shops and services.

The disparity between Troup County's retail market and that of Lee and Coweta counties has farreaching impacts both on potential new residents and on those already living in and around LaGrange. Individuals and families considering relocating near Troup County identify the lack of major retailers as a negative during their tours of the city. Even current residents are more likely to travel to other counties to do their shopping, thereby depriving LaGrange of potential sales tax revenue.

Huff's Model of Retail Gravitation, introduced by David Huff in 1963, is designed to find the probability that a person will shop at a certain retail center. The model compares the amount of retail available in that person's hometown versus nearby towns, factoring in distance. This was calculated for Lee County, Coweta County, and Troup County with the results shown in **Figure 1**.

The impact of these trends is that Troup County shoppers contribute to the demand shares of other counties more than their own. This enables those counties economic development agendas by contributing to tax revenue and visit numbers. Meanwhile, the Troup County market is deprived of both.

Education

Even though Troup County has experienced growth in its job market, it has not translated into a population growth. This is in direct contrast to the population growth in the Coweta and Lee County areas. One of the contributing factors is the negative perception that Troup County schools receive. Georgia reported a high school graduation rate of 79.2% in 2015 while Troup County had a graduation rate of just 71.4%. It also has a lower graduation rate then the five surrounding counties, trailing the highest achieving by 19.5 percentage points. The best performing high school in Troup County is Troup County High School, and it only has a graduation rate of 75.8%.

Reporting Level	System Name	School Name	Graduation Class Size	Total Graduation	Graduation Rate
School	Heard County	Heard County High School	132	120	90.9
System	Heard County	All Schools	132	120	90.9
School	Harris County	Harris County High School	404	363	89.9
System	Harris County	All Schools	404	363	89.9
School	Coweta County	Northgate High School	413	382	92.5
School	Coweta County	East Coweta High School	669	588	87.9
School	Coweta County	Newnan High School	546	439	80.4
System	Coweta County	All Schools	1,632	1409	86.3
School	Meriwether County	Greenville Middle - High School	100	89	89.0
School	Meriwether County	Manchester High School	111	89	80.2
System	Meriwether County	All Schools	212	178	84.0
School	Carroll County	Temple High School	152	128	84.2
School	Carroll County	Mt. Zion High School	95	86	90.5
School	Carroll County	Central High School	272	226	83.1
School	Carroll County	Bowdon High School	115	98	85.2
School	Carroll County	Villa Rica High School	372	296	79.6
System	Carroll County	All Schools	1,008	834	82.7
School	Troup County	Callaway High School	238	160	67.2
School	Troup County	Troup County High School	306	232	75.8
School	Troup County	LaGrange High School	372	263	70.7
System	Troup County	All Schools	918	655	71.4

Table ordered by graduation rate

There are major differences in size between the above counties so we also compared against the seven counties in the state that have comparable student populations. These counties all have graduating class sizes between 818 – 1018 students. Troup County ranked last again, trailing the best performing by 9.5 percentage points.

Reporting			Graduation	Total	Graduation
Level	System Name	School Name	Class Size	Graduated	Rate
System	Catoosa County	All Schools	837	711	84.9
System	Glynn County	All Schools	863	719	83.3
System	Walton County	All Schools	940	774	82.3
System	Dougherty County	All Schools	992	772	77.8
System	Whitfield County	All Schools	952	715	75.1
System	Barrow County	All Schools	947	699	73.8
System	Troup County	All Schools	918	655	71.4

Table ordered by graduation rate

Lee County Alabama is proving to be a big draw for those employed by the many industries located in and around LaGrange. Per the Alabama Department of Education Lee County has an overall graduation rate of 90% (Calculating graduation rate is not a standardized system and can vary from state to state) which is 18.7 percentage points above Troup County.

Reporting			Graduation	Total	Graduation
Level	System Name	School Name	Class Size	Graduated	Rate
School	Lee County	Loachapoka High School	46	43	93.5
School	Opelika City	Opelika High School 323 299			92.6
School	Auburn City	Auburn High School 603 552		91.5	
School	Lee County	Smiths Station High School	448	400	89.3
School	Lee County	Beulah High School	92	81	88.0
School	Lee County	Beauregard High School		144	83.2
System	Lee County	All Schools	1685	1519	90.1

^{*} Table ordered by graduation rate

Lower performing schools, coupled with the lack of retail and available housing, are negatively impacting the attractiveness of Troup County to potential residents. There are, however, many positives about Troup County's school system that should be better marketed and expanded on. Graduation rates are easy to find and are usually the information reported by sources, such as realtors, to quickly give an impression of a school system. The problem is that graduation rates leave so much out and the information left out is the information that should be shared.

With student populations near the state average, Troup County has a student-teacher ratio that is well below state standards and SAT scores that are in line or above the surrounding counties. These two statistics alone start to paint a different picture of Troup County's high schools.

			Mean
School	Grad.	Student: Teacher	SAT
System	Rate	Ratio	Scores
Heard	90.9	15:01	1330
Lee	90.1	14:01	?
Harris	89.9	21:01	1443
Coweta	86.3	18:01	1496
Meriwether	84	17:01	1228
Carroll	82.7	19:01	1386
Troup	71.4	17:01	1424

*Table ordered by graduation rate

While Troup County struggles with graduation rates the students that stay in school are getting a comparable if not better education to that of surrounding counties. As a community LaGrange should do a better job of highlighting the positive aspects of its schools on its School System website. LaGrange has an image problem; many people have a negative impression of Troup County because of incorrect or partial information. It would be prudent for the Troup County School System to take strides to better educate new comers to the area about its strengths, because no one else is going to do it.

Downtown

The above map shows commercial and residential zoning in downtown Lagrange and its immediate surroundings. The downtown is zoned mostly for commercial and tax-exempt uses (Government, churches, Lagrange 10). The area within the lime-green lacks housing giving the area a sterile and potentially dangerous atmosphere. Adding housing units on upper floors and on empty land could improve the image and attractiveness of downtown. The area within the light blue circle southwest of downtown is mostly residential. This area is a natural expansion of downtown. Allowing Retail, Office, Gallery, and Lodging in this area could jumpstart its revitalization and would expand the existing downtown pedestrian realm.

Recommendations

Recommendations to improve the image of LaGrange are designed to grow the impact of its strengths while addressing critical market and community gaps. All are intended to improve the quality of life for current residents through commercial opportunities and social interaction and education. These strategies will not only benefit people already living in the area, but will have the secondary effect of improving the desirability of LaGrange as a possible home to new residents.

1. Develop entry corridors from I-85 that are inviting and draw travelers to the city's vibrant downtown. Whether coming from Atlanta or Montgomery, ensure their first impressions are positive ones.

The Lafayette Corridor (in green) should concentrate on building existing retail with development that draws people into downtown. Encouraging service offices, like medical specialists, will help bolster an already strong entrance. This corridor should be utilized as a focal point for retail development through lot consolidations when opportunities present themselves, and developer incentives.

Whitesville & Hamilton Corridors (in gold) could have the greatest impact on the image of LaGrange. Efforts to improve streetscapes and encourage residents to maintain their properties will provide the city with a way to engage and involve the community. The area is well suited to existing residential usage and would also benefit from managed commercial development. Parks spaced along the length of the corridors could take advantage of vacant lots and further serve to improve the area. Billboard height ordinances could also improve the aesthetics of these areas.

Downtown (in red) developments are intended to strengthen the appeal of one of the city's greatest assets. Here, incorporation of pedestrian paths and the proposed thread trail would enhance connectivity with other areas and further improve walkability. Zoning should be reviewed to encourage a greater mix of uses to grow downtown density and expand downtown commerce.

A lake corridor (in blue) will enhance connectivity between West Point Lake and downtown LaGrange. This corridor should be activity focused and be highlighted by a string of small parks and connected to the greatest extent possible by walking paths. A public event space should be created lakeside as the corridor's gateway to draw more people and events to that area.

2. Troup County is home to three high schools Calloway High School, LaGrange High School, and Troup County High School. Calloway has the lowest graduation scores and falls behind the other two schools in other performance areas. Our recommendation is to rezone the high schools to even out the student population. Below is the current school zone map with the

county split in two with the bottom half going to Troup County. The top half is then split in two with the central and western part of the county going to LaGrange and the Eastern portion going to Calloway.

Rezoning would be the easiest way to institute change while utilizing the existing school system infrastructure. How the new zones are drawn could go a long way toward evening out performance between the three high schools and it could redistribute some of the county's wealth as well. There is a link between income and school performance.

Currently, a large portion of the wealth in LaGrange goes to LaGrange High School or Troup County High School. New zones that shift some of these students to the Calloway would help to bring up its achievement to be more in line with the other two high schools. Calloway is also the newest facility with space to accommodate additional students whereas the other two high schools are currently crowded.

3. Expand West Point Lake's \$82 million economic impact by coordinating activities with downtown events and alumni associations. Conduct outdoor activities such as running/biking races on the same weeks/weekends as periodic events like Azalea Storytelling Festival. Also, its inclusion in public holiday celebrations will also grow its relationship with downtown LaGrange.

By coordinating events, the town will bring a multitude of visitors to the same area during the same period. Although they may be arriving for different reasons, the density will provide greater foot traffic and market for hotel and retail sectors. It also provides more reasons for people to visit the town and be introduced to the idea of relocating. Said in another way, someone may not be enticed to drive to LaGrange for a downtown farmers' market event. However, a downtown farmers' market, 5k road race, and evening concert series all in one visit may be more motivating. Regional examples of this strategy include Dahlonega's Bear on the Square coupled with the University of North Georgia's Parents & Alumni Weekend and Columbus's Downtown Market Days with Soldier Marathon on Veterans Day Weekend. Atlanta, too, offers numerous examples of race events preceding neighborhood festivals.

4. Build on existing partner network to strengthen ties within the community and address issues of education & poverty. Troup County has many organizations active in its development efforts. Including more organizations in key groups, such as adding the Troup County Board of Education to the Troup County Strategic Planning organization, will help provide better rounded information to decision-makers and ensure strategies are reflective of trends and projections.

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Individual Recommendations

While the main project was the group analysis, each student also conducted a side project to make suggestions based on his or her own observations, specialization, and skills. Topics include environment, education, transportation, downtown development, recreation, and retail. These varying reports provide a wide range of viewpoints and influences which allows for a unique look at LaGrange's development. The results of these individual projects are compiled here.



A Southern Green City

Amanda White

Focusing city efforts towards becoming a green city will increase its presence and livability in the future. This can be done by improving air and water quality, increasing recycling and waste management efficiency, devoting acres of land to greenspace, and increasing renewable energy source usage. Developments and infrastructure should model other cities currently working towards independence from fossil fuels and non-renewables. A strong commitment to environmental stewardship will attract those individuals and companies who highly value environmental protection.

Currently, LaGrange's comprehensive plan mentions additional growth for parks, green space, recycling, and trails but it does not address other environmental concerns. LaGrange has the space and resources develop a much more green-friendly plan. There are many local companies that are very passionate about the environment, such as the Calloway Foundation, the Ray Anderson Foundation, Interface Textiles, and Diverse Power. Partnering with these organizations to help grow renewable energy sources within the area will help market the area as a green city.

Installing a solar farm would benefit LaGrange. Airports and open spaces are currently used around the country for existing farms. Colorado Springs uses several acres of open land near the interstate and Air Force Academy to collect solar energy. A case study in San Francisco turned unused roof space into power ("America's 50 Greenest Cities | Popular Science" 2016). The encouragement for private companies to install large scale solar panels is beneficial to them but the city should install them as well. Installing solar arrays on municipal buildings, including ports and libraries, and wastewater-treatment facility, can set Troup County apart to future citizens and industries concerned about the use of renewable resources.

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Green City Features for Students & Professionals

DeAndra O'Connell

For LaGrange to be able to retain college students and attract white-collar professionals, there are two strategies to create a smart growth atmosphere with nature-based entertainment. This can be accomplished by implementing a city sustainability challenge that highlights existing local projects.

Strategy 1

- 1. Apply for a GreenCorp Member to design and assist with challenge implementation.
- 2. Create challenge guidelines and publicly confirm city government participation. A successful and pre-existing challenge is Minnesota GreenStep Cities. The suggested challenge categories derive from this program and include: Building and Lighting, Land Use, Transportation, Environmental Management and Economic and Community Development.
- 3. Installing a temporary green belt, which is a construction restriction placed on the outskirts of the city, will prevent city growth extending outward before infill spaces are consumed. Community gardens are productive projects that improve community aesthesis and fill empty lot space.
- 4. Partner with the Georgia Department of Natural Resources to add a second West Point Lake Visitors Center closer to LaGrange. Potential locations are Sunny Point Recreation Center and Yellow Jacket Beach.

Strategy 2

- 1. Publicize challenge and results to public.
- 2. Inventory and highlight local projects that contribute to innovation and community growth and benefit LaGrange residents.
- 3. Advertise the challenge on the city website, at public events, and in the education system.
- 4. Partner with sustainability clubs in colleges and schools for student participation.

A sustainability challenge is a simple tool for cities to recognize projects being implemented by businesses that are improving resident quality of life. The challenge also doubles as an attraction tool for potential residents and business owners who look for responsive and active cities.

Aviation Maintenance Development Program

Michael Kay

Returning to the days of vocational schools for students interested in a skilled profession, such as aviation maintenance, is critical. In the past, vocational education was used to track students by race or socio-economic conditions, encouraging college for all high school students. This had a negative impact on students and on the economy by creating a skills shortage in challenging and well-paying jobs. The same is also true for many careers in aviation, where vocational schools begin at the high school level and continue with apprenticeships or two-year community college programs. Introducing these programs would benefit the student, aviation industry and local economy.

West Georgia Tech is in a region of opportunity for Aviation Maintenance Technicians. In the State of Georgia there are currently 8 aviation maintenance schools that can produce AMTs (Aviation Maintenance Technician) and their associated specialties within an 18 to 24-month timeframe (FAA.gov). West Georgia Tech is one of the few technical schools that does not provide this program despite its location to numerous employment opportunities throughout Georgia and Alabama.

LaGrange Airport already has a full-time maintenance facility (Southside Aviation) and contains all the services and facilities necessary to provide auxiliary support and attract business into the area for maintenance services. With Atlanta located 50 miles to the northeast and Auburn located 50 miles to the southwest, the airport and college are conveniently located to hubs of aviation maintenance activity. Currently, Auburn University does not have a program to train FAA certified mechanics even though it trains pilots.

Opportunity for employment can be seen by data acquired from the U.S. Bureau and Labor Statistics. The Location Quotient for the region surrounding LaGrange for Employment of aircraft mechanics and service technicians is close to 2, indicating industry clustering and a source of export income. Additionally, employment and mean wages are also high for the same region (BLS.gov). The proximity of Hartsfield Jackson Airport with its supporting

industry employ maintenance personnel to manage the high volume of commercial traffic that exists in the Atlanta Metro Area. Additionally, major military and corporate, and government aviation sectors are in and around the region (Delta, Gulfstream, and Lockheed Martin). To fulfill this goal, West Georgia Technical College should establish an AMT program in support of the City of Lagrange Comprehensive Plan.

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Benefits of a Magnet School

Shae Stringer-Jones

While rezoning LaGrange's high schools could help to better distribute student population, even out performance, and alleviate some crowding in two of the schools, there are other methods that could also work. Another option is to convert Calloway High School into a magnet school because it has the least number of students and it is currently performing at a lower level then the other two schools in the county. It also offers a unique opportunity to expand the magnet curriculum to a middle and elementary school all on the same campus, if it proves to be a success in the future. This approach is more logistically difficult than simply rezoning, but it would create an opportunity for the school system to show what it has to offer and attract the attention of perspective residents.

Educational information from the 2016 school year shows an improvement in graduation rates for the first time since 2011, when the state started using a 4-year cohort to measure graduation rates. Even with the significant positive change from 2015 to 2016, Troup County is still below the state average. Students attending magnet high schools are more than twice as likely to graduate on time than students of other types of schools (Rumberger et al, 2008). Programs focused on improving graduation rates appear to help but they do not address the whole picture of the school system's health. A better-rounded magnet curriculum would address multiple opportunities including graduation rates, student performance, and cultural issues.

One of the weaknesses that undermines LaGrange's ability to attract residents is a disparity between the classes. Magnet schools were originally designed to encourage desegregation and help to bridge the gaps between social divides. By creating a high school with a social focus in addition to more rigorous educational standards it would help to unite communities through common goals. Magnet school students have more positive intergroup relations than students in attending non-magnet schools. Magnet school students also report significantly less racial tension in their school than students attending non-magnet schools (Cobb et al, 2009).

LaGrange had a magnet middle school named Westside Magnet School which admitted students through lottery and provided transportation from all over the county. This approach proved to be too expensive and Westside closed in 2012. Instead, the new magnet school should allow anyone in the county who is interested in attending to be able to apply, with half of the openings assigned based on academic achievement, guaranteeing spots for the top performing students, and the remaining half to be filled through lottery. This would help to elevate high achieving students, address the current zoning income concentrations, and offer new residents something different than traditional high school curriculum.

To address costly transportation measures. the school could instead provide transportation only within a designated area. using current bus routes and schedules with no additional cost to the county. The school system could then work with local nonprofit organizations or churches to provide transportation to students outside that area. Student-facilitated transportation in Troup County is not unprecedented; currently, students needing to taking AP courses at a different school need to find their own transportation.

LaGrange offers amazing amenities, opportunities, and support to its residents but from an outside perspective these things are not visible. A magnet school would help to draw the attention of perspective residents to the county. The existence of a magnet school shows a focus on non-tradition learning and an investment in education that is not obvious in the current school system structure.

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Increasing School Occupancy Rate

Yuying Huang

The LaGrange downtown area has a 21% vacancy rate and 24% of its residents do not hold a collegiate degree. This means that about 800 housing units are unoccupied and the residents that choose to live there are not as highly educated. If the education condition can be improved in that area, the occupancy rate will increase. Since KIA and other international companies are being recruited into LaGrange, the education of their children becomes a significant problem. Most international workers are about 30 years old and their children are heading to elementary or middle school.

Education is a major economic engine and it can strengthen circumjacent commerce. Improving the school environment by renovating aging facilities and opening preferential policies for international students will gain traction from foreign workers, thus increasing the occupancy rates of rental housing. Schools should also be divided in the low-income areas, and avocation should be strengthened for Unity Elementary to attract more international students.

This area has a great educational environment and great recreational facilities, but they have low occupancy rates. Since the school district is also including the West Point area, attracting this group could improve school district quality and it could lead to more economic benefits for LaGrange development.

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Benefits of Public Transportation

Deonta S. Brooks

LaGrange should invest in its future by creating a more walkable and bikeable community. High-speed rail is the way of the future and if LaGrange does not get involved in planning a rail system they could be left out as mega-regions begin to link using high-speed rail and other forms of transportation.

Walkability

Per a study on walkability, increased walkability leads to less neighborhood crime.¹ A city with increased walking areas also increases the health of residents. Another study states that "a 5% increase in walkability to be associated with a per capita 32.1% increase in time spent in physically active travel, a 0.23-point reduction in body mass index, 6.5% fewer vehicle miles traveled, 5.6% fewer grams of oxides of nitrogen (NOx) emitted, and 5.5% fewer grams of volatile organic compounds (VOC) emitted.".² The main takeaway from the study on walkability is the fact there is less nitrogen oxide compounds placed in the air. Nitrogen oxide and nitrogen dioxide are both contributors to global warming and decreased respiratory health.

<u>Biking</u>

Many people would like to bike, but simply painting a white stripe on the ground does increase the amount of people who will feel safe biking. A study on four types of riders concluded that by reducing traffic speeds and introducing buffers increases the number of bicyclists in the area.³ Protected bike lanes makes bicyclists fill safer and while giving them a path for sightseeing. Bike lanes in an urban area also aid in reduced NO_x emissions and other hydrocarbons.⁴ As a city increases population, there is also an increase in vehicles, which leads to an increase in greenhouse gas emissions. An increase in people riding bicycles benefits a growing cities environment and sustainability. Additionally, steps should be taken for the long-range sustainability of a LaGrange as the population continues to grow other measures such as light rail should also be considered.

¹ "How Walkable Streets Can Reduce Crime."

² Frank et al., "Many Pathways from Land Use to Health."

³ McNeil, "FOUR TYPES OF CYCLISTS?"

⁴ "Vehicle Emissions | Green Vehicle Guide."

Light Rail

The long-range economic future of LaGrange could be dependent on light rail. Addition of a rail line from LaGrange to the Piedmont Atlantic mega region is essential. Currently, Interstate 85 is Troup County's main access to the major cities in this region. Troup county does not currently have the population to support a commuter rail line, but populations projections expect LaGrange to increase to close to 100K people by 2030.⁵ A light rail line would open up additional job opportunities and allow workers in larger cities to commute to the growing job market in LaGrange. A light rail line would also alleviate traffic flow issues and future environmental impacts that come with increased population.

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Introducing a Bike Share Program

Brittney Hudson

Exploring the benefits of a bike sharing program could help enhance the quality of life for LaGrange residents. LaGrange completed a multi-model research study to address issues and opportunities in transportation. Some of the challenges that the area faces include sidewalks that need repair and a lack of accommodations at intersections. The plan also points out strengths that LaGrange, which includes a small-town atmosphere, a historic downtown, and convenient transportation. Addressing needed improvements of the presented issues and building on the strengths could make the implementation of a bike sharing program that would promote a biking lifestyle community successful.

Biking in general offers economic and social benefits. Outlined benefits are the public health benefits that it provides the community, its appeal to a younger population, the decrease in CO2 emissions, and its income generation for the city. Improving the city's public health problem could reduce obesity issues stemming from a lack of physical activity. Implementing programs to appeal to a younger population could possibly retain more young professionals to the area. Decreasing the CO2 emissions can improve air quality, which would have a direct impact on public health. Generating income for the city from this program could support the continued improvement of infrastructure which could lead to a wider implementation of the program.

It is important to understand how a community would go about beginning the foundational stages for this program. The first step would be to conduct a detailed feasibility study. Next, a detailed plan and design would need to be established. Finally, LaGrange would need to create a business and financial plan. Copenhagen is one of the most successful examples of how a bike sharing program can benefit a community. Adopting the practices of this area while analyzing avoidable mistakes could lead to the successful, efficient implementation of the program in LaGrange.

Downtown Walkability

Felix Huang

With LaGrange's rapid economic development, maintaining downtown sustainability is crucial for continuing development. This can be accomplished with a simple, convenient, and low-cost plan by increasing the walkability in the area. By restructuring these lanes to accommodate pedestrians and cyclists, also referred to as a "road diet," it will potentially increase safety, sales, and traffic flow (Knapp et al, 1999).

Long-term growth is also possible through increased density and by developing mixed-use buildings in the downtown area. Substantial economic growth after creating a dense, walkable downtown occurred in Evanston, Illinois; Plantation, Florida; Mountain View, California; and Huntersville, North Carolina (ULI, 2008).

Currently, Vernon Street includes four lanes that are 12 feet wide; two of these lanes are dedicated turn lanes, which leaves a small shoulder for cyclists to use. Narrowing lanes from 12 feet to 10 feet encourages cars to drive at safer speeds, which decreases both the frequency and the severity of accidents (Speck, 2014). By combining two turn lanes into one dedicated turn lane, it helps calm traffic and minimizes the number of lanes automobiles must cross (Knapp et Al, 1999). This would then allow for more road space to be dedicated for cyclists. Having additional buffers between cycling lanes and automobile lanes also provides an additional measure of safety.

Vernon Street is highly congested throughout the day because it is a main road that connects directly to US 29. By using a road diet to slow traffic down, it will encourage drivers who are merely passing through to take alternative routes instead of Vernon Street, which will encourage traffic flow.

By adding tables, chairs, and benches to open spaces such as these, it will encourage pedestrians to take advantage of these areas throughout the day. It will also promote foot traffic, which will support local businesses and stores (Sadik-Khan, 2016).

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Improving Pedestrian Connectivity to Downtown

Michael Cullinan

Pedestrian connectivity refers to the ability of a pedestrian to traverse an area safely, easily, and quickly. The biggest impediment to a more pedestrian friendly city is the automobile domination of the transportation network. This holds true for LaGrange as well and it can be improved to have better connectivity.

The pedestrian network in downtown LaGrange has improved in recent years due to investments made by the Callaway Foundation. The "Traditional Neighborhood Redevelopment" areas outlined in the 2015 Comprehensive Plan to the south and west of downtown have not seen much redevelopment. These areas also have severely degraded sidewalks, poor housing conditions, and an overall negative image. These factors discourage pedestrian usage and private redevelopment.

There is much opportunity in LaGrange when one considers the proximity to Atlanta, West Point Lake, the established downtown, existing infrastructure, and perhaps most importantly recent job growth. Growth should be focused in downtown and the core to create a city that can continue to attract good jobs and grow its economy. LaGrange lacks a vibrant urban core that mixes dense housing with retail. This is part of the city's image problem. While the existing downtown is more vibrant and livable than other cities of similar size, it could be vastly improved and expanded by integrating surrounding areas with an improved pedestrian environment and in-fill development. This would help to attract the companies and highly educated workforce that would benefit the city and further improve its image.

The existing street grid and small lot size in the redevelopment areas surrounding downtown are a good foundation to create the dense, walkable urban core that is desirable among younger generations. Many ill-conceived laws hold back redevelopment. LaGrange's Developmental Regulations (LaGrange) includes the following:

- Minimum Lot Size
- Maximum Unit Density
- Lot Line Buffers
- Minimum Street Frontages
- Maximum Lot Coverage
- Buffers Between Residential and Other Uses
- Off street parking minimums

Each of these constraints on development prevents an urban redevelopment of the LaGrange's core. They also constrain the development of new affordable housing, by driving up the costs of new housing. Land and other fixed costs cannot be spread between as many units as would otherwise be possible, which unnecessarily increases the costs per unit which is in turn passed on to the renter or buyer. The requirement to build parking reduces the amount of land that could be developed and increases the net cost of building a new housing unit. The people who need affordable housing are also less likely to be able to afford a vehicle.

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Improving Downtown Appeal

Indrani Das

Downtowns play a critical role in the health of most freestanding small cities like LaGrange. Downtown constitutes a sizable share of a city's tax base and it typically embodies the heritage of a community. Historic downtown is the traditional central business district of LaGrange and known as the heart and soul of the city. Improving the downtown of LaGrange can help to attract many people to visit and will encourage them to live in LaGrange.

Suggested strategies to improve LaGrange Downtown

- Introducing different types of events, contests in downtown for all age of people.
- Attracting people to live downtown or to visit downtown by offering more entertainment and nightlife. It can include opening new restaurants, bars.
- Downtown housing can be built and marketed to young professionals especially singles or childless couples, college students.
- Creating a pedestrian friendly environment can encourage people to linger. Some techniques for achieving this goal is to implement streetscape improvements like flowers, trees, benches, human-scaled lights, attractive pavement, banners etc.
- Shops and restaurants which are old and physically not attractive needs to be renovated. LaGrange can offer incentives for redevelopment. Financial incentives can act as a force to encourage investment in the community.

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Strategies for Attracting Young Professionals

Andrew Campbell

LaGrange's population demographic inspires a knowledge-driven community and provides an attractive labor pool for technology companies. Attracting and retaining young professionals is key for continued development in LaGrange. This can be done by investing in downtown apartments, creating a better night-life scene, and creating social venues such as a dog park will help attract and retain a young demographic. The young professional demographic consists of anyone between the age of 20 and 34. In Troup County, 19% of the population are young professionals, and most them are concentrated just outside the downtown area.

Currently, the lack of housing in downtown LaGrange may be a push factor for young people. Several case studies in other cities may serve as potential framework for successfully relocating young professionals. In Columbus, OH, Quicken Loans worked with the city to provide \$20,000 forgivable loans to any young worker who purchased property downtown, and in Kanas City, MO saw a 50% increase in downtown youth since 2000 by working with companies to provide these kind of incentives (*Businessjournalism.com*).

In addition to investing in multi-family residential units in downtown, it is important to provide the young demographic with entertainment. Troup County contains three establishments classified as bars. This may be one reason why young people are not moving into the Lagrange area. Investing in night life and apartments downtown will further encourage young professionals to settle in LaGrange.

With improved nightlife and downtown residences, young professionals will begin to trickle into the area. To help retain this population, one potential strategy is to build a dog park. Young professionals, in addition to having a place to take their dogs, enjoy the social interaction brought on by a dog park. With a lack of off-leash dog parks in LaGrange, investing in a dog park will provide a boost to a younger image for LaGrange.

The Rec Effect

Casey Hill

The areas of Newnan, Georgia and Auburn, Alabama have similar population sizes and community assets to LaGrange, Georgia. Auburn has roughly twice the population and Newnan has approximately the same population. Newnan, however, has a steeper growth trend, highlighting a need for incentives for prospective residents. "The Rec Effect" focused on the parks and recreation department, possible areas for improvement, and a wide scope of solutions for community involvement and attractiveness.

A comparison between the three cities was drawn up for their parks and recreation department websites and information. Auburn's and Newnan's website had a wide assortment of information discussed on their website. Newnan, also serviced through a county parks and recreation department, has almost twice as many recreation assets and a larger assortment of information available through their website. It is my suggestion that the city incorporate more information into their website so that it is readily available to the public and prospective residents. Even the privately-owned arts entities can have links placed on the website to their pages.

Another issue is that the parks and recreation assets are located within the city's center, even though most the residents lie on the outer fringe of the city. One potential location to build a recreational facility is the green space on the Whitesville Road/Hamilton Road corridor. This would incentivize growth in these areas of concern.

To maintain investment and promote growth in the city center, LaGrange should establish weekly events such as Farmers' Markets, business showcases, and recreational classes. In addition, LaGrange should limit development at West Point Lake to maintain water quality and recreation. The lake, however, can be more integrated into community events. These solutions will assist LaGrange in their future growth by incentivizing the public to work, live, and play in LaGrange.

Reinventing LaGrange Self-Image

Kendall Shipp

Lagrange needs to attract residents, specifically younger people, to encourage people to stay in LaGrange. This demographic is lacking but still accounts for most of the work force in the county. The first step is to market and increase sustainability. Having Lagrange as a national contender in sustainability practices could give it the boost it needs in residency to attract a younger demographic and families.

LaGrange also needs to change its self-image. The first step in transforming underperforming places is to turn around the self-image of the place, by transforming the public mood from one of despair and decline to self-confidence and hope in the future. To achieve this transformation requires leadership, a well-constructed plan and physical evidence of positive change. When people from the outside see that LaGrange is taking steps to improve their quality of life, it will encourage more people to stay in LaGrange.

Analysis of the Retail Market

Jay Howell

The retail market in LaGrange faces tough challenges from neighboring markets in Coweta County, Georgia and Lee County, Alabama. Both markets are substantially larger in terms of retail square footage: 2,082,526 in Coweta County and 1,933,294 in Lee (Cumulative square footage of each city's largest shopping centers). By comparison, Troup County is limited to just 233,000 square feet of retail space. This disparity both encourages Troup County residents to shop outside their community and drives down the market area of LaGrange. However, targeted recruitment of retailers absent from the region could provide Troup County with a means of gaining a foot hold within the retail market of the area.

Huff's Model of Retail Gravitation, introduced by David Huff in 1963, is designed to find the probability that a person will shop at a certain retail center. It considers the quantity of retail available to that person in their own town, that of nearby towns, and the distance between them. It can also consider the relative weight of specialty stores, however, that was not considered for this study.

Other models also show how LaGrange interacts with neighboring counties in the retail market. Reilly's Law of Retail Gravitation, introduced by William Reilly in 1931, attempts to find the trade area boundary between two areas called the "point of indifference". It uses similar information as Huff's Model in a way that finds market areas. Using the square footages previously identified, LaGrange's points of indifference between Coweta County, anchored at Ashley Park, and Lee County, anchored at Tiger Town, are 13.5 and 17.5 miles, respectively. Since Coweta and Lee counties are more closely matched, however, the point of indifference between these two is more helpful.

From Newnan, that point is roughly 37.5 miles, generally right on top of LaGrange. Since distance from the retail cluster is obviously greatest at its boundary, people in either area at this extent would be more willing to consider another option if it were closer. Here is LaGrange's opportunity. If it can provide retail not available in either Lee or Coweta Counties, it will easily draw shoppers from the extents of both market areas.

The National Retail Federation (NRF) performs analysis of worldwide retail firms to identify major trends and best practices. It is headquartered in Washington, D.C. and represents corporations from 45 countries. The NRF produces an annual list of 100 top retailers; the 2016 edition of which shows that both Coweta and Lee Counties have almost 50% more top retailers than Troup County (See Appendix A for complete breakdown). It also identifies stores that are under-represented in the region. Troup County should recruit from these retailers as a way of bringing itself more on par with its neighboring communities.

Contemporary Stores Missing	
in LaGrange	
Rank	Store
6	Target
10	Lowe's
12	Best Buy
25	Kohl's
30	Ace Hardware
38	Gap
39	JC Penney Co.
40	Ross
51	Dunkin Brands
59	Dick's Sporting Goods
60	Office Depot
66	Dillards
80	Panera Bread
86	Ascena Retail Group
88	Academy

Gaps in Contemporary Stores to Recruit to LaGrange	
Rank	Store
3	Costco
13	Apple Store
15	Macy's
31	Whole Foods
34	Nordstrom
58	Toys "R" Us
67	Saks Fifth Avenue
73	Foot Locker
76	Burlington Stores
100	H&M

Troup County should recruit from these retailers as a way of providing stores not present in either of its neighboring communities.

Exploring Mixed-Use Development

Jasmine Ratliff

Mixed-use development promotes areas that are closely connected where people can live, work, and play. The proximity of necessities naturally decreases expenses and creates access to more jobs and community members are able to create more wealth that could lead to an increase in the quality of life. High quality of life makes these communities economically competitive, creates business opportunities, and strengthens the local tax base (US EPA 2016).

LaGrange would benefit socially, economically, and environmentally by creating a mixed-use area. The proposed area would preserve green space and promote walkability while having mixed-income residences. The residential area can be energy efficient townhomes that have programs connected regarding affordability. To connect the mixed-use area with the rest of the community, a public transit stop should be easily accessed to attract others to use the community services provided.

Four main cornerstones of the development include an education center, a wellness center, a recreation center, and a security center. The education center can have afterschool tutoring, adult education classes, and a computer access station for the community. The wellness center can provide an area focused on holistic mental wellness and include private medical practice offices and a walk-in urgent care clinic. The recreation center should include a sports complex, fitness classes, and most importantly nutrition coaches. Finally, the security center is the main anchor, which will host 24 hour surveillance and security while acting as a meeting place for the community. With this proposed development, I feel that LaGrange could continue to grow and attract more people to stay and be a part of the community.

References

US EPA, OA. 2016. "About Smart Growth." Overviews and Factsheets. Accessed November 10. https://www.epa.gov/smartgrowth/about-smart-growth.

Affordable Housing

Dan Yurcaba

Vacancy is not seen as a major issue in LaGrange; however, this is being overlooked in the central city area due to the low concentration of housing in that area. The zoning map for the city shows the central city area is for general commercial and limited industrial use, and the area correspondingly has the lowest number of housing units within the city. Unsurprisingly, many of LaGrange's low income housing developments can be found in this central area (lowincomehousing.us). The high-vacancy rates of central city housing suggest that these developments are an inefficient use of land in the city's central commercial area. The concentration of poverty and vacant housing in the city center serves as a logical obstacle to the city's ability to attract future commercial and retail industry growth to parallel the growth of the city's manufacturing industry.

The exit 13 corridor has been considered as a future development goal. This corridor could provide a good site for new low income housing development, possibly as part of mixed-use development in conjunction with commercial development. Adjusting the spacial distribution of poverty in Lagrange could help maximize the economic potential of the central city area while also serving to develop the city's least attractive transportation corridor.

References

LaGrange Low Income Housing. Retrieved from http://www.lowincomehousing.us/GA/lagrange.html

Conclusion

The land and urban economics class gave its formal presentation to the city of LaGrange on the morning of November 14, 2016. Even though students come from a very diverse background, the group was still able to develop a consensus recommendation for LaGrange.

The city of LaGrange is encouraged to springboard off its automobile manufacturing industry by developing its production technology industry. The influx of high-tech jobs that it would create potentially attracts more young, educated professionals to LaGrange. This highly-sought demographic could then be encouraged to reside in LaGrange by focusing efforts on redeveloping the central (Urban core) and south central neighborhoods. The main concerns for these neighborhoods are the deteriorating homes, poverty, concentration of minorities, and access to education.

The class also recommends the city to redevelop its image to address concerns that act as push factors. This can be achieved by displaying a more detailed and accurate picture of its education system, by increasing downtown development, and by advertising the city's strengths to visitors and commuters.

From the individual reports, one of the common themes is to draw in the young professional demographic by focusing efforts on downtown development and by creating more pedestrian-friendly roads. By addressing these issues, it makes the city a lot more attractive, decreases pollution, reaches the young professional crowd, and helps to spur the economy.

LaGrange currently is one of the fastest growing cities in the South with very promising economic, educational, and residential trends. With its abundant resources in the automotive industry and with West Point Lake, and with its ideal location in between Atlanta, Columbus, and Auburn, LaGrange is in an excellent position to capitalize on its recent growth.

Biography

Amanda White

First year graduate student at Auburn University in Community planning with an environmental focus. Graduated with a Bachelor of Science in Natural Resource Management with a minor in nature based recreation from Auburn University in May of 2016. Originally from Montgomery AL, Amanda has grown up with a passion for nature that became focused during a year away from school and working in a national park and state park. Although currently employed with Chewacla State Park in Auburn, AL, Amanda has a vision for the future that encompasses large scale natural resource planning, development of recreational programs and renewable energy systems.

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Felix graduated with a BA in sociology from Biola University in 2010. He worked as a youth counselor between 2010 to 2013 before joining the army as a human intelligence collector, where he served for three years. While serving in the army, he completed Airborne, Ranger Selection, and Strategic Debriefing courses. Felix is currently a first-year student at Auburn University in the Master of Community Planning program with an emphasis in transportation. He now works as a graduate assistant for the political science department and as a writing consultant for the Miller Writing Center.

Michael Cullinan

Michael is a graduate student from Auburn University in his first year studying Community Planning. His undergraduate degree is in Economics also from Auburn. Originally from Birmingham, he plans to work in regional planning or real estate.

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I graduated from Georgia College and State University in 2009 with a BA in Economics concentrating on Public Economics with a minor in Women's Studies. I am currently in the Public Administration graduate program at Auburn and work full-time for Charter Bank. Prior to Charter Bank I worked for Robins Federal Credit Union in Warner Robins Ga.

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Bachelor of Mechanical Engineering (2010-2015)

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Baja SAE racing and design team captain, financial manager, designer, and outreach coordinator (2010-2014)

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For the last ten years, I have served Auburn University in the capacity of Flight Instructor, Supervisor of Flight, and First Officer for Air Transportation. I enrolled in the M.P.A program in 2009 to position myself for a director position within the university.

Over the course of my aviation career I have flown a variety of airplanes for different companies: P.F. Moon, Georgia Crown Distributing and CSG aviation. I hold an Airline Transport Pilot Certificate and am a Gold Seal Flight Instructor with the FAA.

I reside in Smiths Station Alabama with my wife Shannon and 3 beautiful children: Samuel, Gabriel and Ellie.