City of Battlefield, Missouri

ECONOMIC *and* HOUSING ANALYSIS STUDY

2023

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1. ECONOMIC DEVELOPMENT STUDY

1.1 MARKET AREA CONTEXT

Battlefield is located in Greene County, Missouri, within the Springfield Metropolitan Statistical Area (MSA), which is home to over 480,000 people. See Figure 1.1. Battlefield is approximately 10 miles southwest of downtown Springfield and encompasses over 2.5 square miles.

In the following economic analysis of Battlefield, Missouri, there will be multiple ways in which we consider the geography of and around the Battlefield Area including city, zip code, and county level. One measure of the area is done with rings surrounding the geographic city-center using two-mile, five-mile, and ten-mile radii. See Figure 1.2.

Figure 1.1: Springfield Metropolitan Statistical Area (MSA)

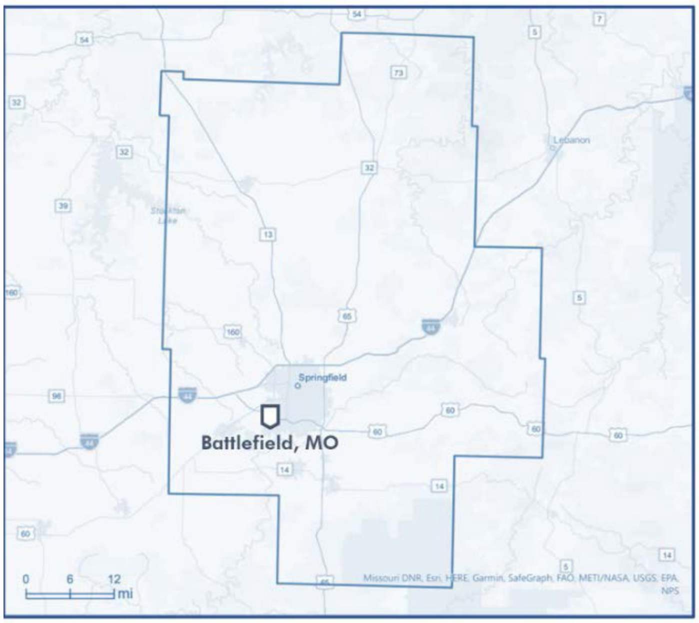
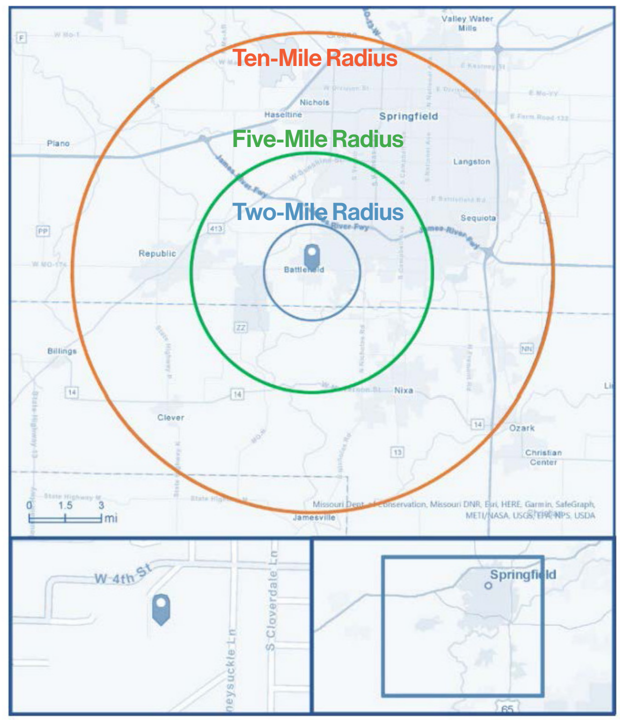


Figure 1.2: Radius Rings Around Battlefield (Two-Mile, Five-Mile, and Ten-Mile)



It should be noted that, as the 65619 ZIP code does not correspond directly with City of Battlefield city limits, every effort will be made to minimize the use of data based on ZIP code information. Instances when this is unavoidable will be noted in the report.

Table 1.1 lays out the following statistics for the areas in and around Battlefield from 2010 through 2020: population, number of households, and average household size (or number of people living in a household). Table 1.2 provides the median household income, and the 2022 and 2027 estimate income distribution of those households.

Table 1.1: Demographic Trends

Description	City of Battlefield	Battlefied Two-Mile Radius	Springfield MSA	Missouri
Population				
2020 Census	5,990	15,611	475,432	6,154,913
2010 Census	5,676	14,194	436,712	5,988,927
Households				
2020 Census	2,286	5,928	192,076	2,479,146
2010 Census	2,172	5,341	174,584	2,375,611
Average Household Size				
2020 Census	2.62	2.30	2.41	2.41
2010 Census	2.61	2.31	2.42	2.45

Source: U.S. Census Bureau, ESRI

Table 1.2: Household Income Trend and Distribution Comparison

Description	City of Battlefield	Battlefied Twp-Mile Radius	Springfield MSA	Missouri
Median Household Income				
2027 Projection	$77,956	$80,393	$59,468	$73,496
2022 Estimate	$69,468	$74,696	$51,642	$61,811
Income Annual Growth 2022-2027	2.3%	1.5%	2.9%	3.5%
2022 Income Distribution				
Total Households	2,318	5,851	196,049	2,521,403
< $50,000	33%	27%	48%	40%
$50,000 - $99,999	37%	39%	31%	32%
$100,000+	29%	34%	21%	29%
2027 Income Distribution				
Total Households	2,356	6,262	201,537	2,521,403
< $50,000	35%	26%	41%	33%
$50,000 - $99,999	25%	34%	32%	32%
$100,000+	41%	39%	27%	35%

Source: U.S. Census Bureau, ESRI

As Tables 1.1 and 1.2 show, **the Springfield MSA has grown rapidly since 2010**. Specifically, Battlefield, Greene County, and the Springfield MSA have grown faster than the rest of the state of Missouri in that time. The population of Battlefield grew by 5% from 2010 to 2020, from 5,676 to 5,990. The 2-mile radius area around Battlefield and The Springfield MSA grew at higher rates, 10.8% and 10.9% respectively, and all were significantly above the whole state of Missouri, 3.4%. The United States population grew 8.0% during that time.

For the purposes of this report, it is projected that over the next 5 years, the City of Battlefield will grow at a similar 5% rate through 2027. While this 5% growth rate differs from commonly used resources such as U.S. Census Bureau and State of Missouri statistics, new home permit and recently approved preliminary and final plat data provided by the City of Battlefield suggest that this growth rate is more in-line with available outside data resources. This perspective is further supported by Census projections within the two-mile radius from Battlefield's city center that indicates that population is expected to grow at 3.0%. This growth within the 2-mile radius of Battlefield city-center is at a slightly faster rate even than Greene County and the Springfield MSA, which will grow at 2.1% and 2.5% respectively. In other words, Battlefield and areas directly outside Battlefield's geographic boundaries can be anticipated to see strong growth trends to prevail for the next 5 years. Please turn to Section 6 of this report to learn more about how this growth presents a variety of opportunities and challenges for the City of Battlefield.

- Table 1.2 highlights details about median household income in and around Battlefield. **In short, household income levels are significantly higher than that in the county, region, and state**. 2022 estimated median household income in Battlefield is 34.5% higher than the overall Springfield MSA. Battlefield sees both fewer lower income households, and more higher income households than the region. Battlefield has 33% of households with a household income of less than $50,000, compared to 48% across the Springfield MSA. Similarly, Battlefield has 29% of households earning more than $100,000, compared to 21% in the full MSA.

- Although household income in Battlefield is expected to grow slower than the county or region, 2027 projections still show Battlefield with a significantly higher household income, $77,956 versus $59,468. Battlefield households earning $100,000 or more are expected to be 41% of total households, while only 27% of households in the Springfield MSA will have an income of more than $100,000.

Figure 1.3: 2022 Population Map by Zip Code with Two-Mile and Ten-Mile Radius Rings Around Battlefield

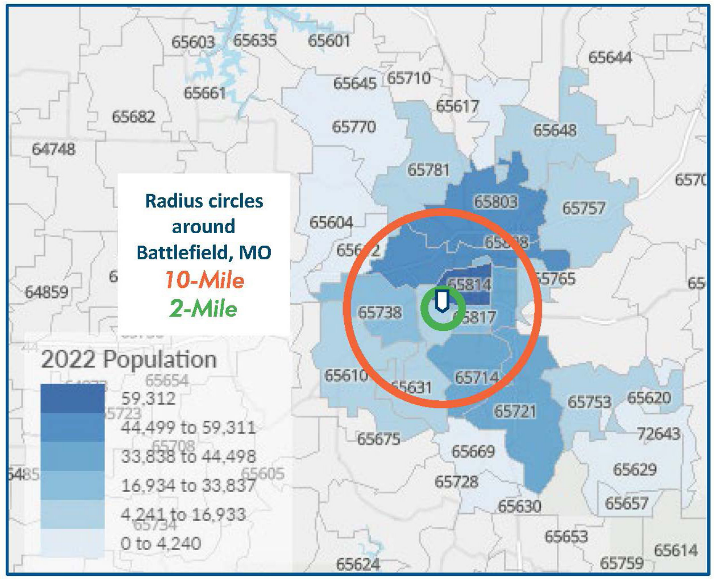
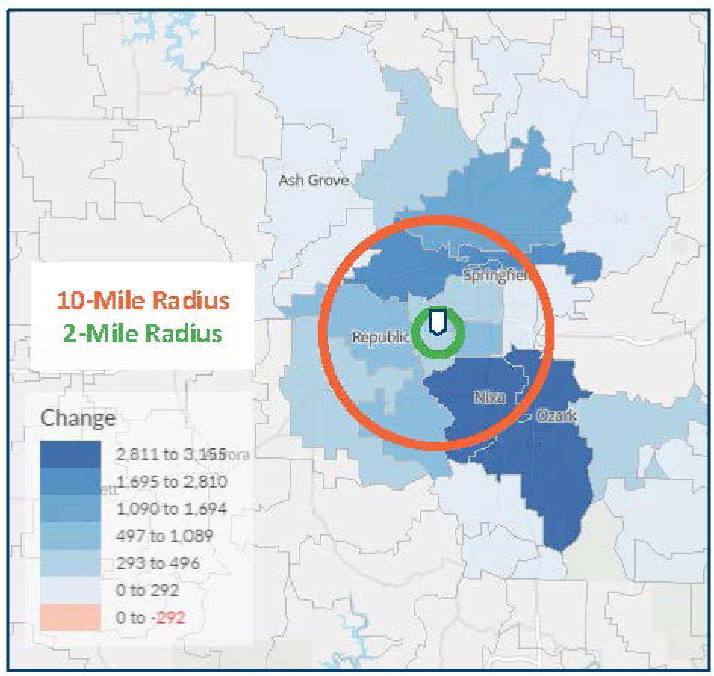


Figure 1.4: 2022 to 2027 Projected Population Change Map by Zip Code with Two-Mile and Ten-Mile Radius Rings Around Battlefield



2. ECONOMIC TRENDS

The purpose of this section and analysis is to help facilitate an understanding of the economic situation in Battlefield relative to the Springfield Metropolitan Statistical Area (MSA), state, and nation. Understanding the past, present, and projected state of the Springfield MSA economy will help Battlefield better plan for the future in areas such as land use, infrastructure, job creation, and economic growth. Sources used for this section include the Bureau of Labor Statistics (BLS), Bureau of Economic Analysis (BEA), Missouri Economic Research and Information Center (MERIC), ESRI (Environmental Systems Research Institute), and Lightcast. Some of these sources do not provide detailed data at the Battlefield level, so present trends at the county, Springfield MSA, and state level will be used. Data from larger areas will be put into context to provide insight into how regional and state trends impact Battlefield.

2.1 MAJOR EMPLOYERS

The Springfield MSA is a diverse and growing economy, with top companies in the healthcare, education, retail, and manufacturing sectors. Food service, logistics, and real estate are all industries on the rise, adding new jobs, even during the COVID-19 pandemic. Top employers in the Springfield MSA are summarized in Table 2.1. Note that healthcare, retail, and government/education make up all of the top 10 spots.

Table 2.1: Major Employers - Springfield, Missouri Region (Spring 2021)

Company Name	Industry	Local Employees
CoxHealth	Healthcare	12,164
Mercy Hospital Springfield	Healthcare	8,202
Walmart, Inc.	Retail	5,381
Springfield Public Schools	Education	3,694
Bass Pro Shops/White River Marine Group	Retail/Manufacturing	3,127
State of Missouri	Government	3,018
United States Government	Government	2,919
Missouri State University	Education	2,760
O'Reilly Auto Parts	Retail/Manufacturing	2,307
City of Springfield	Government	2,028

Source: Springfield Regional Economic Partnership

In addition to those employers listed in the table, there are nine additional employers with 1,000 or more local employees, representing healthcare, software development, manufacturing, transportation, education, and financial services. Table 2.2 includes a variety of employers located within the Battlefield city limits.

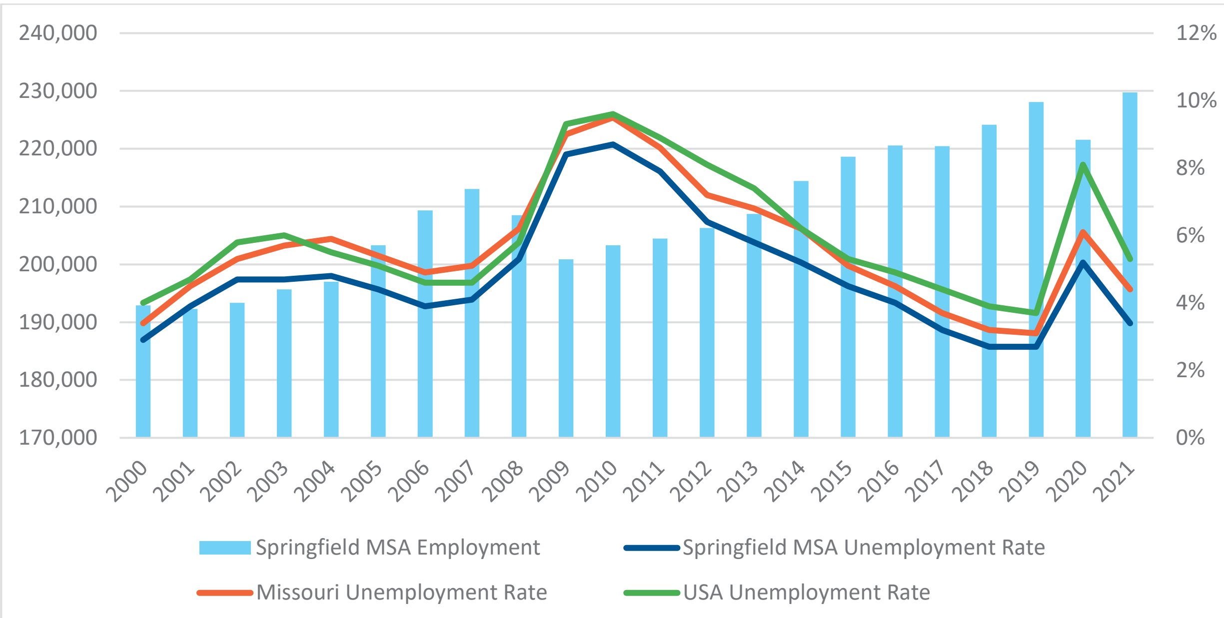
Table 2.2: Major Employers - Battlefield, Missouri (Spring 2023)

Company Name	Industry
City of Battlefield	Government
The Township Senior Living	Healthcare
Godfather's Pizza	Restaurant
Wicked Wok	Restaurant
Subway	Restaurant
McDonald's	Restaurant
Wire Road Brewing Company	Restaurant
White Oak Station	Retail
Eagle Stop Convenience Store	Retail
Rapid Roberts	Retail
Russell Cellular	Telecommunications

2.2 UNEMPLOYMENT RATE

Despite sharing the recent COVID-related challenges that the broader national economy experienced, the Springfield MSA has consistently performed better than Missouri and the United States on unemployment. Although not shown on Table 2.3, Greene County unemployment rate has tracked the Springfield MSA very closely. While full year data from 2022 is not available as of this writing, 2022 year-to-date data shows that the Springfield MSA and Greene County continue to perform better than the rest of Missouri.

Figure 2.1 Total Employment and Unemployment Rates - Springfield MSA



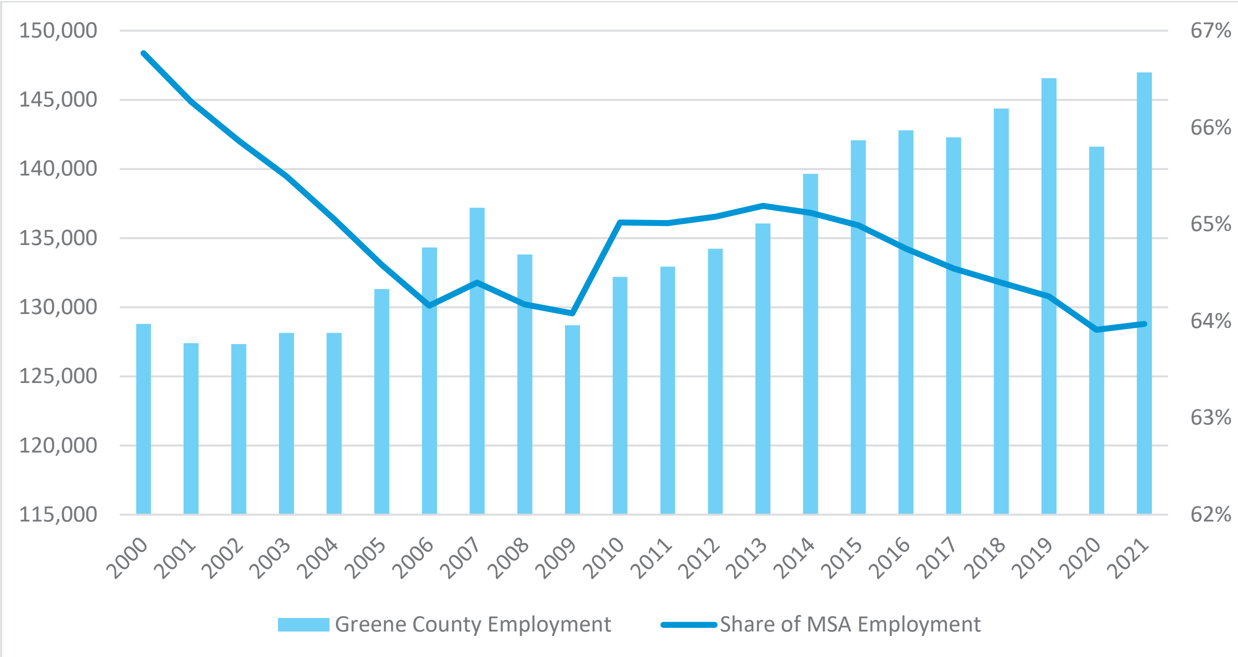
Source: U.S. Bureau of Labor Statistics

With such a low unemployment rate, it is a tight labor market where companies are having to complete for the same workers to fill vacancies. Although the population is growing, this tight labor market is expected to continue.

2.3 EMPLOYMENT TRENDS

Greene County is the largest source of employment in the Springfield MSA with nearly 150,000 jobs in 2021. However, as the overall region has grown, Greene County has made up a decreasing share of the jobs within the full MSA. While the County still has 64% of total jobs, this percentage is down from 67% in 2000. This is not because Greene County has not been adding jobs; It has added 18,177 (14%) from 2000 to 2021. Instead, it is because other counties within the MSA are growing even faster. As we discussed earlier in this report, Greene County is expected to continue to grow rapidly in the coming years, as is the full MSA, so we expect to see jobs also increase, even if the trend that other counties are growing faster may continue. Should Greene County take back its historic position through growing jobs faster than the rest of the region, we would expect to see workers filling those jobs (and associated residents) to select the City of Battlefield as their place of employment and residence.

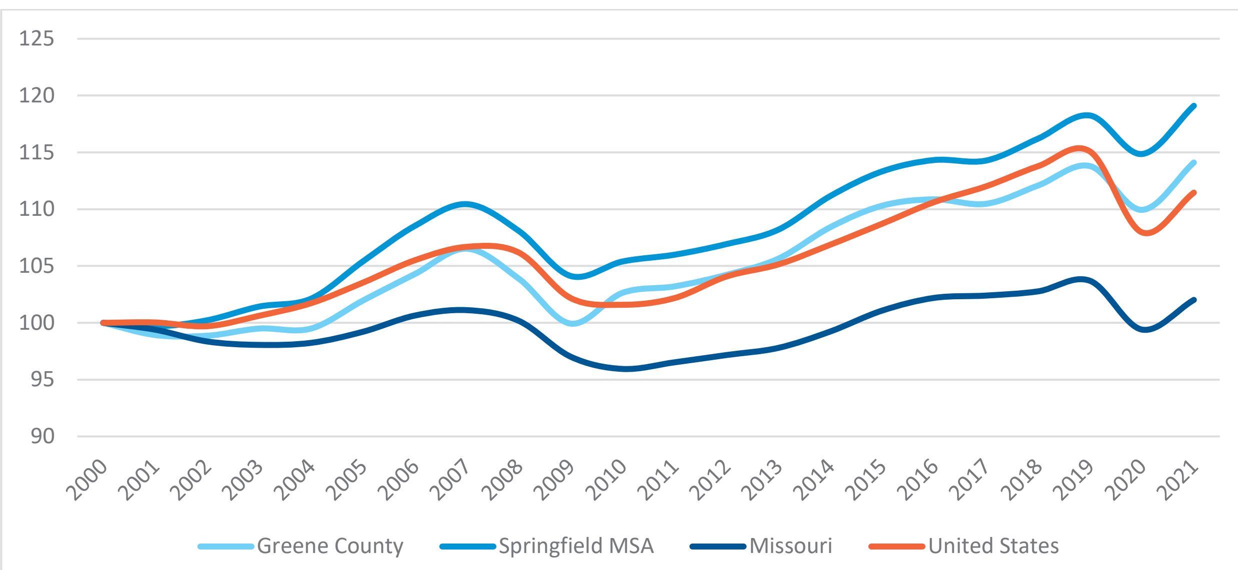
Figure 2.2: Greene County Employment Trends



Source: U.S. Bureau of Labor Statistics

Both Greene County and the Springfield MSA have outperformed the state of Missouri and the United States in employment growth since 2000. The Springfield MSA has been consistently highest since 2004 and has maintained a growth advantage over Missouri and the United States since. Greene County outperforms Missouri, but tracks far closer to the U.S. average consistently. This echoes the story in the prior graph that, while the entire region including Greene County continues to grow rapidly, Greene County is growing slightly slower than the rest of the region.

Figure 2.3: Relative Change in Total Employment (2000 - 2021)

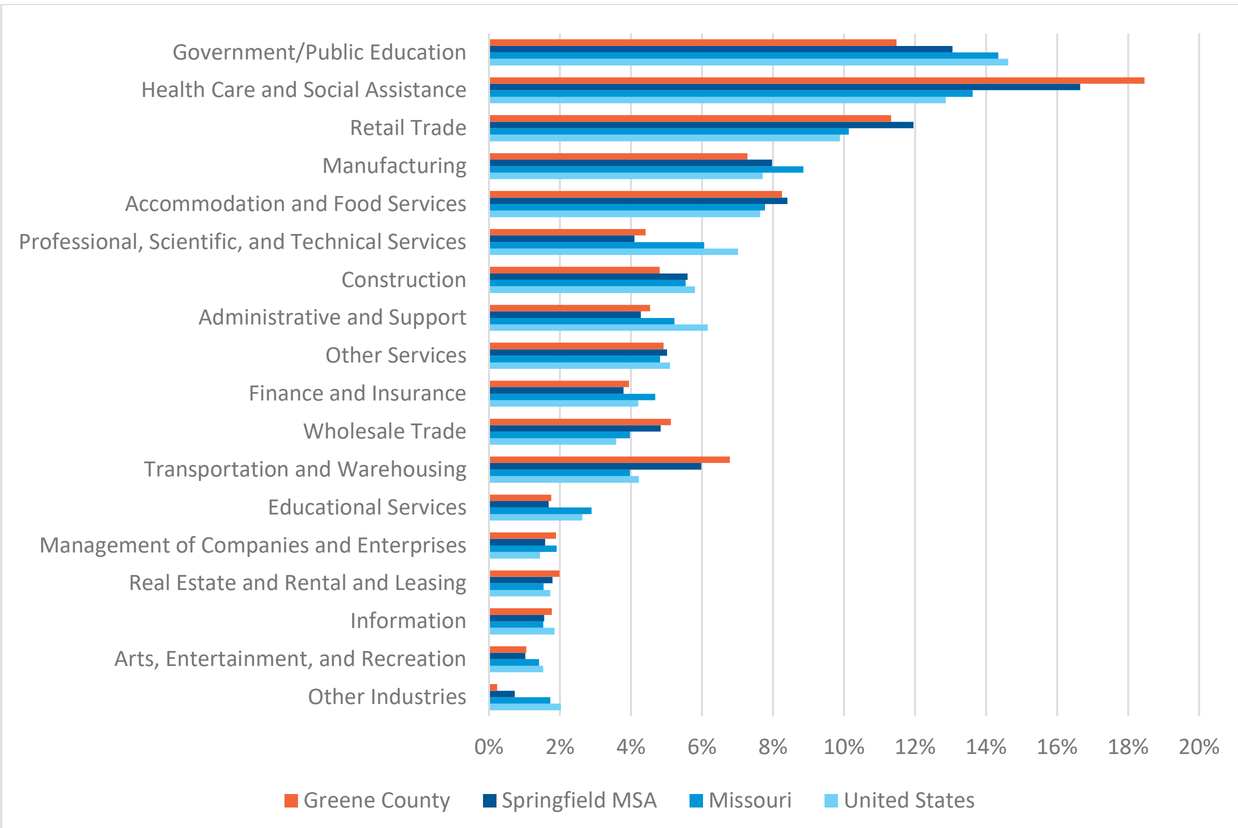


2000 Index = 100
Source: U.S. Bureau of Labor Statistics

2.4 INDUSTRY MIX

As shown in Figure 2.4, Greene County and the Springfield MSA's strong healthcare sector make up the largest percentage of employment of any industry, with 18% of jobs in Greene County outpacing the Missouri average of 14%. Similarly, retail, accommodation and food services all are large parts of the local economy and outpace the state and national averages. Another industry that stands out is transportation and warehousing, which is not only a more notable portion of the regional economy than the rest of the country, but it is also growing rapidly, more than 23% from 2016 to 2021. We expect to see this become an even more pronounced trend in the local industry mix going forward.

Figure 2.4: Employment by Industry



Source: Lightcast (2021)

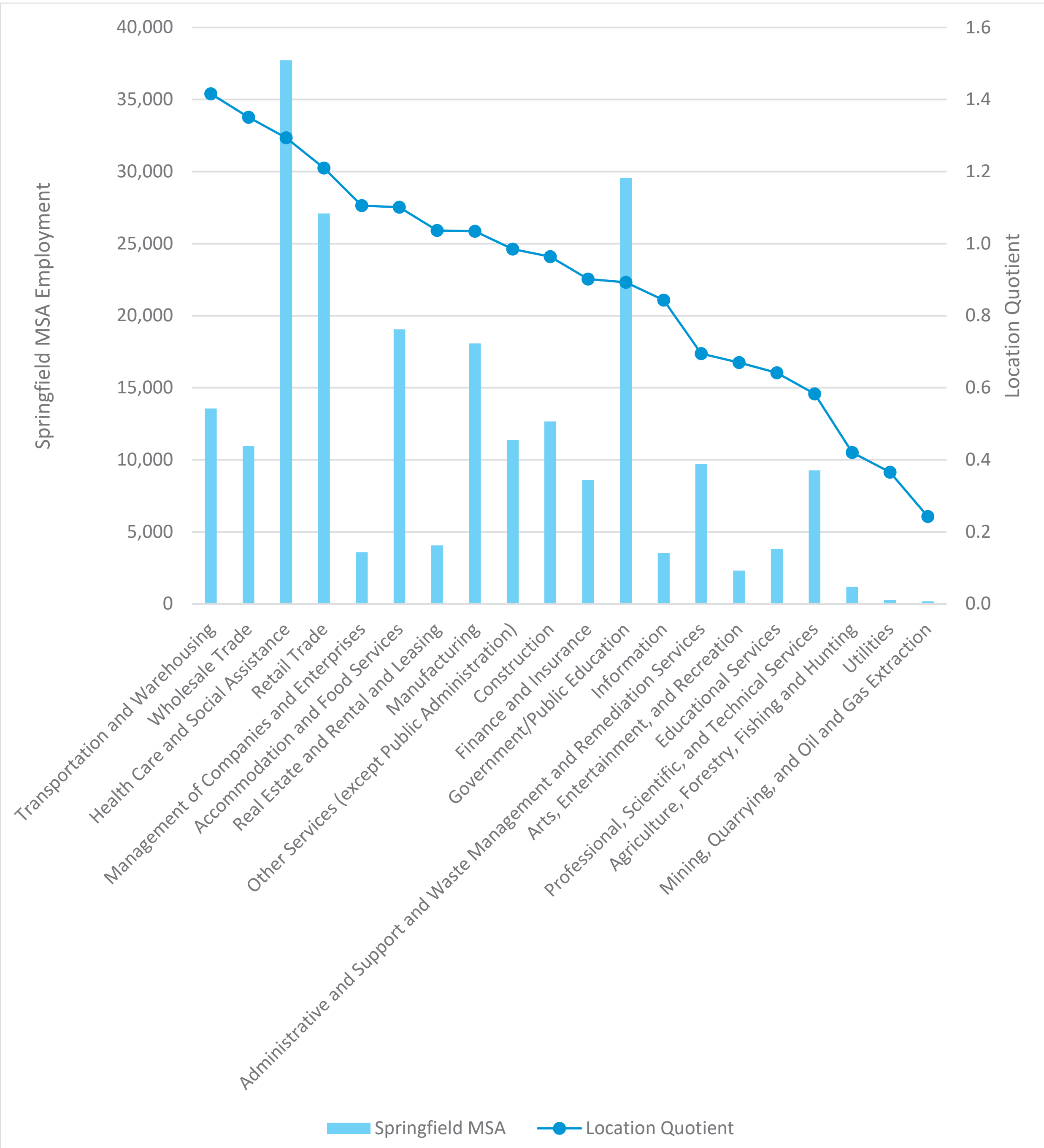
2.5 OCCUPATIONAL ANALYSIS

Location Quotient

An employment location quotient compares the distribution of total employment by industry sector or occupational category of one geography to another. Typically, location quotients compare a region, in this case the Springfield MSA, to the national average to show relative concentrations or strengths of specific industries. A location quotient of 1.0 represents the national average, while a location quotient above 1.0 shows a higher concentration in the region, and a location quotient less than 1.0 shows a lower concentration within the region in that specific industry sector.

As noted in the use of other data previously mentioned in this report, the Springfield MSA has a strong concentration of transportation and warehousing, wholesale trade, health care, and retail trade industries. These sectors have location quotients ranging from 1.4 (transportation and warehousing) to 1.2 (retail trade), suggesting they all outperform the national average. On the other end, the second largest industry in the region, government, and public education, slightly underperforms with a location quotient of 0.9. Agriculture, utilities, and mining all round up the lowest location quotients ranging from 0.4 to 0.2.

Figure 2.5: Employment by Occupation and Location Quotient - Springfield MSA (2021)



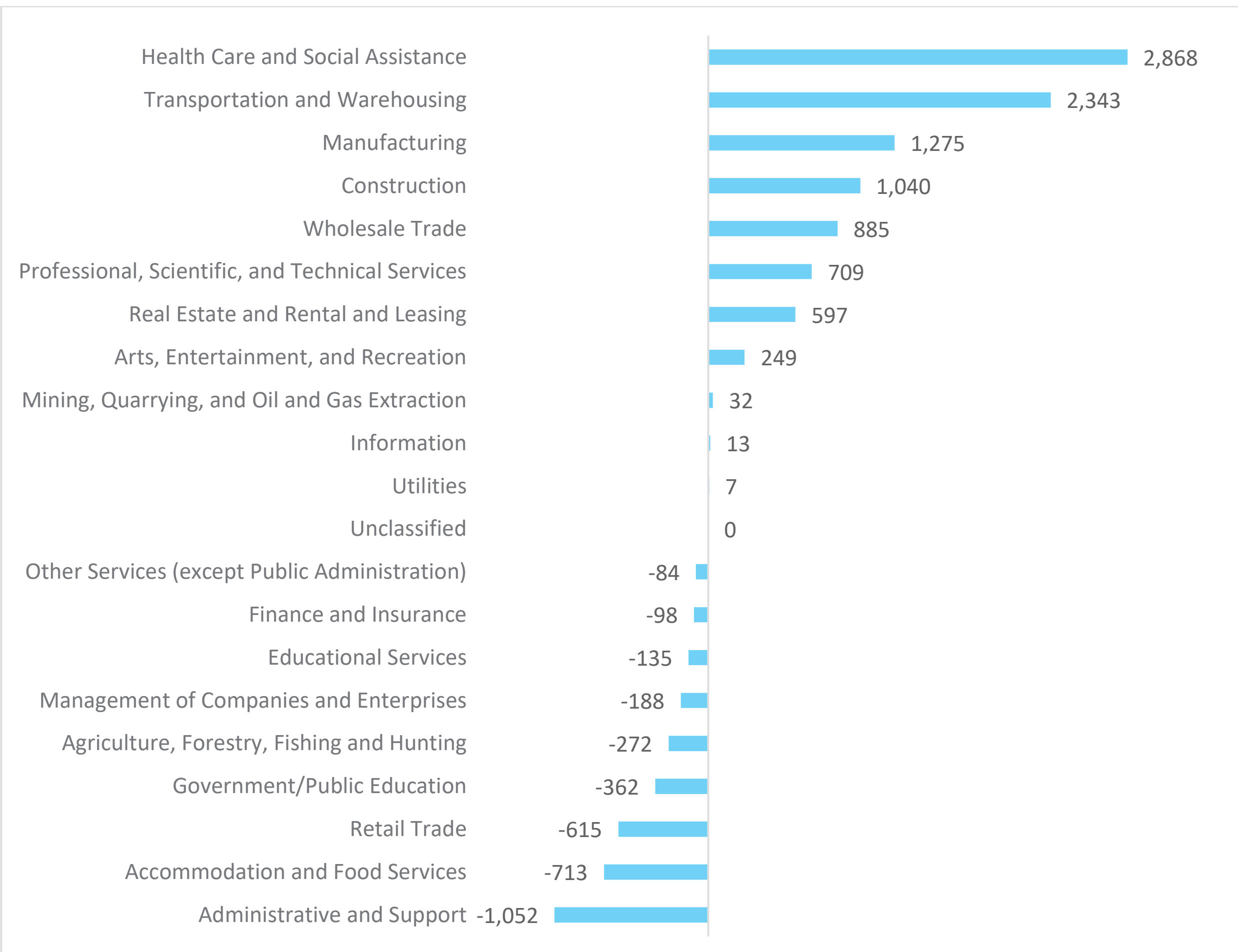
Source: Lightcast

Trends by Occupational Category

From 2016 through 2021, the Springfield MSA added nearly 6,500 net new jobs, with the strongest growth coming in healthcare, transportation, and manufacturing. Meanwhile, retail, accommodation and food services, and administrative jobs declined, though this may be a temporary impact of the COVID-19 pandemic and not an indication of a significant change in the economy.

Healthcare specifically added nearly 2,900 new jobs, or 44% of all net new jobs in the region. Transportation and warehousing added 2,343 new jobs, or 36% of the total, with manufacturing also seeing strong growth. Together these three sectors added 6,486 new jobs, or nearly every net new job across the region. The three sectors also represent roughly 1/3 of all jobs in the region, and as they continue to grow are likely to make up a greater component of employment going forward. This is an important characteristic of the region that will surely impact Battlefield in positive ways in the years and decades ahead, both in terms of employers locating in Battlefield and workers in these industries deciding to move to the community.

Figure 2.6: Net Change in Employment by Industry - Springfield MSA (2016 -2021)

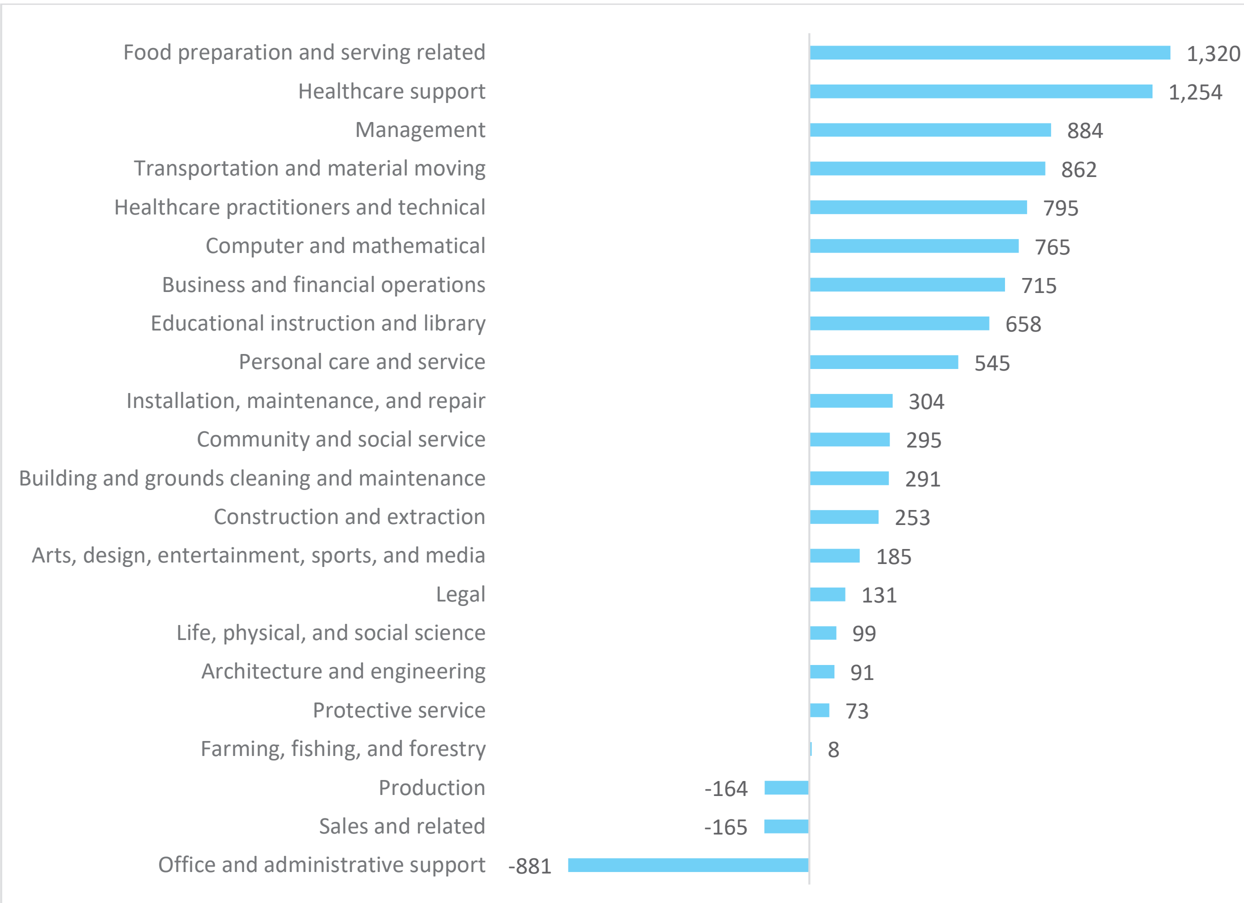


Source: Lightcast

2.6 NATIONAL ECONOMIC CONTEXT

Nationally, we see that services and logistics industries are likely to grow the fastest. Just like in the Springfield MSA, both healthcare and transportation related industries are among the fastest growing nationally. Manufacturing (production) does show a modest decline nationally, even though it is a growing industry in the Springfield region. Other fast-growing industries like computer and mathematical technologies and management-related sectors are less important in Springfield than they are nationally.

Figure 2.7: Projected Net Change in National Employment by Sector - 2021-2031 (in Thousands)



Source: U.S. Bureau of Labor Statistics

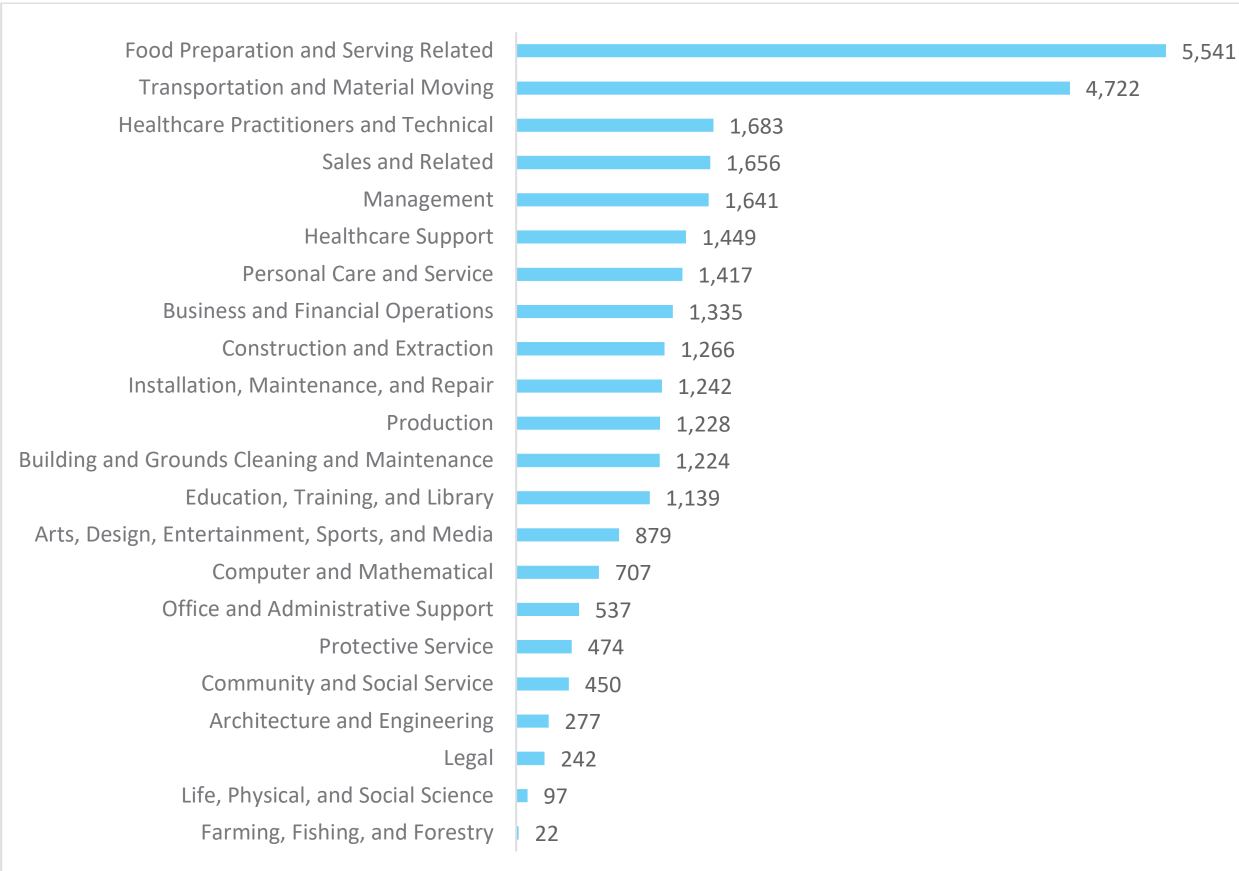
Employment Projections

The Missouri Economic Research and Information Center (MERIC) publishes industry projections by region in Missouri. Unlike other data sources, MERIC does not use the Springfield MSA, so their statistics do not line up perfectly. Instead, they define the Ozark region as including seven counties: Polk, Dallas, Greene, Webster, Christian, Stone, and Taney. Stone and Taney counties are not a part of the Springfield MSA, so their inclusion in the Ozark region is unique and does not match other sources in this report.

MERIC forecasts that there will be a net change of over 29,000 jobs in the Ozark region between 2020 and 2030, an increase of 11.7%. Many of the fastest growing industries in the region match up with national trends, including food preparation and serving, transportation and material moving, and healthcare practitioners. These also support what we've seen as some of the historically fastest growing industries in the Springfield region.

The strong growth in food preparation both supports overall expansion in the industry, and the fact that food service was an industry that saw strong contraction in the past 5 years, likely due to the COVID-19 pandemic. The growth that MERIC projects for the industry more than makes up for the contraction over the past five years and suggests a full recovery.

Figure 2.8: Projected Change in Employment by Industry - Ozark Region (2020-2030)



Source: MERIC

2.7 WAGES

Median wages in the Springfield MSA are below the Missouri medians across every occupation. Overall, wages in Springfield are 11% lower than those across the rest of Missouri. Every single occupation group has lower wages in Springfield than in the rest of Missouri.

Table 2.3: Median Annual Wages by Occupation

Occupation	Springfield MSA	Missouri	Percent Difference
Total, All Occupations	$45,550	$51,390	-11%
Office and Administrative Support	$37,100	$40,560	-9%
Transportation and Material Moving	$37,420	$39,690	-6%
Sales and Related	$37,560	$41,190	-9%
Food Preparation and Serving Related	$25,620	$27,340	-6%
Healthcare Practicioners and Technical	$69,780	$78,670	-11%
Production	$39,400	$42,160	-7%
Educational Instruction and Library	$48,290	$53,570	-10%
Healthcare Support	$28,070	$29,110	-4%
Management	$92,940	$104,120	-11%
Business and Financial Operations	$64,780	$74,780	-13%
Installation, Maintenance, and Repair	$45,420	$50,370	-10%
Construction and Extraction	$51,180	$57,580	-11%
Building and Grounds Cleaning and Maintenance	$29,350	$31,250	-6%
Computer and Mathematical	$68,380	$83,150	-18%
Personal Care and Service	$29,260	$31,060	-6%
Protective Service	$44,950	$46,880	-4%
Community and Social Service	$41,650	$45,190	-8%
Arts, Design, Entertainment, Sports, and Media	$44,550	$51,480	-13%
Architecture and Engineering	$70,170	$84,640	-17%
Legal	$86,460	$98,240	-12%
Life, Physical, and Social Science	$64,150	$65,170	-2%
Farming, Fishing, and Forestry	$31,700	$34,660	-9%

Source: Bureau of Labor Statistics, May 2021

2.8 COMMUTING PATTERNS

While this report generally does not use of ZIP code data since ZIP code boundaries do not correspond with the Battlefield City limits, an exception is made relating to data about commuting patterns in and around Battlefield. This report uses ZIP code data in this case primarily because other data resources do not provide as much insight and detail as ZIP code data. Further, this report views this information as important in understanding a local characteristic, especially in how Battlefield commuting patterns contribute in unique ways to the economy, whether for on-the-go morning coffee, drive-through restaurants, or automobile service uses such as fuel stations, quick-change oil uses, and auto parts stores.

Workers who are 16 and older who reside within the Battlefield ZIP code of 65619 total approximately 4,708 people. Of those workers who commute to their jobs, 21.1% have a commute time of less than 15 minutes. The largest group of commuters, those who travel between 15 and 29 minutes to get to work, total 56.2% of workers. And those whose commute is 45 minutes or greater total 22.6%. The mean travel time to work is 23.8 minutes.

Additionally, 11.3% of workers 16 and older work from home and do not commute, bringing the percent of workers who do commute to approximately 88.7%. Generally, work-from-home opportunities in the years ahead are expected to continue to be an expanding opportunity for many workers in the years ahead.

When comparing workers within the 65619 ZIP code versus averages in Greene County, the Springfield MSA, and the state of Missouri, a greater percentage of workers work from home (11.3% of the 65619 total) in comparison to the 6.9% in Greene County, 6.4% in the Springfield MSA, and 8.4% at the state level. However, for those that do commute, a greater share of commuters travel longer on average to get to work.

Table 2.4: Average Commute Time and Mode of Commute

Description	Battlefield (Zip 64619)	Greene County	Springfield MSA	Missouri
Workers 16 and Older	4,708	141,184	219,447	2,910,919
% Workers by Commute Time				
Less than 15 minutes	21.1	31.6	28.4	28.9
15 - 29 minutes	56.2	48.7	44.0	38.9
30 - 44 minutes	9.5	13.5	18.3	20.2
45 - 59 minutes	6.9	3.0	5.4	6.6
60 minutes or more	6.2	3.2	3.7	5.4
% Workers by Mode of Commute				
Drove Alone	80.2	80.5	81.1	79.4
Carpooled	7.7	8.6	8.7	8.1
Public Transportation	--	1.0	0.7	1.0
Walked or Other Means	0.8	2.9	3.1	3.1
Worked at Home	11.3	6.9	6.4	8.4
Mean Travel Time to Work (Minutes)	23.8	20.7	22.6	23.8

Source: U.S. Census Bureau (American Community Survey, 2021 5-Year Estimates)

2.9 TARGET INDUSTRY CLUSTERS FOR BATTLEFIELD

In many ways, housing and retail are highly dependent on each other, with total current "rooftops" and automobile trips along major roadways being key demographic factors that commercial retailers use in determining location and business expansion plans. Likewise, housing developers use age, income, and other demographic and economic data to assist in determining the housing market segments they wish to target for new development. In short, housing and commercial retail are highly dependent upon and significantly influence each other.

Equally important but existing outside the more direct relationship between housing and commercial retail are those major employers that provide top-tier work opportunities for a locality, a region, and the state. Major employers and the top-tier jobs that produce goods and services provide the necessary "energy" to the local and regional economy that, in turn, generates demand for employee needs such as food, shelter, clothing, and other day-to-day necessities. The inter-dependence between these three parts of the local and regional economy is critical in understanding the importance of targe industry clusters.

With this in mind, section 2.9 focuses on the types of "industry clusters" that are important to the Springfield MSA economy as a whole and, likewise, those that the Battlefield community may be well-positioned to attract or take an increased share in should it chose to do so.

Similar to the Springfield MSA, the largest industries in Battlefield are Health Care and Social Assistance (498 people), Retail Trade (366 people), and Accommodation and Food Services (324 people). Among these three sectors, employers in the Health Care and Social Assistance industry tend to have the greatest abundance of and highest paying employment opportunities. All three industries have professionals associated with them and, generally speaking, the highest average salaries within them are Public Administration ($67,643), Professional, Scientific, and Technical Services ($59,524), and Professional, Scientific, and Management, and Administrative and Waste Management Services ($57,560).

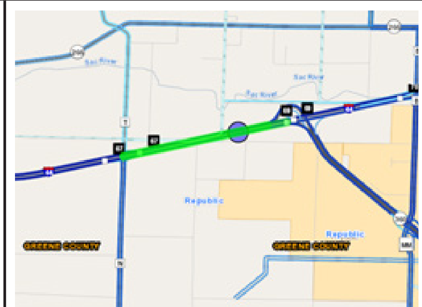
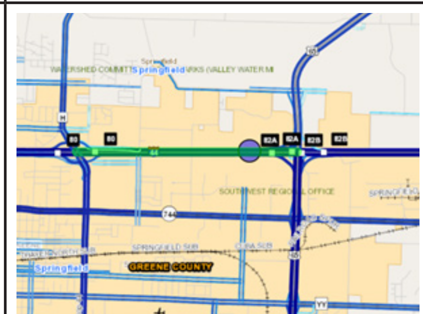
For the year just before the COVID-19 epidemic (2019 to 2020), employment in Battlefield grew at a rate of 8.23%, from approximately 3,000 employees to 3,300 employees. The most common job groups, by number of people living in Battlefield are Office and Administrative Support Occupations (513 people), Sales and Related Occupations (366 people), and Management Occupations (347 people). This data is from the Census Bureau's 2020 American Community Survey (ACS) 5-Year Estimate. Note that some of these residents may live in Battlefield and work elsewhere.

As touched upon in Sections 2.1, 2.4 and 2.5, if Battlefield wishes to pursue the major employers in Greene County and the Springfield MSA, such as those industries shown in Table 2.5, the city will need to identify the location and workforce related needs of that industry.

For example, identifying a medical out-patient care facility or medical office buildings in Battlefield would position the city to capture a greater share of the Health Care and Social Assistance industry. Battlefield's residential demographics with a diversity of age cohorts, convenient access to the surrounding area in southwest Springfield, and the projected growth in housing in the community all suggest that such a facility would be an excellent fit for Battlefield in the future.

Conversely, while it has a strong presence in the region and continued growth prospects, the transportation and warehousing industries may not be an ideal fit for Battlefield due to its relative lack of access to roads such as U.S. 65 and I-44. While U.S. 60 is also an important east/west transportation corridor located just north of Battlefield, it is I-44's west to east orientation and U.S. 65's north-south direction that tends to be the primary attractors for the highway dependent industries. While Battlefield may compete for transportation and warehousing employers, given the choice between similar parcels, it would be anticipated that most companies would select locations near U.S. 65 or I-44. This assertion is supported by MoDOT data found in the table below. Note that single-unit trucks are those where the truck cab and storage/hauling compartment are comprised of a single frame (regardless of the number of axles), typically used for local and short-haul trips. Semi-Trailer Trucks are those where the truck cab is separate/detachable from the trailer (regardless of axles or number of trailers), often used for medium and long-haul trips.

Table 2.5: Comparison of Three AADT Locations in Springfield Region Near U.S. Highways and Interstates

Highway Location	Average Annual Daily Traffic (AADT) for Single Unit Trucks (2022)	Average Annual Daily Traffic (AADT) for Combined Semi-Trailer Trucks (2022)	Combined Total	Thumbnail Location Map
U.S. 60 James River Freeway, west of Route FF intersection	1,511	893	2,404	
1-44, west of James River Freeway interchange	369	2,957	3,326	
1-44, immediately west of U.S. 60	819	6,580	7,399	

Source: www.modot.org/traffic-volume-maps

In addition, the overall residential character of the Battlefield community may not be appropriate for an employer in this industry that relies on large parcels that are sometimes associated with nuisances such as noise (idling motors), traffic (truck traffic), and aesthetic concerns (securely fenced area with large parking areas).

In the middle of these two are the manufacturing and professional/scientific/technical services industries. While manufacturing uses that generate high levels of noise and are often characterized by outdoor uses such as storage and construction may not be appropriate in Battlefield, supporting industries that operate within a fully enclosed building, can meet building setback requirements, and generally can operate in a "campus-like" office building environment may be most welcome in specified areas of Battlefield, such as along the Republic Road west of Route FF or the emerging Farm Road 115 corridor south of the Republic Road intersection.

Table 2.6 provides common land use needs for employers in the health care, transportation and warehousing, and the manufacturing and professional/scientific/technical services industries.

Table 2.6: Common Land Use Needs

Industry	Land Use Issue			
Healthcare/Social Assistance	Peak traffic spikes	Parking	Waste generation/ Disposal (e.g., radioactive medical waste)	Hours of operation
Transportation and Warehousing	Large vehicle traffic impacts	Roads must accomodate large trucks (e.g., wide turn radii)	Highway access	Adjacency/ Compatibility with residential uses
Manufacturing	Noise, odor, vibration, and aesthetic nuisances	Roads must accomodate large trucks (e.g., wide turn radii)	Potential demand for large sites with high demand for certain utilities (water, electricity)	Adjacency/ Compatibility with residential uses
Professional/Scientific/ Techinical Services	Potentially high demand for water, sanitary sewer, and electric services	May have unique site securing needs (fencing)	Potential demand for large sites	Ample, well-located sites that accomodate the full range of building types and land uses

Figure 2.9: Process Flow

2.10 PLANNING IMPLICATIONS

- The strong economy in the Springfield MSA broadly and in Battlefield specifically is expected to continue to grow over the coming years. Despite Greene County being the center of much of this growth, it will become slightly less important to the broader region as faster growth shifts to more outlying areas within the Springfield MSA. This may result in Greene County and communities within it such as Battlefield growing a little slower than the broader region, though all will continue to see strong growth.

- Transportation and warehousing is a strong and rapidly growing part of the economy and will take on more importance going forward. To the extent that these jobs can grow in or near Battlefield will help with both job and resident growth over the coming years.

- Healthcare is a significant part of the Springfield MSA and will continue to grow as a top growth sector. Battlefield's location in Greene County means that it has both the opportunity to get those jobs directly in Battlefield or serve the growing region population who may want to live in Battlefield.

- The low unemployment rates also indicate a strong economy, though it may also put pressure on wages. While wages are lower than the rest of Missouri today, all sectors are faced with wage inflation pressures. Rising wages will attract more residents to the region, though it will also challenge the ability for employers to continue to grow.

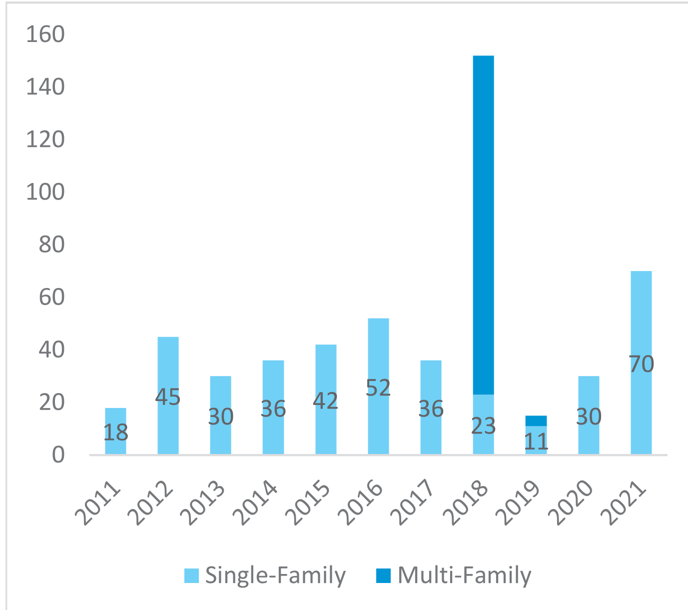
3. HOUSING ANALYSIS

3.1 OCCUPIED HOUSING

In 2016, there was a total of 2,252 occupied housing units in the City of Battlefield. According to ACS data, the five-year period between 2016 and 2021 saw an increase of 5%, or 108 more housing units. Also during this five-year period, the rate of owner-occupancy for all housing units has decreased from 82.6% to 77.5%. With renter-occupied units increasing from 17.4% to 22.5% during this period, a trend appears to be emerging that there is an increasing number of households that are renter-occupied rather than owner-occupied.

When breaking down occupied households by the number of bedrooms in each home, the City of Battlefield was made up of approximately 244 households with up to one bedroom, 1,633 households with two to three bedrooms, and 621 households with four or more bedrooms. Households with up to one bedroom usually support single or double adult households with no children, usually in 20 to 45 year-old age group. This meant that 244 homes or 10% of households were supportive of those population demographics.

Figure 3.1: Battlefield Housing Permits: 2002 - 2021



Source: U.S. Department of Housing and Urban Development (2022)

The 69% of households that were in the two to three bedroom range support a wider variety of household demographic profiles. Twenty-six percent of households contained four or more bedrooms, suggesting homes for families with children with incomes high enough to support the mortgage or rent of a large home.

Per the U.S. Department of Housing and Urban Development, the City of Battlefield saw 526 building permit applications from 2011 to 2021.

Of those permits, 133 were for multi-family buildings and were largely filed in 2018. The other 393 building permits were for single-family households.

Battlefield has a lower ratio of property dedicated to the multi-family housing uses. Approximately 9% of the city's housing inventory is "multi-family" (duplexes and above) according to 2022 American Community Survey data, the lowest among the communities listed in Table 3.1. Battlefield also has the highest rate of single-family detached housing units compared to the state overall and communities in Greene County and Webster County.

Table 3.1: Housing Types (Percent)

City	1 Unit (Single-Family Detached)	2 Units (Duplex Units)	3-4 Units (Low Density Multi-Family	5-9 Units (Medium Density Multi-Family)	10-19 Units (High Density Multi-Family)	% Multi-Family (Dulplex to 19 Unit Structures)
Battlefield	**83%**	**3%**	**1%**	**3%**	**2%**	**9%**
Missouri	70%	3%	5%	4%	3%	15%
Marshfield	78%	5%	8%	2%	1%	16%
Ozark	72%	3%	8%	3%	3%	17%
Nixa	79%	3%	3%	3%	2%	11%
Republic	75%	4%	1%	5%	4%	14%
Rogersville	63%	4%	8%	5%	6%	23%
Springfield	62%	3%	3%	5%	8%	19%
Strafford	77%	4%	6%	1%	0%	11%
Willard	79%	2%	5%	1%	3%	11%

Source: U.S. Census Bureau American Community Survey (2021)
Note: Percentages do not add up to 100% as 1 Unit Attached, Mobile Homes, and Structures with 20+ Units are not included.

The median price of a home in Battlefield according to 2022 ACS data is $165,200. Table 3.2 provides similar information for Battlefield's peer cities in the region and the state of Missouri as a whole.

Table 3.2: Median Home Price in Battlefield and Nearby Cities

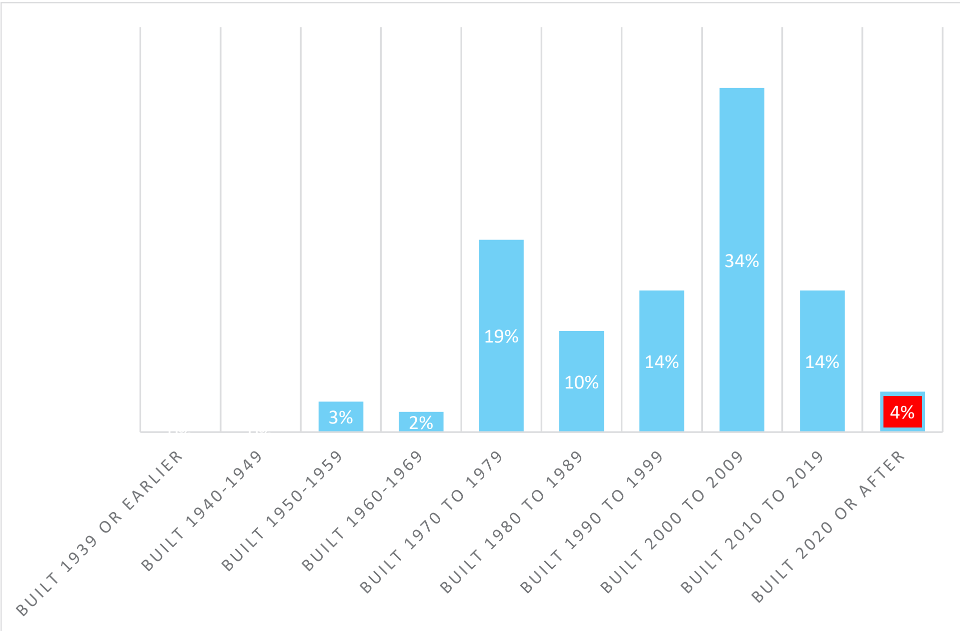
City	Median Home Value
Battlefield	**$165,200**
Missouri	$171,800
Marshfield	$144,800
Ozark	$173,800
Nixa	$191,000
Republic	$141,000
Rogersville	$148,900
Springfield	$127,800
Strafford	$124,700
Willard	$159,600

Source: U.S. Census Bureau American Community Survey (2022)

Data on the median price of a home in Battlefield and other communities is useful as it provides insight into how affordable homes are in each community. Battlefield's Median Home Value of $165,200 is in the middle range of other cities in the Springfield MSA.

Please note that housing costs are influenced by a wide variety of factors. These may include proximity to major thoroughfares and highways, age/year housing structure was built, school district, local property tax rates, and proximity to amenities. Figure 3.2 provides information into the first of these factors: Year House Was Built Distribution in Battlefield

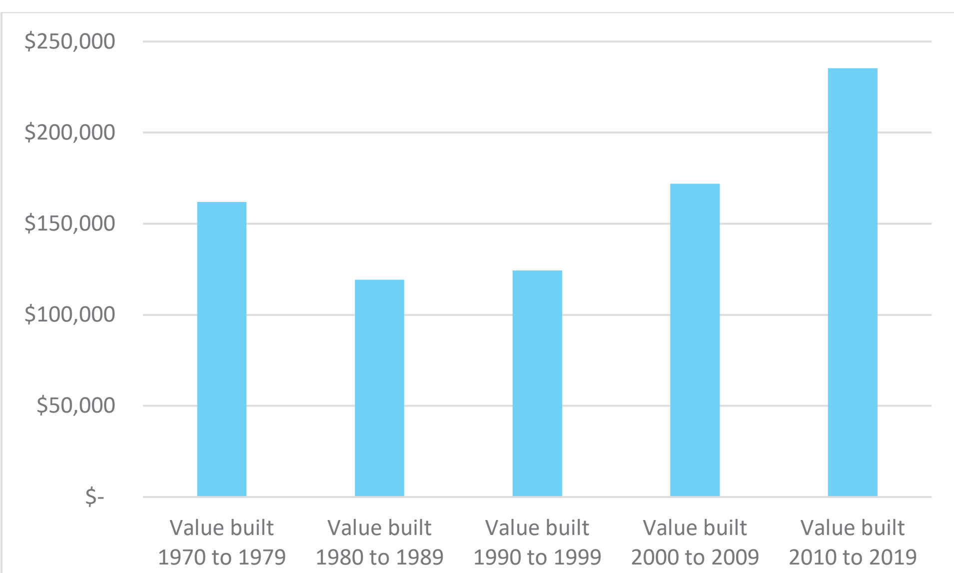
Figure 3.2: Battlefield Housing Units Constructed by Decade



Source: U.S. Census Bureau American Community Survey

It is a positive sign that new housing has been consistently built in Battlefield since the 1970's. Save for a housing building spike from 2000-2009, roughly 10-20% of the housing stock in Battlefield is evenly built across the past five decade dating to the 1970s. This distribution optimizes housing choice and helps to smooth housing characteristics that may have been popular during a given decade but are now not a preferred option for contemporary needs. For example, in the 1970s a single central bathroom for all family member use was a common home interior layout. Today, a master bathroom that is separate from bathroom(s) for children or guests is a more common preference among homebuyers. Similarly, detached garages were a standard home feature from the 1930s through the 1950s. Today, attached garages are the norm. This is important because communities that are heavily characterized by homes from a particular era may face challenges in retaining high home ownership rates.

Figure 3.3: Median Home Value by Year Structure Built in Battlefield



Source: U.S. Census Bureau American Community Survey

Figure 3.3 further highlights the information from Figure 3.2 for homes built in Battlefield over the past five decades. It is notable that homes that were built in the 1970s in Battlefield have retained their values exceptionally well compared to those built in the 1980s and 1990s. This is important because it indicates that homes that are approximately 50 years old have been well-maintained and are still in demand on the housing market. In addition, it further suggests that the neighborhoods in which these homes are located are stable and offer amenities to residents that outweigh the "inconveniences" of owning a home that is 50 years old, such as higher maintenance costs, higher utility bills, smaller overall interior living space, and the greater challenges relating to updating the home interior.

Table 3.3: Median Move-In Year for Battlefield and Peer City Homeowners

City	Median Year Owner Moved In to Home
Battlefield	**2008**
Missouri	2007
Marshfield	2010
Ozark	2012
Nixa	2011
Republic	2010
Rogersville	2015
Springfield	2007
Strafford	2009
Willard	2012

Source: U.S. Census Bureau American Community Survey

Table 3.3 offers another glimpse into the homeowner characteristics of Battlefield. The community's median tenure in a home is the longest home-owner tenure rates among Battlefield's peer communities, rivaled only by the overall state of Missouri tenure of 2007.

3.2 TARGET HOUSING CLUSTER DEMOGRAPHICS

As discussed in Section 2.9 with regard to the industry segments that Battlefield is best positioned to pursue, this section reviews the existing demographic make-up of Battlefield using a tool called "Tapestry Segmentation" from ESRI. ESRI's Tapestry Segmentation divides U.S. residential areas into 67 distinctive segments based on socioeconomic and demographic characteristics to provide an accurate detailed description of U.S. neighborhoods. As applied to Battlefield, the Tapestry Segmentation segments the community into demographic and socioeconomic cohorts in a way that is helpful in understanding local lifestyle trends and preferences among residents. Tapestry Segmentation shows common behaviors within each segmented neighborhood and can be used to better understand Battlefield's population and needs.

While this tool does make some sweeping generalities and assumptions about large segments of a community, when applied appropriately, it can effectively assist in creating a marketing vision strategy to attract future residents AND businesses. The Tapestry Segmentation tool also provides insight into housing segments and demographics that are most likely to grow over the next 20 years. This location quotient information can assist in focusing in on the housing segments which the City would like to position itself to attract in the future.

Of the 67 unique "LifeMode" groups found across the U.S., the Tapestry segments predominantly found in Battlefield make up 98% of the Battlefield population (according to ESRI) and include:

- Middleburg (55%)
- Workday Drive (27.2%)
- Bright Young Professionals (8.9%)
- Old and Newcomers (7.8%)

The characteristics of each segment are summarized below. The full Tapestry reports with more details can be found in Appendix A. To see all segments and characteristics, visit www.esri.com/tapestry.

Middleburg

Middleburg is the largest tapestry segment in Battlefield, making up 55% of the population according to ESRI. Middleburg neighborhoods transformed from the easy pace of country living to semirural subdivisions in the last decade, as the housing boom spread beyond large metropolitan cities. Residents are traditional, family-oriented consumers. Still more country than rock and roll, they are thrifty but willing to carry some debt and are already investing in their futures. They rely on their smartphones and mobile devices to stay in touch and pride themselves on their expertise. They prefer to buy American and travel in the U.S. This market is younger but growing in size and assets.

Those in the Middleburg tapestry prefer semirural locales within metropolitan areas. Neighborhoods changed rapidly in the previous decade with the addition of new single-family homes. Their housing choice may include mobile homes (Index 150) and they prefer affordable housing, having a median value of $175,000 (Index 84) with a low vacancy rate. Young couples, many with children have an average household size is 2.75.

Their Socioeconomic Traits from an education perspective indicate that 65% have a high school diploma or some college. Their Labor force participation typical of a younger population at 66.7% (Index 107). Traditional values are the norm within this segment — faith, country, and family. They prefer to buy American for a good price and are comfortable with the latest in technology for convenience (online banking or saving money on landlines) and entertainment.

Table 3.4: Middleburg

Middleburg - 4C	
Family Landscape:	Successful, younger families in newer housing
Urbanization:	Semirural
Household:	Married Couples
Housing:	Single-Family
Median Age:	36
Median Income:	$58,000
Other characteristics:	Professional/Services
	College Degree
	White
	Buy children's toys, clothes
	Carry some debt, invest for future
	Go hunting, bowling, target shooting
	Watch country, Christian TV channels
	Own trucks, SUVs

Source: ESRI

Workday Drive

Workday Drive is the second largest tapestry segment in Battlefield, making up 27.2% of the population.

Workday Drive is an affluent, family-oriented market with a country flavor. Residents are partial to new housing away from the bustle of the city but close enough to commute to professional job centers. Life in this suburban wilderness offsets the hectic pace of two working parents with growing children. They favor time-saving devices, like banking online or housekeeping services, and family-oriented pursuits.

Workday Drive residents prefer the suburban periphery of metropolitan areas. They select predominantly single family homes in newer neighborhoods, with 34% having been built in the 1990s (Index 236), and 31% built since 2000. Owner-occupied homes have a high rate of mortgages at 68% (Index 164) and low rate vacancy at 4%.

Workday tapestry is characterized by a median home value of $257,400 with most households comprised of married couples with children and an average household size of 2.97. Most households have two or three vehicles to accommodate long travel times to work. A disproportionate number commute from a different county (Index 132).

In terms of socioeconomic traits, this tapestry segment is characterized by 40.5% college graduates with more than 72% having some college education. High labor force participation rate at 71%; two out of three households include two plus workers (Index 124). They are connected, with a host of wireless devices—anything that enables convenience, like banking, paying bills, or even shopping online. They are well insured and invested in a range of funds, from savings accounts or bonds to stocks. They tend to carry a higher level of debt, including first (Index 149) and second mortgages (Index 154) and auto loans (Index 149).

Table 3.5: Workday Drive

Workday Drive - 4C	
Family Landscape:	Successful, young families in newer housing
Urbanization:	Suburban Periphery
Household:	Married Couples
Housing:	Single-Family
Median Age:	37
Median Income:	$89,000
Other characteristics:	Professional/Management
	College Degree
	White
	Go jogging, biking, target shooting
	Carry high level of debt
	Visit theme parks, zoos
	Shop, bank online
	Own 2+ vehicles (minivans, SUVs)

Source: ESRI

Bright Young Professionals

The third largest tapestry segment in Battlefield is Bright Young Professionals, making up 8.9% of the population according to ESRI.

Bright Young Professionals is a large market, primarily located in urban outskirts of large metropolitan areas. The average household size is 2.41, the median age is 33, and the median household income is $54,000. The median household income, median home value, and average rent in this segment are close to national averages.

These communities are home to young, educated, working professionals. More than one out of three householders are under the age of 35. Roughly 35% of this segment has some college or an associate's degree; 33% have a bachelor's degree or higher. Slightly more diverse couples dominate this market, with more renters than homeowners. More than two-fifths of the households live in single-family homes; over a third live in 5+ unit buildings.

Labor force participation is high at a rate of 72%. The work is generally white-collar work, with a mix of food service and part-time jobs (among the college students).

This segment's market profile includes residents who are physically active and up on the latest technology. Concern about the environment impacts their purchasing decisions. They own newer computers (desktop, laptop, or both) and 2+ TVs. They go online and use mobile devices for communication, banking, accessing social media, downloading entertainment, redeeming mobile coupons, and to check the news. Bright Young Professionals enjoy a variety of sports, attending concerts, going to bars/clubs, and eat out often at fast-food and family restaurants.

Table 3.6: Bright Young Professionals

Bright Young Professionals – 8C	
Middle Ground:	Lifestyles of thirtysomethings
Urbanization:	Urban Periphery
Household:	Married Couples
Housing:	Single-Family, Multi Units
Median Age:	33
Median Income:	$54,000
Other characteristics:	Professional/Services
	College Degree
	White
	Go to bars/clubs; attend concerts
	Own U.S. savings bond; bank online
	Eat at fast food, family restaurants
	Rent DVDs from Redbox or Netflix
	Well connected via latest technology

Source: ESRI

Old and Newcomers

The Old and Newcomers tapestry segment is the fourth largest in Battlefield and makes up 7.8% of the population, per ESRI.

This market features singles' lifestyles **on a budget**. The average household size in this segment is 2.12, with a median age of 39.4 and a median household income of $44,900. Their focus is more on **convenience than consumerism, economy over acquisition**. Old and Newcomers is composed of neighborhoods in transition, populated by renters who are just beginning their careers or retiring. Predominantly single households, with a mix of married couples with no children.

Households within this tapestry segment are frequently renter occupied with tenants paying an average rent that is lower than the national average. Consumers are **price aware and coupon clippers**, but open to impulse buys.

The average labor force participation rate is 62.6%, despite the increasing number of retired workers. Thirty-two percent of households in this segment currently receive income from Social Security. Thirty-one percent have a college degree, 33% have some college education, and 9% are enrolled in college, whether that be traditional students or those taking adult education classes.

Old and Newcomers' market profile shows a strong sense of community. They support charity causes and are environmentally conscious. Their entertainment features the Internet, watching movies at home, listening to country music, and reading the paper. Vehicles are a basic means of transportation. Food features convenience, frozen, and fast food. They do banking as likely in person as online. The age of Old and Newcomers is not always obvious from their choices.

Table 3.7: Old and Newcomers

Old and Newcomers - 8F	
Middle Ground:	Lifestyles of thirtysomethings
Urbanization:	Metro Cities
Household:	Singles
Housing:	Single-Family, Multi Units
Median Age:	39
Median Income:	$45,000
Other characteristics:	Professional/Services
	College Degree
	White
	Buy frozen, convenience foods
	Bank online or in person
	Support environmental organizations
	Watch movies at home
	View car as transportation only

Source: ESRI

These characteristics show the types of demographic group/age cohorts that Battlefield is most likely to attract. In addition to attracting senior housing in the future, the tapestries show that multi-family housing could also be attractive in Battlefield.

4. POPULATION PROJECTIONS

4.1: Population Projections

Projecting future population is important to understanding the overall region's growth and potential. Although no methodology is perfect, the following projections consider differing growth rates from a number of sources, including ESRI, Lightcast, and the state of Missouri. For each source, we have examined their most recent five-year growth projections.

ESRI is the most conservative of the three, forecasting a 0.6% annual growth rate for the Springfield MSA from 2020-2027. The state of Missouri is the most aggressive, forecasting a 1.1% annual growth rate from 2020-2025. Lightcast is in the middle with a 0.7% annual growth rate from 2021-2026. These three rates make up the low, medium, and high scenarios for the Springfield MSA.

These projections suggest that the population in the Springfield MSA would grow from approximately 436,000 in 2010 to between 541,000 and 585,000 by 2040.

Table 4.1: Springfield MSA Population Projections

Year	Low - 0.6% ESRI	Medium - 0.7% Lightcast	High - 1.1% State of Missouri
2010	436,712	436,712	436,712
2020	475,432	475,432	475,432
2022	484,259	484,259	484,259
2025	493,303	494,551	499,769
2030	508,753	512,192	526,730
2035	524,686	530,463	555,147
2040	541,119	549,385	585,096

Source: ESRI, Lightcast, State of Missouri

If we take these same scenarios and apply them to the two-mile radius area around Battlefield specifically, the population trends show significant growth by 2040. The area around Battlefield would grow from about 14,000 in 2010 to a range of 17,000 to 19,000 by 2040.

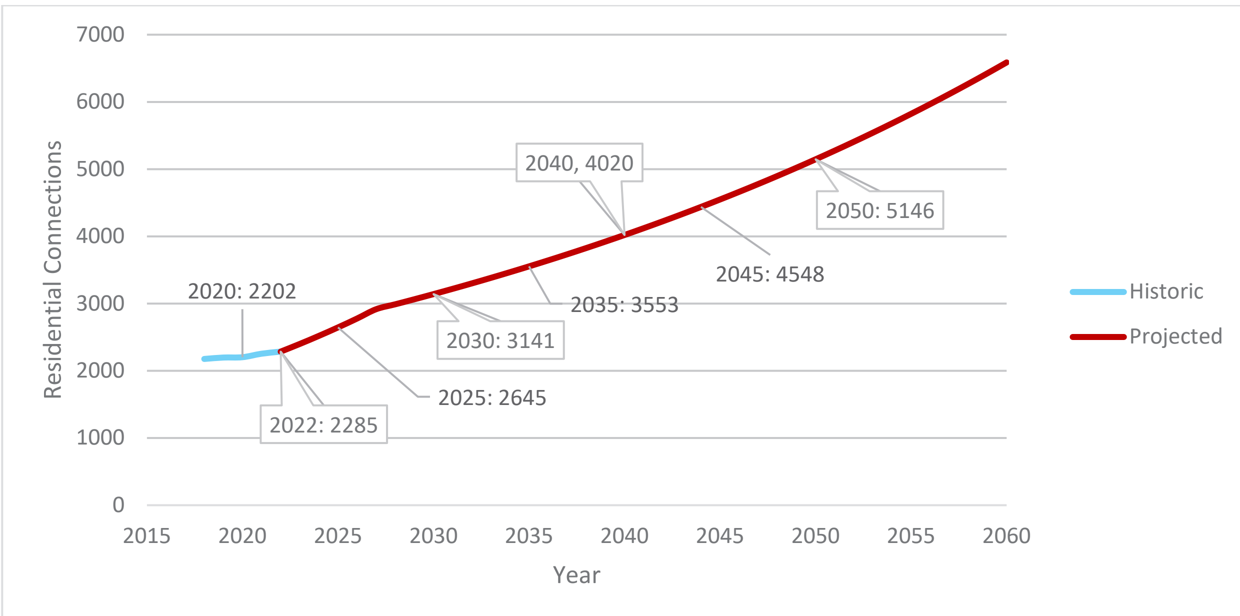
Table 4.2: Battlefield (Two-Mile Radius) Population Projections

Year	Low - 0.6% ESRI	Medium - 0.7% Lightcast	High - 1.1% State of Missouri
2010	14,194	14,194	14,194
2020	15,611	15,611	15,611
2022	15,723	15,723	15,723
2025	16,017	16,057	16,227
2030	16,518	16,630	17,102
2035	17,036	17,223	18,025
2040	17,569	17,838	18,997

Source: ESRI, Lightcast, State of Missouri

While this report had the option to use more conservative annual growth rates for the City of Battlefield from ESRI (0.6%), Lightcast (0.7%), and the state of Missouri (1.1%), this study's steering committee requested to use population and housing growth projections that match those found in the City of Battlefield's Sanitary Sewer Study prepared by Cochran Engineering. While, as of this writing in April 2023, the Sanitary Sewer Study is in draft format, CMT coordinated with Cochran Engineering to fulfill the City's request so that the two reports would consistently apply a 5% growth rate through 2027 and a 2.5% annual growth rate through 2050 in new households/residential connections. While the Sanitary Sewer Study only made new residential connection (household) projections and not population projections, this study has assumed that each household/residential connection would contain 2.59 persons (a rate consistent with the City of Battlefield's 2020 Census data on "persons per household.")

Figure 4.1: City of Battlefield Household/Residential Connection Projections



Source: 2023 City of Battlefield Sanitary Sewer Study (draft) prepared by Cochran Engineering

The decision to use a 5% growth rate through 2027 and 2.5% annual growth rate thereafter for Battlefield is supported by a review of Battlefield's post-2020 Census population numbers conducted for this report. Specifically, the City of Battlefield provided data on all the new housing permits issued after April 1, 2020 (the official date of the 2020 Census) through January 31, 2023. During this 33 month period (April 2020 to January 2023), the City platted a 90-lot residential subdivision on the east side of Route FF north of Farm Road 190. It also experienced continued infill development of residential lots city-wide. As a result, an additional 105 housing units were permitted during this period, a number close to the Sanitary Sewer Study's projected 88 lots during this same period. Assuming Battlefield's 2020 Census average of 2.59 persons per dwelling unit has remained consistent in these new homes, it is further estimated that an additional 272 people now live in Battlefield as of January 2023.

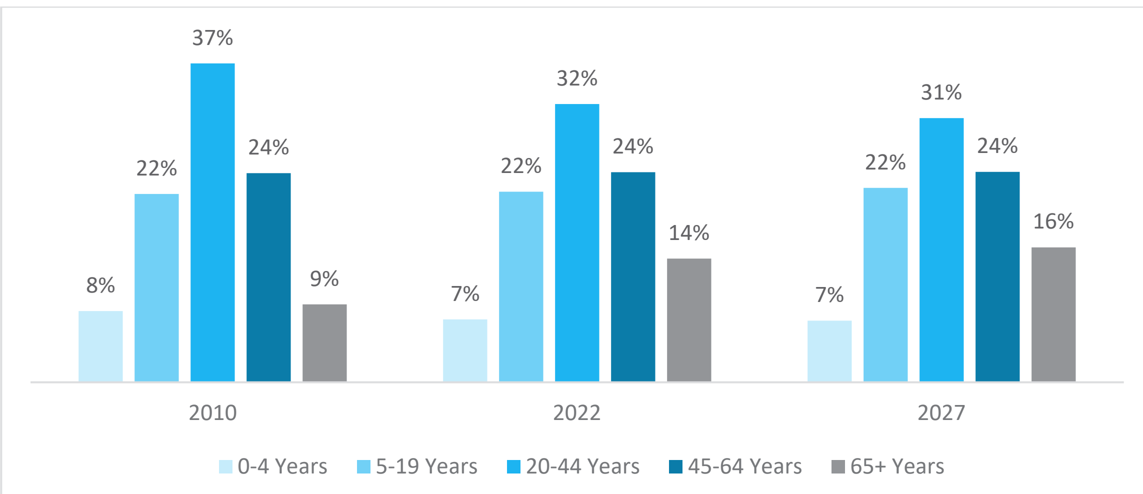
In addition, it is anticipated that additional residents will move to Battlefield as a result of two new subdivisions that were or will be platted in Battlefield in 2022 and 2023. While homes have not been built on these lots yet, the two subdivisions are comprised of a total of 181 lots. It is anticipated that nearly all these lots will be move-in ready by 2025. Similar to the above, these future 181 homes are also assumed to average 2.59 persons per housing unit or 469 new residents. These 469 people would be in addition to the 272 people added to the 2022 estimate. While 181 lots is roughly 50% less than the 360 projected by the Sanitary Sewer Study, Battlefield staff remains optimistic that additional lots could be developed/platted over the 2023-25 timeframe, bringing household growth rates closer to the 5% rate found in the Sanitary Sewer Study assumes through 2027.

For population growth projections from 2027 to 2045, this study assumes an annual growth rate of 2.5% to be consistent with the Sanitary Sewer Study. These projections suggest that the population in Battlefield would grow from approximately 5,590 in 2010 to 11,780 by 2045 (4,548 households x 2.59 persons per household. The impacts of these changes will be discussed in Section 7 on Land Demand for Residential and Commercial Property in Battlefield.

4.2: Age Demographics

Moving to the age demographics of the Battlefield community, the age range of children (0 years to 19 years) will remain approximately 30% of Battlefield's population through 2027. However, the young adult age range (20 years to 44 years) will continue a decrease which began in 2010 when young adults made up 37% population. The percentage is down to a projected 31% of the population in 2027. Conversely, the retired adults age range (65+ years) will continue increasing from 2010 when retirees made up 9% of the population up to the projected 16% in 2027. This trend is partially explained by the aging of the Baby Boomer generation (1946 to 1964), a population bulge that has been impacting communities nation-wide in recent years. While the even larger Millennial generation (1981-1996) has not yet placed its definitive stamp on Battlefield's age demographics, this is another area that merits continued monitoring for trends in the years ahead as this cohort settles into their prime earning years.

Figure 4.2: Battlefield Population - Average Age Ranges as a Percentage of Total Population (2010, 2022, 2027)



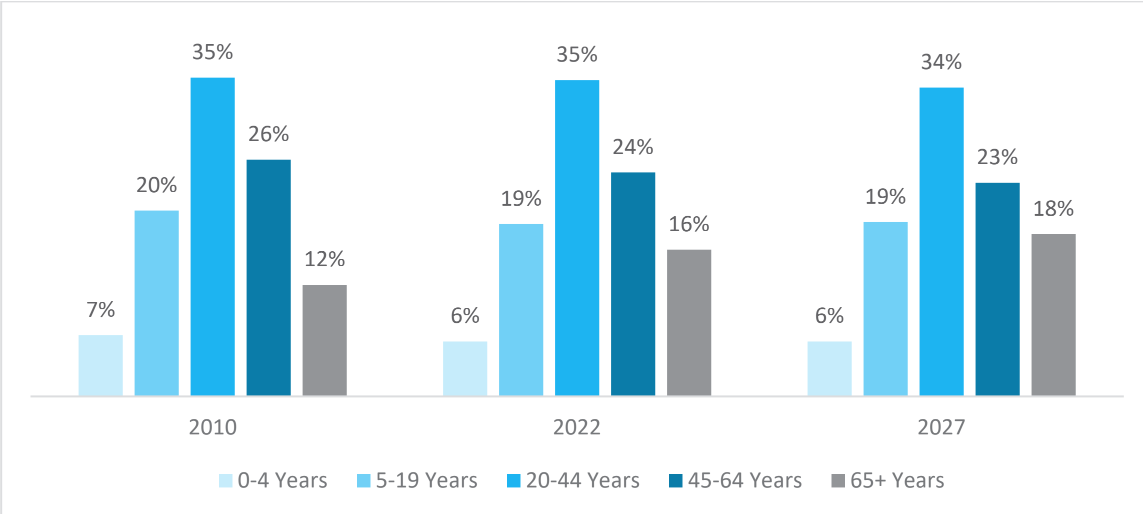
Source: ESRI

When comparing the population age ranges for Battlefield versus the overall Springfield MSA, Battlefield averages a greater percent of population in the children's age range (0 to 19 years), roughly 30% versus the roughly 25% in the larger geography. See charts below. This suggests that good schools are of high importance to families living in Battlefield.

Age ranges for working adults (20 to 64 years) make up 56% of the population in Battlefield. This is only slightly below the 57% in the Springfield MSA. While this variance is small, it may impact Battlefield's generated tax revenues per capita relative to the broader areas around it.

Lastly, while the 65+age range in Battlefield is projected to increase up to 16% of the population by 2027, the Springfield MSA will have reached 18% of its populations in that age group. Battlefield's retiree population as a percent of the total population is still relatively low.

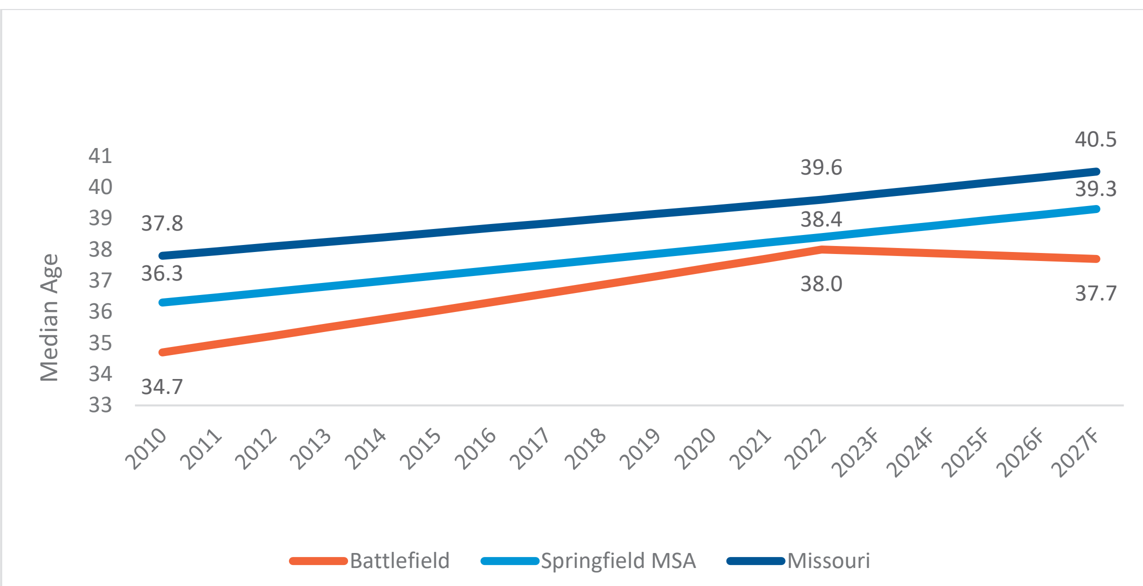
Figure 4.3: Springfield MSA Population - Average Age Ranges as % of Total Population (2010, 2022, 2027)



Source: ESRI

When looking at the median age for the city of Battlefield, the Springfield MSA, and the state of Missouri in Figure 4.4, Battlefield retains a relatively low median age versus the broader regions. In 2010, Battlefield's median age was 34.7 years. The Springfield MSA's median age was 36.3, and the median age for Missouri was 37.8. In 2022, Battlefield's median age reached 38.0, but forward-looking projections suggest that this will decline slightly to 37.7, while the Springfield MSA's median age will increase to 39.3.

Figure 4.4: Median Age from 2010 to 2027: Battlefield, Springfield MSA, and Missouri



Source: ESRI

5. MARKET POTENTIAL AND BUSINESS ANALYSIS

5.1 MARKET POTENTIAL

A Market Potential Index (MPI) measures the relative likelihood of the adults or households in the specified trade area to exhibit certain consumer behavior or purchasing patterns compared to the United States average. An MPI of 100 represents the U.S. average. The data is based on national propensities to use various products and services, applied to local demographic composition. Usage data were collected by MRI-Simmons in a nationally representative survey of U.S. households.

Eight categories and more than 70 subcategories of consumer behavior and purchasing patterns are included here in the following categories: Apparel and Accessories, Automobiles, Cellphones, Television and Electronics, Entertainment and Exercise, Groceries, Restaurants, and Convenience Stores. The MPIs within each category illustrate whether the consumer behavior and purchasing patterns are at, above, or below national averages.

Additionally, this section compares the Market Potential Index for the two-mile radius ring around Battlefield's city-center with that of the MPI for the ten-mile radius ring. An area's demand "premium" or "deficit" relative to another area is calculated by subtracting the area of interest's MPI from its comparison area's MPI. Those subcategories with a "premium," or MPI that is higher in the two-mile radius ring versus the ten-mile radius ring, are represented as numbers greater than zero. Those categories with a "deficit," or MPI that is lower in the two-mile radius ring versus the ten-mile radius ring, are represented as numbers less than zero.

Apparel and Accessories

In the Apparel and Accessories category below, the two-mile radius ring around Battlefield ranked at or above the national average for each subcategory. This suggests that demand for apparel and accessories is above the national average and that Battlefield has households with income high enough to support those spending habits. The top subcategory, "Bought a watch in last 12 months," ranked six points higher than the national average with an MPI score of 106. The lowest subcategory, "Bought any fine jewelry in last 12 months," ranked exactly at the national average with an MPI score of 100.

Table 5.1: Market Potential: Apparel and Accessories

Market Potential: Apparel and Accessories	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Bought any men's clothing in last 12 months	104	100	+4
Bought any women's clothing in last 12 months	103	100	+3
Bought any shoes in last 12 months	101	99	+2
Bought any fine jewelry in last 12 months	100	98	+2
Bought a watch in last 12 months	106	98	+8

Source: MRI Simmons

When comparing the two-mile radius ring to the ten-mile radius ring, Battlefield, again, has a demand premium for apparel and accessories to the larger area around it. The clothing subcategories saw a +4 and +3 demand premium in and around Battlefield versus the broader area. The purchase of watches was +8 points higher in and around Battlefield versus the larger ten-mile radius ring.

While this analysis is not suggesting that the City of Battlefield pursue the attraction of a watch store into the area, the numbers do suggest that disposable income of the population in the two-mile radius ring around Battlefield's city-center has the potential to support businesses providing goods and services beyond basic necessities.

Automobiles

The two-mile area around Battlefield has a higher than national average demand for owning/leasing vehicles, as well as the personal maintenance of those vehicles. These results support findings in the Commuting Patterns section of this document noting that 88% of workers in the 65619 zip code commute to work alone or in a carpool for an average of 23.8 minutes each way.

Additionally, the "Household bought/leased new vehicle last 12 months" subcategory has a +17 point MPI premium over the ten-mile radius ring. This suggests the area in and around Battlefield can afford newer vehicles and does so at a more frequent rate than in the wider ten-mile radius ring.

Table 5.2: Market Potential: Automobiles

Market Potential: Automobiles	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Household owns/leases any vehicle	104	100	+4
Household bought/leased new vehicle last 12 months	104	87	+17
Bought gasoline in last 6 months	104	101	+3
Bought/Changed motor oil in last 12 months	108	104	+4
Had tune-up in last 12 months	98	100	(-2)

Source: MRI Simmons

Cellphones

Cellphones appear to be in high demand in Battlefield, versus the U.S. and the ten-mile radius area around it. The population in the two-mile radius have cellphones at +2 points higher than the national average and have purchased a new cellphone in the last year at a rate +5 points higher than the U.S.

When looking at the number of cellphones used in households, the two-mile radius around Battlefield's city-center increases from being below average (83 vs. 100 national average) for households with only one cellphone then swings to +14 points higher than average (114 vs. 100 national average) for households with three or more cellphones. For both the two-mile radius ring and the ten-mile radius ring, households are 7% more likely to only have a cellphone and no landline telephone than the national average. All of these statistics suggest the need for infrastructure that supports good cellular service and high-speed internet that supports good wi-fi service.

Table 5.3: Market Potential: Cellphones

Market Potential: Cellphones	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Bought cellphone in last 12 months	105	102	+3
Have a smartphone	102	100	+2
Have a smartphone: Android phone (any brand)	104	105	(-1)
Have a smartphone: Apple iPhone	100	95	+5
Number of cellphones in Household: 1	83	111	(-28)
Number of cellphones in Household: 2	103	100	+3
Number of cellphones in Household: 3+	114	88	+26
Household has cellphone only (no landline telephone)	107	107	0

Source: MRI Simmons

Televisions and Electronics

Household demand for televisions and electronics is higher than national averages in subcategories which depend on internet services. While the subcategory of "Household owns 1 TV" is 87 points out of the national average of 100, the subcategories for households owning 2, 3, and 4+ TVs increases to +12 above the national average in the subcategory "Household owns 4+ TVs."

Subcategories that have relatively high MPIs within the two-mile radius ring (five points or more over the national average) all require internet access: "Own any tablet," "Own any e-reader," "Household has Internet connectable TV," and "Household owns any Internet video device for TV." As with the high MPI statistics from the Cellphones section, the area in and around Battlefield has high demand for internet infrastructure.

Table 5.4: Market Potential: Televisions and Electronics

Market Potential: Televisions and Electronics	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Own any tablet	105	97	+8
Own any e-reader	111	97	+14
Own e-reader/tablet: iPad	102	91	+11
Household has Internet connectable TV	106	98	+8
Own any portable MP3 player	97	95	+2
Household owns 1 TV	87	105	(-18)
Household owns 2 TVs	100	105	(-5)
Household owns 3 TVs	101	95	+6
Household owns 4+ TVs	112	90	+22
Household owns any Internet video device for TV	107	98	+9
Household subscribes to cable TV	99	98	+1
Household subscribes to fiber optic	89	73	+16
Household purchased video game system in last 12 months	88	81	+7
Played a video/electronic game (console) in last 12 months	105	110	(-5)
Played a video/electronic game (portable) in last 12 months	94	102	(-8)

Source: MRI Simmons

Entertainment and Exercise

Subcategories for Entertainment that ranked relatively low for both the two-mile radius and the ten-mile radius include going out to live theater and gambling at casinos. Highly ranked subcategories for both radius rings were attending a movie theater, going to a bar and/or nightclub, and dining out.

In the subcategory of "Exercise at club 2+ times per week," the +8 MPI point rank above the national average and the +11 MPI point demand premium over the ten-mile radius ring suggests that the population in and around Battlefield has relatively high demand for exercise facilities such as a gym or membership studio. Given the higher than average median household income and evidence of disposable income, the City of Battlefield could support initiatives for entertainment, facilities, and/or parks that support healthy lifestyles.

Table 5.5: Market Potential: Entertainment and Exercise

Market Potential: Entertainment and Exercise	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Attended a movie in last 6 months	105	100	+5
Went to live theatre in last 12 months	95	94	+1
Went to a bar/nightclub in last 12 months	106	107	(-1)
Dined out in last 12 months	105	103	+2
Gambled at a casino in last 12 months	93	94	(-1)
Visited a theme park in last 12 months	100	88	+12
Exercise at club 2+ times per week	108	97	+11
Exercise at home 2+ times per week	102	101	+1

Source: MRI Simmons

Groceries

Subcategories in the Groceries category trend with national averages, if not slightly higher within the two-mile radius ring around Battlefield than the ten-mile radius ring. The exception appears to be the subcategory of "Organic Food," which is -12 points lower than the national average MPI, making it appear that Battlefield residents do not have a consumer preference for specialty organic foods.

Table 5.6: Market Potential: Groceries

Market Potential: Goceries	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Bread	100	100	0
Chicken (fresh or frozen)	101	97	+4
Turkey (fresh or frozen)	108	101	+7
Fish/Seafood (fresh or frozen)	97	95	+2
Fresh fruit/vegetables	101	99	+2
Fresh milk	101	99	+2
Organic food	88	90	(-2_
Drank non-diet (regular) in last 6 months	99	101	(-2)
Drank beer/ale in last 6 months	102	99	+3

Source: MRI Simmons

Restaurants

The subcategory for "Dined out in the last 12 months" in the Entertainment category above, indicated that the area in and around Battlefield had a +5 point premium over the national average. When looking at the more detailed subcategories regarding consumer behavior for restaurants, "Went to family restaurant/steak house in the last 6 months" indicates a preference +8 points higher than the national average and a +5 point premium in the two-mile radius ring over the ten-mile radius ring. Additionally, the frequency of dining in the subcategory "Went to family restaurant/steak house: 4+ times a month" coming in at +13 points higher than the national average and +7 points higher than the ten-mile radius ring suggests that the population can support existing and potentially more family restaurants and/or steak houses.

The other subcategories related to fast food rank both below and above national averages and relative to the broader area. While consumer behavior varies in how the population purchases fast food and where they consume it, the frequency with which they do so shown in the "Went to fast food/drive-in restaurant 9+ times/month" at +7 over the national average and +4 over the broader ten-mile radius ring indicates recurrent and reliable demand for fast food services.

Table 5.7: Market Potential: Restaurants

Market Potential: Restaurants	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Went to family restaurant/steak house in last 6 months	108	103	+5
Went to family restaurant/steak house 4+ times/month	113	106	+7
Went to fast food/drive-in restaurant in last 6 months	101	101	0
Went to fast food/drive-in restaurant 9+ times/month	107	104	+3
Fast food restaurant last 6 months: eat in	112	107	+5
Fast food restaurant last 6 months: home delivery	92	96	(-4)
Fast food restaurant last 6 months: take-out/drive-thru	110	105	+5
Fast food restaurant last 6 months: take-out/walk-in	90	93	(-3)

Source: MRI Simmons

Convenience Stores

While almost all of the subcategories within the Convenience Store category indicate a higher than normal MPI versus the national average, the inclusion of gasoline purchases as part of overall convenient store purchases makes it unclear how much demand there is for goods and services other than gasoline. For example, the two subcategories that breakout convenience store purchases other than gas are for brewed coffee and cigarettes. While these two subcategories have varying MPIs, both goods generate less revenue than purchases of fuel.

Regardless, knowing that households in and around the Battlefield area have a high propensity to commute to jobs at an average of 23.8 minutes each way and have relatively high MPIs for owning/purchasing/leasing newer vehicles suggests that the City of Battlefield can support convenient stores.

Table 5.8: Market Potential: Convenience Stores

Market Potential: Convenience Stores	Two-Mile Radius MPI	Ten-Mile Radius MPI	Battlefield Demand Premium (Deficit)
Shopped at convenience store in last 6 months	106	105	+1
Bought brewed coffee at convenience store in last 30 days	98	99	(-1)
Bought cigarettes at convenience store in last 30 days	114	120	(-6)
Bought gas at convenience store in last 30 days	113	110	+3
Spent at convenience store in last 30 days: $1-$19	106	108	(-2)
Spent at convenience store in last 30 days: $20-$39	100	96	+4
Spent at convenience store in last 30 days: $1-$40-$50	111	106	+5
Spent at convenience store in last 30 days: $1-$51-$99	119	118	+1
Spent at convenience store in last 30 days: $1-$100+	112	107	+5

Source: MRI Simmons

5.2 BUSINESS SUMMARY

Goods and services that businesses supply for their communities are meant to meet the demand of the population. The following table shows the resident population and number of businesses found within the two-mile, five-mile, and ten-mile radius rings from Battlefield's city-center.

For the 15,723 people who live within the two-mile radius ring, there is access to nine Food Services and Drinking Places, eight businesses providing Health Care and Social Assistance, eight Miscellaneous Store Retailers, and so on.

Note: Miscellaneous Store Retailers includes stores from pet supply and smoke shops to office supplies and bookstores. These are typically stores focused on a specific industry or customer. Whereas General Merchandise Stores are those offering a wide variety of goods: Walmart, Dollar General, Sam's Club, etc. A full list of business descriptions for each business category can be found in Table B.1 in Appendix B of this document.

Table 5.9: Number of Businesses

Business Category	Two-Mile Radius	Five-Mile Radius	Ten-Mile Radius
Total Resident Population	15,723	81,016	296,898
Number of Businesses			
Food Services and Drinking Places	9	166	845
Health Care and Social Assistance	8	328	1,207
Miscellaneous Store Retailers	8	62	311
Food and Beverage Stores	6	37	192
Health and Personal Care Stores	5	47	181
Arts, Entertainment, and Recreation	4	53	242
Motor Vehicle and Parts Dealers	3	65	279
General Merchandise Stores	3	36	155
Gasoline Stations	2	19	53
Automotive Repair and Maintenance	1	59	285
Building Materials, Garden Equipment, and Supplies Dealers	1	34	142
Electronics and Appliance Stores	0	15	65

Source: MRI Simmons

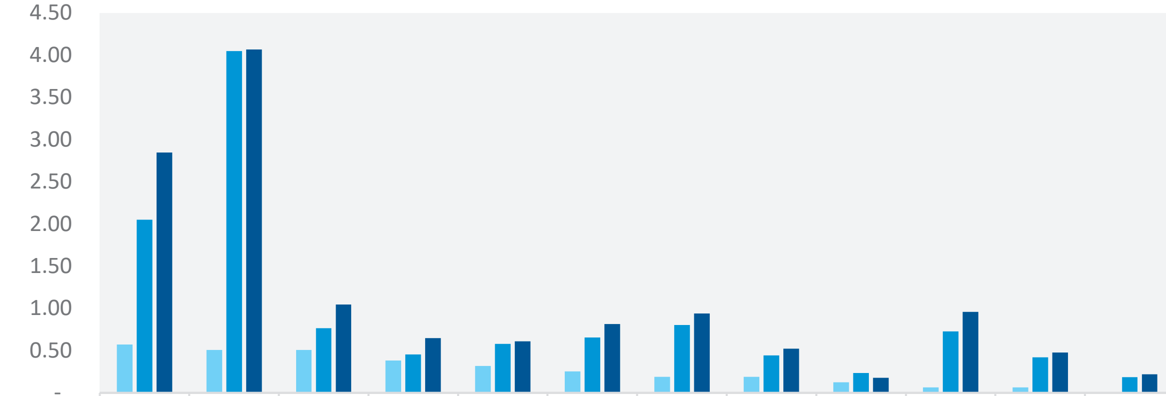
To understand if an area has enough goods and services for its population, it is helpful to understand the number of businesses in the areas around it relative to the area of interest. The ratio of business per 1,000 residents (business/resident) for an area provides a view to the volume of business types relative to its population. By comparing the ratios of business/resident between geographic areas, it can be seen if the area of interest is potentially underserved for a particular business type.

Figure 5.1 compares the business/resident ratios for 12 business types within the three radius ring areas around Battlefield. There is no "standard" or "rule-of-thumb" for what a business/resident ratio should be. The variance to comparison geographies are what will show if an area is underserved.

For example, within the two-mile radius ring around Battlefield's city-center, there are 0.57 Food Services and Drinking Places per 1,000 residents. Within the five-mile and ten-mile rings, the number of Food Services and Drinking Places increases to 2.05 and 2.85 businesses per 1,000 residents. This means that the relative availability of the said business type is more than twice as high, or 258% higher, in the five-mile radius ring around Battlefield than can be found within two miles of the city-center. Similarly, the relative availability of Food Services and Drinking Places is almost four times higher, 397%, in the ten-mile radius ring from Battlefield's city-center. This suggests that residents closer to Battlefield have reasonably easy access to Food Services and Drinking Places just outside of the two-mile radius ring.

Looking at Food and Beverage Stores, availability in the two-mile radius ring is 0.38 businesses per 1,000 residents, 0.46 for the five-mile ring, and 0.65 for the ten-mile ring. This suggests that while Food and Beverage Stores are somewhat scarce close to Battlefield, availability of those businesses is also scarce as the geography gets larger.

Figure 5.1: Ratio of Businesses per 1,000 Residents for Radius Rings Around Battlefield: Two-Mile, Five-Mile, and Ten-Mile



	Food Services & Drinking Places	Health Care & Social Assist.	Misc. Store Retailers	Food & Beverage Stores	Health & Personal Care Stores	Arts, Entertain -ment & Rec.	Motor Vehicle & Parts Dealers	General Merch. Stores	Gasoline Stations	Auto Repair & Main - tenance	Bldg Material, Garden Eqpmnt & Supplies Dealers	Elec - tronics & Appli - ance Stores
2-Mile	0.57	0.51	0.51	0.38	0.32	0.25	0.19	0.19	0.13	0.06	0.06	-
5-Mile	2.05	4.05	0.77	0.46	0.58	0.65	0.80	0.44	0.23	0.73	0.42	0.19
10-Mile	2.85	4.07	1.05	0.65	0.61	0.82	0.94	0.52	0.18	0.96	0.48	0.22

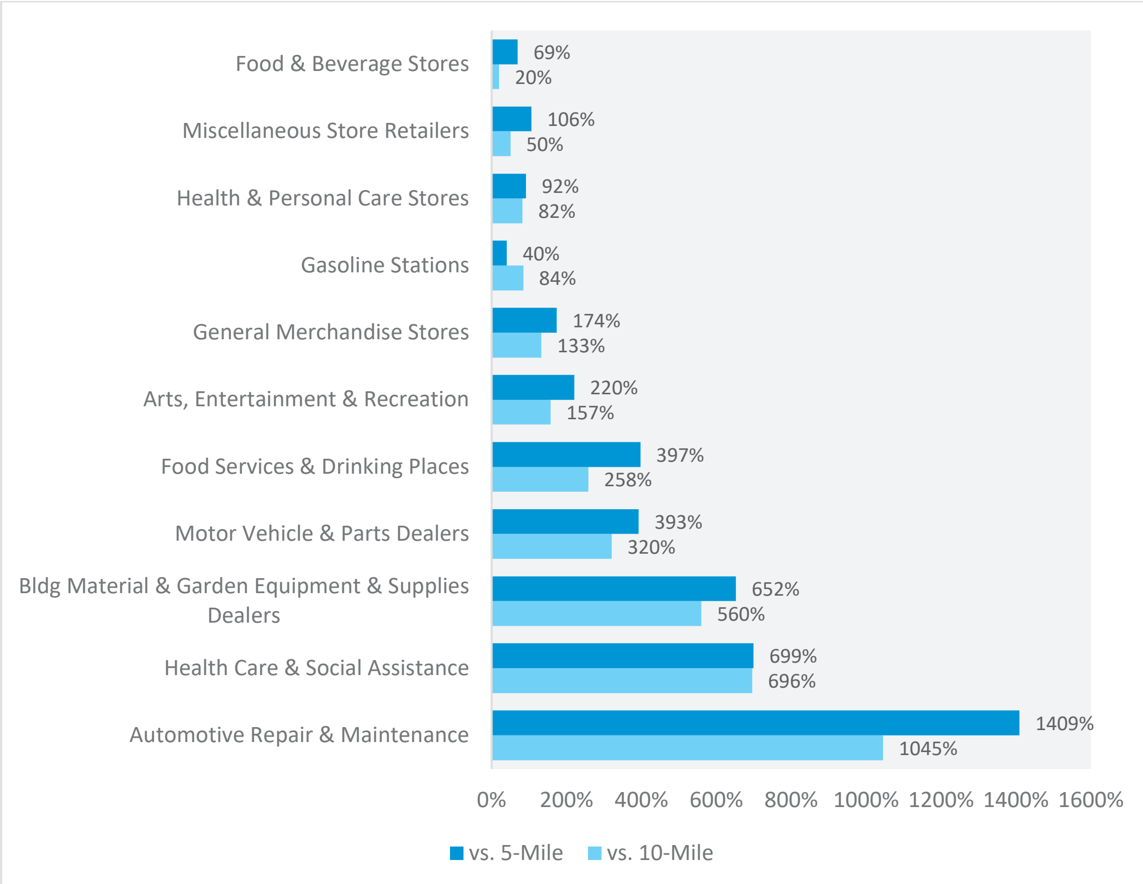
Source: MRI Simmons

Lastly, Figure 5.2 sorts the relative availability of a variety of business types by comparing the number of businesses within each category within a two- to five-mile radius of Battlefield compared to a two- to ten-mile radius. This information is helpful to potential business owners as it highlights business types that have a low or high concentration near Battlefield. For example, gasoline stations are relatively harder to find between two to five miles of Battlefield, but are more plentiful within the ten-mile distance. Conversely, while Automotive Repair and Maintenance shops are at a high concentration overall around Battlefield, they are especially plentiful within the two- to five-mile radius. This data suggests that there may be more local demand for a gasoline station in and round Battlefield due to relative lack of availability, but the demand for Automotive Repair and Maintenance shops is likely to have been largelty met in the Battlefield vicinity.

The business types with the smallest relative availability are Food and Beverage Stores, Miscellaneous Store Retailers, Health and Personal Care Stores, Gasoline Stations, and General Merchandise Stores. Business types of note that have both a low ratio of businesses per 1,000 residents AND low relative availability that could be a focus for Battlefield are:

1. Food and Beverage Stores
2. Health and Personal Care Stores
3. Gasoline Stations
4. General Merchandise Stores

Figure 5.2: Business Type Categories by Relative Availability: Five-Miles vs. Two-Miles and Ten-Miles vs. Two-Miles



Source: MRI Simmons

5.3 OPPORTUNITIES

Retail opportunities for Battlefield arise where there is demand, a concept discussed above in the Market Potential section of this document. They also occur where there is a shortage of a particular business types, both nominally and relative to the areas around Battlefield.

Two categories of interest appear to be opportunities for development in Battlefield:

Support of Vehicles and Transportation: Given the high propensity for a long commute and the high market potential for convenience stores selling gasoline, the residents in and around Battlefield have need of those businesses. Availability of Gasoline Stations and Food and Beverage Stores (in which convenience stores are included) is low both within the two-mile radius around Battlefield, as well as within the five-mile ring and the ten-mile ring. This suggests an opportunity for Battlefield to pursue more businesses that support vehicles and transportation.

Support of Personal Necessities: While the market potential for groceries in Battlefield hovers around national averages, the market potential or demand for dining out is high. This may be a chicken-and-egg case where the low availability of Food and Beverage Stores and General Merchandising Stores that often also sell food and beverages, has lead consumer behavior to dine out rather than purchase groceries for home. Low availability of Food and Beverage Stores, Health and Personal Care Stores, and General Merchandise Stores, nominally and relatively, suggest an opportunity for Battlefield to pursue more businesses that support easy access to those necessities such as food, beverages, and personal care at home.

6. LAND DEMAND FOR RESIDENTIAL AND COMMERCIAL PROPERTY IN BATTLEFIELD

6.1 RESIDENTIAL LAND NEEDS FOR BATTLEFIELD

As discussed in Section 4, using data from the Sanitary Sewer Study prepared by Cochran Engineering, which assumes a household growth rate of 5% annually from 2023 to 2027, followed by a 2.5% annual growth rate thereafter through 2045, the population in Battlefield is projected to increase to 11,780 in 2045 if the average number of persons per household remains consistent at 2.59 during this period. This is the equivalent of 2,346 new households. This population growth will drive demand for new housing, retail, and related services, and will require the city to attract more jobs.

Table 6.1: Battlefield Population Estimates: 2020 - 2045

Year	Population at 5% Annual Growth Rate 2023 - 2027 and 2.5% 2027 - 2045	Households at 5% Annual Growth Rate 2023 - 2027 and 2.5% 2027 - 2045
2020	5,703	2,202
2022	5,918	2,285
2025	6,851	2,645
2030	8,134	3,141
2035	9,203	3,553
2040	10,412	4,020
2045	11,780	4,548
2020 - 2045 Difference	6,077	2,347

Source: City of Battlefield Sanitary Sewer Study (2023)
Note: Population determined by an assumed persons per household rate of 2.59

This growth will also require land to be developed. Based on projections above, 650 acres of land will be needed to accommodate residential growth from 2022 through 2045. This estimate assumes 3.5 dwelling units per acre for 95% of the new housing units (single-family detached homes), and nine dwelling units per acre for 5% of the new housing units (medium density multi-family homes).

Note that Battlefield's zoning code has a minimum lot size of 12,000 square feet for single-family detached dwellings in the R-1 and for single-family uses in R-2. (The R-1 U district allows for lots comprised of less than 12,000 square feet if the lots were in existence on or before October 15, 2002). This means that, for newly platted R-1 lots, the "dwelling units per acre" yield is 3.63 units. In practice, this density ratio is lower after allocating approximately 15% of every acre to needed facilities such as roads/street right-of-way and stormwater detention facilities. With this factored in, dwelling units per acre falls to approximately 3.10. If Battlefield keeps its minimum lot size at 12,000 square feet, total acres for single-family detached residential uses should likewise be increased by 15% to 732 acres.

Another way to utilize available land more efficiently would be to increase the overall acres allocated to multi-family zoning. At present, according to the 2021 City of Battlefield Comprehensive Plan, about 1% of the overall acreage within City limits is zoned R-2 Two-Family Residence District or R-3 Multi-Family Residence District. (The City has an R-4 Manufactured Home Residence District in the Zoning District Code which allows for slightly denser construction, but no property is zoned R-4 at this time). If Battlefield were to increase this rate to 5% for new housing construction through 2045, the City could accommodate 117 multi-family dwelling units on 13 acres rather than just 21 multi-family dwelling units on 2.61 acres. If this ratio were increased further to reach a modest 10% goal for new residential construction through 2045, 235 dwelling units could be accommodated on 26 acres. Reaching a 10% goal would allow for the projected 650 acres for all residential development in Battlefield to be reduced by 3.25% or 629 acres. While this reduction seems minimal, 10% would be at a rate more similar to Battlefield's peer cities in the Springfield MSA region (See Table 3.1). These municipalities are able to offer residents a wider range of housing choices, including the ability to accommodate seniors over the age of 65 who want to continue to live in the communities they love but, due to health reasons, may be unable to be responsible for homeowner duties such as lawn care and exterior maintenance of the home.

6.2 COMMERCIAL LAND NEEDS FOR BATTLEFIELD

As Battlefield's population grows, the community will continue to experience increased demand for retail outlets that enable residents to conveniently purchase the goods and services they need on a regular basis. As described in Chapter the economic analysis earlier this this report, some percentage of these purchases will occur outside the City of Battlefield. Ideally though, the Battlefield community will provide sufficient commercial retail outlets to serve residents locally, a more sustainable approach that helps keep consumer spending within the City limits to pay for the services it provides to residents.

Existing Retail Property in Battlefield

To calculate the additional land needed to serve the retail needs of the estimated 6,077 new Battlefield residents through 2045, it is necessary to determine:

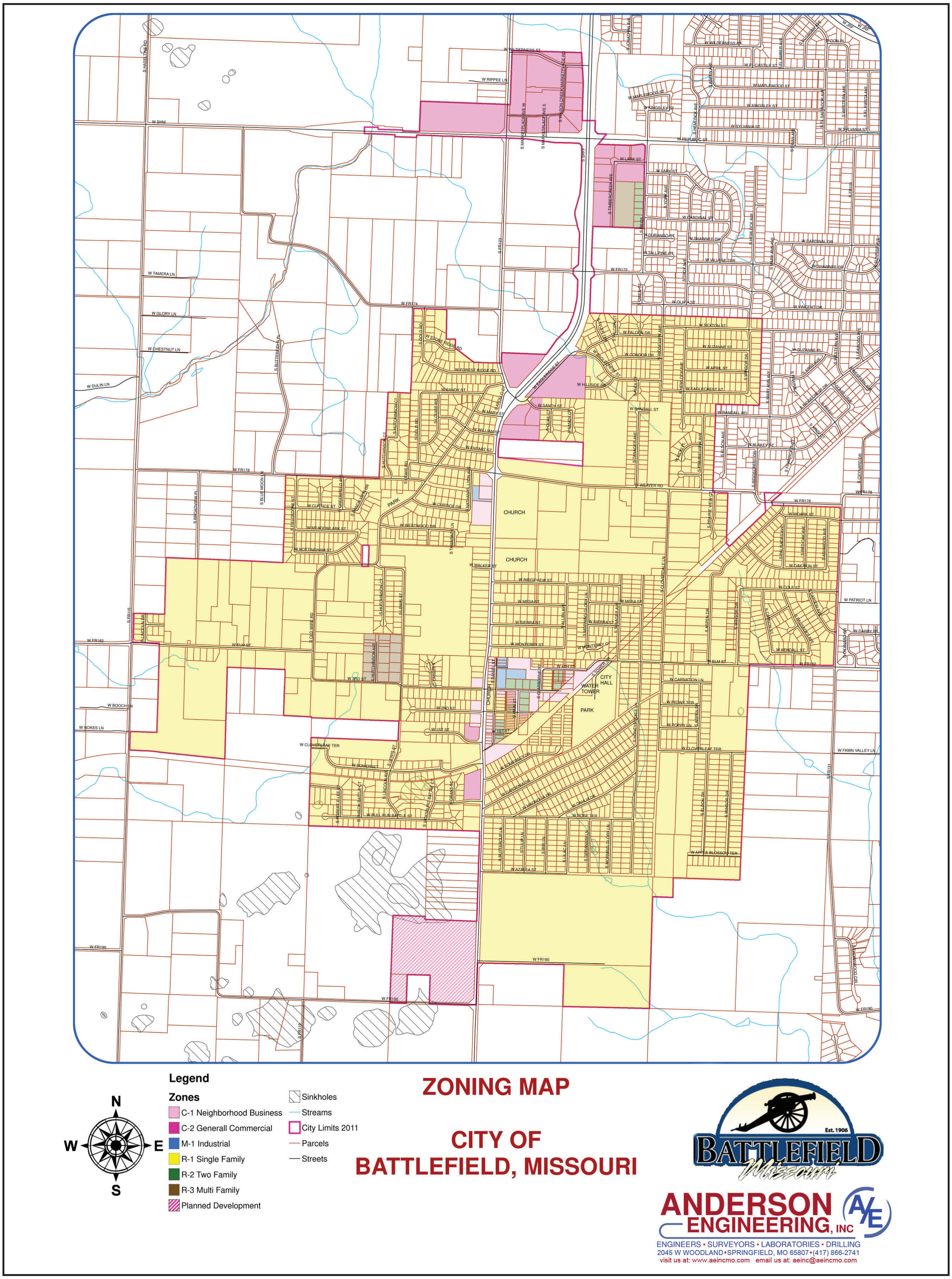
1. How much retail area current Battlefield residents need, and
2. How intensely this commercial land is developed to meet these needs.

The calculation of these two factors will greatly assist in determining how to meet the day-to-day retail needs of new residents over the next 20-25 years for items such as food, clothing, and personal care items as detailed in Section 4 on Market Potential and Business Analysis.

To calculate current retail space levels, Battlefield's Zoning Map was evaluated to identify properties within the City limits that are zoned commercial. This includes the properties on the Zoning Map as either C-1 Neighborhood Business or C-2 General Commercial. Excluded from the overall calculation are commercially-zoned city-owned parcels and a 33-acre Planned Development parcel on the northwest corner of Route FF and Farm Road 190. While all or some of this acreage could develop commercially, the fact that this land is either city-owned or the developer has not made a final determination on the mix of residential and commercial uses on the PUD necessitates the exclusion of these parcels.

Excluding city-owned parcels and the PUD-zoned property, there are a total of 114.25 acres zoned either C-1 or C-2 in Battlefield. This amount was determined by using the City Zoning Map, the most recent aerial photographs from the Greene County Assessor's webpage (2020), Google Earth (April 2022), and other aerial photograph resources. Each parcel was reviewed to determine if the property was developed or vacant. In cases where aerial photos showed a property as undeveloped but there is contrary information obtained from City building permit data indicated recent development, 2020-2023 commercial building permit information provided by the City of Battlefield was also used.
Excluding city-owned parcels and the PUD-zoned property, there are a total of 114.25 acres zoned either C-1 or C-2 in Battlefield. This amount was determined by using the City Zoning Map, the most recent aerial photographs from the Greene County Assessor's webpage (2020), Google Earth (April 2022), and other aerial photograph resources. Each parcel was reviewed to determine if the property was developed or vacant. In cases where aerial photos showed a property as undeveloped but there is contrary information obtained from City building permit data indicated recent development, 2020-2023 commercial building permit information provided by the City of Battlefield was also used.

Figure 6.1: City of Battlefield Zoning Map



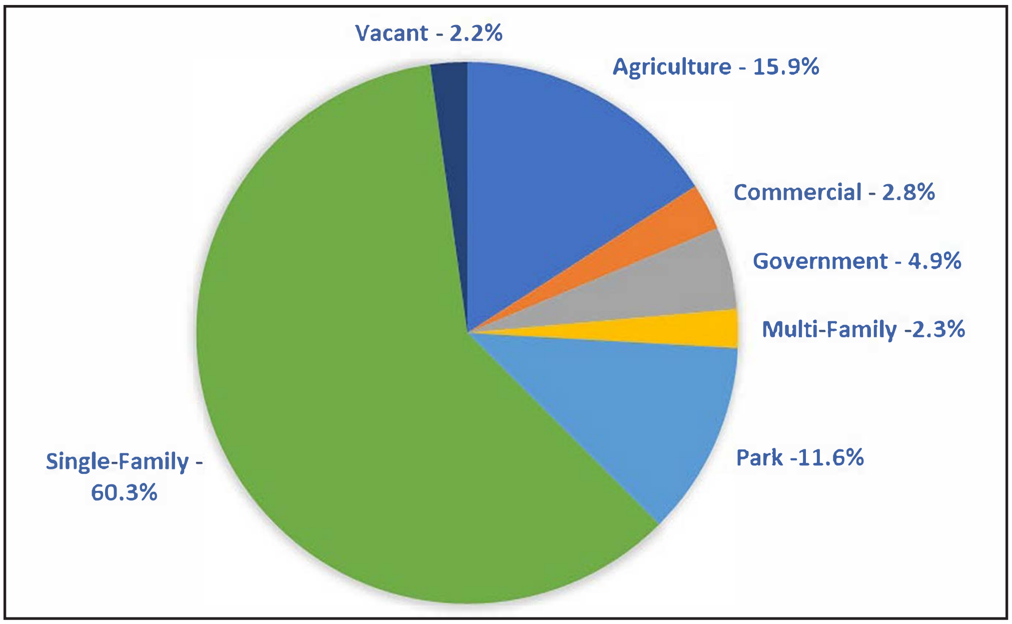
Source: City of Battlefield

Based on this information, 24.41 acres (21%) of commercially-zoned property in Battlefield are developed and 89.84 acres (79%) are presently vacant/undeveloped. This is the equivalent lot area of 1,063,300 square feet of developed commercial property in Battlefield.

In assessing undeveloped commercial property in Battlefield, it is notable that a significant portion of this land is located on the northwest corner of Route FF and Republic Road, the southeast corner of Route FF and Republic Road, and near the intersection of Route FF and Farm Road 123. These areas are appropriately zoned for future commercial uses and it is reasonable to anticipate their development in the years to come. However, for this study, only commercially-zoned property has been verified as developed was included in this analysis.

It is important to keep in mind that, just as there is no "rule-of-thumb" for what a standard business/resident ratio should be, there is also no standard on what the "retail space per resident" ratio should be. That being said, the 2021 Comprehensive Plan indicates that, using Greene County Assessor's Office land use data, only 2.3% of Battlefield's overall size is allocated to commercial land uses, while 62.6% of land uses are either single-family or multi-family residential uses. See Figure 6.2 below from Page 75 of Battlefield's 2021 Comprehensive Plan.

Figure 6.2: Battlefield's Current Land Use



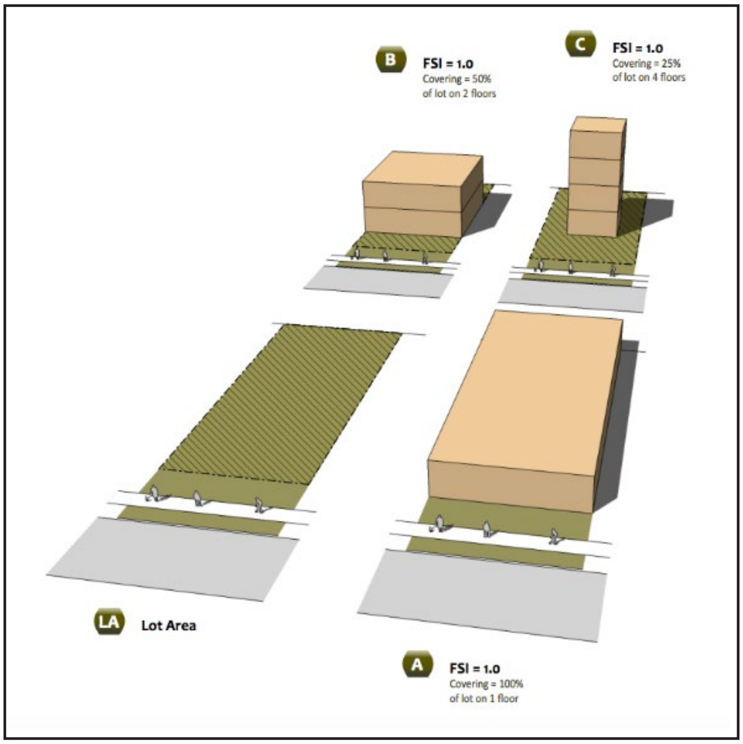
Source: City of Battlefield Comprehensive Plan, 2021

Meanwhile, the City of Republic's Comprehensive Plan (page 32) states that 7% of that city's overall acreage is allocated to commercial buildings while the 2019 Comprehensive Plan for the City of Ozark, Missouri (page 28) notes that the equivalent of 8.5% of that city's current land uses are for commercial uses. In short, this suggests that, while Battlefield may choose to allocate a greater percentage of acres to commercial uses in the future, the most appropriate measure would be today's allocation in 2023. As a result, this study assumes that the city's current ratio of approximately 2.8% is likely to remain consistent for the foreseeable future.

Intensity of Commercial Land Development in Battlefield: Floor Area Ratio

In tandem with the number of acres the city has allocated to commercial uses is the level of development intensity of these acres. This development intensity can be expressed as floor area ratio or FAR. In short, FAR is "The total floor area of all buildings or structures on a lot divided by the area of said lot."

Figure 6.3: Floor Area Ratio



FAR can fluctuate markedly depending on the land use. To illustrate, this study looked at two FAR data sources. The first was recent commercial building permits issued by the City of Battlefield from 2020 to 2023. These results are shown in Table 6.2 below.

Table 6.2: Battlefield Commercial Building Permit Data (2020 - 2023)

Property Owner	Location	Building Size (in sq ft per Greene County Assessor data)	Overall Property Size (in sq ft per Greene County Assessor Data)	Floor Area Ratio (Lot Size Divided by Building Size)
PODS of SW MO	4400 South Timbercreek Ave.	23,901	138,956	0.17
Wire Road Microbrewery	4453 South Timbercreek Ave	3,570	70,132	0.05
Kelly Burk	4800 S. State Hwy FF	8,000	87,120	0.09

Source: City of Battlefield platted lot data (2023)

Also reviewed was information available from the Net Lease Advisor website (netleaseadvisor.com) to obtain information about "typical" Floor Area Ratios for a variety of Midwest U.S. franchise retailers, restaurants, banks, grocers, pharmacies, and consumer service uses. This information is contained in the Table 6.3.

Table 6.3: Floor Area Ratio of Select Midwest Retailers

Retailer	Approximate Building Size (sf)	Approximate Lot Size (sf)	Floor Area Ratio (FAR)
Auto Parts Stores (Auto-Zone, O'Reilly Auto	7,000	1 to 1.5 acres	0.13
Branch Banks (Chase, Bank of America)	5,000	1 acre	0.12
Small Box Commerical Retail (Sherwin Williams, Mattress Firm)	6,000	1 acre	0.12
Mid-Size Commercial Retail (Dollar General, Walgreens)	10,000 - 15,000	1 to 3 acres	0.18
Big Box Commercial Retail (Hobby Lobby, ALDI Grocery)	23,000 - 64,000	3 to 10 acres	0.17
Restaurants (Fast Food or Fast Casual - Wendy's, Chipotle)	3,500 to 5,000	1 acre	0.08
Restaurants (Sit Down - Applebee's, Olive Garden)	8,000 - 12,000	1.5 acres	0.12

Source: Net Lease Advisor

As these tables illustrate, the FAR for the retail and restaurant outlets in Battlefield in Table 6.2 is generally consistent with national FAR data in Table 6.3, ranging from as low as 0.05 to as much as 0.18. As a mid-point amount for this range, this analysis will use a FAR of 0.12 to assist in projecting the amount of additional commercial acres needed in Battlefield through 2045.

Retail Floor Space per Household Calculation

To provide a measure of how much retail floor space will be needed to meet future Battlefield residents needs, this study used Battlefield's 2020 population of 5,990 divided by the estimated gross floor area of commercial buildings in Battlefield. The results are in Table 6.4.

Table 6.4: Estimated Square Feet of Retail per Household, Battlefield

Total Lot Area (sq ft) of Commercially-Zoned Land in Battlefield	Square Feet of Retail Gross Floor Area (GFA) when FAR = 0.12	Square Feet of Retail per CAPITA when FAR = 0.12	Square Feet of Retail per HOUSEHOLD (if FAR = 0.12 and avg person per household is 2.59)
1,063,300	127,596	21	54.39

As shown in Table 6.4, Battlefield's 2020 estimated 127,596 square feet of retail gross floor area, when equally allocated to all 5,990 Battlefield residents, results in 21 square feet of retail space per capita. With an average size of 2.59 persons per household, 54.39 square feet of retail space is needed for every housing unit in Battlefield.

Future Commercial Acreage Calculation

As noted in Section 4 on population projections, a growth rate projection from the draft Sanitary Sewer Study report was made to arrive at 2,347 new households estimated to be created in Battlefield through 2045. With 54.39 square feet of retail space needed per household, Table 6.5 provides a retail gross floor area when the average FAR is 0.12. Table 6.5 also shows the number of commercially-zoned acres needed to accommodate this gross floor area for a Battlefield population of 11,780 persons in 2045.

Table 6.5: Acres of Retail Needed by 2045

Number of New Households (through 2045)	Square Feet of Retail GFA (FAR = 0.12)	Acres of Retail Needed by 2045
2,347	1,063,555	24.42

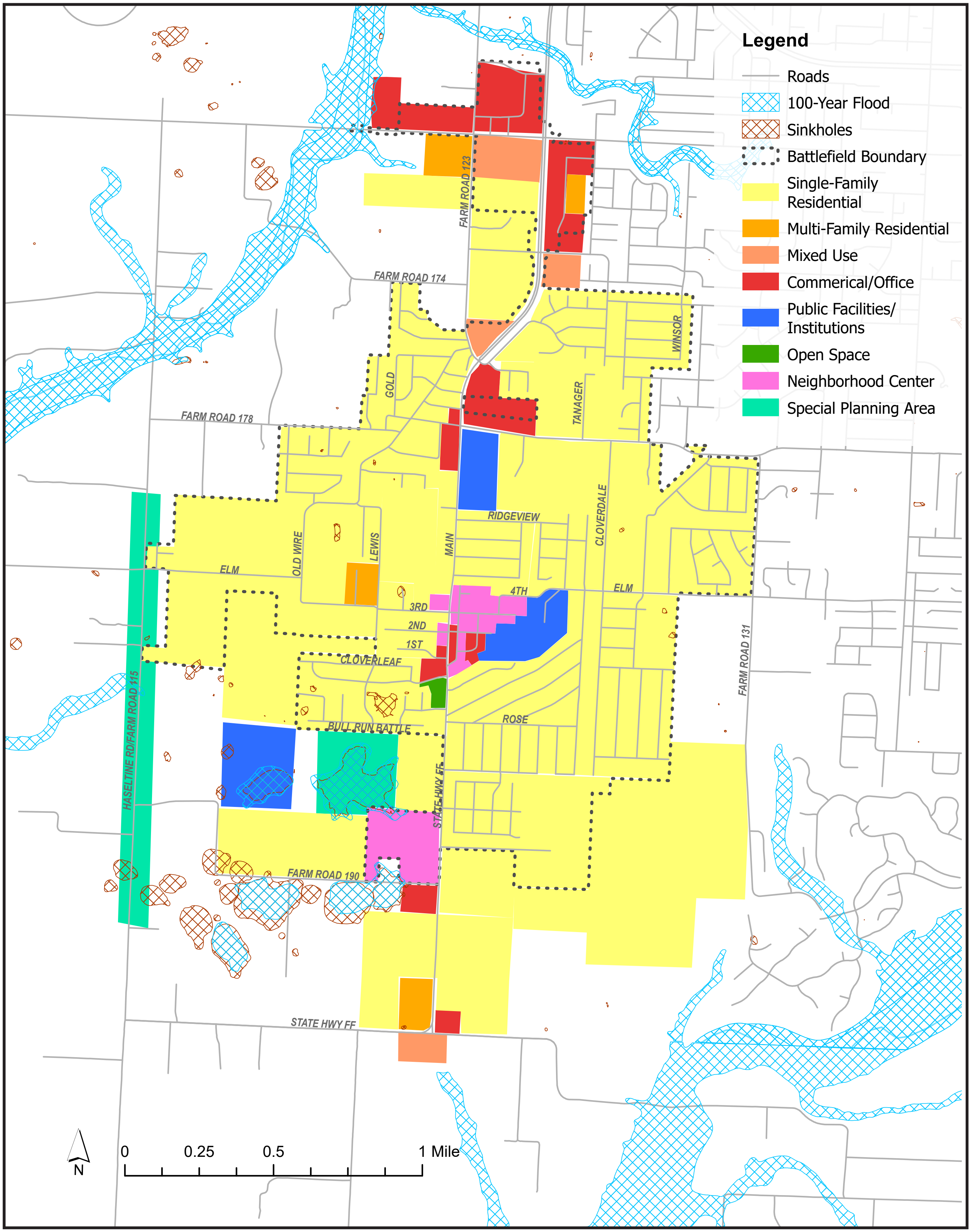
Source: 2023 City of Battlefield Sanitary Sewer Study (draft) prepared by Cochran Engineering, CMT

While an additional 24.42 acres is a significant amount of property for which to plan for a community of 11,780 in 2045, it should be noted that Battlefield presently has approximately 89.84 acres of commercially-zoned property that is vacant/undeveloped. While much of this property is located near the intersection of Route FF and Republic Road and near Route FF and Farm Road 123, it is likely that this existing acreage inventory will be utilized before 2030 since it is "shovel ready" and the Republic Road area is already home to uses such as the Wire Road Brewing Company and the Russel Cellular National Home Office, a key anchor in an emerging employment district in Battlefield.

As will be discussed in the next section, at least some of this commercial acreage should be allocated toward Battlefield's future downtown area near Route FF and 3rd Street. In addition, with significant single-family home growth already taking place on both the east and west sides of Farm Road 190 and with future developable residential development suitable near the t-intersection of Route FF and Blue Springs, it would be prudent to plan for neighborhood commercial uses at both of these locations.

7. FUTURE LAND USE MAP

Figure 7.1: Future Land Use Map



With a population projection, retail land demand, and an overall land use demand model in hand based on analysis in the previous sections, the intent of this section is to efficiently allocate 24.5 acres of commercial retail and 650 acres of residential development throughout Battlefield and the immediately adjacent areas currently within unincorporated Greene County.

There are several things to keep in mind:

1. This analysis does not attempt to identify land use needs for employment districts such as industrial parks, business parks, office parks, or other large regional employers. Developing employment districts is usually a long-term endeavor beyond the scope of this analysis, frequently focusing on large lot land assembly, peak hour automobile or truck arrivals and departures onto appropriately designed roadway systems, and multi-modal transportation alternatives such as rail, bus, and bicycles. (For more on this, see Section 2-9 "Target Industry Clusters for Battlefield").

2. Battlefield's success in creating an employment district will likely change the projections described in this report. This will necessitate require City leaders to adjust accordingly to accommodate the needs of the employers within these districts as well as make wise decisions about how housing demand can and should be adjusted. Likewise, success in achieving an employment district anywhere within the greater Springfield MSA is likely to have positive "ripple effect" in Battlefield as employees seek housing alternatives throughout the community.

3. This analysis makes every attempt to prioritize development in areas that are, or can be, efficiently served by sewer, water, and electric utilities as well as roads and other transportation infrastructure. From the City of Battlefield's perspective, sanitary sewer services must be provided in a cost-effective manner by taking advantage conditions where homes and businesses are located in close proximity (with 500 feet) to existing facilities. Opportunities to serve developable land by gravity sewer as much as possible is also a consideration. Knowing the number of acres needed through 2045 will assist the City in its "facilities planning" effort. The ability to plan ahead to help minimize the need for costly sanitary lift stations or expanded wastewater treatment facilities, will be critical during this multi-decade period.

4. This analysis does not assess the impact of increased demand or the cost of providing community services such as public safety/emergency services (fire, police, and ambulance), trash hauling services, public school/education-related services, and the provision of parks and recreation facilities and open space. However, in knowing how many future residents for whom to plan and how much retail demand these residents will generate, the City will be better positioned to identify future capital needs, the cost of providing local municipal services, and how much property tax and sales tax revenue growth can be expected from this new growth.

7.1 APPROACH

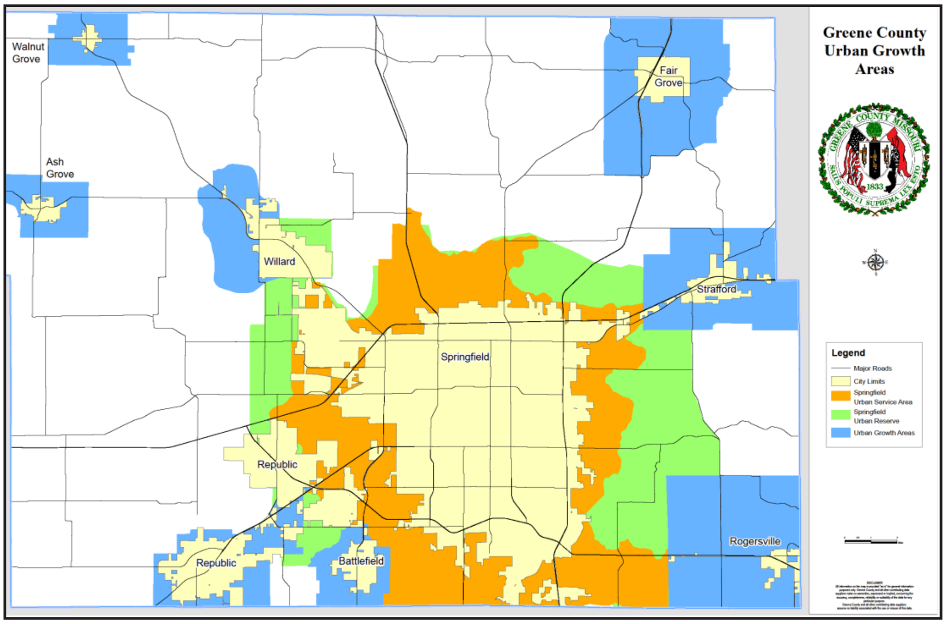
As described in previous sections, the intent of the Future Land Use Map (FLUM) is to identify locations for future residential and commercial development in Battlefield. Specifically, this map will allocate 650 acres for residential development and 24.5 acres for commercial development.

Before presenting the FLUM, there are several maps in the 2018 Greene County Comprehensive Plan that are helpful in assessing land use conditions and anticipated growth areas outside Battlefield City corporate boundaries.

The first of these is the Urban Growth Area Map. The Urban Growth Area around Battlefield in Figure 7.2 and Figure 7.3 in blue are areas which have either been designated by each municipality as their desired area for future growth OR are areas that Greene County Planning and Zoning Department identified n behalf of the municipality for future growth. Generally, the growth area boundary distance from municipal limits was set at 1 mile, unless within that distance there was a known annexation agreement boundary with another community that would result in this 1 mile distance being reduced.

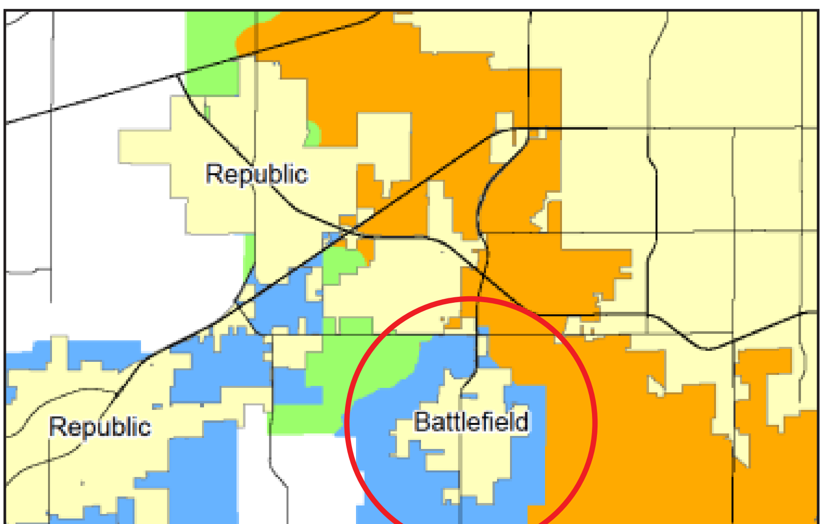
The 2018 Greene County Comp Plan states that "Future growth in these (urban growth) areas will occur as public water, sewer and roads are provided. It is anticipated that the municipalities will annex their respective growth areas. The County should encourage urban density development in these areas."

Figure 7.2: Greene County Urban Growth Area Map



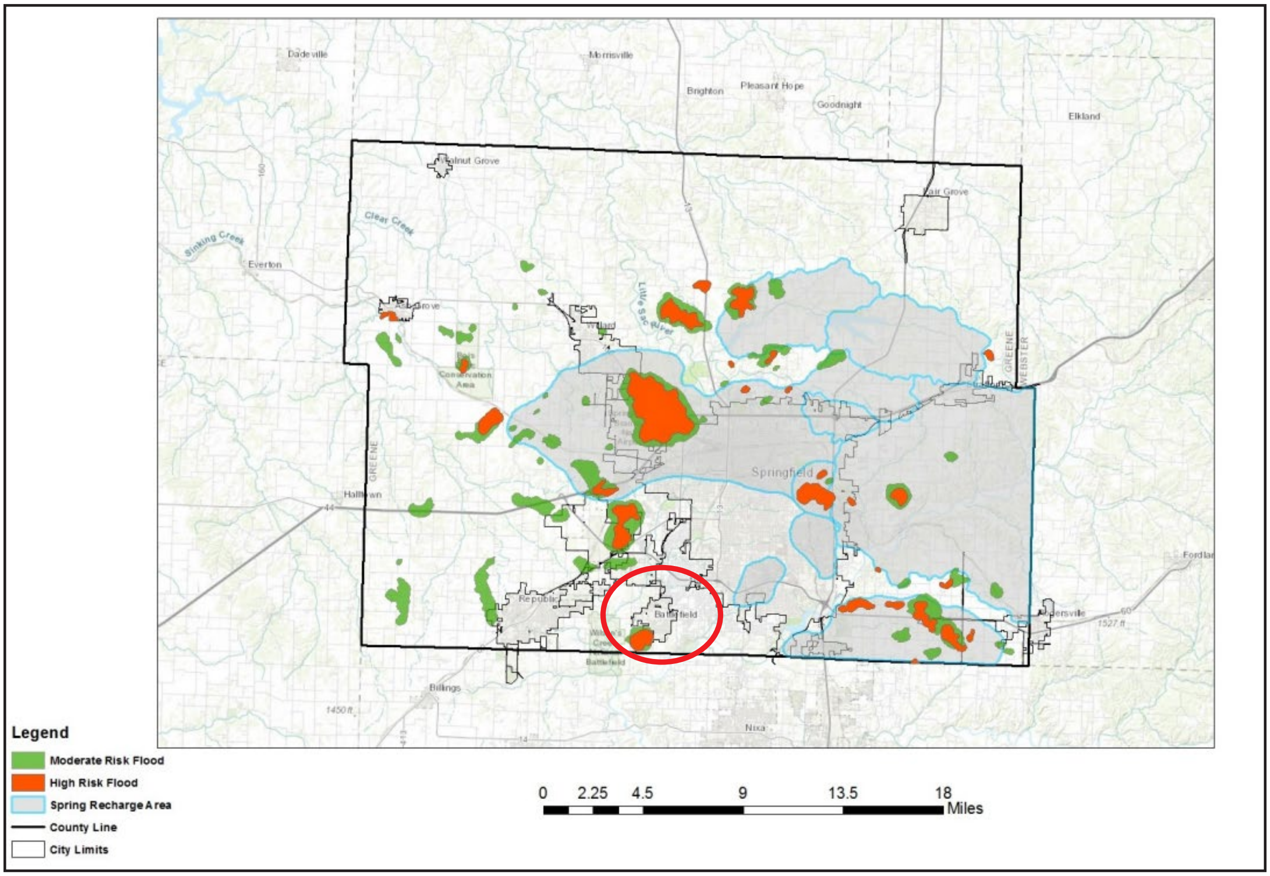
Source: 2018 Greene County Comprehensive Plan (Page 45)

Figure 7.3: Greene County Urban Growth Area Map Around Battlefield



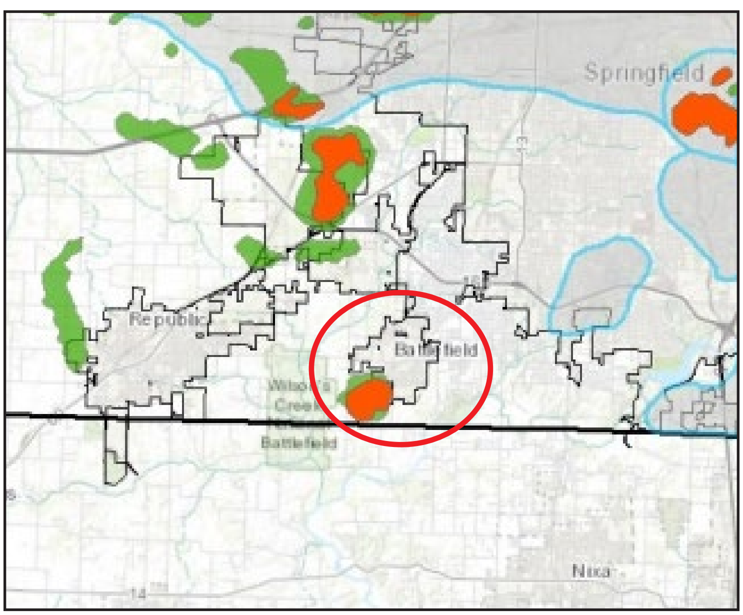
Source: 2018 Greene County Comprehensive Plan (Page 45)

Figure 7.4: Greene County Water Recharge and Flood Areas



Source: 2018 Greene County Comprehensive Plan (Page 34)

Figure 7.5: Battlefield Water Recharge and Flood Areas

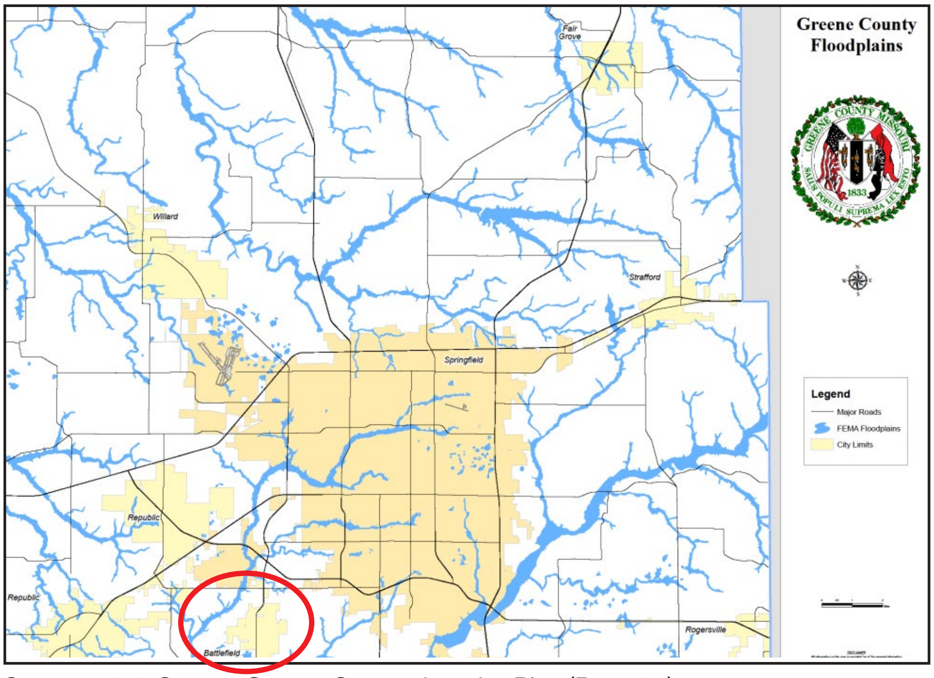


Source: 2018 Greene County Comprehensive Plan (Page 34)

Figure 7.4 and Figure 7.5 show the countywide and Battlefield-specific water recharge and flood areas. The circled area in Figure 7.5 is in the vicinity of Farm Road 190, generally west of Route FF. This high-risk flood area is characterized by sinkholes and Federal Emergency Management Agency (FEMA) designated 100-Year Floodplains. Construction within these flood-prone area is strongly discouraged as many land uses will be required to obtain flood hazard insurance at significant cost to property owners in the long-term.

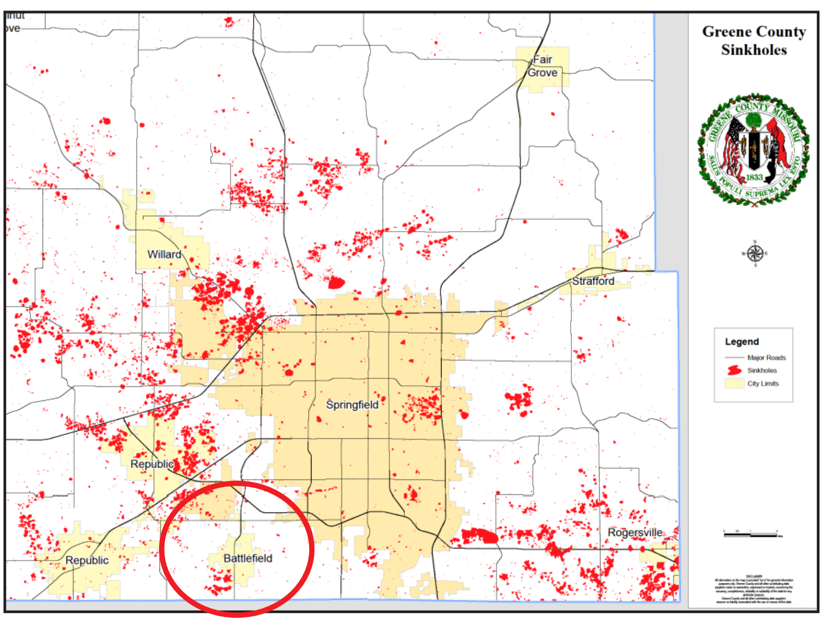
Figure 7.6 and Figure 7.7 further highlight the floodplains and prevalence of sinkholes in the vicinity of Farm Road 190 and Route FF, posing additional development challenges.

Figure 7.6: Greene County Floodplain Map



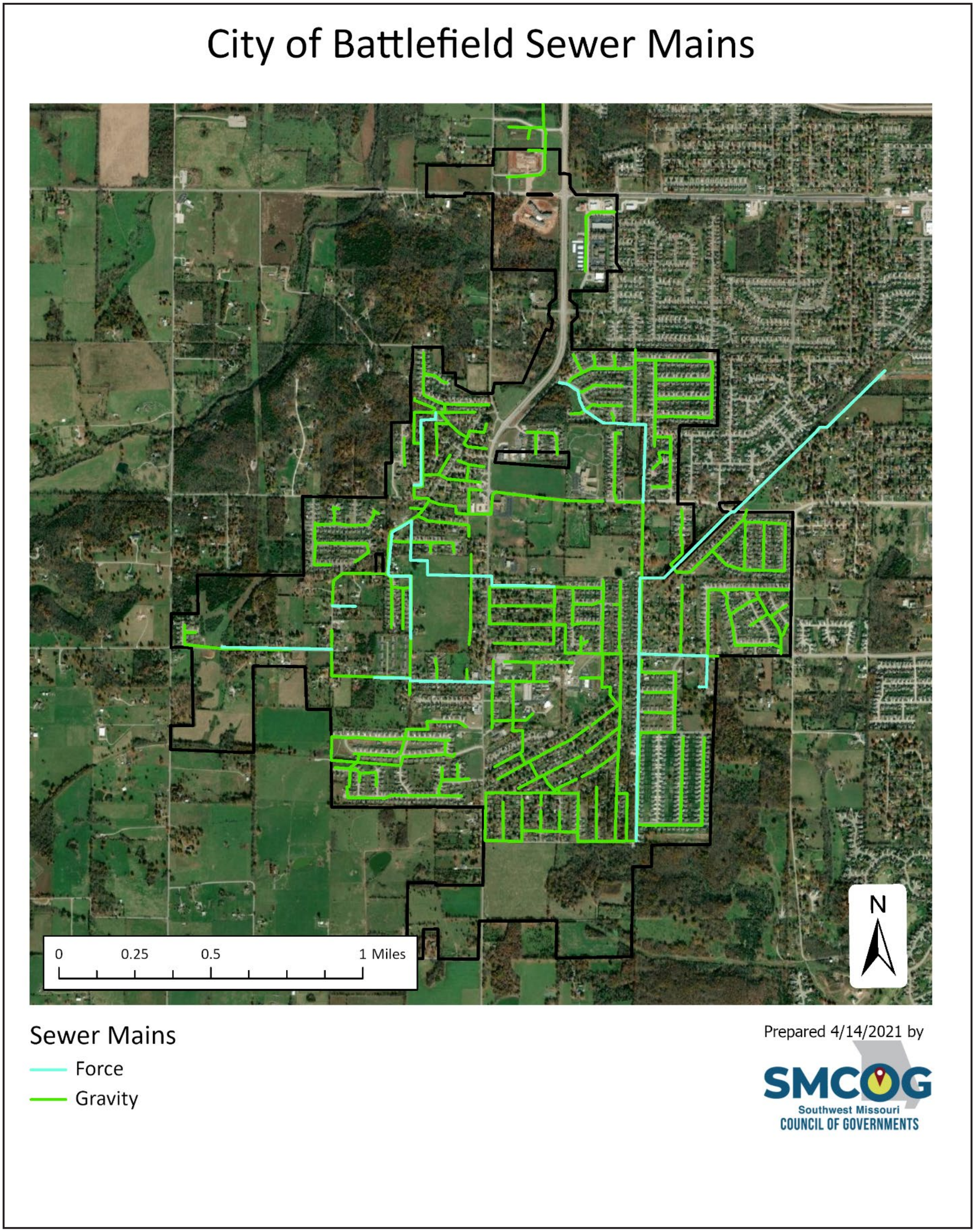
Source: 2018 Greene County Comprehensive Plan (Page 35)

Figure 7.7: Greene County Sinkhole Map



Source: 2018 Greene County Comprehensive Plan (Page 41)

Figure 7.8: Battlefield Potential Gravity Sewer-Served Parcels



Map 7.8 shows force-main and gravity flow sanitary sewer facilities throughout Battlefield. Maps such as this one are helpful in identifying parcels that may be more favorable to development due to meeting the following criteria:

1. Comprised of a minimum of 15 acres. While parcels that are smaller than 15 acres can certainly be developed, the 15-acre threshold is usually of sufficient size to allow the developer to construct streets, stormwater facilities, and underlying zoning requirements while still dividing the remaining land in a manner that will result in profitable work.

2. Currently located within Battlefield City limits or are adjacent to existing City limits. Parcels that are located farther away from existing City limits or have multiple parcels that separate the developable lot from touch City limits pose a challenge in that development of these lots could result in "leapfrog" development that detracts from efficient delivery of municipal utilities and services.

3. Favorable topography. Topography that is unusually high or low compared to immediately surrounding areas or which features significant variation is generally viewed as detrimental to development due to the need for grading and adding or removing rock and dirt from the site. This may especially be a challenge in Battlefield due to the high water table and proximity to sinkholes, karst topography and the 100-year floodplain, particularly along Farm Road 190.

4. Are reasonably close to existing City sanitary sewer facilities (500 feet maximum). Sanitary sewer line extensions are not only costly, but the responsibility for their extension/installation are fully borne by the developer. 500 feet from the nearest sanitary sewer line with sufficient capacity to serve new development is a typical rule of thumb in assessing the ease of development for a particular land tract.

In short, parcels that met the above criteria are usually viewed as highly favorable to development as they represent cost savings to the developer, potentially sound investments for future property owners, and efficient provision of sanitary sewer services for the City.

7.2 FUTURE LAND USE MAP HIGHLIGHTS AND SUB-AREA ANALYSIS

North Battlefield

Figure 7.9: Republic Road and North Route FF

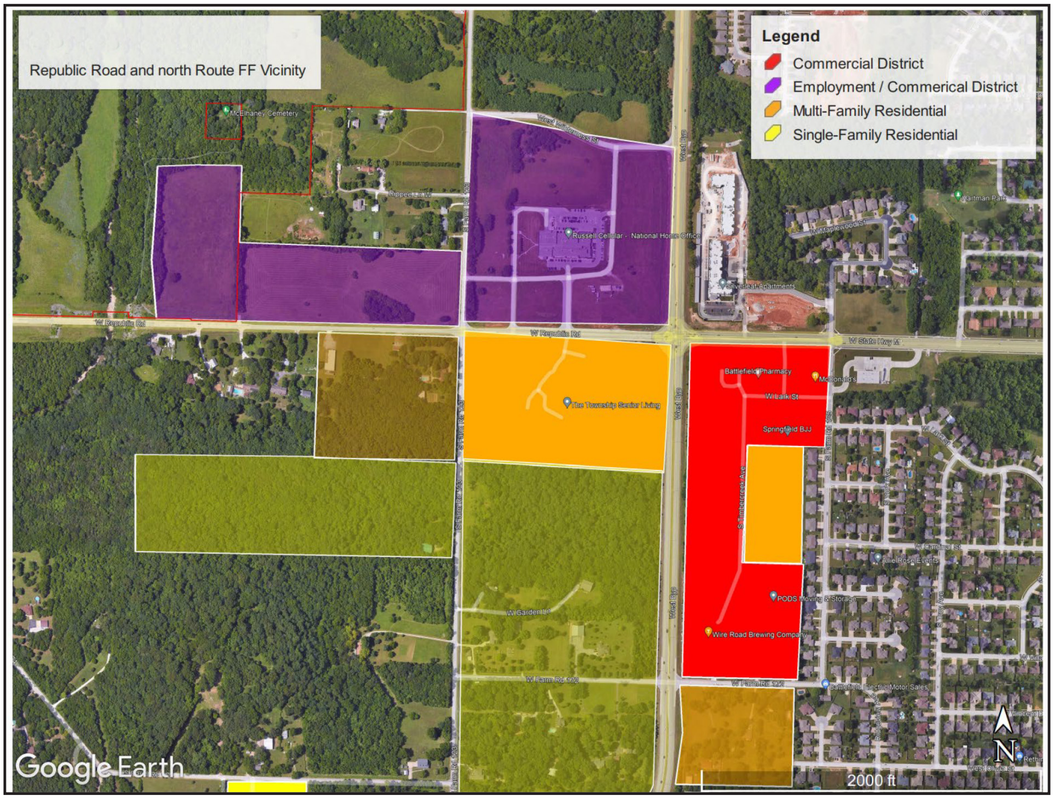


Figure 7.9 shows an important sub-area of Battlefield that is comprised of an Employment/Commercial District (northwest corner of Republic Road and Route FF), an emerging commercial node (southeast corner of Republic Road and Route FF) and some of Battlefield's most developable property in relation to provision of utility services (both sides of Farm Route 123).

The area highlighted in purple is a 31-acre mixed-use commercial area that is developing into a key Employment District for the community and is home to the headquarters for Russell Cellular. With excellent access to points west, east and north, this property would benefit from additional office buildings along with supporting retail and restaurant businesses. The FLUM shows an additional 24 areas to the west that is also highly suitable as an expanded Employment District.

In support of the Employment District area, the FLUM shows a 13-acre area of multi-family development to the immediate south along Republic Road. Both this area and the Employment District are supported by the emerging 23-acre commercial area on the NE corner of Route FF and Republic Road.

This area of Battlefield is noted on Figure 7.8 as containing 87 acres of land that is highly suitable for single-family residential uses that are close to existing facilities and potentially served by gravity sewer.

Areas not highlighted in Figure 7.9 to the west and south are not designated on the FLUM for development due to topographical challenges. A total of 100 acres of residential uses in the highlighted area is anticipated to be sufficient for the 20-year development horizon for this portion of the City.

Southeast Battlefield

Figure 7.10: South Route FF and the Southeast Quarter of Battlefield

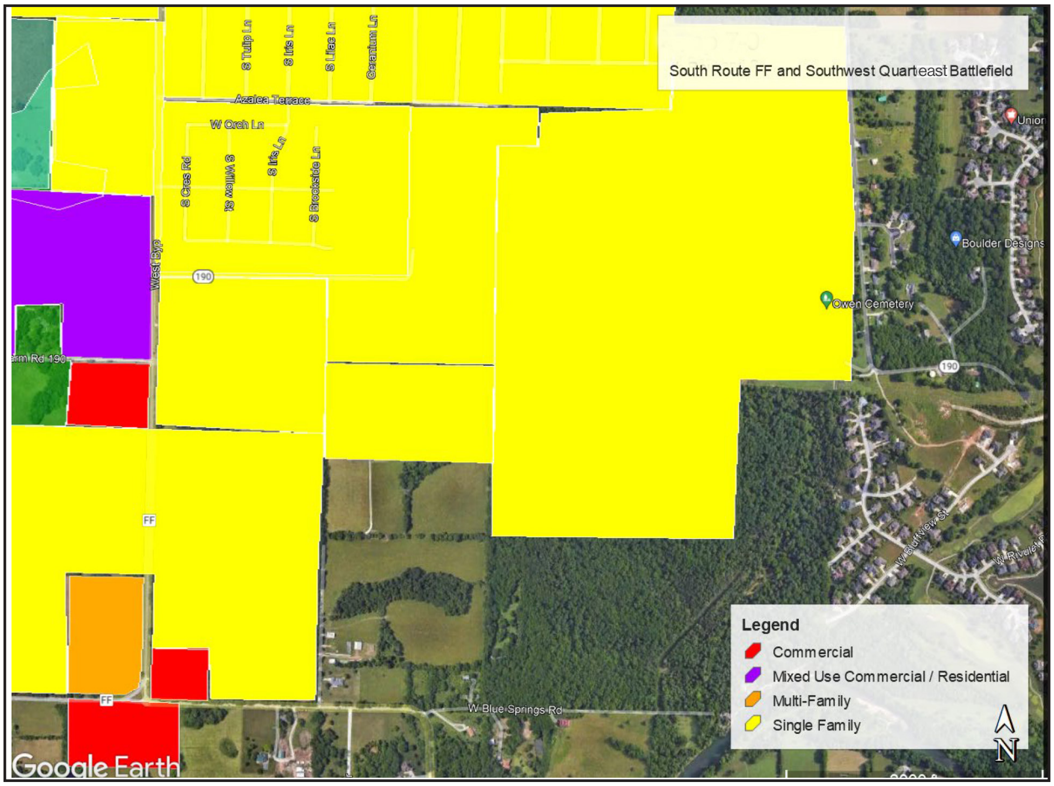


Figure 7.10 highlights a key residential growth area on the east side of Route FF and a neighborhood commercial area to serve these residents at the T-intersection of Blue Springs and Route FF. While portions of this area are located outside current Battlefield city limits, much it is designated for future single-family residential use. The yellow highlighted area designates undeveloped parcels comprised of 386 acres, an amount that represents a significant portion of the residential acreage needed for future residential growth in Battlefield through 2045.

It should be noted that the FLUM is not to designed to "predict" where growth will go, but to enable that growth to happen if and when it does and to allow the City time to plan for infrastructure. As such, the FLUM designates this area with a heavy emphasis on single-family residential so that market forces can move fluidly in determining which parcels should develop. In addition, it positions the area to be in keeping with likely residential development patterns that could change when future roadway right-of-way corridors such as Farm Road 190 and/or a southward extension of Highway 130.

In keeping with a policy described in the 2021 Comprehensive Plan to promote a walkable and less-automobile dependent community, Map 7-9 includes a 14-acre "mixed use" area at the T-intersection of Blue Springs and Route FF that is within a ½ mile radius of 180 acres of the residentially designated area in this quadrant. The mixed-use designation is advantageous as it allows for first floor commercial uses and second or third floor residential uses at this intersection. This designation also allows for flexibility to shift to a commercial designation for this 14-acre area.

Finally, it is notable that, within this area, there is a sanitary sewer pump station located at the intersection of Azalea Terrace and Cloverdale Lane. This facility is designed to pump wastewater north to the City of Springfield's Southwest Treatment Plant located approximately ½ mile north of the City of Battlefield. Such a facility is highly beneficial in contributing to making this area developable.

Southwest Battlefield

Figure 7.11: South Route FF and the Southwest Quarter of Battlefield

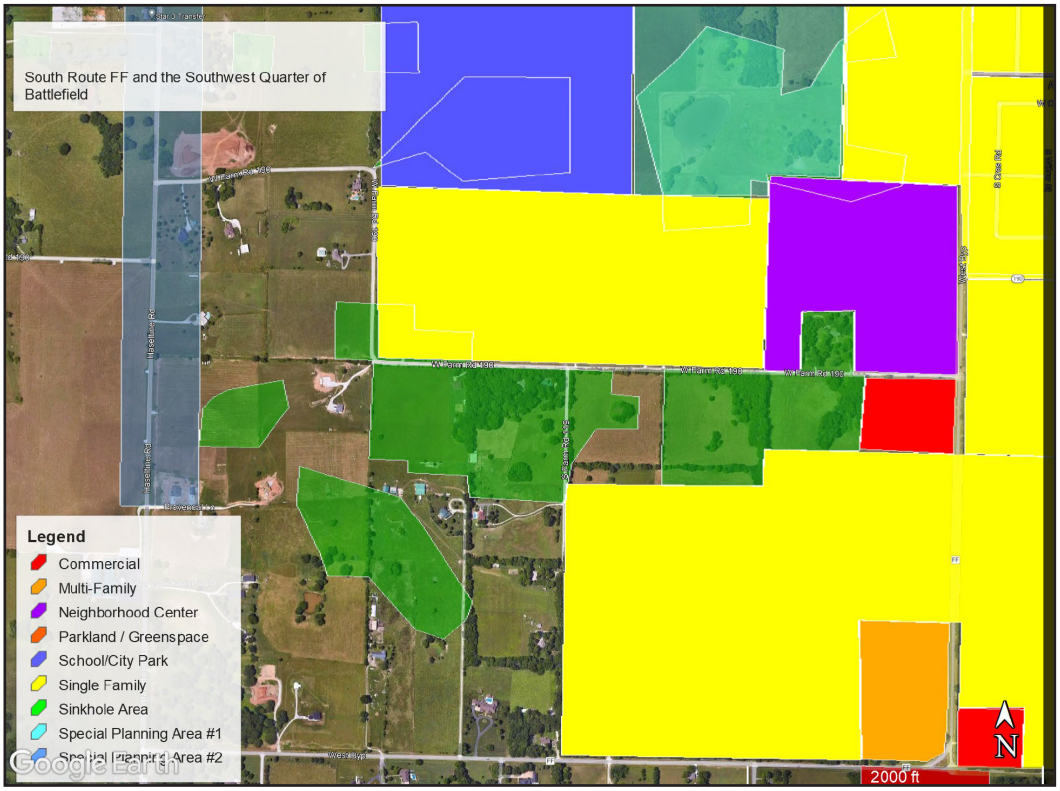


Figure 7.11 covers the southwest portion of Battlefield, west and north of Route FF. Notable in this segment is a 7-acre area on the northwest corner of Route FF at the "T" intersection with Blue Springs Road designated for multi-family residential development. Multi-family residential is appropriate at this location for several reasons:

- The intersection of Route FF and Blue Springs Road is likely to be a key gateway into the Battlefield community from the south in the future. As such, access to Route FF going north and west as well as future roadway improvements to Blue Springs to the east and a potential roadway extension to the south all lend to the northwest corner of Route FF/Blue Springs to be highly suitable and accessible for multi-family residential uses.

- As the adjacent property to the north and west are undeveloped, a future developer of the 7-acre parcel will potentially experience less scrutiny from adjoining property owners about the multi-family designation at this location.

- The multi-family residential property would be in close proximity to commercial goods and services available in the mixed-use areas to the south and east as well as the seven acres of commercial on the southwest corner of Farm Road 190 and Route FF.

The multi-family area is surrounded by 107 areas single-family residential. This designation is extended to the west along FF toward Haseline Road to include an additional 59 acre area. If faced with a choice between extending services along Route FF toward Haseltine Road or investing in utility services elsewhere in the City, it is recommended that the latter policy be pursued in order to support a more compact approach to development. However, as 650 acres will be needed for development through 2045, this parcel was included to help meet this undeveloped parcel target.

Also notable on Figure 7.11 are areas demarked by either known sinkhole areas or 100-year floodplains located generally south of Farm Road 190. To protect this ecologically-sensitive area, the FLUM has not designated this area for any type of development. Large-lot residential or allowing this area to remain agricultural or undeveloped is the recommended approach south of Farm Road 190.

West Battlefield

Figure 7.12: West Battlefield and Farm Road 190 Vicinity

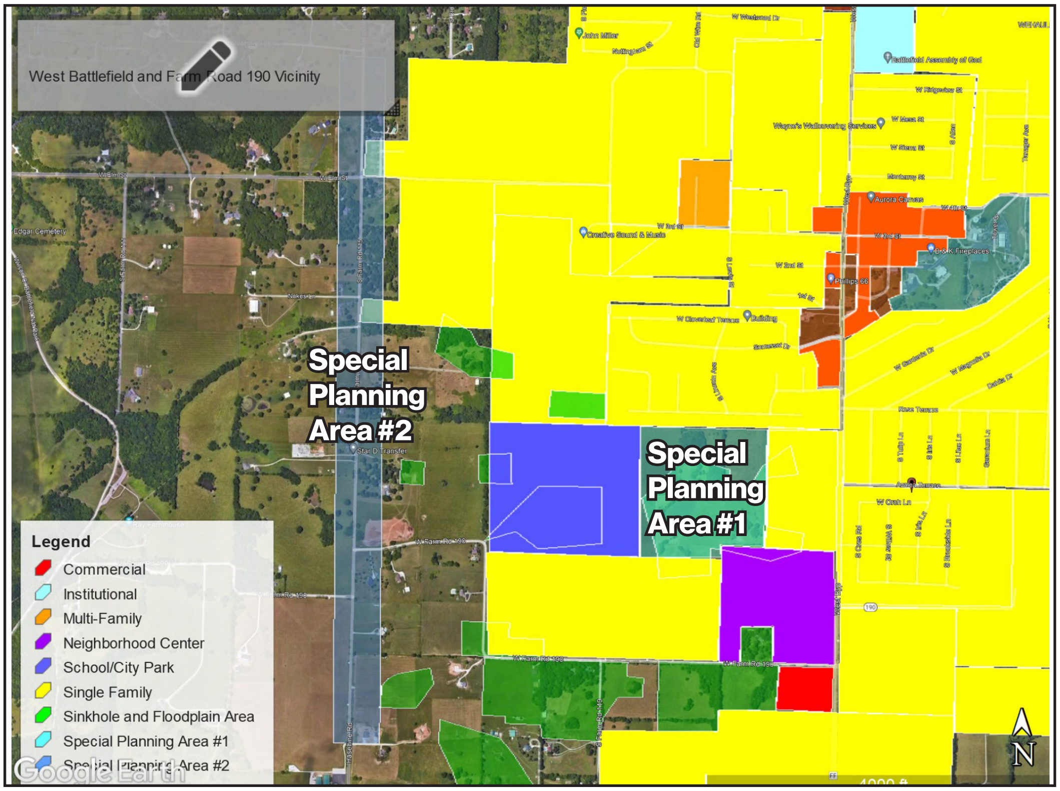


Figure 7.12 shows areas west of Battlefield's current City limits along Farm Roads 190 and 115. It is anticipated that Farm Road 190 will develop into a key east-west corridor from Route FF to Route 115/Haseline Road in the coming years. Along Farm Road 190 is an area currently under consideration for a new elementary school and City parkland (shown in dark blue and located west of a Special Planning Area). A school or community park would serve as an excellent amenity to the surrounding area and is a potential destination for a westward extension of the Trail of Tears trail coming out of the downtown area. With a school or park site situated in the middle of this area, a 68-acre area to the south and a 46 acre area to the north is shown as single-family residential.

The existing and future single-family areas in this section are also served by a mixed-use commercial area on the northwest corner of Farm Road 190 and Route FF. The majority of the area is within a 10 minute walk to this property.

This area is also has two "Special Planning Areas:"

Special Planning Area #1 is a 45 acre area characterized by sinkholes and a Federal Emergency Management Agency (FEMA) designated 100 year floodplain. As any development or buildings within this area will be required to meet flood elevation standards, the FLUM does not designate a recommended development type. In fact, the City should consider targeting this area for an expanded park site from the area to the west to protect the sensitive environmental features of the parcels.

Special Planning Area #2 is shown along Farm Road 115/Haseline Road. At present, this corridor is characterized by a variety of large lot residential and agriculture-related land uses. However, its placement approximately half-way between Route FF to the east and Route ZZ to the west suggests that it may evolve into an important collector or minor arterial corridor in the future. In that case, the City and MoDot will need to plan for roadway improvements and the extension of public utilities along this corridor to serve emerging uses, similar to the recently completed 2023 Route FF Corridor Study. In addition, locations for neighborhood commercial uses at street intersections such as West Elm and Farm Road 190 to serve the residential uses to the east should be part of a future Haseltine Road Corridor Plan.

Downtown Battlefield

Figure 7.13: Downtown Battlefield

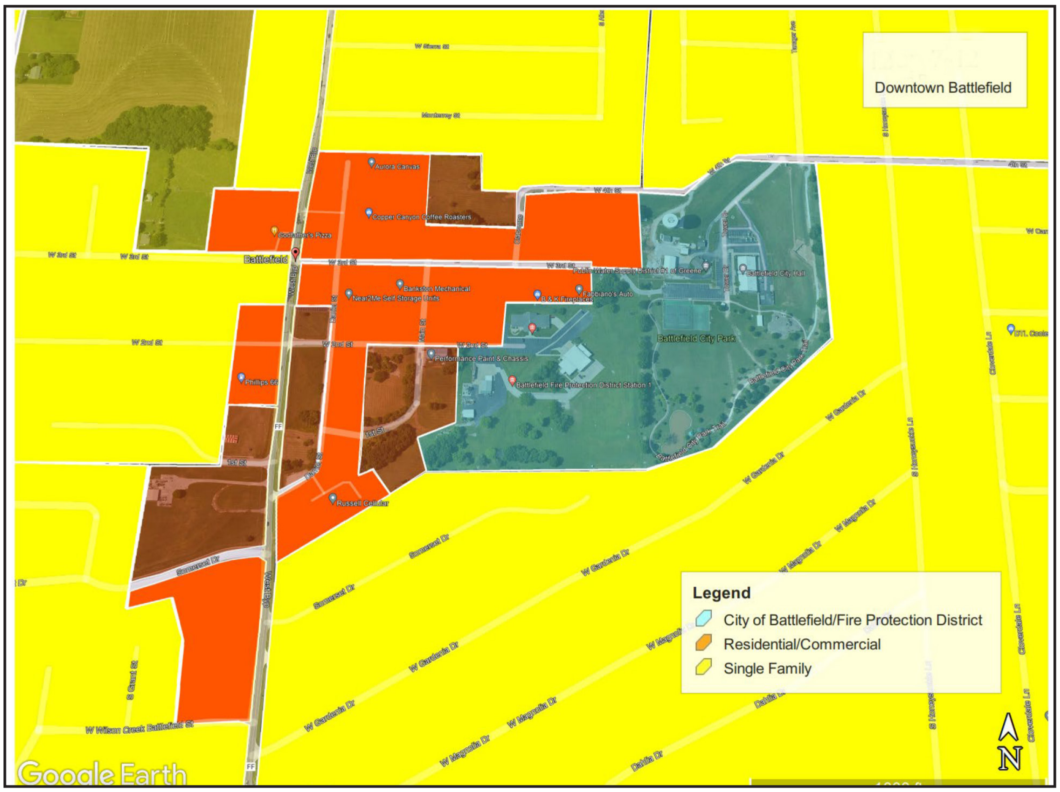


Figure 7.13 illustrates a close-up view of the central commercial core of Battlefield. This area is characterized by numerous small retailers, service providers, restaurants, recognizable national brands such as Godfathers Pizza and a Dollar General (under construction) as well as uses oriented toward traffic along Route FF such as a Phillips 66 convenience store. Also important to the area is Battlefield City Hall, Battlefield Fire Protection District facilities, a water tower belonging to the Public Water Supply District #1 and Battlefield City Park.

Unsurprisingly, the area is largely developed, with commercial and multi-family residential uses. As a result, Figure 7.13 identifies vacant parcels where additional commercial or multi-family residential uses could be located to provide additional "identity of place" to this area. The areas on Figure 7.13 in a red opaque designation are comprised of a total of 12 acres on both sides of Route FF. While this is a relatively modest amount, effective use of this vacant land at densities suggested in Section 8 of this report will show that there is considerable potential in the downtown Battlefield area using only the available 12 acres of undeveloped land.

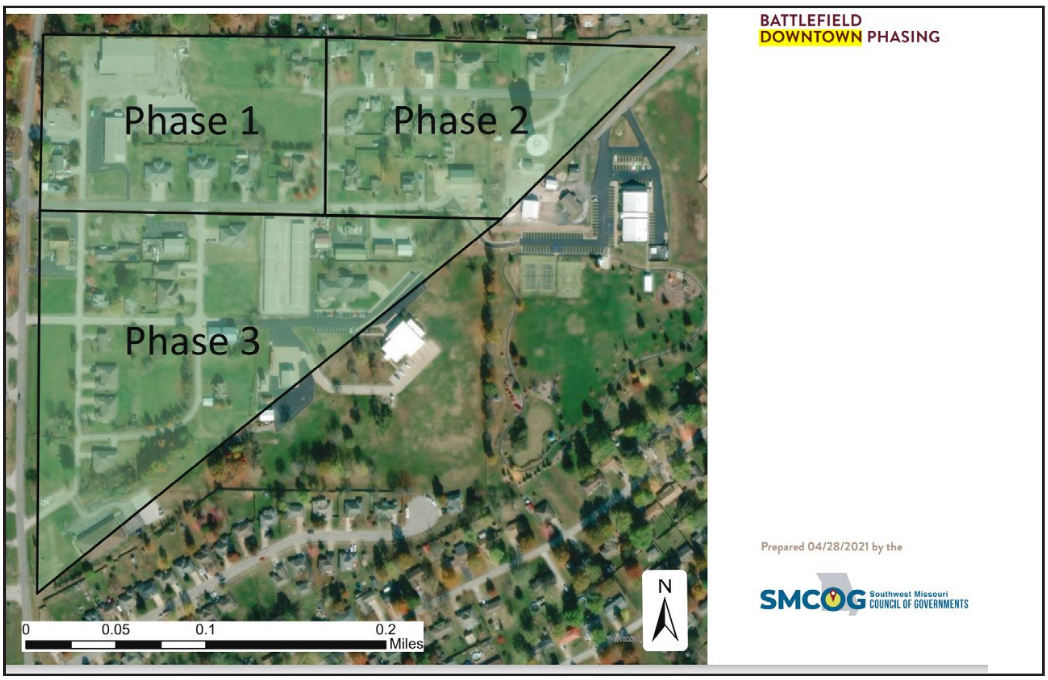
8. SUB-AREA MARKET TRENDS AND GROWTH IMPLEMENTATION POLICY OPTIONS

The purpose of this section is to provide the City of Battlefield with a set of actions items they can utilize to effectively plan for the commercial and residential growth anticipated through 2045 for three areas: Downtown Battlefield, the Route FF corridor, and the city as a whole.

8.1 DOWNTOWN BATTLEFIELD

In 2021, the City of Battlefield adopted a new Comprehensive Plan. Within the plan is a section that specifically addresses the community's vision for a downtown area, which is further supported by a set of goals and objectives for this area generally defined by the illustration in Figure 8.1 below.

Figure 8.1: Battlefield Downtown Phasing from 2021 Comprehensive Plan



It should be noted that much of the vacant area in the downtown area is located within "Phase 3" of the map found on Page 61 of the 2021 Comprehensive Plan. As vacant property is easier and less costly to develop, the City might consider moving Phase 3 to Phase 1 to accommodate development of this available acreage.

The Comprehensive Plan also includes a set of Goals for the downtown area. They are as follows (with commentary from the results of this Economic and Housing Study to provide additional insight):

Goal 1 states "Create economic development policies to attract new businesses and developers with fiscally responsible incentives." This Goal certainly remains achievable following the results of this study. However, Battlefield will need to effectively utilize the 12 acres of vacant area downtown to advance this goal. The City may need to further identify areas that could be re-developed or buildings that could be re-purposed to further contribute to this effort.

Similarly Goal 3 is to "Create downtown as one of the major economic centers and an attractive center." This Goal includes Objective 1 which states "Create a redevelopment plan for downtown that addresses opportunities and site constraints." This goal and objective is also achievable as 12 acres of retail and/or 100 additional housing units as called for in Section 7 would be a major catalyst in this effort.

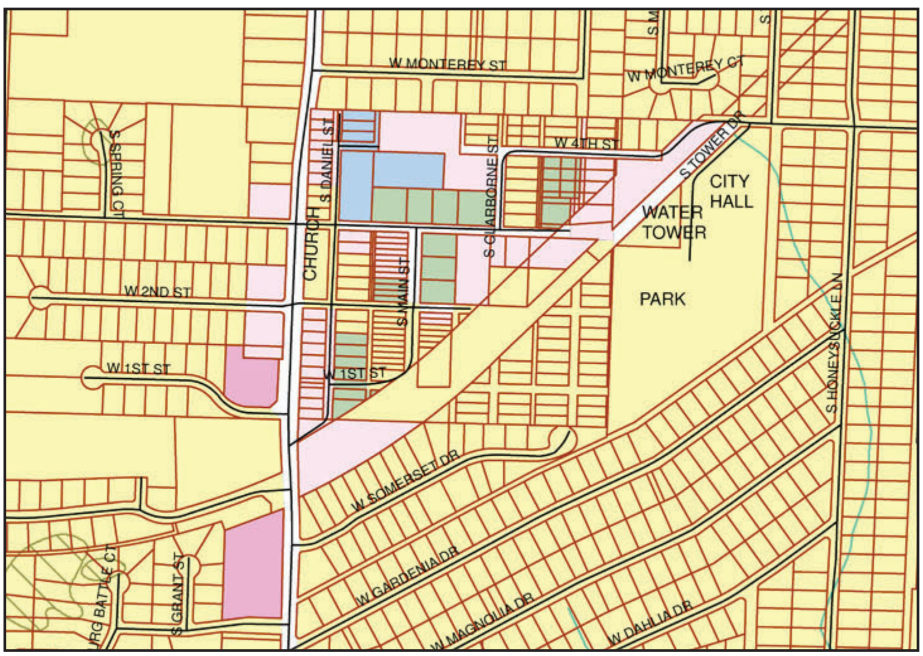
Objective 2 in Goal 3 is also pertinent to the results of this study: "Objective 2: Modify zoning regulations in the downtown area and incorporate aesthetics guidelines." Specifically, the Zoning Code will need to be modified to either create a zoning overlay district, or to create a downtown-specific district that allows for reduced building setbacks and the elimination of off-street parking requirements.

With the Comprehensive Plan Goals and Objectives helping to identify steps the City can take to make downtown an economic center for the community, what follows is a list of Challenges, Action Items, Recommendations to establish a more defined path forward.

Challenge #1: Downtown Battlefield: "Creating a 'There' There."

Objectively speaking, Downtown Battlefield lacks many of the elements of what the average person would think of when it comes to a "downtown" area. In seeking a basic definition of what a "downtown" is, the Wikipedia.org website offers the following: "Downtown is a term primarily used...to refer to a city's sometimes commercial, cultural, and often the historical, political, and geographic heart. It is often synonymous with its central business district (CBD). Downtowns typically contain a small percentage of a city's employment. In some metropolitan areas it is marked by a cluster of tall buildings, cultural institutions and the convergence of rail transit and bus lines."

Figure 8.2: Zoning in Downtown Battlefield



Using these basic parameters and Battlefield's Zoning Map in Figure 8.2 for additional insight, one will see a centrally located central business area that contains a modest assemblage of Neighborhood Commercial zoning intermixed with single-family, two-family, and industrial zoning. East of this area is the "political heart" of Battlefield, marked by City Hall, Fire Protection District facilities, and City Park. While the downtown area lacks tall buildings, cultural institutions, and transit facilities, there is an established percentage of Battlefield's employment, some of which are retail uses that would commonly draw pedestrians to downtown areas: gift shops, coffee roasters, and pizza restaurants. While they are valued local businesses and every community needs them (and needs a place for them), land uses such as self-service storage facilities, automobile repair shops, and sign manufacturing companies are also located in downtown Battlefield (according to Google Earth). These are uses that would not usually contribute to a relatively compact, pedestrian-oriented central business district.

Not covered in the basic “downtown” definition above are other features that routinely draw residents and attract community visitors to a small downtown areas. These may include uses such as outdoor art/sculptures, bike and/or walking paths, parks, fountains, ponds, seating areas and stages for musicians or Shakespeare in the Park-styled events, tot lots, small dog parks, and pop-up retail uses/food truck parking areas that support these uses. While these types of uses would require use of what is already limited acreage in downtown Battlefield, they do provide important places for people to gather and experience hard-to-measure but essential quality of life characteristics of the community. In other words, these experiences and amenities would create the “there” in Downtown Battlefield.

The pictures below are examples from the New Town community located in St. Charles, Missouri. While Battlefield will determine its own unique ways to attract residents and visitors, these pictures are provided to inspire and eventually plan for what can take place in a well-planned downtown area, even when space to do so is limited.

To achieve a compact, walkable area with a strong sense of place and character, available undeveloped land will need to be carefully utilized. The achieve this, the following objectives should be implemented:

1. Sufficient density to transform what can generally be described as an auto-oriented environment into a walkable one.
2. Battlefield’s downtown must vigorously pursue a defined walkable center that is scaled for pedestrians.

3. The downtown must have a lively public realm lined with retail and other activities such as outdoor dining areas that invite pedestrian use and “active” uses (community spaces and seating, entertainment gathering areas, fountains and clock tower, etc.)
4. Housing on upper levels that provide 50% of the support for the commercial uses on the first floor is important. The remaining 50% of support for retail uses is generated from surrounding neighborhoods, and visitors from outside Battlefield.
5. The downtown must have a mix of uses that appeal to a variety of interests and age demographics and contribute to area vitality.
6. Connectivity to downtown accommodated by a variety of travel alternatives leading to downtown is important.
7. Those travelling toward the downtown area from all directions must have visual cues that they are entering the “commercial center” of Battlefield. This can be achieved through transitions in building scale, character, and intensity that is compatible with adjacent neighborhoods
8. As available land is at a premium downtown, auto-oriented uses should not be permitted as a principal or special use.
9. Similarly, there should be no off-street parking requirements for the downtown commercial node. On-street parking should be encouraged and, when unavailable, downtown visitor parking can be accommodated at parking lots adjacent to City Hall
10. For interior (non-corner) lots, side yard setbacks should be zero (0) feet with front yard build-to line of 10 feet (10-foot maximum setback) to allow for the 10 foot buffer shown in the illustration below.

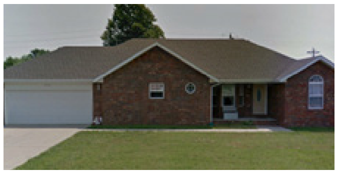
Above: Mixed use building with a Floor Area Ratio of 0.8 (33,500 square feet of interior space on 41,360 square feet of lot area) located in Edwardsville IL. A building type such as this, with residential units on 2nd and 3rd floors and retail on first floor, would be a strong statement in downtown Battlefield.

Above: Buildings in the center of New Town at St. Charles (St. Charles, Missouri) with a Floor Area Ratio of 0.88 (13,700 square feet of interior space on 15,500 square feet of lot area). The area relies on on-street parking and minimum lot coverage standards to allow for higher Floor Area ratios that are 4 to 8 times higher than a "typical" suburban development.

Above: (Left) Cross Section from Route FF Corridor Study for Downtown Battlefield Area; (Right) Photo of wide sidewalks that allow for outdoor seating, street furniture and trees, and merchandise display in New Town at St. Charles (St. Charles, Missouri).

Table 8.1 is an inventory of challenges for downtown Battlefield, ways to address them, and action items to institute change over the short, medium and long-term.

Table 8.1: Downtown Battlefield Challenge Matrix

Challenges	Path Forward	Action Items	Additional Notes
Mix of diverging zoning districts and uses in the downtown area, some of which do not contribute to "placemaking" efforts.	Determine if M-1 zoning could be changed to commercial zoning in downtown area. Determine if existing under-utilized parking lots could be developed with structures, or be used for seasonal/temporary uses such as vegetable stands, food trucks, ice cream vendors, etc. Determine if there are under-utilized structures in M-1 and C-1 that could transition to artist spaces, business incubators, or unique recreational opportunities.	Engage with property owners /businesses to see whether they will buy-in to "downtown placemaking." Adopt an overlay zoning district for downtown to reduce setbacks, eliminate parking requirements, and increase building heights from 30 feet max. Eliminate M-1 zoning downtown and re-purpose M-1 structures such as pole-barns and garage structures for commercial activities. Inquire as to if the Russell Cellular building on Daniel Street is available.	Overlay zone would "grandfather" certain existing uses but new M-1 uses would not be allowed downtown. C-1 zoning appears to be adequate in terms of land uses, as it emphasizes everyday goods and service land uses, with few automobile-intensive uses. Code may need to be amended to allow for food trucks and "pop-up" vendors.
Downtown has uses/ structures that were recently built and unlikely to re-develop in the foreseeable future (e.g. residential duplexes, church buildings).	Determine if there are ways to incorporate these uses into the character of downtown through community branding techniques.	Banner and downtown entryway signs to convey one is within the Battlefield downtown area. Coordinate with church events so they occur in conjunction with downtown activities like craft fairs or Movie in the Park nights .	 
Even though the downtown area (see Map 8-1) is a fairly compact 40 acres, with a max distance across of less than 0.5 mile, the *perceived* walk distances between uses are detrimental in creating a unified space 0.5 mile walk is about 10 minutes (more with families with your children).	Effective use of available vacant land with frontage along Route FF between 3rd Street and Daniel Street is critical due to high visibility and future planned improvements along Route FF. Public art contributes to an interesting walk. First Street vacant property also essential for uses less reliant on visual cues to draw customers. Future commercial uses intended to create a downtown area need to be closely clustered together.	With lot depths of 140 feet along Route FF (a bit shallow for most commercial uses), amend Zoning Code allow for zero front and rear setbacks. Eliminate off-street parking requirements downtown. This allows for more efficient use of land. Install sidewalks in the downtown area while planning for linkages to future improvements to Route FF. Public art designed at a "family-friendly" scale for light playing/interaction and photo-ops for visitors.	Battlefield's local streets are rather narrow, reducing ease to adopt on-street parking options. Visitors could be directed to City Hall parking area or get permission to use church parking lots during off-peak periods.

Challenges	Path Forward	Action Items	Additional Notes
Zoning "bulk regulations" in C-1 and M-1 are contrary to "dense" development.	C-1 zoning should allow for greater building coverage and lesser setbacks.	City should consider an overlay district for the downtown area.	
While critical to the area, City Park and FPD property are "disconnected" from the remainder of downtown.	Extend the Battlefield City Park Trail around FPD buildings, with potential pedestrian connection to First Street. Determine whether the Fire Protection District has plans for moving/vacating existing buildings, especially south of 2nd Street. If so, explore whether these buildings or property can be utilized in a new way. Plan for Trail of Tear extension across city property to Route FF (and even further to west).	Lighted paths for safety from commercial areas along Route FF to City Park. Minimum 10-foot width multi-use path for cyclists and 2x2 walkers going both directions.	
Lack of unified building appearance or character.	Battlefield is anticipated to be home to nearly 11,800 residents by 2045. Downtown will be at the center of commercial and community activity and should convey high-quality community standards of appearance, design, and scale.	Adopt Architectural Design guidelines for Downtown area. Design guidelines should address use of a variety of building materials, color and visual interest, especially at street level. Guidelines should convey permanence and allow for a pitched roof-style to highlight the mixed-use commercial/ residential character of the area.	Some communities have an Architectural Review Board. These boards require citizen volunteers and potential staff time and the Design Guidelines need to be written for flexibility so the ARB can successfully implement the vision.

Table 8.2: Downtown Density Potential

Land Use	Density or Floor Area Ratio Target	Dwelling Units or Square Foot Area	Notes
Multi-Family Residential	10 dwelling units per acre (medium-density residential equivalent)	100 dwelling units or 259 persons at 2.59 persons per household	Dwellings would be on the 2nd and 3rd floors of new buildings
Commercial	Minimum Floor Area Ratio of 1.0	Depends on building sq ft size	With off-street parking requirements eliminated, the FAR can be increased considerably

Challenge #2: Overall City of Battlefield: "It Takes a Village."

Similar to but significantly more complex than Challenge #1 above is planning for all of Battlefield. As the 2021 Comprehensive Plan can be relied upon to highlight and detail a wide variety of Goals, Objectives and Implementation steps, this study will focus on general land use planning objectives, planning for **housing** for single- and multi-family uses, planning for **commercial areas**, and general **economic development** concepts such as locating employment districts and enabling Battlefield to capture an identified portion of key employment segments in the Springfield MSA.

Table 8.3: Citywide Challenge Matrix - General

Challenges	Path Forward	Action Items	Additional Notes
General - This section outlines common "growth management" steps and strategies to address all types of growth.	**Step 1**: Plan for "Infrastructure" While market forces should primarily decide where infrastructure investments should go, most commercial and multi-family growth is likely to occur near Republic Road and Route FF, due to proximity to greater Springfield to the north and east. Single-family residential growth is most likely to occur south of Battlefield's downtown area on both sides of Route FF.	The Future Land Use Map (FLUM) in this document has sufficient acreage to meet the 2045 population projection. The FLUM is useful to plan for where infrastructure will go. Amend on a 5-year basis as needed. Adopt a 5-year Capital Improvement Plan for sanitary sewers and roads. Re-assess annually to add new projects and replace those that are completed. City should finance future infrastructure expansion preferably using a "growth pays for growth" policy. To achieve this, City should explore development cost sharing options used by other Midwest communities (hook-on fees, "green line" fees, impact fees).	Battlefield will need to work closely with the Public Water Supply District, the local electric provider, the Fire Protection District, and local school officials.
	Step 2: Plan for "Annexations" and the ability to serve these parcels with utilities.	Actively pursue voluntary annexation of parcels shown on the FLUM immediately adjacent to City limits. Enter into Annexation Agreements with those property owners not adjacent to City limits. Avoid "leapfrog" development to ensure efficient delivery of utilities and public services. Consistently apply policy that sanitary sewer services will not be offered to parcels outside City limits unless there is an Annexation Agreement for non-contiguous property.	Remain flexible on provision of utilities to annexed land while keeping in mind that MO State Statutes require annexed areas to be served with standard municipal services / utilities within a specified period of time.

Challenges	Path Forward	Action Items	Additional Notes
	Step 3: Plan for roadway and pedestrian trail improvements that tie into regional infrastructure.	Work with Ozark Transportation Organization (OTO) and MoDot for effective roadway planning. Implement the Route FF Corridor Study Plan for the Trail of Tears extension west of Route FF. Plan for sidewalks community-wide.	

Table 8.3 Continued: Citywide Challenge Matrix - Housing

Housing Challenges	Path Forward	Action Items	Additional Notes
Planning for 2,347 new homes (6,077 people) over a 20+ year period is a huge task. This report (and the corresponding Sanitary Sewer Study) plan for a 5% population growth rate from 2020 to 2027 (1,850 persons in 714 new households), and 2.5% thereafter through 2045 (3,808 people in 1,470 households).	From April 2, 2020 through December 2023, Battlefield is expected to add at least 285 developable new lots to its housing inventory as a result of plats which occurred during this 3+-year period as of March 2023. This is generally on-pace with a 5% growth rate. Should this pace continue, the time to plan is now.	Plan for Multi-Family and Mixed Use Development While this report and the FLUM show conceptual locations for multi-family and mixed-use commercial/ residential development, the property owners and the general public must be on-board.	Close coordination with the City of Springfield for agreements to treat wastewater is essential. Battlefield may be planning for significant growth, but if other government and utility providers are not engaged, the growth cannot happen. It is often best to plan for (and zone) multi-family use locations BEFORE single-family uses occur.
Prepare for a 5% population growth rate for the short term.	Short: 2023 through 2027	Short: Plan for 714 homes for 1,850 people on 198 acres (95% single family, 5% multi family).	Check growth rates each year to see how actual growth is matching up with projected growth. If projected growth is out-pacing real growth, City has more time and flexibility with planning for all challenges, including infrastructure and annexations.
Prepare for a 2.5% population growth rate	Medium: From 2028 through 2035	Medium: Plan for 564 homes for 1,461 people on156 acres (95% single-family, 5% multi-family)	
Prepare for a 2.5% population growth rate.	Long: From 2036 to 2045	Long: Plan for 906 homes for 2,347 on 251 acres (95% single-family, 5% multi-family	
Are community greenspace amenities keeping up with population growth?	Determine if the City should adopt a greenspace dedication policy /impact fee for new development. Opportunities to co-locate school district / community parkland are effective ways to use limited governmental funds.	Subdivision Code amendment may be needed if greenspace dedication policy /impact fee is adopted. Intergovernmental agreements with school district for property on FLUM to anchor a community amenity off Farm Road 190.	Reserving greenspace off Farm Road 190 in conjunction with school district is also an effective way to mitigate floodplain and sink hole topography to the east and south of the potential school site.

Housing Challenges	Path Forward	Action Items	Additional Notes
Are there more efficient ways to utilize land?	Consider various policy options to amend the code to use land more efficiently.	Consider density bonuses for developers that build at higher densities or mixed use residential/ commercial uses. Code amendments may include: 1. New zoning district with reduced lot sizes and setbacks 2. Reduced road or ROW widths 3. Reduced commercial parking requirements 4. Density minimum requirements	
Plan for Mixed Use Development	As of the date of this report, Battlefield's zoning code does not allow for commercial uses in residentially zoned areas OR residential uses in commercial zones. This policy detracts from walkable, vibrant, neighborhoods, resulting in reliance on automobiles for local trips to access day-to-day goods and services.	Identify commercial uses that are acceptable in residential areas. These are often non-auto-intensive uses that serve residents within a 1-mile radius rather than regionally. Coffee shops, small restaurants, professional offices, boutique stores, and pharmacies are "neighborhood commercial" examples. Identify multi-family density levels that are appropriate in Commercial districts. Require at least a minimum percentage of first floor gross floor area commercial uses. Provide density bonuses for mixed-use buildings. Pursue shared-parking arrangements to allow for parking for residents and commercial customers.	R-1, R-1U, R-2, R-3 and R-4 do allow for very limited commercial activities, such as Home Occupations, day-cares, and bed-and-breakfasts. C-1 and C-2 allow for residential uses that were existing when the district was mapped, but 400.370 specifically prohibits new residential uses.

Table 8.3 Continued: Citywide Challenge Matrix - Commercial Area

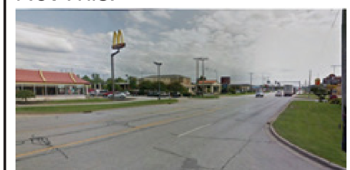
Commercial Area Challenges	Path Forward	Action Items	Additional Notes
Commercial Nodes not Commercial Roads!	This report and the FLUM anticipate commercial and/or community destinations (schools, parks) within a 10-minute walk (0.5 mile) for most residents. Avoid strip development along extended stretches of arterial and collector streets such as Route FF or Haseline Road. Cluster these uses instead, building back away from the road instead of along it. Plan for commercial node locations and corresponding multi-modal transportation infrastructure now.	Schools, parks, pools, libraries (and defined walking/biking paths/routes to reach them) are land use alternatives when commercial prospects are slow to emerge. These “anchors” are a way to leverage growth to an area. Within the City limits, zone arterial and collector streets in advance, committing to the “commercial node” approach. Engage with property owners of potential commercial development. Multi-modal road infrastructure to these sites must be planned in advance to ensure they are in place. Zoning of large(r) parcels is best negotiated prior to annexation or in conjunction with the Annexation Agreement. Adopt a Complete Street policy that prioritizes non-motorized transportation and safety. Adopt Architectural Standards for commercial and multi-family buildings.	This!  Not This!  Photo source: American Planning Association, Planning Advisory Service Report 598 “Commercial Corridor Redevelopment Strategies”

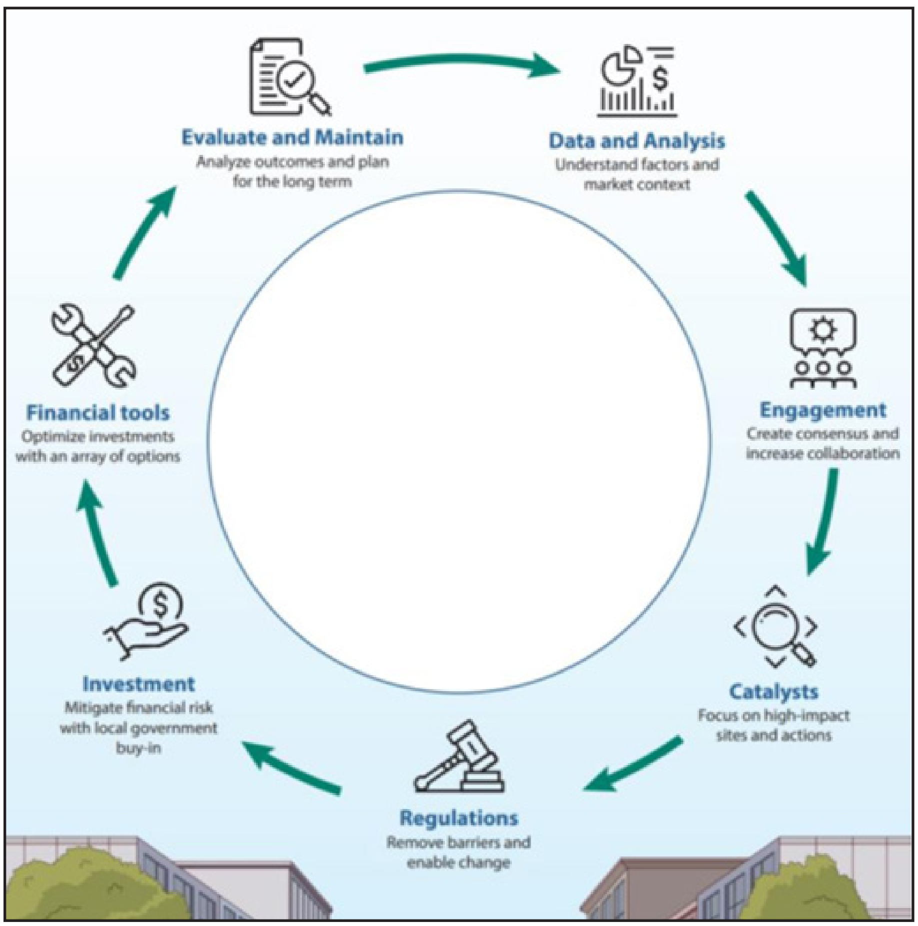
Table 8.3 Continued: Citywide Challenge Matrix - Employment District

Employment District Challenges	Path Forward	Action Items	Additional Notes
Employment District Challenges	The Employment District where Russell Cellular is located has significant upside for Battlefield. It’s well-located, has access to utilities and roads, and plenty of room to expand. Work with the developer to help it grow and allow it to set the standard for other Employment Districts/ Mixed Use development in Battlefield.	Ensure this and future Employment Districts are attracting the types of businesses Battlefield wants. If there is a business type Battlefield wants to attract, set the stage by providing needed infrastructure per Table 2-15 The Planned Unit Development (PUD) process can be extremely helpful in planning for Employment Districts. Assess whether Battlefield’s PUD process is up to the task.	

Employment District Challenges	Path Forward	Action Items	Additional Notes
Three ways to participate in the benefits of Employment Districts: 1. House the land use; 2. House the people who work there; or 3. Do Both!	Engage with economic development resources to identify ways to prepare land for commercial development and/or an Employment District Other Employment District locations may include NW corner of Farm Road 190/ Route FF, intersection at Blue Springs and Route FF, and along Haseline Road, depending on other road improvements in vicinity.	Southwest Missouri Council of Governments (SMCOG) is among numerous resources for this type of assistance in Springfield region. As Employment Districts come on-line in SW Springfield region, Battlefield officials should remain engaged in how "ripple effects" may positively affect Battlefield's growth.	

The infographic below is a good example of the suite of strategies that Battlefield will need to keep in mind as it plans for significant growth in the coming years.

Figure 8.3: Commercial Corridor Redevelopment Strategies



Source: American Planning Association, Planning Advisory Service Report 598 " Commercial Corridor Redevelopment Strategies"

8.2 ROUTE FF CORRIDOR

There are a number of general economic and housing trends that are occurring along the Route FF corridor that are important to the community and help to inform this report from a housing and economic perspective.

One City, Two School Districts

As shown in Figure 8.4, children in Battlefield attend school in either the Republic or Springfield School districts. This split attendance area has only recently become an increasing challenge for residents of the community as most homes have historically been in the Springfield Schools District. This has begun to change and will continue in the years to come however as homes in the Green Ridge Estates subdivision on the east side of Route FF, south of Rose Avenue are within the Republic School District. In addition, much of the large parcel developable area on the west side of Route FF in the vicinity of Farm Road 190 is also within the Republic School District.

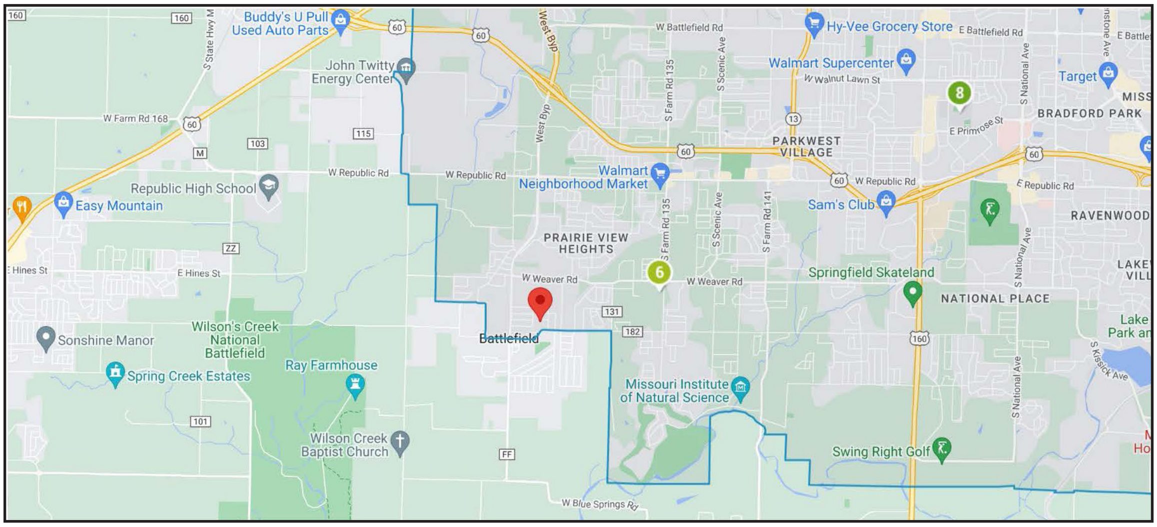
It is no surprise that parents and parents-to-be will make housing choices based on where their children will attend school. As part of their decision-making process, they carefully weigh non-academic but important criteria such as the travel distance to school, what time the school bus arrives in the morning and/or the drop-off times in the afternoon, and whether the school is on their way to work to allow them to spend a few extra moments with their kids before the rush of the day starts. Its little decisions such as these that have the potential to impact housing growth in Battlefield in the years ahead.

Regardless of the school district, pedestrian connectivity for children walking to school is a concern for the Battlefield community as well. Some students can walk to school on Weaver. Others will have to drive to Republic. With child safety paramount in parents and guardian's minds, a safe walk to school will also drive housing choices.

Finally, school property often serves a dual role of providing open and recreation space, whether it is the age-appropriate playground equipment at the elementary school that gets used after-hours or the track and ball fields at the middle and high schools for pickup games and a place to walk or run. In addition, the school buildings themselves, which frequently remain for 40+ years over multiple generations, come to represent important "anchors" to neighborhoods and the community. School buildings are places where weekend basketball games occur, science fairs are held, voting booths are placed, and community meetings are held. They also are the location for games and graduation events for out-of-town visitors, thus serving an economic role as well. These are just a few examples of how schools are important factors in housing decisions.

It should be noted that the Battlefield appears to be on the cusp of determining a location for new school building within the Republic School District area along Farm Road 190. Knowing that such a facility may serve as a "neighborhood anchor," the Future Land Use Map takes this into account by showing significant areas in the vicinity as being reserved for residential use.

Figure 8.4: Springfield (Shaded) and Republic (Unshaded) School District Attendance Areas



Source: Greatschools.org

Route FF and "Linear Recreation"

The recently completed 2023 Route FF Corridor Study highlights another import sub-area market trend that could contribute to housing and economic development within the Battlefield community: Bike and Pedestrian-friendly Amenities.

Increasingly, as residents and employees of areas businesses seek community amenities that contribute to long-term quality of life, linear recreation paths, including multi-use paths, bike lanes, and sidewalks located along major corridors, have begun to fulfill this need. Linear recreation, whether used for walking, jogging, biking, or skateboarding, can contribute to opportunities for daily exercise while running routine local errands. Frequently, these trips can also evolve into spontaneous family time for all age groups.

These "linear park" facilities are not for just locals either. A much-discussed Trail of Tears trail connection from the east to an intersection at Route FF and Somerset has the potential to bring residents from other communities to Battlefield to support its downtown commercial core. The bike/ped facilities along Route FF are natural extensions of the Trail of Tears facility and, while plans for this future area are still in the feasibility study stage, it is not hard to imagine Battlefield as a logical "turn around" location, where riders and walkers grab a snack, have dinner, or do some shopping before returning home.

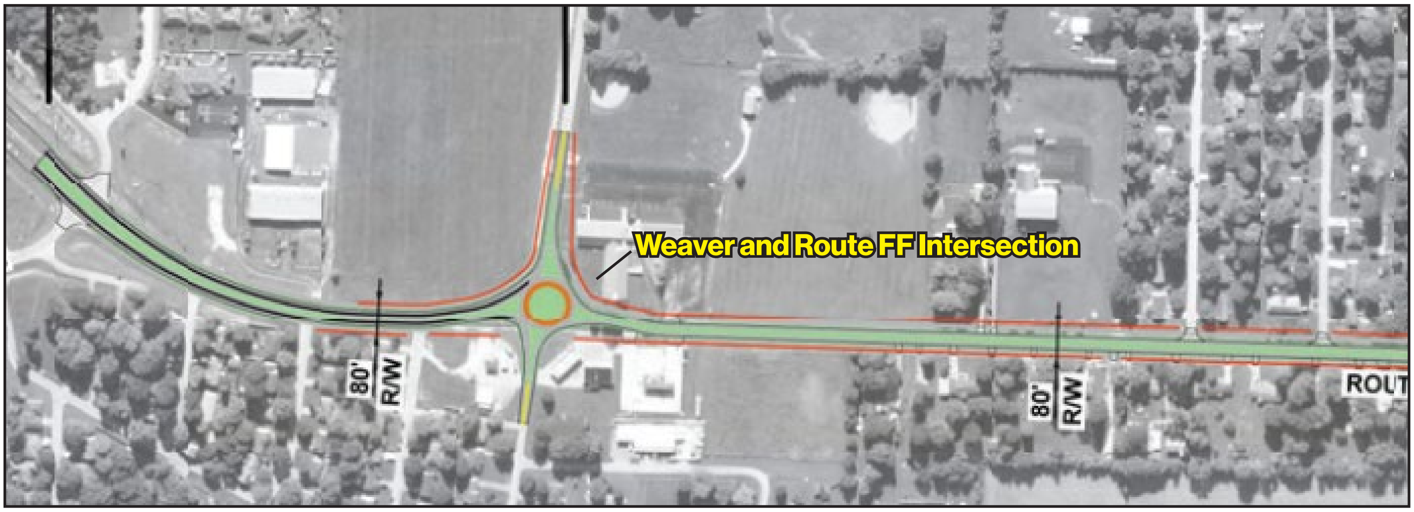
Figure 8.5: Ozark Greenways Map

Source: Ozark Greenways
Note: Circled area is Trail of Tears Unpaved Trail

Route FF: Battlefield's Economic Engine

Expanding on the concept discussed above relating to a future downtown Battlefield commercial node, the City is encouraged to view the entire Route FF corridor, as envisioned in the 2023 Route FF Corridor Study, as a critical piece to the Battlefield local economy and contributor to the community's housing needs in the decades ahead. While downtown Battlefield is anticipated to be within Segment 2 (see Figure 8.6b), Segment 1 (between the north city limits and Weaver Road – See Figure 8.6a) and Segment 3 (from Azalea Terrrace south to the Blue Springs T-intersection - See Figure 8.6c) are also potential locations for housing and retail opportunities as well as employment district centers.

Figure 8.6a: Segment 1 (North) of Route FF Corridor Study Overview Plan



Segment 1 is characterized by a four-lane corridor due to higher traffic volumes with intersection improvements anticipated at Weaver, a raised median, sidewalks along the west side, and a shared-use path (bicycles and pedestrians) on the east side. Existing traffic volumes (2022) are 10,600 vehicles per day. This is expected to increase to 14,700 to 16,600 vehicles per day by 2045.

Figure 8.6b: Segment 2 (Central) of Route FF Corridor Study Overview Plan

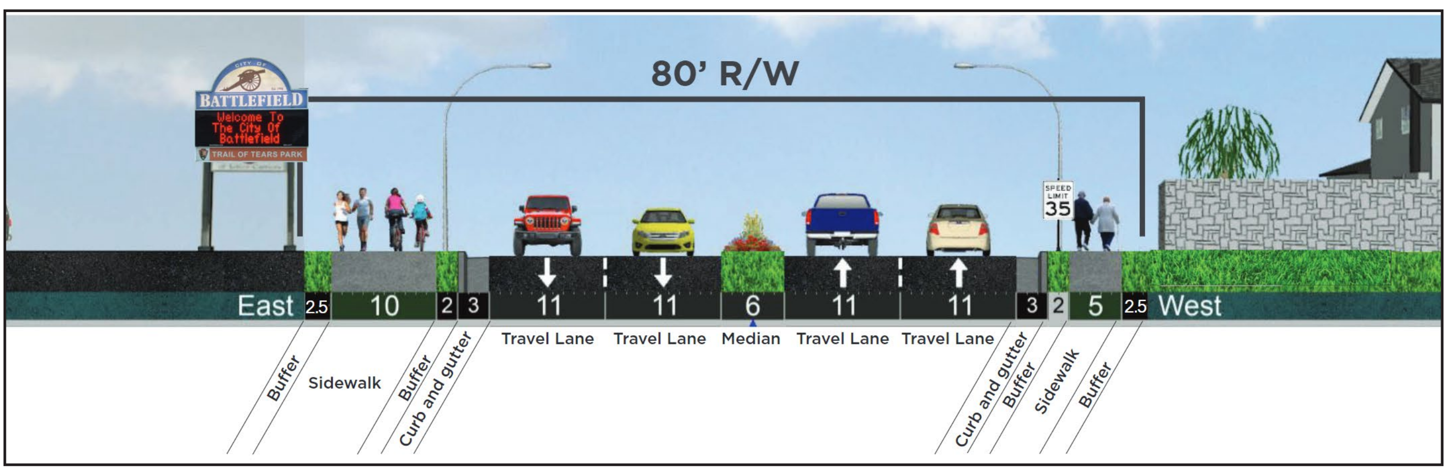
Segment 2 features improvements to include a three-lane section to slow traffic and encourage a safer pedestrian environment through Battlefield's downtown area. In addition, improvements also include a raised median with openings for vehicular access, intersection improvements (traffic circles) at 3rd Street and Azalea Terrace, and future accommodations for the Trail of Tears trail crossing toward the west. Sidewalks will be constructed on the west side of Route FF and a shared use path wih be located on the east side. In 2022, traffic volumes through Segement 2 were 2,500 vehicles per day, a number that is expected to increase to more than double or triple to 6,000 to 10,000 vehicles per day by 2045 (a pace similar to residential growth in the vicinity).

Figure 8.6c: Segment 3 (South) of Route FF Corridor Study Overview Plan

In anticipation of needing to slow traffic speeds, Segment 3 will also feature three-lane sections, with intersection improvements planned at Farm Road 190 and at the Blue Springs T- intersection. Similar to the segments above, the corridor will feature sidewalks on the west side and shared-use paths on the east side of Route FF. Similar to Segment 2, 2,500 vehicles per day are occurring in 2022, a number that is expected to increase to 6,000 to 10,000 vehicles per day by 2045.

Figures 8.7 through 8.9 are illustrations from the Route FF Corridor Study that show "typical" corridor cross-sections along Route FF. These cross-sections highlight the location of roads/lanes, landscape boulevards/medians, curbs/gutters, buffer areas, and sidewalks/10-foot multi-use paths, as well as widths of each, and the conceptual adjacent land uses that serve and benefit from these amenities. These illustrations are intended to provide the reader with a visual understanding of how these roadways will function. For this study, these drawings also highlight the housing and economic opportunities the Route FF corridor offers. Details of each of these three sections are described below.

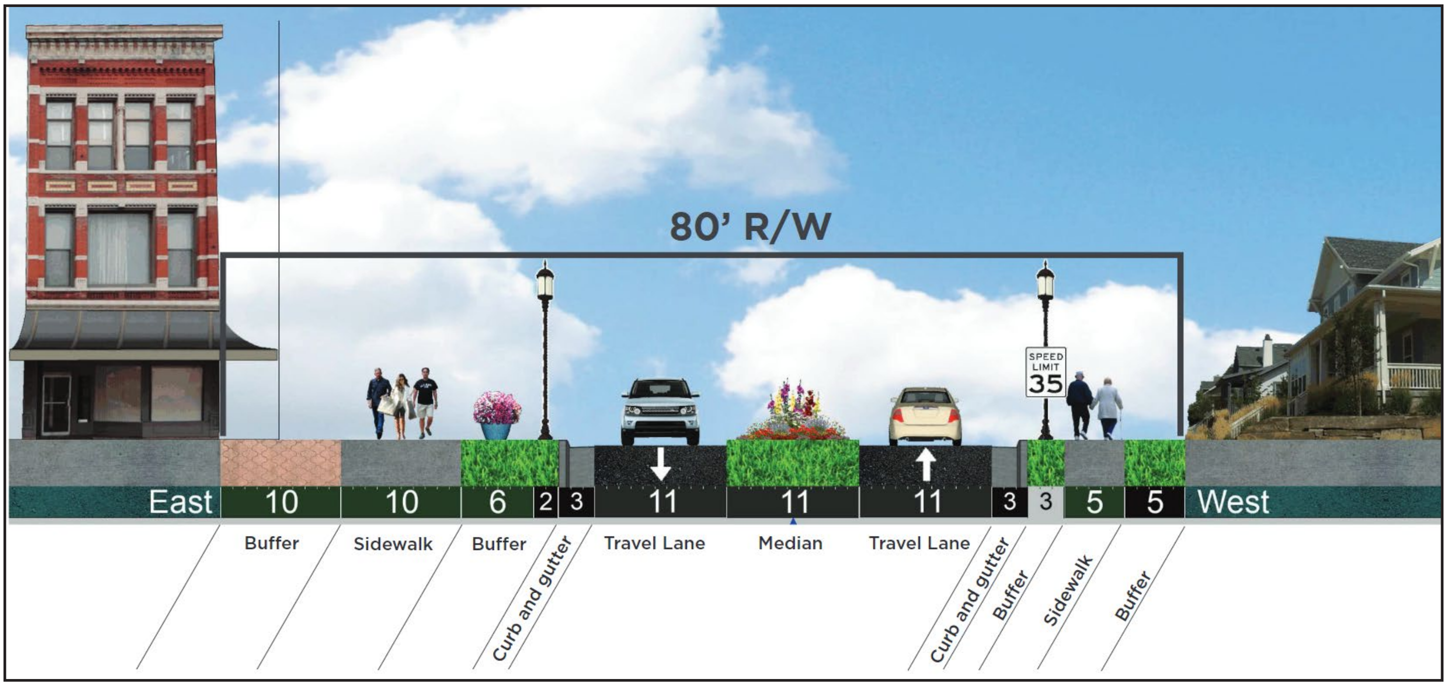
Figure 8.7: Section 1 from Northern Battlefield City Limits to Weaver Road



Section 1 (Figure 8.7) shows a Route FF roadway corridor that is anticipated to remain a "limited access" segment, where traffic counts are expected to remain high due to the proximity to the more heavily urbanized areas to the north. Customers of businesses and employees of the Russell Cellular employment district in this section are likely to access these locations via east/west oriented streets such as Republic Road and Weaver Road, and Farm Road 123. This segment is anticipated to carry up to 16,600 automobiles daily, benefitting businesses that capitalize on visibility and a more "suburban" approach to building setbacks and off-street parking. That being said, the Future Land Use Map anticipates that landowners and developers will be well-positioned to capitalize on multi-family housing along the Republic Road

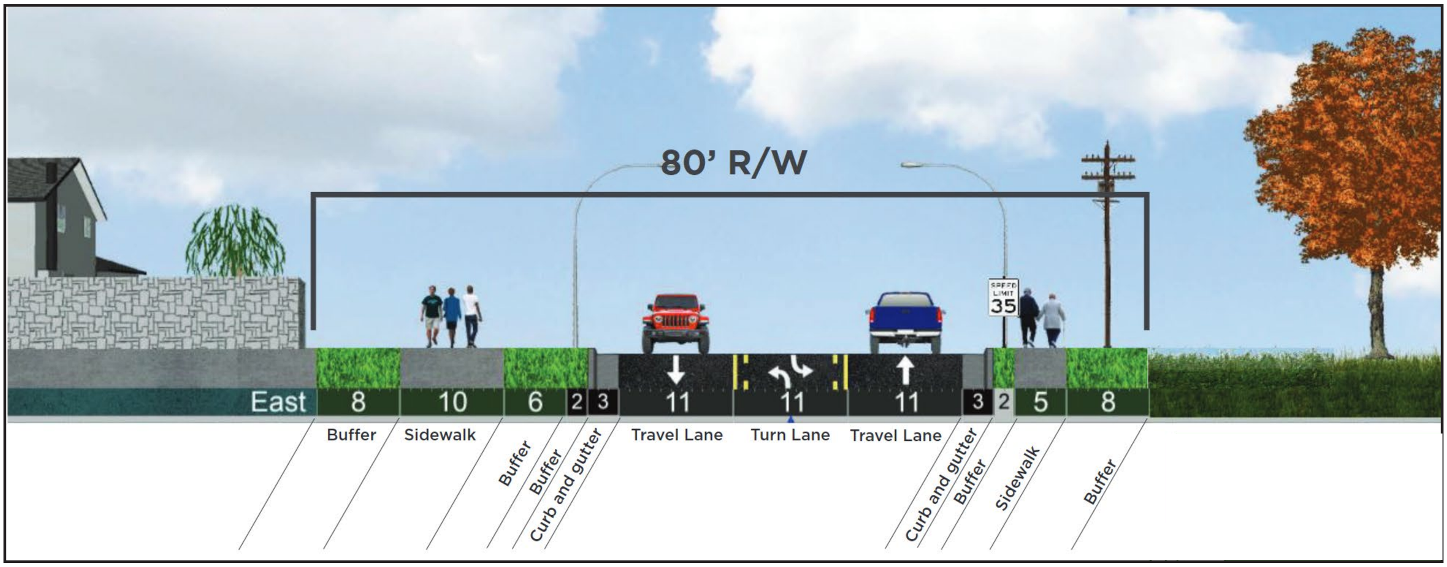
street frontage west of Route FF. Residents of these facilities will enjoy excellent walking and biking amenities along Route FF and Republic Road, proximity to land uses like the Wire Road Brewing Company, a ½ mile walk to work, and a one-mile bike ride to downtown Battlefield.

Figure 8.8: Section 2 from Weaver Road to Azalea Terrace



Section 2 (Figure 8.8) is characterized by a future "downtown Battlefield" commercial area. While details about a downtown Battlefield commercial node are described above, it is notable that traffic counts between Weaver and 3rd Street are projected to decrease by 2,000 to 2,500 vehicles or a 12-15% reduction over this 1 mile distance from Republic to the 3rd Street area. This is due to residents using streets such as Farm Road 123, Old Wire Road, Eagle Crest, and Weaver Road to access mostly single-family residential uses on the east and west sides of Route FF. As traffic decreases, buildings placed closer to the street as allowed by an amended Zoning Code and visual cues such as crosswalks, roundabouts, outdoor retail areas, amenities in the right-of-way such as bike racks, planters and seating areas, and public art will all work to visually signal to motorists and pedestrians that they have moved from a more "suburban" area into a more dense and vibrant commercial area. This area is planned to be characterized by multi-family housing on the 2nd and 3rd floors of buildings, outdoor eating establishments, and first floor retailers displaying wares in the buffer area. All of these features represent a mixed-use combination of housing alternatives and economic activity.

Figure 8.9: Section 3 from Azalea Terrace to Blue Springs T-Intersection



Section 3 (Figure 8.7) is located between Azalea Terrace and Blue Springs, a portion of the corridor that has a strong semi-rural presence today but is anticipated to transition significantly over the next 20-25 years due to the introduction of single-family homes, mixed-use commercial areas, and the construction of a public school and additional public greenspace off Farm Road 190. In keeping with the goal of a walk- and bike-accessible city where residents are within a 10-15 minute walk to obtain daily retail necessities or to reach outdoor recreation facilities, the vision for this southern-most section of Route FF again prominently features 10-foot multi-use paths, excellent sidewalks leading to the Route FF corridor from surrounding neighborhoods, and a commercial node that has a lower square footage allocation to retail to allow the scale of buildings to fit seamlessly with nearby residential uses. Compared to Sections to the north, automobile traffic in Section 3 is anticipated to decline by 40-50% versus Section 1 and to 30-50% versus Section 2, a reduction that will further enhance the quiet, more walkable character of the area.

9. POLICY RECOMMENDATIONS

The following are policy recommendations and action items for the City of Battlefield in conjunction with the information contained in this report as well as supporting documents such as the 2021 Battlefield Comprehensive Plan and the 2023 Route FF Corridor Plan Study. These policy recommendations should be used in conjunction with "Challenge/ Action" table(s) in Section 8.

9.1 RECOMMENDATIONS FROM THIS STUDY

Consider the adoption of alternatives for developers to reduce minimum lot sizes. Battlefield's minimum lot size in the R-1 and R-2 zoning districts for single-family detached homes is 12,000 square feet, resulting in a density of 3.63 dwelling units per acre. This ratio is impacted further following allocation of 10-15% of a large parcel's size to street right-of-way, stormwater detention areas, and common lots maintained by the home owners association (landscaped medians, subdivision entry signage, etc.). In short, Battlefield is consuming considerable developable acreage to accommodate single-family detached housing at just above three dwelling units per acre. This policy may pose a challenge to the community in the years ahead because:

1. Sewer line extensions are costly and land that is relatively compact that can be readily served by existing sanitary sewer lines is limited.
2. Housing demographic studies suggest that the Millennial and post-Millennial generations are leaning toward a smaller overall home and lot size to allow themselves sufficient budget flexibility for life "experiences" such as travel and experiencing the outdoors. This is coupled with statistics from the Baby Boom generation that, in order to reduce yard maintenance responsibilities during their senior years, they are willing to forego larger lot size but not overall interior housing square foot area. Battlefield's current housing density ratios appear to be increasingly out-of-step with these trends.
3. On a national basis, providing utility services to detached single-family homes is often a "loss leader" for municipalities. Property taxes alone for residential uses are frequently insufficient to cover the provision of utilities, roads and services like public safety, especially for large lot situations where the total number of connections are reduced due to distances between households.

Battlefield should explore various alternatives to reducing overall lot size, especially as it plans for how to accommodate more intense population growth compared to past years and decades. Code amendments may include:

1. Creating a new zoning district with reduced lot sizes and setbacks.
2. Reduced road or ROW widths
3. Reduced commercial parking requirements
4. Adopting "density minimum" requirements

The "10-minute walk" policy. This report is also highly supportive of a "10-minute walk" policy to commercial and recreational destinations from residential areas. This policy is based on the concept that 10 minutes is the "break point" between an individual choosing walking or biking to a place to get a loaf of bread, a cup of coffee, pick up the children from school, or walk to the park instead of using an automobile. In practice, 10-minutes is roughly the equivalent of a ½ mile. The Future Land Use Map in Section 7 shows commercial nodes placed in a manner that supports this policy with a recommendation to find a commercial node along Haseline Road. To implement this policy over the long-term, Battlefield's leaders will need to make a firm commitment to the quality of life benefits such a policy allows. These benefits will accrue to current and future residents and will be critical since this approach is not one that is evident in the Battlefield of 2023.

Transportation, warehousing, and healthcare. These three industry categories are experiencing strong and rapidly in the Springfield regions and will continue to take on more importance going forward. To the extent that these jobs can grow in or near Battlefield will help with both job and population growth over the coming years.

Market Battlefield as a leader in the "Work from Home " demographic. In a post-COVID economy, workers have discovered the convenience of "skipping the commute" and either working for an employer that allows work-from-home privileges or non-contractual "gig work" that offers an excellent opportunity to earn a consistent wage while dispensing with a 30-minute drive. Battlefield is already well-positioned as a community to attract this worker demographic. Specifically, the community is characterized by a strong residential presence, excellent schools, and an increasing variety of quality-of-life amenities. In addition, the City already has an excellent Home Occupations ordinance found in Section 400.430 that further allows Battlefield to capitalize on industries that allow workers to conduct business from throughout the region.

In addition, the COVID-19 epidemic has added new momentum to the emergence of "third spaces" for employees to work. In addition to home and office, these third spaces include libraries, coffee shops, book stores, or re-purposed commercial spaces equipped with wi-fi and workspace amenities. While no zoning code amendments are needed to allow for the continued emergence of this land use, Battlefield can encourage local businesses to fill this niche. Once established, the City can subsequently tout these spaces in its community branding initiatives and on its website as an amenity to residents. Its an idea that is easy to implement and a great way to promote the Battlefield community.

Retail opportunities with Upside. The economic review contained in this report suggests that Battlefield is well-positioned to support business uses within the areas of "Vehicles and Transportation" and "Personal Necessities." Uses such as convenience stores and vehicle maintenance uses fall into the former category while the latter generally includes fitness training facilities, child daycare use, haircare and manicure locations, and caregivers to family pets such at veterinary clinics and doggie day cares.

9.2 2021 COMPREHENSIVE PLAN

ECONOMIC DEVELOPMENT

GOAL 1: ATTRACT NEW BUSINESSES TO THE CITY.

Objective 1: Create economic development policies to attract new businesses and developers with fiscally responsible incentives.

Update: As of this writing, the City of Battlefield is still reviewing economic development policies with fiscally responsible incentives that can be adopted locally to attract businesses and developers. The Housing and Economic Analysis report should prove valuable in advancing this Objective as it provides a clearer picture of the demographics of local residents and their lifestyle preferences. These details can be provided to prospective business owners as well as employers operating within the Springfield MSA's major industries.

Objective 2: Ensure areas poised for commercial growth have adequate infrastructure service to support development.

Update: This report generally, and the Future Land Use Map specifically, should advance this Objective significantly. City officials will be able to use the Future Land Use Map knowing that it identifies areas that can be efficiently served with City sanitary sewer utilities while remaining consistent with a Comp Plan objective of a pedestrian and bike friendly community while accommodating community growth. In addition, the projections on the amount of acreage for commercial and residential land uses will contribute greatly to facility planning for utilities and services the City provides to its residents.

GOAL 2: SUPPORT CURRENT AND FUTURE BUSINESSES.

Objective 1: Provide resources for establishing local businesses.

Update: While resources for local businesses are often assumed to be financial incentives, this report will prove highly valuable to City officials in assisting these current and future businesses in better understanding the economic and housing growth the City is anticipated to experience in the years ahead.

Objective 2: Build stronger relationships between businesses and the City.

Update: Businesses have a need to understand what long-term objectives the City is likely to support or seek to implement. Broad policies, such as the one described above supports a goal of having all residents within a 10 minute walk of a commercial node, as well as more specific plans that detail how and when streets will be improved are both important details that businesses need in order to grow and thrive.

GOAL 3: CREATE DOWNTOWN AS ONE OF THE MAJOR ECONOMIC CENTERS AND AN ATTRACTIVE URBAN LIFESTYLE CENTER.

Objective 1: Create a redevelopment plan for downtown that addresses opportunities and site constraints.

Update: See Section 7.2 of this report for more information, but in short, there is approximately 10 acres of undeveloped land in the downtown vicinity, an excellent start in achieving the Objective. At 10 units per acre (a "medium density" level), there is the potential for 100 dwelling units in the downtown area. A second priority is the efficient use of available land, best achieved through the elimination of off-street parking requirements in the downtown area, as well as reduced setbacks, which can be achieved through a Zoning Code amendment OR an "overlay plan" for the downtown Battlefield area. If is recommended to start with these vacant 10 acres to see if re-development or re-purposing of existing buildings is prudent.

Objective 2: Modify zoning regulations in the downtown area and incorporate aesthetics guidelines.

Update: As noted above, zoning regulations can be modified to eliminate off-street parking requirements for buildings in the downtown area and to reduce building setbacks. Aesthetic guidelines are not specifically addressed in this report, but the report author can attest that very effective architectural guidelines (or a Form-Based Code ordinance) can and should be applied to this area in order to lend additional character to Battlefield's evolving "downtown" concept.

Objective 3: Improve infrastructure to include a pedestrian-friendly environment.

Readers are directed to the 2023 Route FF Corridor Study for additional insight into this objective.

HOUSING

GOAL 1: IMPROVE AND MAINTAIN THE QUALITY OF EXISTING HOMES AND NEIGHBORHOODS.

Objective 1: Evaluate, establish, enforce, and revise property maintenance code, as necessary.

Objective 2: Encourage renovation of old housing stock to provide affordable and accessible units.

Update: As described in Section 3 of this report, Battlefield is fortunate to have its housing resources fairly evenly distributed across a 60-year timeline. This characteristic helps in smoothing the potential impacts of ensuring that homes built decades ago remain viable and attractive to early 21st Century residents. Knowing that, per this report, residents are known to take excellent care of their homes and property across all age demographics contributes and that they tend to live in these homes for periods that rival peer communities in the region greatly advances both of these Comprehensive Plan objectives.

GOAL 2: ALLOW FOR DEVELOPMENT OF DIVERSE HOUSING OPTIONS THAT IS FISCALLY SUSTAINABLE.

Objective 1: Require neighborhood amenities for new housing developments.

Update: The Route FF Corridor Study, in conjunction with the discussion and analysis contained in this study, significantly advances public awareness of community-provided amenities like multi-use paths, bike paths and trails, and sidewalks. Knowing that these "linear parks" connect to key destinations in Battlefield, including shopping, parkland, schools and employment opportunities further serves to advance this objective.

Objective 2: Encourage development of diverse housing options by allowing a wider range of housing.

Update: As discussed in Section 3 (Housing) and Section 6 (Land Demand for Residential and Commercial Property in Battlefield), local zoning maps and Census data suggest that a wider range of housing options for residents beyond the traditional single-family detached home is a potentially challenging but important objective for the Battlefield community. At present, this report has stated that 99% of the residentially zoned land in Battlefield is allocated to one housing type: Single-family detached homes. This ratio is in marked contrast to Battlefield's peer communities. To make headway in this effort, the City is encouraged to adopt a housing policy that establishes goals to encourage low and medium density housing such as duplexes, townhomes, and residential units situated above commercial uses at locations that are close to commercial gathering areas and community schools and recreational park space.

9.3 ROUTE FF CORRIDOR STUDY

UPDATE BATTLEFIELD SUBDIVISION REGULATIONS

- 405.390 Access Management – Good access management = Good economic development practices. When commercial uses know from what road(s) customers will be able to access their property and how far the driveway access points must be from the intersection, they are able to make better investments into their property for items like free-standing signs, directional signage, landscaping, and exterior lighting plans.

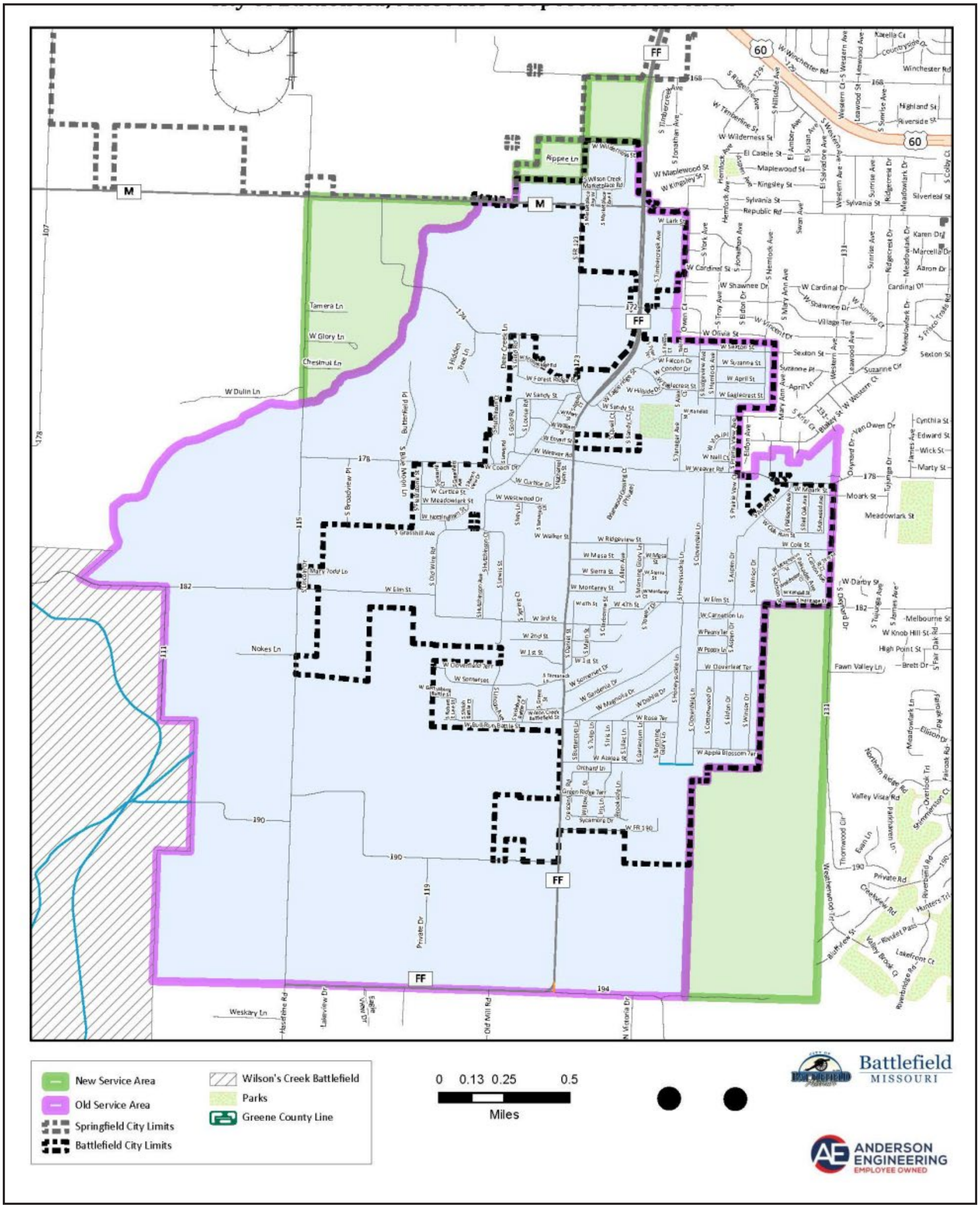
- 405.400 OTO MTP update text – Route FF is the primary north/south route through Battlefield. Per the 2023 Route FF Corridor Plan Study, the community stands to benefit economically when residents and potential customers from outside the community travel Route FF and become aware of and stop to make purchases at commercial locations along this corridor. In addition, planning for alternative north/south routes such as Farm Road 115/Haseline Road and the future east/west intersecting road can help determine commercial node locations along this route as well.

- 405.400 Design Standards – The Route FF Corridor Study identifies roadway widths and round-about locations, both of which are critical for commercial and residential developers to know and plan for during the pre-development stages of site layout. Equally important are design standards that highlight non-motorized alternatives such as bike lanes, multi-use paths, and sidewalks. A wide variety of commercial uses, from coffee shops to bicycle sales and repair retailers, center their business plans around great community amenities such as these. Design standards are also frequently the basis for housing choice decisions. The frequency that current and future residents think about questions like "How quickly can I get from home to my place of employment?" to "How safe is the multi-use path that leads to schools, parks, and the grocery store?" should not be under-estimated. This is especially true in light of the "longevity in the same home" characteristic, makes Battlefield one of the best "live-in-place" communities in the region.

- 405.410 Sidewalk Provision – The Route FF Corridor Study sets the stage for critical housing, economic development, and quality of life amenities for the years ahead. As a Missouri Department of Transportation (MoDot)-maintained road, the Battlefield community will rely on this agency to deliver what is described in this plan over the coming years and decades. Likewise, Battlefield needs to deliver on ensuring that residents of all ages and ability can safety reach the bike lanes, off-street trails, and multi-use paths along this corridor through the provision of sidewalks on locally-maintains streets throughout the community. Battlefield should review its sidewalk requirements found in Section 405.410 of the Subdivision Regulations, including the "exterior sidewalk" provisions in subsection C to better ensure that the sidewalks and/or multi-use path along Route FF comes to fruition.

9.4 ANNEXATION STRATEGIES

Figure 9.1: City of Battlefield Proposed Service Area



Annexation is the process that a municipality uses to bring in parcels of unincorporated land from the county and make it part of the City. Once a property has been annexed, the owners are entitled to the full range of services provided to other City residents.

In most cases, annexation occurs on a voluntary basis. That is, the owner asks the City to annex his or her property, frequently for the propose of connecting to City-provided utility services. Missouri state statutes also provide for involuntary annexations, but the involuntary annexation process is lengthy, involves the Circuit Court, and it requires a local referendum for parties both within the City limits and in the unincorporated area. For the purposes of this report, only the voluntary annexation process will be detailed below.

Note that property can only be annexed if it is immediately adjacent to the existing City boundary. For properties that are not touching existing City limits, the property owner and the City may enter into an "annexation agreement" which provides that, upon being contiguous, the owner agrees to allow the property to be annexed. Annexation agreements may have an expiration date unless renewed prior to the date of expiration; it is recommended that the City Attorney advise on the length of the annexation agreement prior to signatures and approval by the City's governing body.

Annexation agreements are usually used to allow a non-contiguous property to connect to City-provided utilities. As the subject property is anticipated to be within City limits at a future date, local officials are generally amenable to the annexation agreement process. In Battlefield's case, it is prudent to determine in advance if the subject tract of an annexation can be readily and cost-effectively served. Further evaluation is recommended to better understand if annexation of the subject parcel can lead to subsequent annexation of additional parcels further beyond the current City limits.
As there are areas surrounding Battlefield that have topographic challenges that may necessitate significant capital expenditure(s) to be served by City utilities (sanitary sewer lift stations, for example), careful study of water basins, ridge lines, and low lying areas is important to determine if a parcel can be served and the best "downstream" locations for lift stations.

During discussions between the property owner and the City prior to annexation, it is strongly recommended that both parties identify the intended land use of the parcel and what zoning district is needed to allow for this use. It is also important to let all parties know that Section 400.310 of the City's Land Use code states, in part, "All territory annexed to the City of Battlefield... shall maintain the zoning classification nearest to that designated by Greene County, except that agriculturally zoned property shall be automatically zoned "R-1." This section is critical as nearly all unincorporated Greene County property immediately adjacent to Battlefield is agriculturally zoned. See Figure 9.2. Areas shown in white are designated "Agriculture (A-1)" and would therefore automatically be zoned R-1 upon annexation.

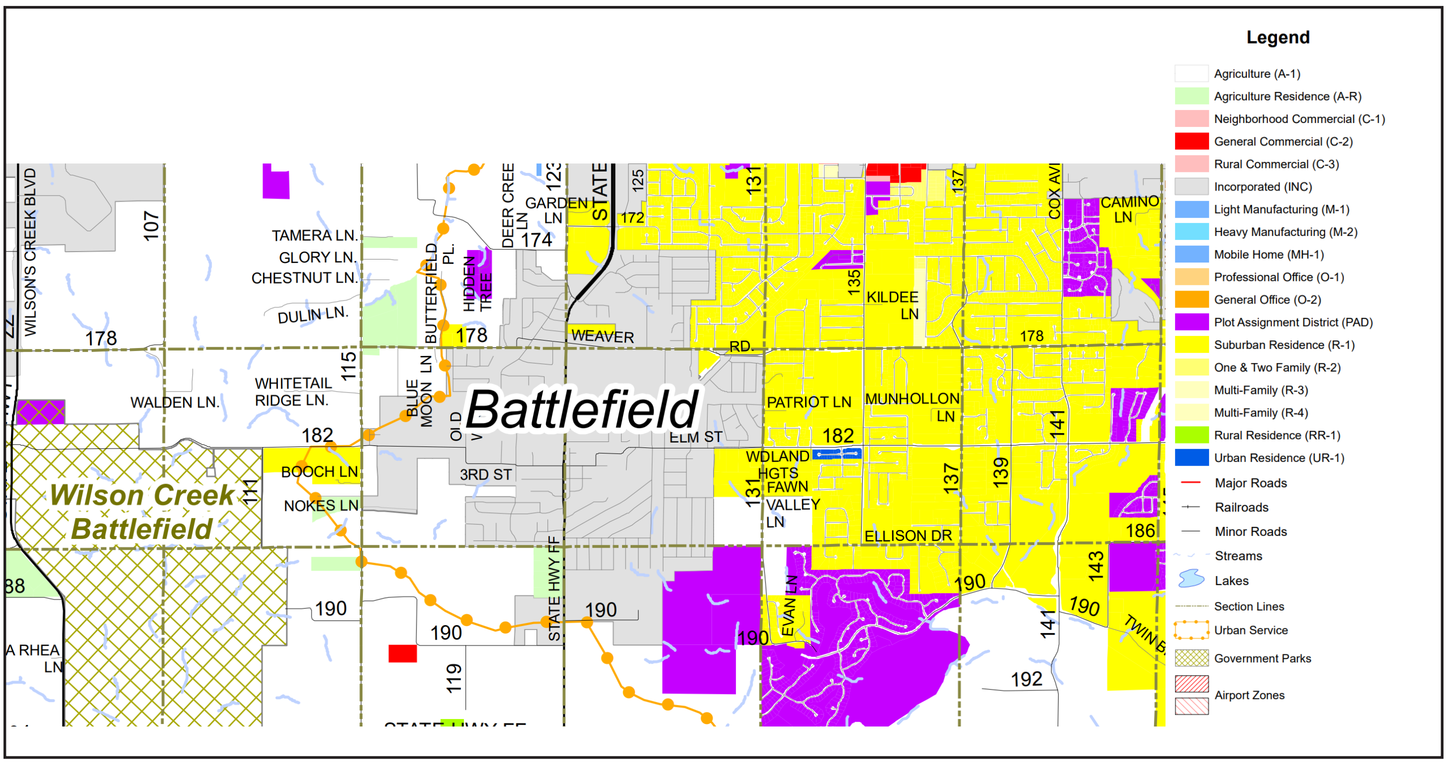
If R-1 is not the desired zoning classification, the property owner/petitioner will have to request a different zoning classification, which would be subject to a public hearing, review and recommendation by the Planning and Zoning Commission, and final approved by the Board of Aldermen. In short, this process is essentially identical to the "rezoning" process. This process can occur in tandem with the annexation process but careful coordination is necessary so that the annexation and the rezoning from R-1 to the requested zoning classification can occur at the same Board of Aldermen meeting. If they do not occur simultaneously, the annexed property will remain R-1 until the rezoning process is complete. Some property owners prefer the assurance that they will receive the zoning district classification they are seeking before committing to annex, so this discussion between the City and the property owner is critical before the annexation process begins.

Discussions between the City and the property owner of the to-be-annexed tract should certainly address each party's plans and expectations relating to fuure zoning of the annexed property at the time annexation procedures begin. This will assist all parties in understanding planned future developments, public improvements, and impacts on adjoining properties.

Often, there can be some hesitancy by the to-be-annexed property owner as to *whether* to annex into a municipality if the desired zoning is not guaranteed at the time of annexation. On the other hand, the municipality is obligated to follow "due process" provisions afforded by State and Federal law that allow all interested/impacted parties an opportunity to be heard regarding a proposed rezoning or establishment of zoning following annexation. In the past, Battlefield has traditionally kept the annexation and post-annexation rezoning processes separate. That is, annexation occurs (and R-1 "annexation zoning" assigned) followed by later action to "rezone" the property to the property owner's desired classification. This is potentially problematic as the property owner risks not being assigned the requested zoning classification even though the annexation process has been completed.

To remedy this situation, many municipalities throughout Missouri act to simultaneously begin the "rezoning" process at the same time as annexation procedures are initiated. For example, upon receipt of the annexation petition, the City will send the zoning request to the Planning and Zoning Commission for its recommendatiton, following all the locally established rules and procedures regarding public hearing notices for zonings as required by state and local laws. If done correctly, weeks later the annexation petition AND the "rezoning" of the parcel are positioned tobe placed on the same evening's City Council/Board of Aldermen agenda. So long as the annexation petition is approved first, the governing body can then proceed with immediately rezoning the property from R-1 to the zoning classificatiton selected by the property owner, since all the public notice procedures have been completed. Note that this is a carefully-choreographed process that ensures that ALL required procedures have taken place. It is recommended that the City Attorney agree in advance to this process and carefully monitor it as it plays out over the course of roughly 2 months from start to finish.

Figure 9.2: Greene County Zoning Map



A final consideration for City staff and the Planning and Zoning Commission to keep in mind is the "Urban Service Area" boundary shown on the Greene County Zoning map above (Figure 9.2) as an orange dashed line. Note that this is the Urban Service Area for the City of Springfield's sanitary sewer services, not the City of Battlefield's Urban Service Area. Since the City of Battlefield provides the sanitary sewer lines that ultimately lead to City of Springfield sanitary sewer lift stations, the City may need to negotiate with City of Springfield to adjust these Urban Service Area boundaries, especially in light of the fact that most of Battlefield's future growth is generally south and south of the Route FF/Farm Road 190.

10. LOCAL AND REGIONAL ECONOMIC DEVELOPMENT INITIATIVES AND INCENTIVES

Economic development incentives, when applied appropriately to a given economic need or situation, can significantly help to advance community economic development and employment opportunities while contributing to objectives such as increasing the local property tax base and enhancing the community's overall quality of life.

While economic development incentives is a diverse and ever-changing landscape, they can generally be categorized into the following general topic areas.

Special Taxing Districts

Pursuant to the provisions of Missouri state statutes, a city may establish or approve the establishment of special districts that can impose assessments and/or taxes to pay for public improvements or eliminate blight. These districts, which include Neighborhood Improvement Districts (NID), Community Improvement Districts (CID) and Transportation Development Districts (TDD), require the cooperation of most of the property owners in the district.

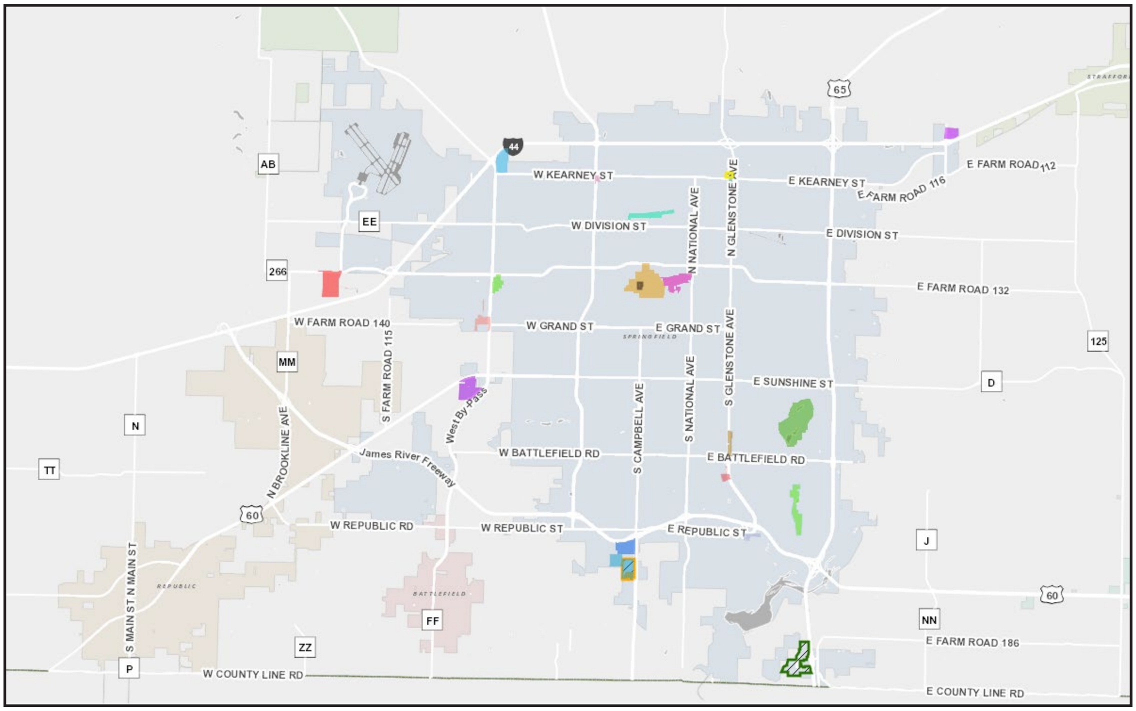
More specifically, a NID is created by election or petition of owners of real property within the NID's boundaries and generates funding for projects through the sale of municipal revenue bonds backed by special property assessments. NIDs are usually designed to pay for public infrastructure, facilities, or other improvements that confer a benefit on residential properties within the district.

A CID is a local special taxing district that collects revenue within its boundaries to pay for special public facilities, improvements, or services. CIDs are created by ordinance of the local governing body upon presentation of a petition signed by owners of real property in the proposed district's boundaries, and typically encompass commercial areas.

A TDD may be created by the Missouri Highways and Transportation Commission if the Project involves any of the state's highways or transportation system to fund or operate one or more projects that would assist the promotion, design, construction, improvement or operations of this infrastructure. A TDD project may include public streets, highway, intersections, signage, signals, parking lots, and any similar or related transportation infrastructure. Funding TDDs is accomplished through an add-on sales or property tax and/or real property special assessments.

As shown on Figure 10.1, the City of Battlefield does not currently utilize Special Taxing Districts. However, each can be effectively utilized to make land and capital improvements to property adjacent to roads such as State Route FF.

Figure 10.1: Special Taxing Districts in the Springfield, Missouri Area



Source: Missouri Department of Economic Development (https://ded.mo.gov/eez-locations)

Property Tax Abatement

Municipalities may encourage redevelopment by providing real property tax abatement for approved projects through an Urban Redevelopment Corporation (URC). Tax abatement using this program may be available for a period of 25 years. During the first 10 years, the property is not subject to real property tax except in the amount assessed on the land, exclusive of improvements. During the next 15 years, the real property may be assessed up to 50% of its true value, providing a substantial tax benefit for the 25-year total benefit period.

Tax Increment Financing

Tax Increment Financing (TIF) is an economic tool available to municipalities to encourage redevelopment of blighted areas. To establish a TIF, the municipal governing body adopts a Redevelopment Plan approved by a locally appointed TIF Commission. Resulting TIF funds are usually used to construct certain public use facilities within the TIF district and are supported by fiscal evidence that the (re)development could not proceed without supplemental funding. The effective use of a TIF district relies on an assumption that property values and/or local sales tax will increase in the long-term after the development is operational. As a result, while the community foregoes property and sales tax revenue in the short-to-medium term, in the long-term the resulting development will offer extended benefits to the community long after the TIF has expired. Further, a well-planning TIF district will serve as an economic anchor for future development in the surrounding vicinity, adding additional economic momentum on a 25-year time horizon to the original TIF investment.

Small Business Loan Programs

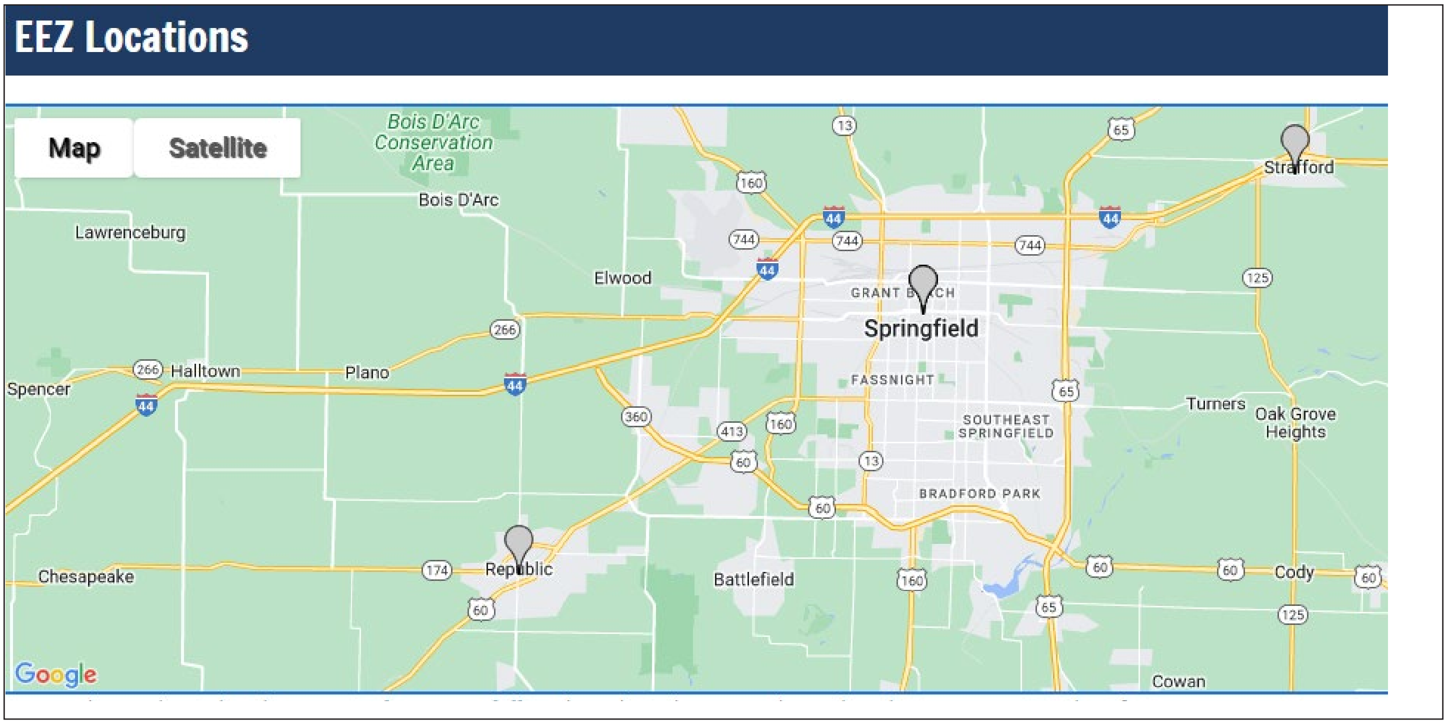
The Missouri Department of Economic Development offers a low-interest direct loan program designed to help small businesses take steps toward expanding and creating jobs. The eligibility requirements include a provision that the applicant must employ 15 or fewer employees, and the company must be 100 percent Missouri-owned and 100 percent Missouri-located.

Enhanced Enterprise Zones (EEZ)

EEZs may be created by communities to encourage job creation in a blighted area. Communities with designated zones can offer expanding businesses within those zones local incentives as well as connect them with state incentives through the Missouri Works program (Zone Works category).

As shown in Figure 10.2, at this time, the communities of Republic, Strafford, and Springfield, Missouri have EEZ designated areas. There is no EEZ within Battlefield.

Figure 10.2: Enhanced Enterprise Zone Locations in Springfield and Surrounding Areas



Source: Missouri Department of Economic Development (https://ded.mo.gov/eez-locations)

"Chapter 100" State Sales Tax Exemptions

This program is approved locally and is administered by the Missouri Department of Revenue. It offers exemptions from state sales taxes on Building Materials for approved construction projects. In addition, the program offers a separate state sale tax exemptions program from certain depreciable assets used in the purchase, construction, extension, or improvement of an approved project.

"Chapter 353" Property Tax Abatement

Municipalities may encourage redevelopment of blighted areas by providing real property tax abatement for approved projects through an Urban Redevelopment Corporation (URC). Tax abatement may be available for a period of up to 25 years. During the first 10 years, the property is not subject to real property tax except in the amount assessed on the land, exclusive of improvements. During the next 15 years, the real property may be assessed up to 50% of its true value, providing a substantial tax benefit for the 25-year total benefit period. Property tax abatements are a local redevelopment initiative and are administered by the officially recognized economic development authority of the municipality.

To find out more about these Missouri State Statute authorized economic development incentives, visit the Missouri Department of Economic Development website at https://ded.mo.gov/community/local-programs.

APPENDIX A: TAPESTRY SEGMENTATION REPORTS

ESRI's Tapestry Segmentation divides U.S. residential areas into 67 distinctive segments based on socioeconomic and demographic characteristics to provide an accurate detailed description of U.S. neighborhoods. As applied to Battlefield, the Tapestry Segmentation segments the community into demographic and socioeconomic cohorts in a way that is helpful in understanding local lifestyle trends and preferences among residents. Tapestry Segmentation shows common behaviors within each segmented neighborhood and can be used to better understand Battlefield's population and needs.

Of the 67 unique "LifeMode" groups found across the U.S., the Tapestry segments predominantly found in Battlefield make up 98% of the Battlefield population (according to ESRI) and include:

- Middleburg (55%)
- Workday Drive (27.2%)
- Bright Young Professionals (8.9%)
- Old and Newcomers (7.8%)

The characteristics of each segment are shown on the following pages. To see all segments and characteristics, visit www.esri.com/tapestry.

Figure A.1: ESRI Tapestry: Middleburg

LifeMode Group: Family Landscapes

Middleburg

4C

Households: 3,511,200

Average Household Size: 2.75

Median Age: 36.1

Median Household Income: $59,800

WHO ARE WE?

Middleburg neighborhoods transformed from the easy pace of country living to semirural subdivisions in the last decade, as the housing boom spread beyond large metropolitan cities. Residents are traditional, family-oriented consumers. Still more country than rock and roll, they are thrifty but willing to carry some debt and are already investing in their futures. They rely on their smartphones and mobile devices to stay in touch and pride themselves on their expertise. They prefer to buy American and travel in the US. This market is younger but growing in size and assets.

OUR NEIGHBORHOOD

- Semirural locales within metropolitan areas.
- Neighborhoods changed rapidly in the previous decade with the addition of new single-family homes.
- Include a number of mobile homes (Index 150).
- Affordable housing, median value of $175,000 (Index 84) with a low vacancy rate.
- Young couples, many with children; average household size is 2.75.

SOCIOECONOMIC TRAITS

- Education: 65% with a high school diploma or some college.
- Labor force participation typical of a younger population at 66.7% (Index 107).
- Traditional values are the norm here—faith, country, and family.
- Prefer to buy American and for a good price.
- Comfortable with the latest in technology for convenience (online banking or saving money on landlines) and entertainment.

TAPESTRY SEGMENTATION
esri.com/tapestry

Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100.
Consumer preferences are estimated from data by MRI-Simmons.

LifeMode Group: Family Landscapes

Middleburg

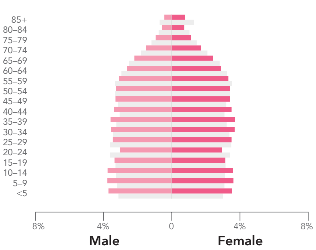
4C

TAPESTRY SEGMENTATION
esri.com/tapestry

AGE BY SEX (Esri data)

Median Age: 36.1 US: 38.2

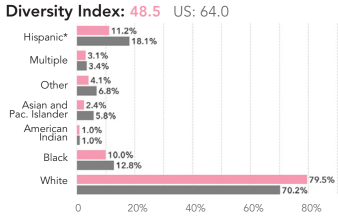
Indicates US



RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

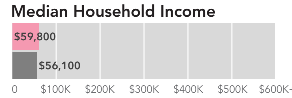
Diversity Index: 48.5 US: 64.0



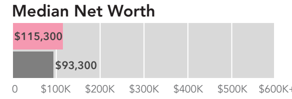
INCOME AND NET WORTH

Net worth measures total household assets (homes, vehicles, investments, etc.) less any debts, secured (e.g., mortgages) or unsecured (credit cards). Household income and net worth are estimated by Esri.

Median Household Income

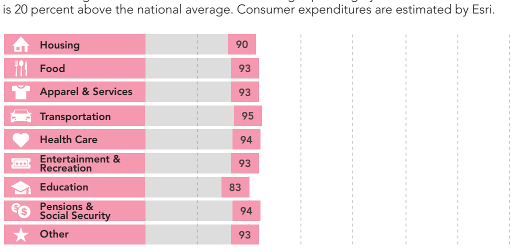


Median Net Worth



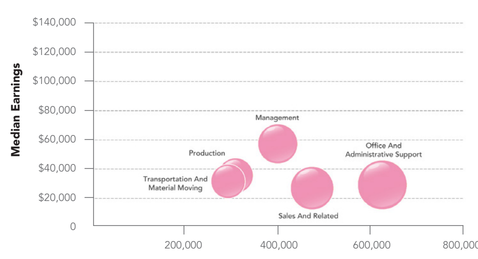
AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



LifeMode Group: Family Landscapes

4C

Middleburg

TAPESTRY SEGMENTATION
esri.com/tapestry

MARKET PROFILE (Consumer preferences are estimated from data by MRI-Simmons.)

- Residents are partial to domestic vehicles; they like to drive trucks, SUVs, or motorcycles.
- Entertainment is primarily family oriented, TV and movie rentals or theme parks and family restaurants.
- Spending priorities also focus on family (children's toys and apparel) or home DIY projects.
- Sports include hunting, fishing, bowling, and baseball.
- TV and magazines provide entertainment and information.
- Media preferences include country and Christian channels.

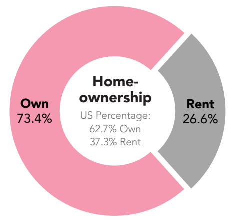
HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

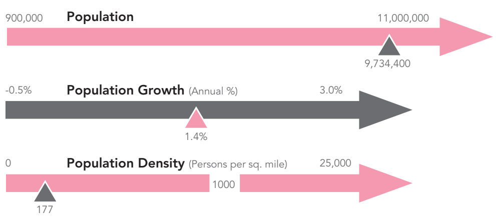
Median Value:
$175,000

US Median: $207,300



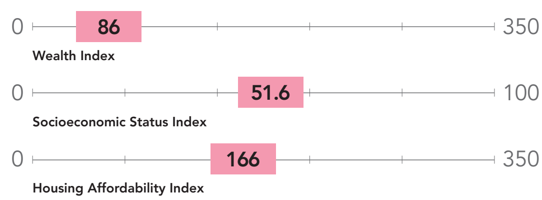
POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.



LifeMode Group: Family Landscapes

4C

Middleburg

TAPESTRY SEGMENTATION
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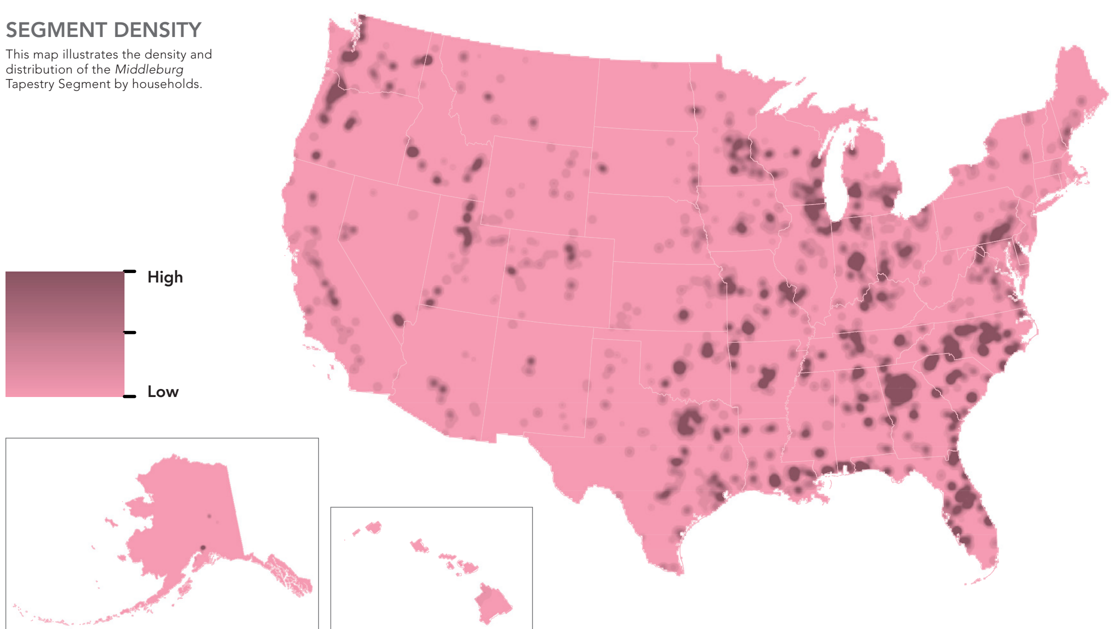
SEGMENT DENSITY

This map illustrates the density and distribution of the *Middleburg* Tapestry Segment by households.



For more information
1-800-447-9778
info@esri.com
esri.com

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G2831429

Figure A.2: ESRI Tapestry: Workday Drive

LifeMode Group: Family Landscapes

Workday Drive

4A

Households: 3,541,300

Average Household Size: 2.97

Median Age: 37.0

Median Household Income: $90,500

WHO ARE WE?

Workday Drive is an affluent, family-oriented market with a country flavor. Residents are partial to new housing away from the bustle of the city but close enough to commute to professional job centers. Life in this suburban wilderness offsets the hectic pace of two working parents with growing children. They favor time-saving devices, like banking online or housekeeping services, and family-oriented pursuits.

OUR NEIGHBORHOOD

- *Workday Drive* residents prefer the suburban periphery of metropolitan areas.
- Predominantly single family, homes are in newer neighborhoods, 34% built in the 1990s (Index 236), 31% built since 2000.
- Owner-occupied homes have high rate of mortgages at 68% (Index 164) and low rate vacancy at 4%.
- Median home value is $257,400.
- Most households are married couples with children; average household size is 2.97.
- Most households have two or three vehicles; long travel time to work including a disproportionate number commuting from a different county (Index 132).

SOCIOECONOMIC TRAITS

- Education: 40.5% college graduates; more than 72% with some college education.
- High labor force participation rate at 71%; two out of three households include two plus workers (Index 124).
- Connected, with a host of wireless devices —anything that enables convenience, like banking, paying bills, or even shopping online.
- Well insured and invested in a range of funds, from savings accounts or bonds to stocks.
- Carry a higher level of debt, including first (Index 149) and second mortgages (Index 154) and auto loans (Index 149).

TAPESTRY SEGMENTATION
esri.com/tapestry

Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by MRI-Simmons.

4A

LifeMode Group: Family Landscapes

Workday Drive

TAPESTRY SEGMENTATION
esri.com/tapestry

AGE BY SEX (Esri data)

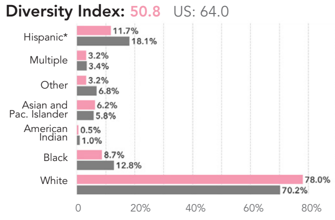
Median Age: 37.0 US: 38.2

Indicates US

RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

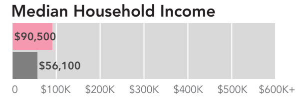
Diversity Index: 50.8 US: 64.0



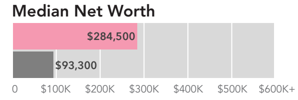
INCOME AND NET WORTH

Net worth measures total household assets (homes, vehicles, investments, etc.) less any debts, secured (e.g., mortgages) or unsecured (credit cards). Household income and net worth are estimated by Esri.

Median Household Income

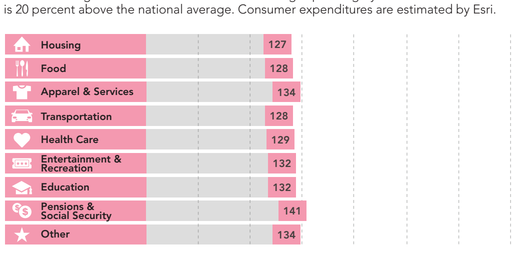


Median Net Worth



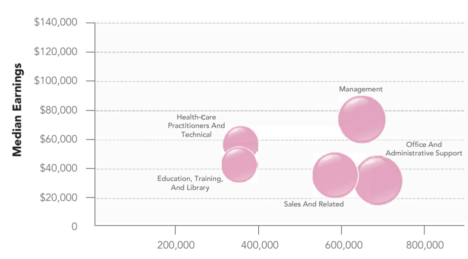
AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



4A

LifeMode Group: Family Landscapes

Workday Drive

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MARKET PROFILE (Consumer preferences are estimated from data by MRI-Simmons.)

- Most households own at least two vehicles; the most popular types are minivans and SUVs.
- Family-oriented purchases and activities dominate, like four plus televisions (Index 154), movie purchases or rentals, children's apparel and toys, and visits to theme parks or zoos.
- Outdoor activities and sports are characteristic of life in the suburban periphery. They attend sporting events, as well as participate in them like bicycling, jogging, golfing, and boating.
- Home maintenance services are frequently contracted, but these families also like their gardens and own the tools for minor upkeep, like lawn mowers, trimmers, and blowers.

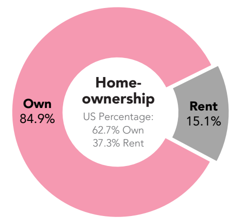
HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

Typical Housing:
Single Family

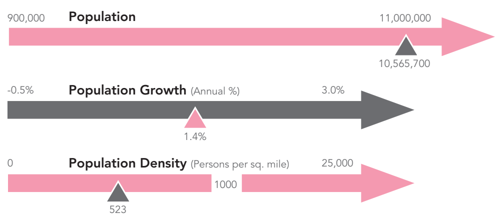
Median Value:
$257,400

US Median: $207,300



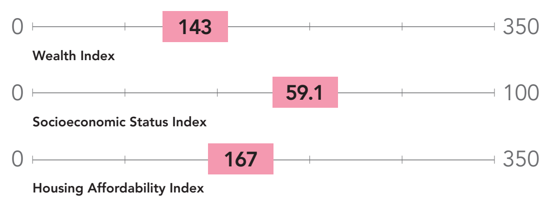
POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



ESRI INDEXES

Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.



4A

LifeMode Group: Family Landscapes

Workday Drive

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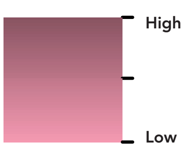
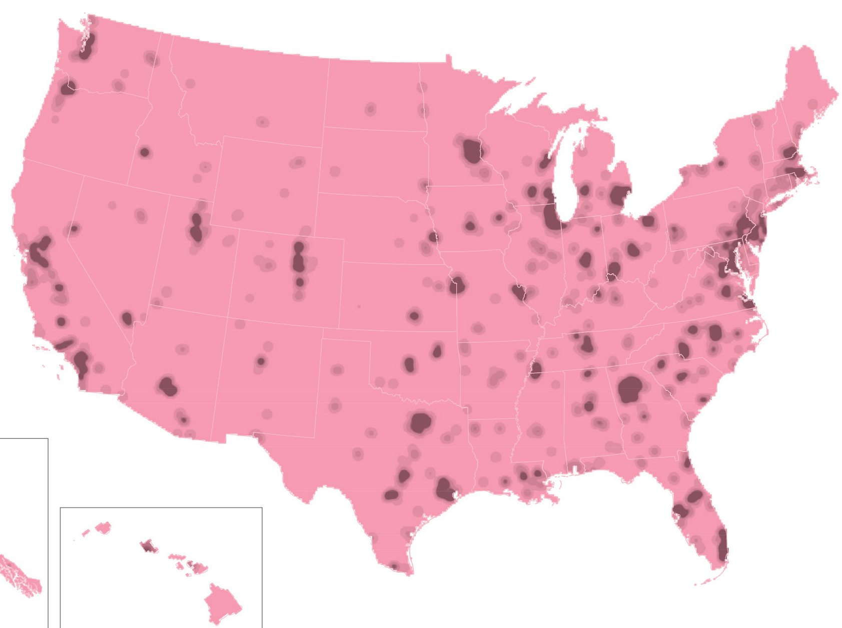
SEGMENT DENSITY

This map illustrates the density and distribution of the *Workday Drive* Tapestry Segment by households.





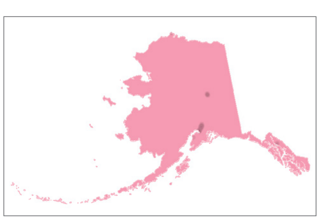


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Figure A.3: ESRI Tapestry: Bright Young Professionals

LifeMode Group: Middle Ground

Bright Young Professionals

8C

Households: 2,750,200

Average Household Size: 2.41

Median Age: 33.0

Median Household Income: $54,000

WHO ARE WE?

Bright Young Professionals is a large market, primarily located in urban outskirts of large metropolitan areas. These communities are home to young, educated, working professionals. More than one out of three householders are under the age of 35. Slightly more diverse couples dominate this market, with more renters than homeowners. More than two-fifths of the households live in single-family homes; over a third live in 5+ unit buildings. Labor force participation is high, generally white-collar work, with a mix of food service and part-time jobs (among the college students). Median household income, median home value, and average rent are close to the US values. Residents of this segment are physically active and up on the latest technology.

OUR NEIGHBORHOOD

- Approximately 57% of the households rent; 43% own their homes.
- Household type is primarily couples, married (or unmarried), with above-average concentrations of both single-parent (Index 125) and single-person (Index 115) households.
- Multiunit buildings or row housing make up 56% of the housing stock (row housing [Index 178], buildings with 5–19 units [Index 275]); 43% built 1980–99.
- Average rent mirrors the US (Index 100).
- Lower vacancy rate is at 8.2%.

SOCIOECONOMIC TRAITS

- Education completed: 35% with some college or an associate's degree, 33% with a bachelor's degree or higher.
- Labor force participation rate of 72% is higher than the US rate.
- These consumers are up on the latest technology.
- They get most of their information from the internet.
- Concern about the environment impacts their purchasing decisions.

TAPESTRY SEGMENTATION
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Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100. Consumer preferences are estimated from data by MRI-Simmons.

8C LifeMode Group: Middle Ground

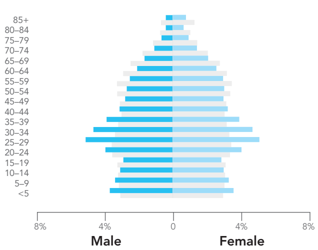
Bright Young Professionals

TAPESTRY SEGMENTATION
esri.com/tapestry

AGE BY SEX (Esri data)

Median Age: 33.0 US: 38.2

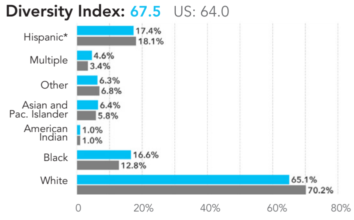
Indicates US



RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

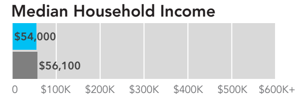
Diversity Index: 67.5 US: 64.0



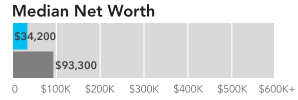
INCOME AND NET WORTH

Net worth measures total household assets (homes, vehicles, investments, etc.) less any debts, secured (e.g., mortgages) or unsecured (credit cards). Household income and net worth are estimated by Esri.

Median Household Income

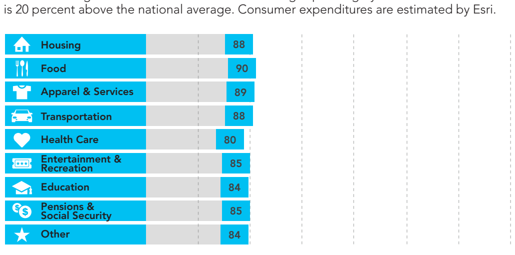


Median Net Worth



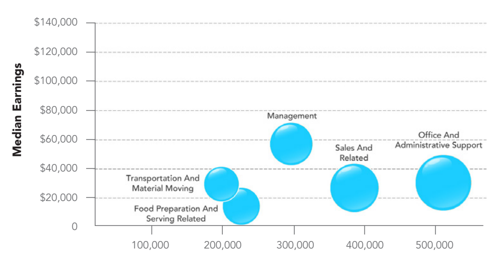
AVERAGE HOUSEHOLD BUDGET INDEX

The index compares the average amount spent in this market's household budgets for housing, food, apparel, etc., to the average amount spent by all US households. An index of 100 is average. An index of 120 shows that average spending by consumers in this market is 20 percent above the national average. Consumer expenditures are estimated by Esri.



OCCUPATION BY EARNINGS

The five occupations with the highest number of workers in the market are displayed by median earnings. Data from the Census Bureau's American Community Survey.



8C

LifeMode Group: Middle Ground

Bright Young Professionals

TAPESTRY SEGMENTATION
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MARKET PROFILE (Consumer preferences are estimated from data by MRI-Simmons.)

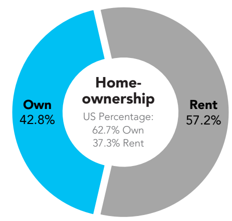
- Own retirement savings and student loans.
- Own newer computers (desktop, laptop, or both), iPods, and 2+ TVs.
- Go online and use mobile devices for banking, access YouTube or Facebook, visit blogs, download movies, and play games.
- Use cell phones to text, redeem mobile coupons, listen to music, and check for news and financial information.
- Find leisure going to bars/clubs, attending concerts, going to the beach.
- Enjoy a variety of sports, including backpacking, rock climbing, football, Pilates, running, and yoga.
- Eat out often at fast-food and family restaurants.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

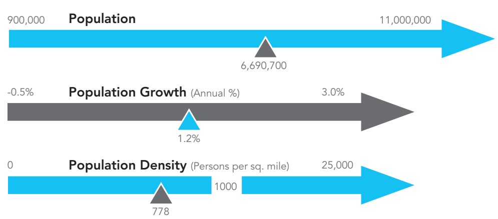
Typical Housing:
Single Family;
Multi-Units

Average Rent:
$1,042
US Average: $1,038



POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



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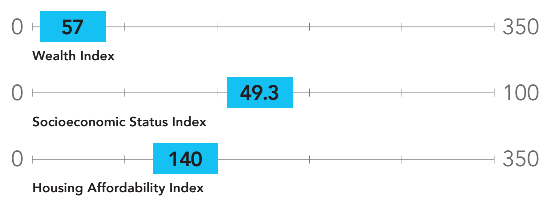
Esri developed three indexes to display average household wealth, socioeconomic status, and housing affordability for the market relative to US standards.



8C

LifeMode Group: Middle Ground

Bright Young Professionals

TAPESTRY SEGMENTATION
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SEGMENT DENSITY

This map illustrates the density and distribution of the *Bright Young Professionals* Tapestry Segment by households.

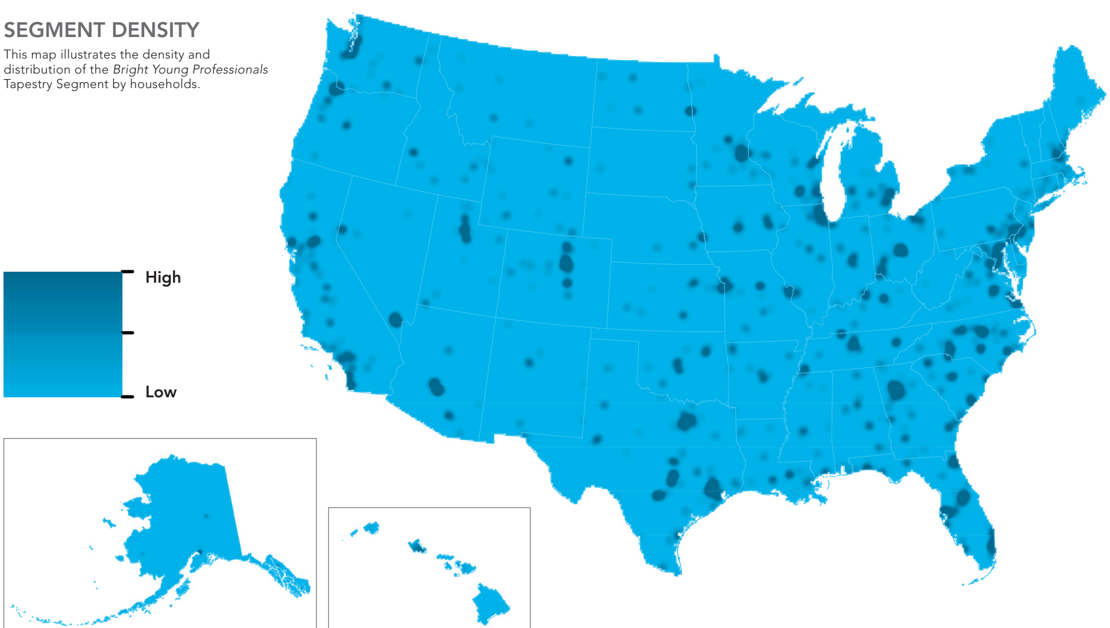

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Figure A.4: ESRI Tapestry: Old and Newcomers

LifeMode Group: Middle Ground

Old and Newcomers

8F

Households: 2,859,200

Average Household Size: 2.12

Median Age: 39.4

Median Household Income: $44,900

WHO ARE WE?

This market features singles' lifestyles, on a budget. The focus is more on convenience than consumerism, economy over acquisition. *Old and Newcomers* is composed of neighborhoods in transition, populated by renters who are just beginning their careers or retiring. Some are still in college; some are taking adult education classes. They support charity causes and are environmentally conscious. Age is not always obvious from their choices.

OUR NEIGHBORHOOD

- Metropolitan city dwellers.
- Predominantly single households (Index 148), with a mix of married couples (no children); average household size lower at 2.12.
- 55% renter occupied; average rent is lower than the US (Index 85).
- 45% of housing units are single-family dwellings; 45% are multiunit buildings in older neighborhoods, built before 1980.
- Average vacancy rate at 11%.

SOCIOECONOMIC TRAITS

- An average labor force participation rate of 62.6%, despite the increasing number of retired workers.
- 32% of households are currently receiving income from Social Security.
- 31% have a college degree (Index 99), 33% have some college education (Index 114), 9% are still enrolled in college (Index 121).
- Consumers are price aware and coupon clippers but open to impulse buys.
- They are attentive to environmental concerns.
- They are comfortable with the latest technology.

TAPESTRY SEGMENTATION
esri.com/tapestry

Note: The Index represents the ratio of the segment rate to the US rate multiplied by 100.
Consumer preferences are estimated from data by MRI-Simmons.

8F

LifeMode Group: Middle Ground

Old and Newcomers

TAPESTRY SEGMENTATION
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AGE BY SEX (Esri data)

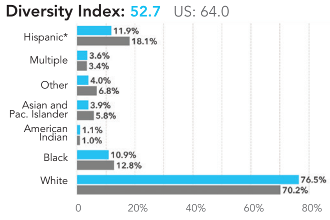
Median Age: 39.4 US: 38.2

Indicates US

RACE AND ETHNICITY (Esri data)

The Diversity Index summarizes racial and ethnic diversity. The index shows the likelihood that two persons, chosen at random from the same area, belong to different race or ethnic groups. The index ranges from 0 (no diversity) to 100 (complete diversity).

Diversity Index: 52.7 US: 64.0



INCOME AND NET WORTH

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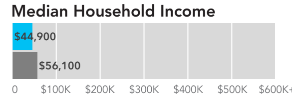
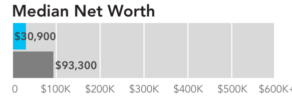
Median Household Income



Median Net Worth



AVERAGE HOUSEHOLD BUDGET INDEX

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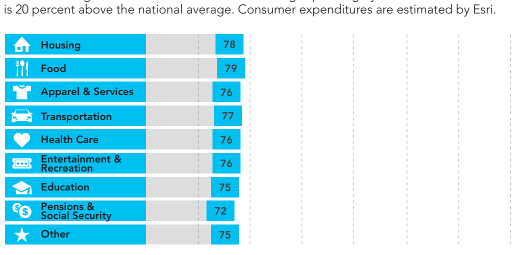

OCCUPATION BY EARNINGS

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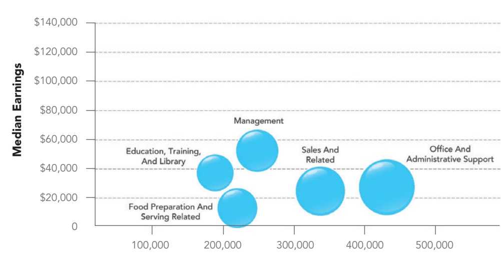

8F

LifeMode Group: Middle Ground

Old and Newcomers

TAPESTRY SEGMENTATION
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MARKET PROFILE (Consumer preferences are estimated from data by MRI-Simmons.)

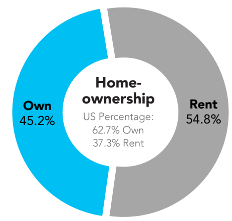
- Residents have a strong sense of community. They volunteer for charities, help fundraise, and recycle.
- They prefer cell phones to landlines.
- Entertainment features the internet (employment searches, rating products, updating social media profiles), watching movies at home, listening to country music, and reading the paper.
- Vehicles are basically just a means of transportation.
- Food features convenience, frozen, and fast food.
- They do banking as likely in person as online.

HOUSING

Median home value is displayed for markets that are primarily owner occupied; average rent is shown for renter-occupied markets. Tenure and home value are estimated by Esri. Housing type and average rent are from the Census Bureau's American Community Survey.

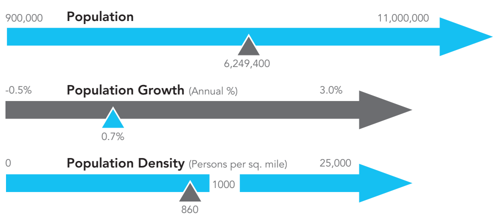
Typical Housing:
Single Family;
Multi-Units

Average Rent:
$880
US Average: $1,038



POPULATION CHARACTERISTICS

Total population, average annual population change since Census 2010, and average density (population per square mile) are displayed for the market relative to the size and change among all Tapestry markets. Data estimated by Esri.



ESRI INDEXES

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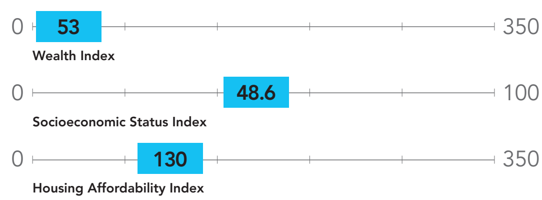

8F

LifeMode Group: Middle Ground

Old and Newcomers

TAPESTRY SEGMENTATION
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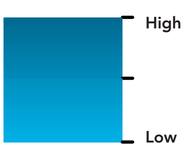
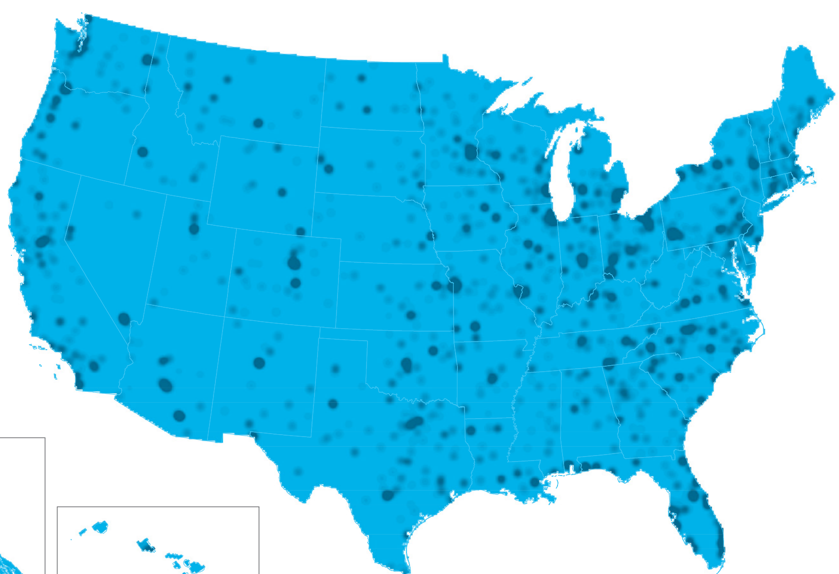
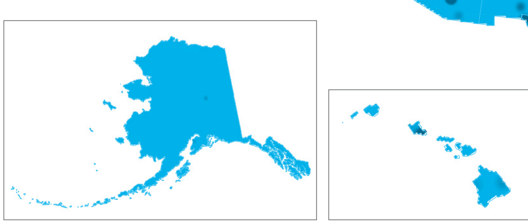
SEGMENT DENSITY

This map illustrates the density and distribution of the *Old and Newcomers* Tapestry Segment by households.







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APPENDIX B: BUSINESS CATEGORY DESCRIPTIONS

Table B.1 includes all the land uses that are attributed to a given industry. The industry "Business Category" is in the left column and the description of the land use is contained in the right column. This information supplements the economic analysis in Section 5.

Table B.1: Business Category Descriptions

Business Category	Description
Food Services and Drinking Places	Bagel shops, full service
	Diners, full service
	Doughnut shops, full service
	Family restaurants, full service
	Fine dining restaurants, full service
	Full service restaurants
	Pizza parlors, full service
	Pizzerias, full service
	Restaurants, full service
	Steak houses, full service
	Cafes, limited-service
	Carryout restaurants
	Delicatessen restaurants
	Diners, limited-service
	Drive-in restaurants
	Family restaurants, limited-service
	Fast casual restaurants
	Fast-food restaurants
	Pizza delivery shops
	Pizza parlors, limited-service
	Pizzerias, limited-service (e.g., takeout)
	Restaurants, carryout
	Restaurants, fast-food
	Sandwich shops, limited-service
	Steak houses, limited-service
	Sub shops, limited-service
	Takeout eating places
	Airline food services contractors
	Cafeteria food services contractors (e.g., government office cafeterias, hospital cafeterias, school cafeterias)
	Food concession contractors (e.g., convention facilities, entertainment facilities, sporting facilities)
	Food service contractors, airline
	Food service contractors, cafeteria
	Food service contractors, concession operators (e.g., convention facilities, entertainment facilities, sporting facilities)
	Food service contractors, industrial
	Food service contractors, institutional

	Industrial caterers (i.e., providing food services on a contractual arrangement (except single-event basis))
	Banquet halls with catering staff
	Caterers
	Catering services, social
	Beverage stands, nonalcoholic, mobile
	Canteens, mobile
	Coffee carts, mobile
	Concession snack stands, mobile
	Food carts, mobile
	Food concession stands, mobile
	Ice cream truck vendors
	Lunch wagons
	Mobile food stands
	Refreshment stands, mobile
	Snack stands, mobile
	Street vendors, food
	Alcoholic beverage drinking places
	Bars (i.e., drinking places), alcoholic beverage
	Cocktail lounges
	Discotheques, alcoholic beverage
	Drinking places (i.e., bars, lounges, taverns), alcoholic
	Lounges, cocktail
	Nightclubs, alcoholic beverage
	Tap rooms (i.e., drinking places)
	Taverns (i.e., drinking places)
	Buffet eating places
	Cafeterias
	Bagel shops, on premise baking and carryout service
	Bakery cafes, on premise baking and selling for immediate consumption
	Beverage (e.g., coffee, juice, soft drink) bars, nonalcoholic, fixed location
	Canteens, fixed location
	Coffee shops, on premise brewing
	Confectionery snack shops, made on premises with carryout services
	Cookie shops, on premise baking and carryout service
	Doughnut shops, on premise baking and carryout service
	Fixed location refreshment stands
	Frozen custard stands, fixed location
	Ice cream parlors
	Pretzel shops, on premise baking and carryout service
	Refreshment stands, fixed location
	Snack bars (e.g., cookies, popcorn, pretzels), fixed location
	Soft drink beverage bars, nonalcoholic, fixed location
Health Care and Social Assistance	Offices of physicians
	Offices of dentists

	Offices of other health practitioners
	Outpatient care centers
	Medical and diagnostic laboratories
	Home health care services
	Other ambulatory health care services
	Hospitals
	Nursing and community care facilities
	Residential mental retardation, mental health, substance abuse and other facilities
	Individual and family services
	Child day care services
	Community food, housing, and other relief services, including rehabilitation services
Miscellaneous Store Retailers	Feed stores, pet
	Pet shops
	Pet supply stores
	Art auctions
	Art dealers
	Art galleries retailing art
	Galleries, art, retail
	Manufactured (mobile) home dealers
	Mobile home dealers, manufactured
	Used manufactured (mobile) home dealers
	Cigar stores
	Cigarette stands, permanent
	Smokers' supply stores
	Tobacco stores
	Architectural supply stores
	Art supply stores
	Auction houses (general merchandise)
	Batteries, except automotive, dealers
	Beer making supply stores
	Binocular stores
	Cake decorating supply stores
	Calendar shops
	Candle shops
	Cemetery memorial dealers (e.g., headstones, markers, vaults)
	Closet organizer stores
	Collectors' items (e.g., autograph, card, coin, stamp) shops (except used rare items)
	Electronic cigarette stores
	Emergency preparedness supply stores
	Fireworks shops (i.e., permanent location)
	Flag and banner shops
	Flower shops, artificial or dried
	Home security equipment stores
	Hot tub stores

	Janitorial equipment and supplies stores
	Marijuana stores, medical or recreational
	Monument (i.e., burial marker) dealers
	Police supply stores
	Religious goods (except books) stores
	Swimming pool supply stores
	Trophy (including awards and plaques) shops
	Wine making supply stores
	Florists
	Flower shops, fresh
	Office supply stores
	School supply stores
	Stationery stores
	Balloon shops
	Card shops, greeting
	Christmas stores
	Collectible gift shops (e.g., crystal, pewter, porcelain)
	Craft (except craft supply) stores
	Curio shops
	Fruit basket or fruit bouquet stores (except exclusively by Internet)
	Gift shops
	Gift stands, permanent location
	Greeting card shops
	Novelty shops
	Party goods (e.g., paper supplies, decorations, novelties) stores
	Seasonal and holiday decoration stores
	Souvenir shops
	Antique dealers (except motor vehicles)
	Antique shops
	Apparel stores, used clothing
	Appliance stores, household-type, used
	Architectural salvage dealers
	Bicycle (except motorized) shops, used
	Book stores, used
	Clothing stores, used
	Consignment shops, used merchandise
	Flea markets, used merchandise, permanent
	Furniture stores, used
	Music stores (e.g., cassette, instrument, record, tape), used
	Rare manuscript stores
	Record stores, used
	Secondhand merchandise stores
	Sporting goods stores, used
	Thrift shops, used merchandise
	Used bicycle (except motorized) shops
	Used merchandise dealers (except motor vehicles and parts)

	Used merchandise stores
	Used rare collectors' items (e.g., autograph, coin, card, stamps) shops
Food and Beverage Stores	Commissaries, primarily groceries
	Delicatessens primarily retailing a range of grocery items and meats
	Food (i.e., groceries) stores
	Grocery stores
	Supermarkets
	Convenience food stores
	Baked ham stores
	Butcher shops
	Delicatessens (except grocery store, restaurants)
	Frozen meat stores
	Meat markets
	Poultry dealers
	Fish markets
	Seafood markets
	Fruit and vegetable stands, permanent
	Fruit markets
	Fruit stands, permanent
	Produce markets
	Produce stands, permanent
	Vegetable markets
	Baked goods stores, retailing only (except immediate consumption)
	Candy stores, packaged, retailing only
	Confectionery stores, packaged, retailing only
	Nut (i.e., packaged) stores
	Coffee and tea (i.e., packaged) stores
	Dairy product stores
	Fix-and-freeze meal stores
	Gourmet food stores
	Ice cream (i.e., packaged) stores
	Soft drink stores, bottled
	Specialty food stores
	Spice stores
	Take-and-bake meal stores
	Take-and-bake pizza shops
	Tea and coffee (i.e., packaged) stores
	Water stores, bottled
	Beer stores, packaged
	Duty free liquor shops
	Liquor stores, package
	Package stores (i.e., liquor)
	Wine shops, packaged
Health and Personal Care Stores	Apothecaries
	Drug stores
	Institutional pharmacies, on-site

	Pharmacies
	Beauty supply stores
	Cosmetics stores
	Perfume stores
	Lens grinding, ophthalmic, in retail stores
	Optical goods stores (except offices of optometrists)
	Sunglass stores
	Food (i.e., health) supplement stores
	Herbal supplement stores
	Nutrition (i.e., food supplement) stores
	Vitamin stores
	Convalescent supply stores
	Hearing aid stores
	Medical equipment and supplies stores
	Personal mobility scooter dealers
	Prosthetic stores
	Sick room supply stores
Arts, Entertainment, and Recreation	Performing arts companies
	Commercial Sports Except Racing
	Racing and Track Operation
	Independent artists, writers, and performers
	Promoters of performing arts and sports and agents for public figures
	Museums, historical sites, zoos, and parks
	Amusement parks and arcades
	Gambling industries (except casino hotels)
	Other amusement and recreation industries
Motor Vehicle and Parts Dealers	Automobile dealers, new only or new and used
	Light utility truck dealers, new only or new and used
	New car dealers
	Antique auto dealers
	Automobile dealers, used only
	Light utility truck dealers, used only
	Used car dealers
	Camper dealers, recreational
	Camper parts and accessories stores
	Motor home dealers
	Recreational vehicle (RV) dealers
	Recreational vehicle (RV) parts and accessories stores
	RV dealers
	Travel trailer dealers
	Used recreational vehicle (RV) dealers
	Boat dealers, new and used
	Boat trailer dealers
	Marine supply dealers
	Outboard motor dealers
	Power boat dealers

	Sailboat dealers
	Used boat dealers
	Aircraft dealers
	All-terrain vehicle (ATV) dealers
	Bicycle shops, motorized
	Golf cart dealers, powered
	Horse trailer dealers
	Moped dealers
	Motor scooters dealers
	Motorbike dealers
	Motorcycle dealers
	Motorcycle parts and accessories dealers
	Off-road all-terrain vehicles (ATVs), wheeled or tracked, dealers
	Personal watercraft dealers
	Snowmobile dealers
	Used aircraft dealers
	Used motorcycle dealers
	Used utility trailer dealers
	Utility trailer dealers
	Auto supply stores
	Automobile parts dealers
	Automotive audio equipment stores
	Automotive parts and supply stores
	Automotive parts dealers, used
	Batteries, automotive, dealers
	Parts and accessories dealers, automotive
	Speed shops
	Stereo stores, automotive
	Truck cap stores
	Used automotive parts stores
	Automotive tire dealers
	Tire dealers, automotive
	Truck tires and tubes dealers (except heavy truck)
	Used automotive tire dealers
	Used tire dealers
General Merchandise Stores	Department stores
	Supercenters
	Superstores (i.e., food and general merchandise)
	Warehouse clubs (i.e., food and general merchandise)
	Catalog showrooms, general merchandise (except catalog mail-order)
	Dollar stores
	General stores
	Home and auto supply stores
	Limited price variety stores
	Trading posts, general merchandise
	Variety stores

	Department stores
Gasoline Stations	Convenience food with gasoline stations
	Gasoline stations with convenience stores
	Gasoline with convenience stores
	Gasoline stations without convenience stores
	Marine service stations
	Service stations, gasoline
	Truck stops
Automotive Repair and Maintenance	Automotive engine repair and replacement shops
	Automotive fleet repair and maintenance services
	Automotive repair and replacement shops, general
	Car repair shops, general
	Diesel engine repair shops, automotive
	Engine repair and replacement shops, automotive
	Garages, general automotive repair (except gasoline service stations)
	General automotive repair shops
	Mobile automotive and truck repair services
	Truck repair shops, general
	Automotive exhaust system repair and replacement shops
	Exhaust system repair and replacement shops, automotive
	Muffler repair and replacement shops
	Automotive transmission repair shops
	Transmission repair shops, automotive
	Automotive brake repair shops
	Automotive electrical repair shops
	Automotive front end alignment shops
	Automotive radiator repair shops
	Automotive tune-up shops
	Brake repair shops, automotive
	Drive shaft repair shops, automotive
	Electrical repair shops, automotive
	Front end alignment shops, automotive
	Ignition and battery repair shops, automotive
	Radiator repair shops, automotive
	Suspension repair shops, automotive
	Tune-up shops, automotive
	Wheel alignment shops, automotive
	Antique and classic automotive restoration
	Automotive body shops
	Automotive paint shops
	Automotive upholstery shops
	Body conversion services, automotive
	Body shops, automotive
	Interior repair shops, automotive
	Paint shops, automotive
	Restoration shops, antique and classic automotive

	Truck trailer body shops
	Truck trailer paint and body repair
	Upholstery shops, automotive
	Van conversion shops (except on assembly line or factory basis)
	Automotive glass shops
	Glass installation, automotive repair
	Glass shops, automotive
	Glass tinting, automotive
	Glass work, automotive
	Window tinting, automotive
	Windshield repair shops, automotive
	Automotive oil change and lubrication shops
	Lubrication shops, automotive
	Oil change and lubrication shops, automotive
	Quick-lube shops
	Automotive air-conditioning repair shops
	Automotive emissions testing services
	Automotive rustproofing and undercoating shops
	Automotive safety inspection services
	Automotive tire repair (except retreading) shops
	Diagnostic centers without repair, automotive
	Emissions testing without repair, automotive
	Garages, do-it-yourself automotive repair
	Rustproofing shops, automotive
	Spray-on bedliner installation for trucks
	Tire repair shops (except retreading), automotive
	Undercoating shops, automotive
Building Materials, Garden Equipment, and Supplies Dealers	Home centers, building materials
	Home improvement centers
	Paint stores
	Wallpaper and wall coverings stores
	Handtools, power-driven, repair and maintenance services retailing new power-driven handtools
	Hardware stores
	Tool stores, power and hand (except outdoor)
	Building materials supply dealers
	Cabinet stores, kitchen (except custom), to be installed
	Ceiling fan stores
	Ceramic tile stores
	Door stores
	Electrical supply stores
	Fencing dealers
	Floor covering stores, wood or ceramic tile only
	Garage door dealers
	Glass stores
	Hardwood flooring dealers

	Kitchen cabinet (except custom) stores
	Lighting fixture stores
	Lumber retailing yards
	Masonry (e.g., block, brick, stone) dealers
	Plumbing supply stores
	Prefabricated building dealers
	Roofing material dealers
	Siding dealers
	Tile stores, ceramic
	Window stores
	Garden power equipment stores
	Lawn power equipment stores
	Power equipment stores, outdoor
	Farm supply stores
	Feed stores (except pet)
	Garden centers
	Lawn supply stores
	Nurseries, retail, stock primarily grown off premises
	Nursery and garden centers without tree production
Electronics and Appliance Stores	Appliance stores, household-type
	Household-type appliance stores
	Sewing machine stores, household-type
	Vacuum cleaner stores, household-type
	Audio equipment stores (except automotive)
	Camera shops, photographic
	Cellular telephone accessories stores
	Citizens' band (CB) radio stores
	Computer equipment stores
	Computer stores
	Consumer-type electronic stores (e.g., televisions, computers, cameras)
	Electronic part and component stores
	Music stores (e.g., cassette, compact disc, record, tape)
	Photographic supply stores
	Radio and television stores
	Record stores, new
	Software stores, computer
	Stereo stores (except automotive)
	Television and radio stores
	TV (television) stores
	Video game software stores
	Video tape stores