



Chapter 3 Existing Conditions

Demographics
Economy and Jobs
Land Use
Housing and Retail
Community Assets and
Institutions
Transportation
Parks and Recreation
Natural Resources

This Chapter was part of the 'Discovery Report' issued in November 2016.

Demographics

OVERVIEW

Changing demographics are perhaps the most important factors influencing both economic and housing growth in Lake Saint Louis. People age, people move in and out of the city, people compare values between nearby cities, lifestyles and tastes change, and household incomes can change.

Understanding current demographics and trends is critical context for the comprehensive plan, helping to anticipate needs in land use, community facilities, infrastructure, transportation, parks, and recreation.

POPULATION & POPULATION DENSITY

Lake Saint Louis is located between several larger communities in St. Charles County, most notably O'Fallon and St. Peters to the east and Wentzville to the west as shown on the next page. Moreover, Dardenne Prairie, while smaller than Lake Saint Louis, is rapidly growing to the southeast. As of 2014, Lake Saint Louis had a population of 15,380, less than half that of Wentzville, a quarter of St. Peters, and less than a fifth the size of O'Fallon. Dardenne Prairie is smaller still with about 2,500 fewer residents than Lake Saint Louis.

While Lake Saint Louis is relatively small, its population density is 1,839 residents per square mile which is higher than Wentzville (1,456 residents per square mile), though less than neighboring St. Peters (2,350 residents per square mile), Dardenne Prairie (2,336 residents per square mile) and O'Fallon (2,718 residents per square mile).



POPULATION GROWTH

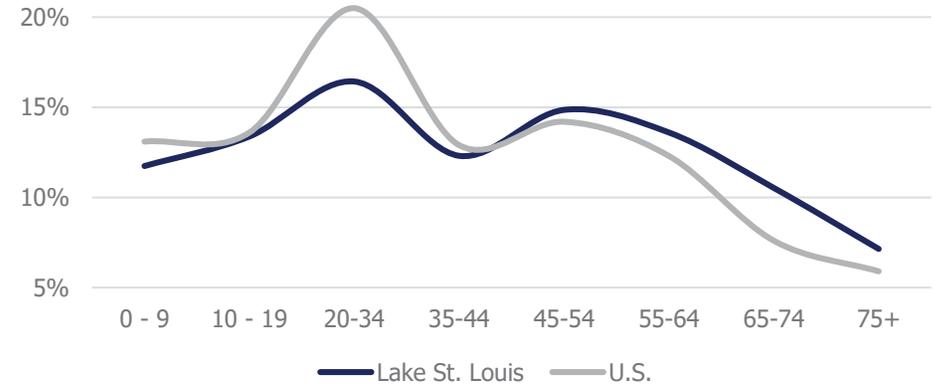
Lake Saint Louis and the surrounding communities have grown rapidly in the past thirty years as a result of population migration and annexation. Growth rates in population since 1980 are shown on the map on this page. Lake Saint Louis grew from 3,840 residents in 1980 to 15,380 today, nearly quadrupling in population, though growing at a much slower rate than Wentzville and O'Fallon.

Census population estimates between 2010 and 2014 show Lake Saint Louis as adding about 470 residents for a four-year growth rate of 4.2 percent. Meanwhile, O'Fallon grew 5.9 percent (4,700 more residents), St. Peters grew 6.7 percent (3,500), and Wentzville grew 16.7 percent

(4,850). The entire county added 5.3 percent more population even as the St. Louis metropolitan area grew just 0.7 percent.

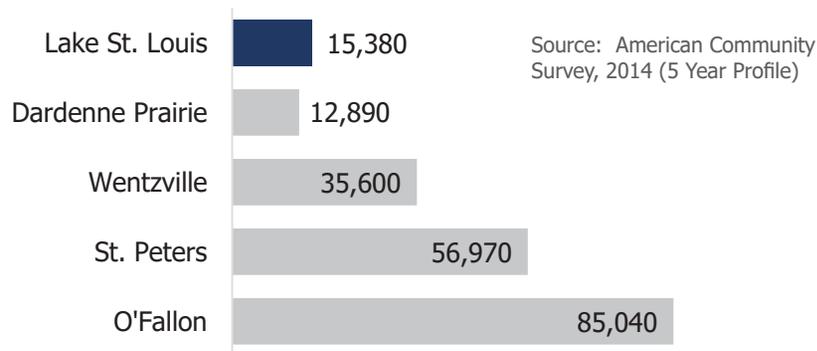
POPULATION BY AGE

The median age of Lake Saint Louis' population as of 2015 is 42.1 years. This is higher than the median age of St. Charles County, which is 37.8, and the U.S., which is 38.0. The distribution of population by age in Lake Saint Louis is similar to the age profile of St. Charles County as a whole, which has fewer young adults and a greater number of Baby Boomer households (those who are now about 52 to 70 years old) than the national average.

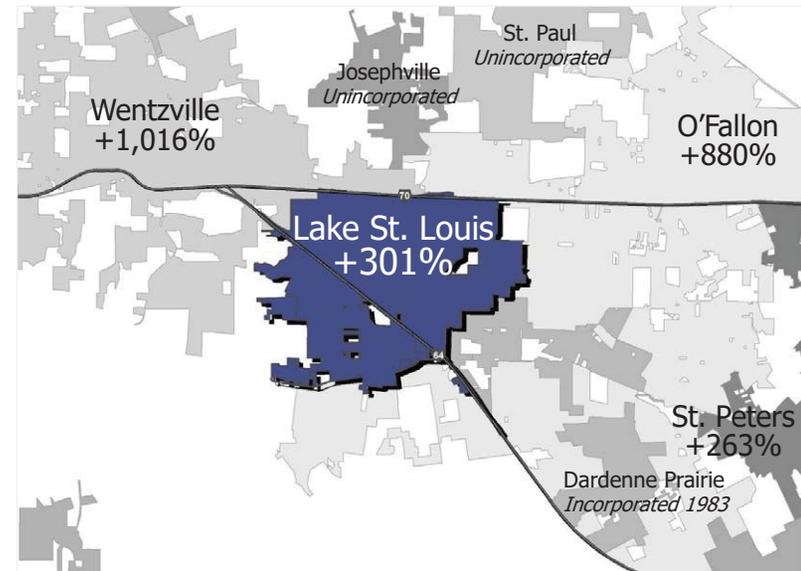


Source: American Community Survey, 2014 (5 Year Profile)

Share of the Population by Age: Lake Saint Louis vs. USA



Source: American Community Survey, 2014 (5 Year Profile)



Source: American Community Survey, 2014 (5 Year Profile)

Population of Lake Saint Louis and Nearby Communities

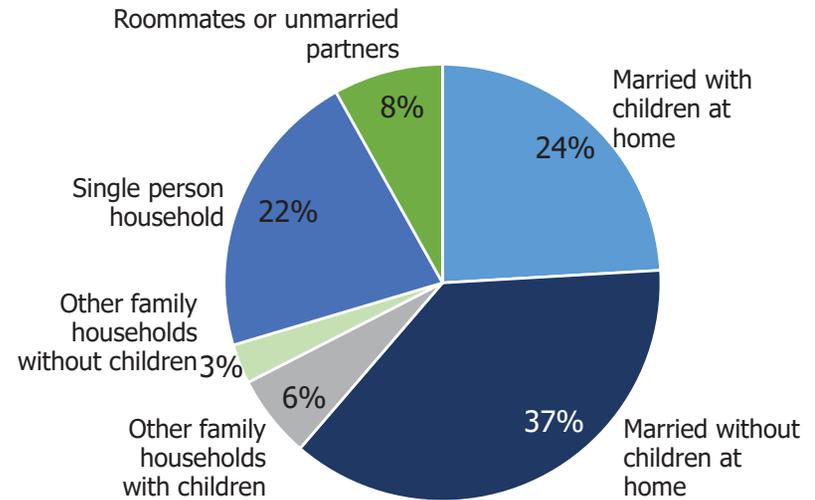
Population Growth Since 1980

HOUSEHOLD COMPOSITION

In Lake Saint Louis, nearly two-thirds of households are occupied by married couples. Twenty-four percent of households consist of a married couple with children living at home, while 37 percent are married couples without children, in many cases “Empty Nesters” with grown children living elsewhere. Nine percent of households consist of other family members living together (single parents or other family members), while 22 percent of households are occupied by a single person living alone. Eight percent of households consist of multiple, unrelated people living together, either roommates or unmarried partners. Overall, the proportion of married households (61 percent) is higher than the national average (49 percent), while the

proportion of other household types is lower.

A number of broader demographic trends are influencing household size nationally and within Lake Saint Louis. Average household size has decreased for a number of reasons in recent decades, including a greater number of single-person households, an increase in the average age of marriage and childbearing, and fewer children per household. U.S. Census data shows that average household size in St. Charles County has decreased from 3.5 people per household in 1970 to 2.6 people per household in 2014. These trends are having an impact on residential preferences and are expected to continue.



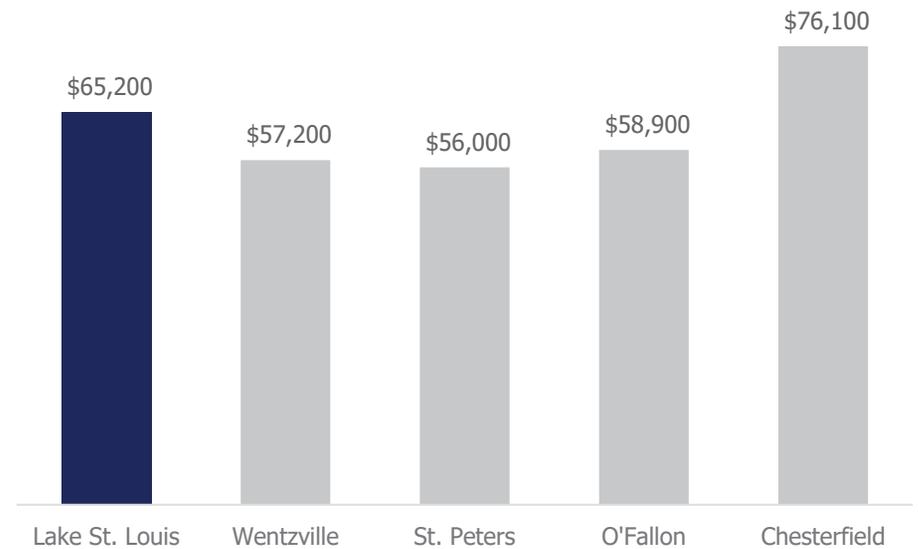
Source: American Community Survey, 2014 (5 Year Profile)

Household Composition

MEDIAN HOUSEHOLD INCOME

Median household income in Lake Saint Louis is about ten to fifteen percent higher than its neighbors of Wentzville, St. Peters, and O'Fallon. Overall, Lake Saint Louis is a prosperous community, but there are indications that it and many of its neighbors are “leaking” retail purchases to stores in Chesterfield Valley in adjacent St. Louis County. Thus, it is valuable also to compare Lake Saint Louis incomes to the even more prosperous Chesterfield. Lake Saint Louis has relatively high proportions of households in the middle and upper income brackets

compared to St. Charles County. Fifteen percent of Lake Saint Louis households have annual income of \$35,000 or less, compared with 20 percent of St. Charles County households. In the middle income range, 43 percent of Lake Saint Louis households earn between \$35,000 and \$100,000 annually, compared to 47 percent of St. Charles County households. Forty percent of households earn \$100,000 or more per year, compared to 33 percent of St. Charles County households.



Source: American Community Survey, 2014 (5 Year Profile)

Median Household Income



Source: American Community Survey, 2014 (5 Year Profile)

Households by Income

TAPESTRY SEGMENTATION

Tapestry analysis divides all United States residential neighborhoods into 67 segments based on demographic and socioeconomic conditions. These tapestry segments are combined with consumer traits to create neighborhood profiles that are useful for better understanding a community’s residents. Tapestry data is provided by ESRI, a company that maintains an extensive database of demographic and consumer data.

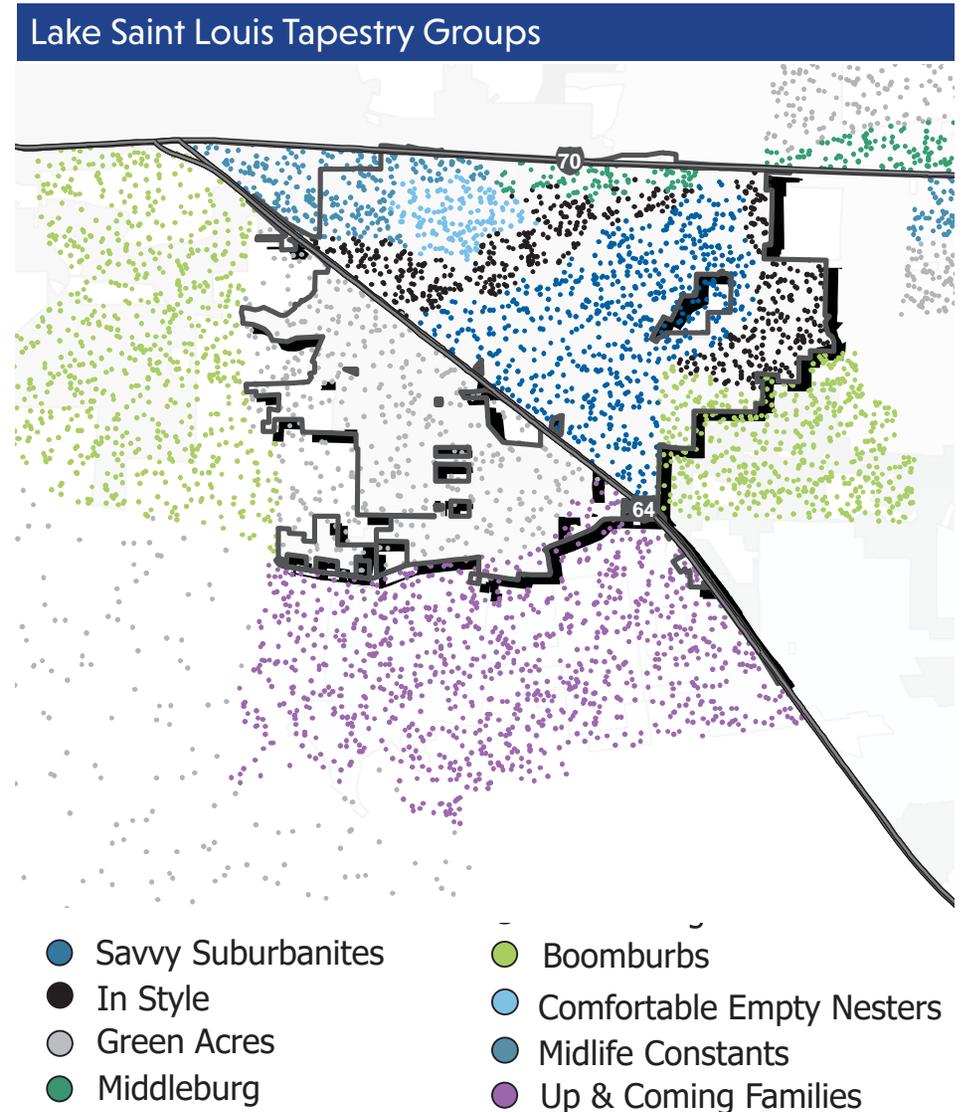
Lake Saint Louis is currently home to eight tapestry segments. “Savvy Suburbanites” are the dominant group, accounting for 33 percent of all households. Savvy Suburbanite households have a median age of 44 and a median household income of \$104,000. Many of these households have grown children who live elsewhere. Savvy Suburbanite households stay active with home improvement projects and exercise, and like fine dining and cultural

events.

The second most dominant group is “In Style.” In Style households have a median age of 41 and a median household income of \$66,000. Many of these households are made up of one person or a couple without children. These households also support the arts, and are generous supporters of charities and causes.

Both of these groups tend to live in single family homes in neighborhoods established between the 1970s and the 1990s, make extensive use of technology, work in professional industries, and have above-average net worth from savings and investments.

Summaries of each of the eight tapestry segments can be found on the following page. The nearby map shows these tapestry neighborhoods within Lake Saint Louis and neighboring communities.



Source: ESRI, 2016

SAVVY SUBURBANITES



33%

Savvy Suburbanites residents are well educated and well capitalized. Families include empty nesters. Located outside the urban core, their suburban lifestyle includes home remodeling and gardening plus the active pursuit of sports and exercise.

IN STYLE



25%

In Style denizens embrace an urbane lifestyle that includes support of the arts, travel, and extensive reading. Professional couples or single households without children, this population is slightly older and already planning for their retirement.

GREEN ACRES



10%

Self-described conservatives, these households are invested in the future, and derive wages from self-employment, investments, and retirement, in addition to traditional jobs. Green Acres residents like to work on their homes and gardens.

MIDDLEBURG



10%

Middleburg neighborhoods transformed from the easy pace of country living to semi-rural subdivisions in the last decade. Residents are conservative, family-oriented young couples who are thrifty but willing to carry some debt and are already investing in their futures.

BOOMBERGS



8%

Young professionals with families that have opted to trade up to the newest housing in the suburbs. Residents are well-educated professionals with a running start on prosperity. The cost of affordable new housing typically comes at the expense of a long commute.

COMFORTABLE EMPTY NESTERS



7%

Residents in this growing segment are professionals working in government, health care, or manufacturing, earning a comfortable living and benefiting from years of prudent investing and saving. Many are enjoying the transition from child rearing to retirement.

MIDLIFE CONSTANTS



4%

Midlife Constants residents are seniors, at or approaching retirement, with below average labor force participation and above average net worth. They live outside central cities, in smaller communities, in homes typically dating from before 1980. They are generous, but not spendthrifts.

UP & COMING FAMILIES



3%

Up and Coming Families residents are younger and more mobile and ethnically diverse than the previous generation. They are ambitious, working hard to get ahead, and willing to take some risks to achieve their goals. Their homes are new and their families are young.

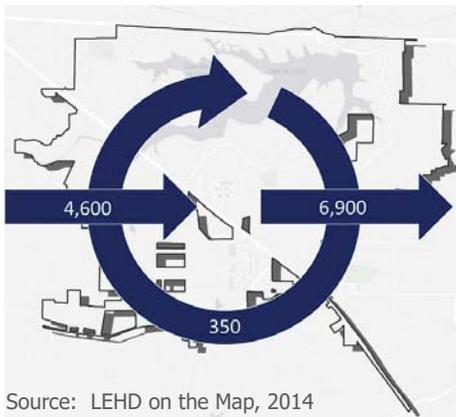
Economy and Jobs

OVERVIEW

Job growth and economic diversity have been strong trends for Lake Saint Louis over the last decade or so. This section reviews trends and forces in terms of economic sectors and locations within the city compared to elsewhere in St. Charles County and adjoining cities. This review will help inform the evaluation of policy alternatives for further growth and economic sustainability.

COMMUTING PATTERNS

Of Lake Saint Louis' 15,380 residents, 47.1 percent are employed, but very few are employed within Lake Saint Louis itself. The nearby map shows the commuting patterns for workers in Lake Saint Louis. The arrow on the left shows the number of incoming commuters, people who come from communities other than Lake Saint Louis each day to work. The arrow on the right shows the number of Lake Saint Louis residents who leave to work elsewhere. These arrows do not indicate direction of travel, just inflow and outflow. Finally, the circular arrow shows the number of Lake Saint Louis residents who also work in Lake Saint Louis. This is a small percentage of the overall Lake Saint Louis workforce—only five percent of workers. According to these commuting patterns, Lake Saint Louis would be considered a “bedroom community,” with a larger nighttime population than daytime population.



Lake Saint Louis
Commuting Flows

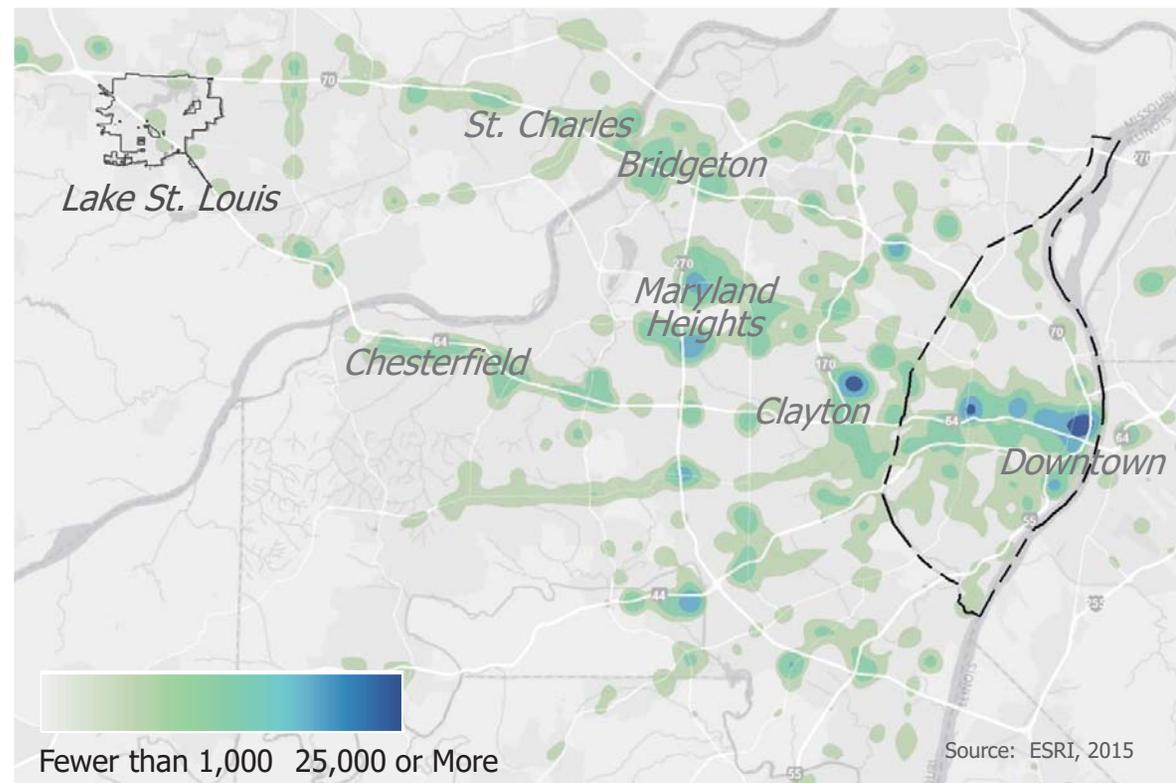


So where do Lake Saint Louis residents work? A look at regional employment density gives a sense of where jobs are concentrated throughout St. Charles County, St. Louis County, and St. Louis City. Compared to St. Louis County and St. Louis City, there are relatively few major concentrations of employment in St. Charles County. Unsurprisingly, employment tends to cluster along major highway corridors and roadways, where transportation access is the easiest. The majority of residents work in communities to the east and southeast of Lake Saint Louis, such as Bridgeton, Weldon Springs, Chesterfield, St. Charles, and Maryland Heights. About 41 percent of residents work in St. Louis County, while 37 percent work in St. Charles County. Average commute time is 25 minutes, and nearly 93 percent of workers drive or carpool to work.

During the day, 6,900 Lake Saint Louis residents leave and are replaced by 4,600 workers from other communities. The people who

work in Lake Saint Louis come from other parts of St. Charles County (52 percent), St. Louis County (13 percent) and Lincoln and Warren Counties (11 percent). Compared to Lake Saint Louis residents working elsewhere, people employed in Lake Saint Louis tend to earn less on average. This is because Lake Saint

Louis residents tend to work almost entirely in professional, white-collar jobs, while many of the jobs available within Lake Saint Louis are lower paid, service-oriented jobs, such as retail jobs at The Meadows.



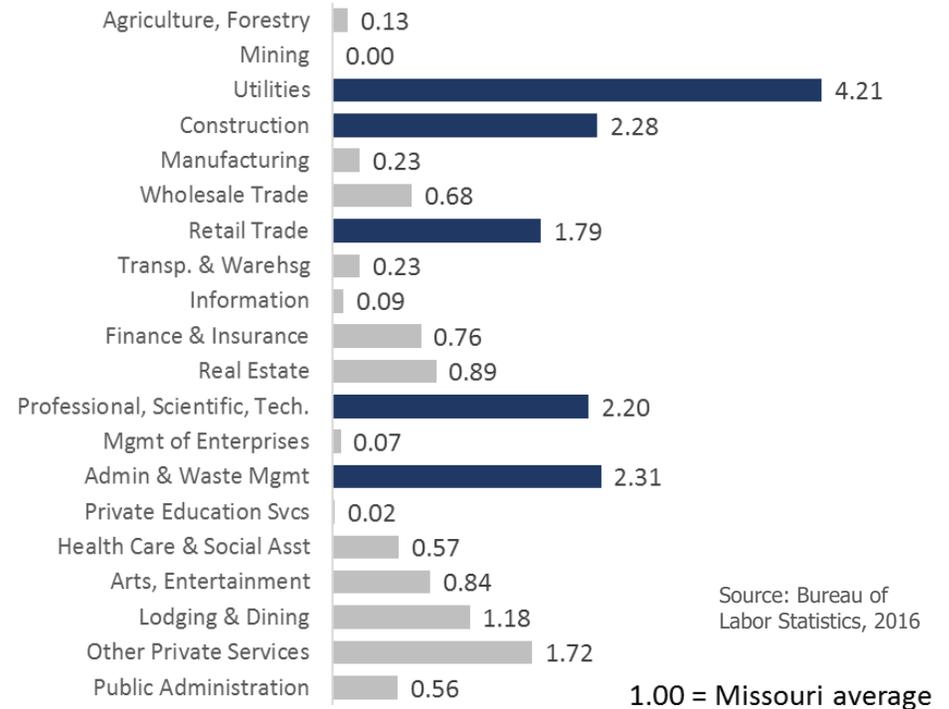
Jobs per Square Mile in Lake Saint Louis and the St. Louis Region

LOCAL ECONOMY

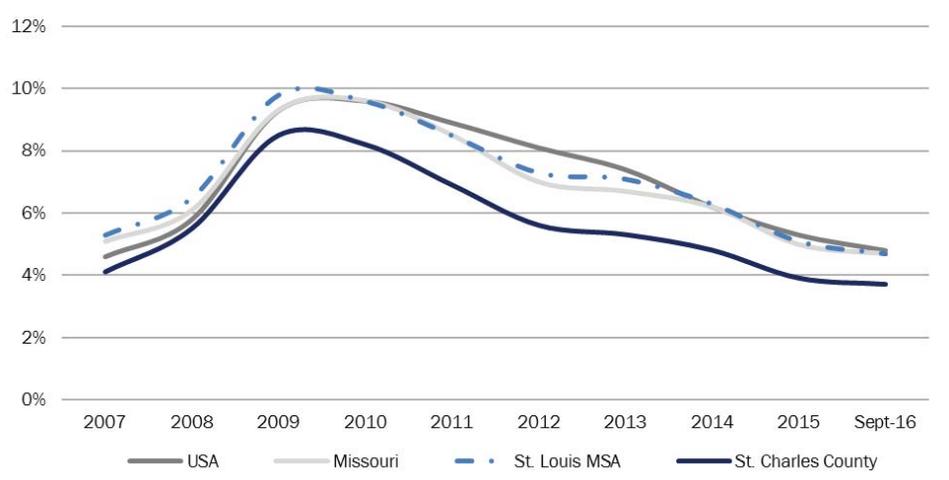
The largest employer in Lake Saint Louis is SSM St. Joseph Hospital West, which employs 895 people. This concentration of employment is near the Interstate 70 and Lake Saint Louis Boulevard interchange. The second largest employer in Lake Saint Louis is Medical Transportation Management (MTM), a transportation services provider that employs 1,300 employees company wide, with 500 in Lake Saint Louis. The third largest employer in Lake Saint Louis is National Information Solutions Corporative (NISC), a company that provides technological services to utility and telecommunications providers. NISC employs about 475 people in Lake Saint Louis. All three of these businesses have expanded their facilities in the past five years. Lake Saint Louis' location quotient is shown on the right. Particular strengths of the Lake Saint Louis economy (those with location quotients well in excess of 1.00, the Missouri average, include utilities (likely the influence of NISC); construction; professional, scientific, and technical services; and administration. Industries with a location quotient of less than 1.00 represent opportunities for growth and diversification, if desired.

UNEMPLOYMENT

Data from the Bureau of Labor Statistics shows trends in unemployment over time for the U.S., Missouri, the region, and St. Charles County (information on unemployment trends is not available for communities with fewer than 25,000 people). The unemployment rate in St. Charles County in September 2016 (3.7 percent) was lower than the national average (4.8 percent). Overall, unemployment in St. Charles County has decreased to pre-recession levels, indicating a general economy recovery.



Lake Saint Louis Location Quotients by Industry



Unemployment Trend Comparison

Existing Land Use

OVERVIEW

The City of Lake Saint Louis is somewhat unique in that it has grown to be one of the premier cities in the region without a formal future land use plan. Part of the success of the City has been its origins. Until the late 1990's and early 2000's, most of the growth of the City was focused within the boundaries of the Lake Saint Louis Community Association, which is a planned community.

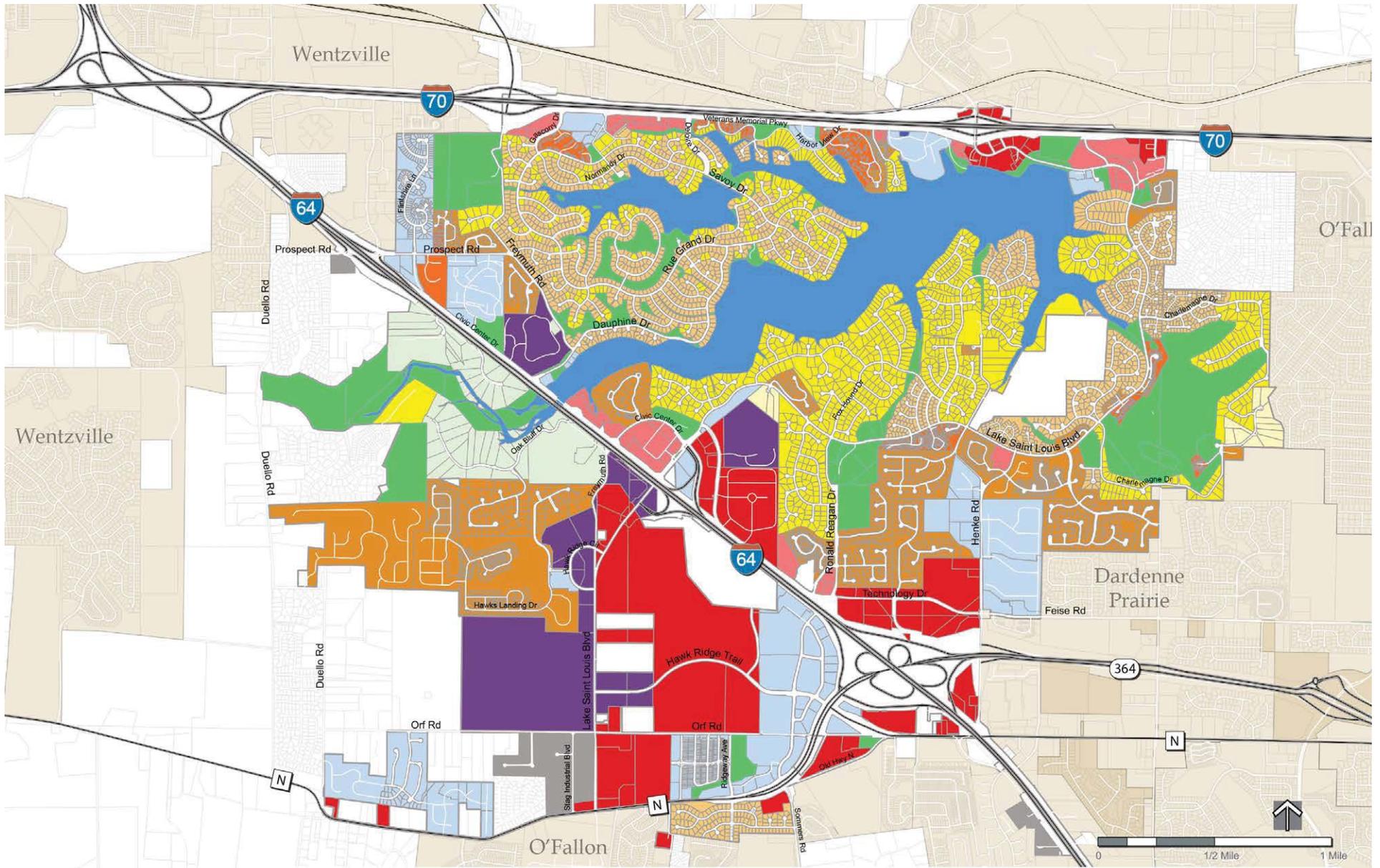
As the City has grown to the south and west and with significant amounts of undeveloped land within the City limits, the need for a future land use plan becomes more critical.

The City does not have a current, formally adopted land use plan, therefore this section will highlight the existing zoning and the built environment within the City. This information along with demographic data, market and economic analysis, and community input will help shape the future land use plan.

The land use plan is advisory in nature, but provides guidelines for City staff, the Planning and Zoning Board and the City Council in considering and approving development proposals, as well as changes to the City's infrastructure and facilities.

A land use plan is a long-range map of what is intended in the future. A zoning map is what is allowed now. A zoning map and designations are what can be legally done with a parcel such as setbacks, minimum lot sizes, buildings heights, buffering, landscape requirements, etc.





Legend

- | | | | | |
|--------------------------|--------------------|---------------------------------------|---------------------|--------------------------------------|
| Business Park | Highway Commercial | Non Urban | Planned Development | Single Family Residential (9,000 sf) |
| Community Business | Light Industrial | Office Park | Planned Residential | Single Family Residential (1 acre) |
| Multi-Family Residential | Public Activity | Single Family Residential (15,000 sf) | | |

Map: Existing Zoning

EXISTING ZONING DISTRICTS

“NU” Non-Urban District

The Non-Urban District encompasses areas within which rough natural topography, surface or subsurface geological conditions or location in relation to developed areas creates practical difficulties in providing and maintaining public roads and public or private utility service and facilities including sewage treatment, water and power supply. The Non-Urban District also encompasses areas in which significant non-urban uses have been established.

“SR” Single-Family Residential

The “SR” Districts are intended to provide criteria for the development of those portions of the planned community of Lake Saint Louis designated for single-family detached residences. Further, the “SR” Districts are intended to preserve the character of existing predominantly single-family residences while at the same time allowing for the in-fill construction of new units if in substantial conformance with surrounding residences.

Districts are defined below. Square feet / acreage refers to minimum lot size for each district.

“SR1” District:
Fifteen thousand (15,000) square feet.

“SR2” District:
Nine thousand (9,000) square feet.

“SR3” District
One (1) acre.

“MR” Multi-Family Residential District

The intent and purpose of the Multiple Family Residential District is to provide the regulations and guidelines for the development of a variety of attached dwelling unit building types in conformance with the overall concept of the planned community of Lake Saint Louis. Uses include duplexes, apartment dwellings, and attached single family dwellings.

“PR” Planned Residential District

The intent of the “PR” Overlay District is to accommodate residential development which by deviating from fixed standards results in: a variety of residential densities, a preservation of the natural environment of a site, a diversity in site planning which maximizes the unique characteristics of a site, and/or the provision of productive open space, all of which are in the interest of the health, safety and welfare of the residents of Lake Saint Louis, Missouri.

All permitted and special uses allowed in the “SR1”, “SR2” and “MR” Districts shall be allowed in the “PR” District by site plan review.

“CB” Community Business District

The Community Business District is intended to provide for a balanced variety of retail, service and office facilities which are significantly dependent upon and intended to serve the residents of the City of Lake Saint Louis.

“OP” Office and Research Park District

The intent of the “OP” District is to provide opportunities for the development of office and research facilities which will:

- Be in close proximity to the major highway access points,
- Provide an employment base in the City, and
- Will enhance the City’s tax base.

“LI” Light Industrial District

The “LI” District is intended to accommodate light industrial manufacturing and warehousing activities at a scale and intensity of use that is compatible in location with traffic circulation and with the visual character of the City of Lake Saint Louis. It is the purpose of these regulations to protect adjacent areas against encroachment by incompatible uses and to restrict the intrusion of certain uses, which would be more appropriate in heavy industrial or commercial uses.

“HC” Highway Commercial

The “HC” (Highway Commercial) District is intended to provide for a variety of retail, service, office, recreation and entertainment facilities that are intended to serve local residents, highway travelers, and metro residents outside the City. Its designation on land within the City shall be limited to areas along state and interstate highways, and those areas easily served by those highways.

“PD” Planned Development District

The purpose of this zoning district is to provide areas suitable for planned developments. The Planned Development District is designed to provide for site design and utilization in areas favorable for growth but experiencing a variety of developmental problems or for areas having access to urban services, utilities and public improvements containing potentially significant site planning advantages for planned developments. Problems may relate to existing or future traffic, land acquisitions, topographic, utility and related problem areas. It is the intent of this zoning district to maximize the public welfare and to provide the flexibility needed by developers to potentially enhance the aesthetic quality, consumer benefits and marketability of multiple- or single-use developments and to reduce the capital investment necessary for development, utilities, and public improvements.

“PA” Public Activity District

The Public Activity District is intended to accommodate those uses and groupings of uses which would have a distinctly public rather than private character and to encourage the retention of certain properties in a relatively undeveloped state, such as public or private recreation use or a private cemetery.

“FP” Flood Plain Overlay District

The intent of the Flood Plain Overlay District is to protect future development from those areas within the City of Lake Saint Louis which are subject to property damage from water level fluctuation on area lakes, streams, and rivers due to periodic stormwater events and subsequent runoff. The district boundary shall be the 100-year flood level as determined by Federal Insurance Administration, U.S. Department of Housing and Urban Development and adopted by the City of Lake Saint Louis as the official floodplain boundaries within the City.

Downtown Lakefront Redevelopment Overlay District

In 2007, the City of Lake Saint Louis adopted a “downtown lakefront business district”, defined as the area between the big lake and Veterans Memorial Parkway and on both sides of the dam.

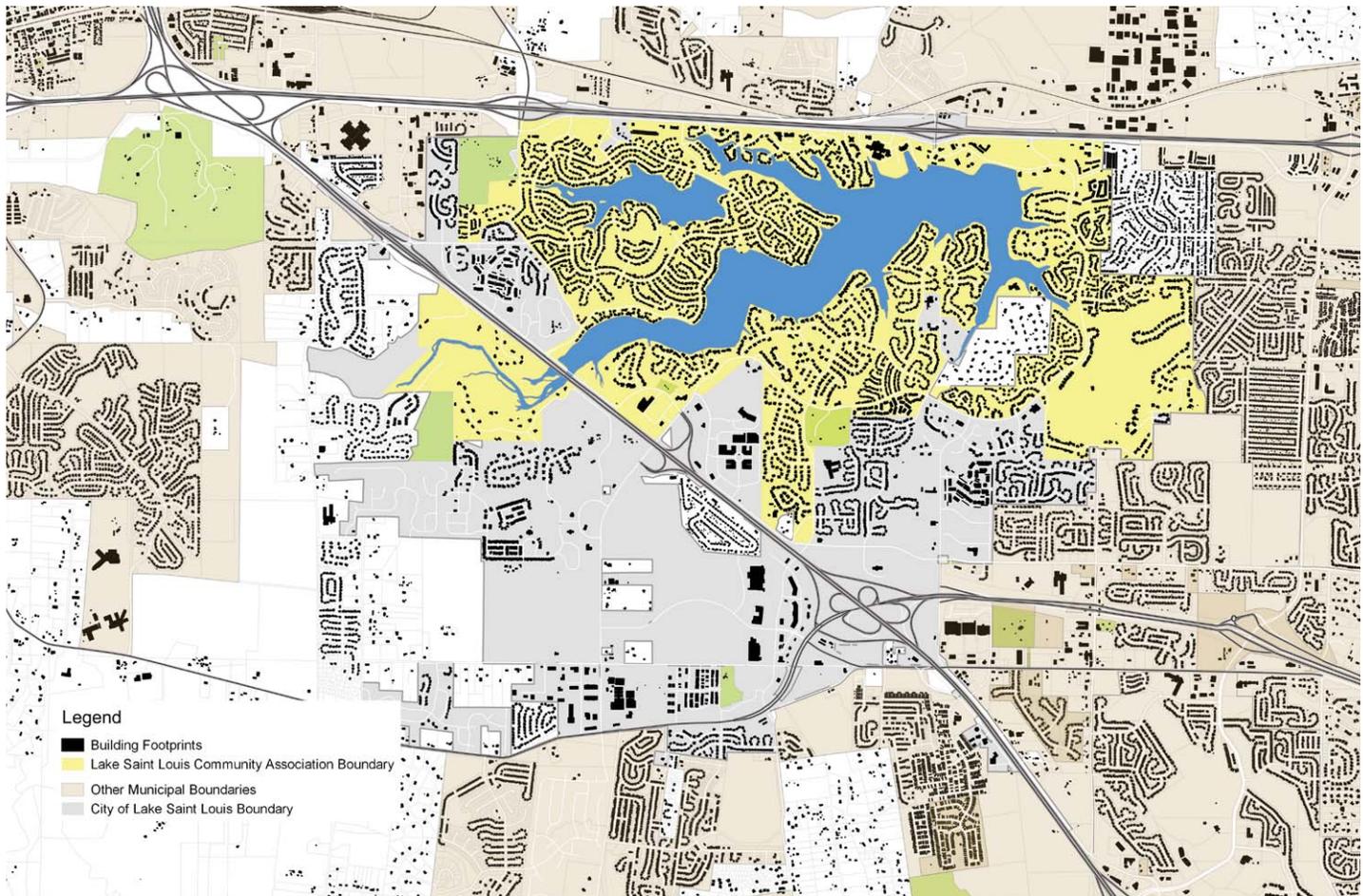
The Downtown Lakefront Redevelopment Overlay District (“Overlay District”) is intended to allow the development of tracts of land to their fullest extent and; at the same time, comply with the City’s Strategic Lakefront Redevelopment Land Use Plan. This Overlay District offers opportunities for more intensive redevelopment of housing, shopping, and businesses to complement the commercial lakefront area. Improvements should preserve and highlight the natural beauty and the unique relationship of Lake Saint Louis to the urban environment, as well as expand cultural and entertainment opportunities in the lakefront redevelopment area.

Summary Table - Existing Zoning Districts

	Lot Area (Min)	Lot Width at Front Bldg Line (Min)	Lot Depth (Min)	Front Yard Dimension (Min)	Side Yard Dimension (Min)	Rear Yard Dimension (Min)	Transitional Yard	Max Height	Max Number of Dwellings
"NU" Non-Urban District	3 AC	250 feet	250 feet	90 feet	35 feet	50 feet		2 stories or 35 feet	1 per 3AC
"SR1" Single Family Residential	15,000 SF	70 feet		35 feet	8 feet	30 feet or 20%		2 stories or 35 feet ¹	
"SR2" Single Family Residential	9,000 SF	70 feet		25 feet	8 feet	25 feet or 20%		2 stories or 35 feet ¹	
"SR3" Single Family Residential	1 AC	100 feet		50 feet	20 feet	50 feet		2 stories or 35 feet ¹	
"MR" Multi-Family Residential								3 stories or 40 feet	6 per net AC
Duplexes	15,000 SF	100 feet		35 feet	8 feet	30 feet or 20%			
Town House on Individ Lots	1,500 SF	18 feet		30 feet	20 feet				
Town House Apts	20,000 SF	100 feet		30 feet	10 feet	10 feet			
Garden Apartment	20,000 SF	100 feet		30 feet	15 feet (25' adjacent to "SR")	15 feet (25' adjacent to "SR")			
Elderly Housing Facility								2 stories or 30 feet	12 per gross AC
"PR" Planned Residential	None	None		None	None	None		3 stories or 40 feet ²	6 per net AC
"CB" Community Business District	1 AC ³			50 feet	10 feet	45 feet	Fence or Landscape	30 feet ⁴	
"OP" Office and Research Park District	2.0 FAR ⁶				100 feet adjacent to SF	100 feet adjacent to SF	Fence or Landscape	65 feet ⁵	
"LI" Light Industrial District	1 AC	150 feet		50 feet	25 feet	25 feet	Fence or Landscape	50 feet ⁴	
"HC" Highway Commercial	0.5 AC	150 feet	150 feet	20 feet or 42 feet with front parking	9 feet	20 feet		30 feet ⁴	
"PD" Planned Development District	3.0 FAR ⁶								6 per net AC

Summary Table Notes - Existing Zoning Districts

- (1) Unless otherwise approved by ARB with certain criteria.
- (2) Additional height may be allowed by special use permit.
- (3) Lot may be reduced to 1/2 acre if part of a comprehensively planned commercial development.
- (4) Buildings of great height may be specifically permitted by site plan review and approval.
- (5) Additional height may be allowed by special use permit.
- (6) No minimum lot area specified. Density is defined by Floor Area Ratio (FAR).



Existing Building Footprints

EXISTING BUILDING FOOTPRINTS

The map to the left illustrates existing building footprints. As the map shows, significant areas within the City remain undeveloped, especially along Lake Saint Louis Boulevard west of I-64 and along Hawk Ridge Trail west of the Shoppes at Hawk Ridge.

UNINCORPORATED AREAS

There are two large unincorporated areas within the city proper. One area is northwest of the Shoppes at Hawk Ridge adjacent to Interstate 64. The second area is north of Lake Saint Louis Boulevard between Henke Road and Charlemagne Drive. There are smaller unincorporated areas along Lake Saint Louis Boulevard and Orf Road near Hawk Ridge Trail.

DEVELOPMENT PATTERNS: GROWTH BY DECADE

In 1967 the first preliminary plan for Lake Saint Louis was approved by St. Charles County. Construction on the dam for the large lake began in 1968.

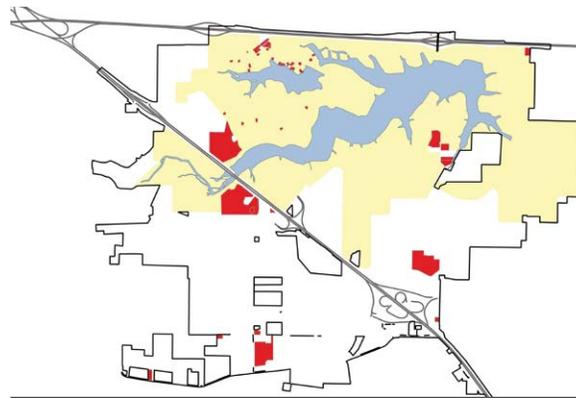
Growth really took off in the 1970's. The City was incorporated in 1975 and by 1976, the population exceeded 2,400 residents.

Until 2000, growth of the City was mostly limited to the current boundaries of the Lake Saint Louis Community Association. During the 2000's and prior to the recession, there was rapid growth in the southern and western sections of the City. In addition to residential growth, this period included retail and commercial growth including the Shoppes at Hawk Ridge and the Meadows shopping center.

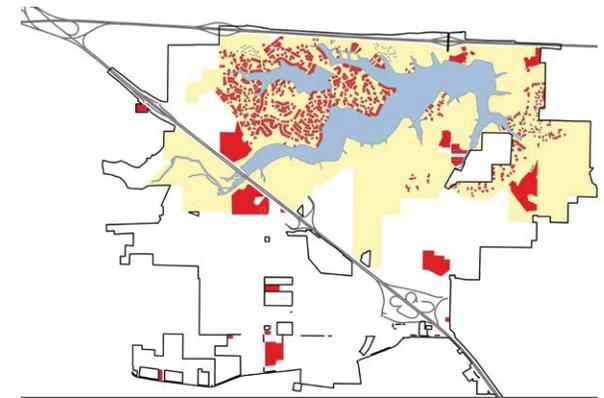
Legend

- Developed Parcels
- Lake Saint Louis Community Association Boundary

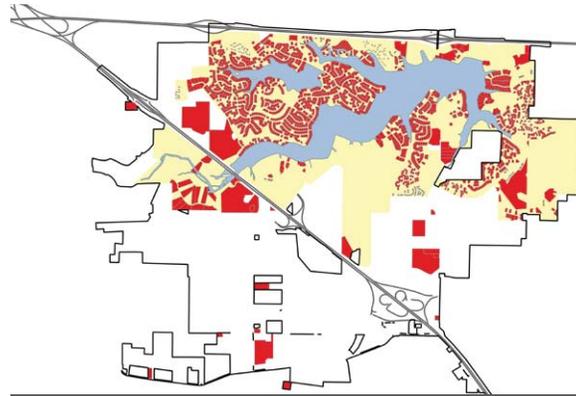
Note: Current City limits shown in all diagrams.



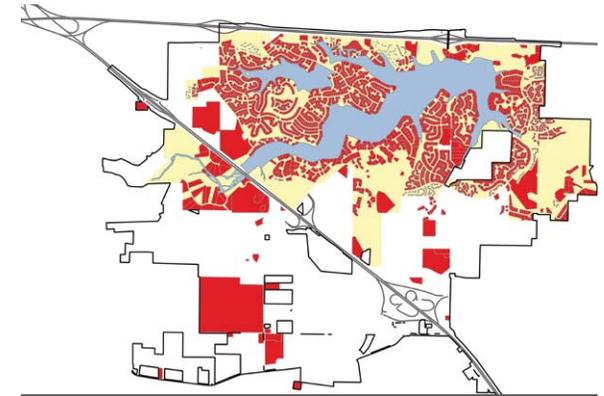
Prior to 1970



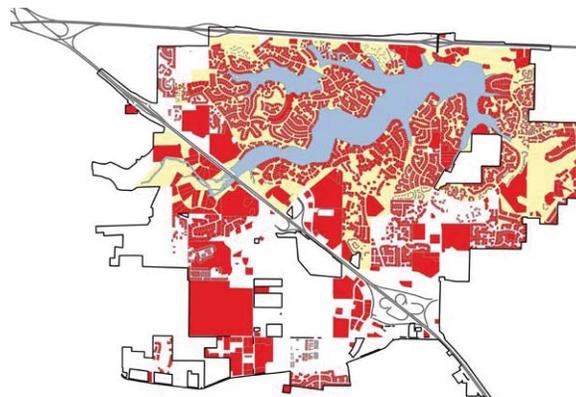
1970's



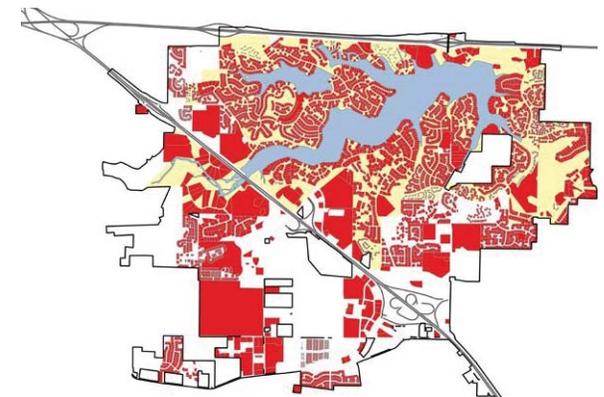
1980's



1990's



2000's



2010's

Existing Housing & Retail Development

OVERVIEW

Lake St. Louis has traditionally been known as a residential community. In recent years, significant retail development has occurred with the Shoppes at Hawk Ridge opening in 2006 and the Meadows opening in 2008. This section will review existing data and trends in housing and retail development in the City.

HOUSING VALUE

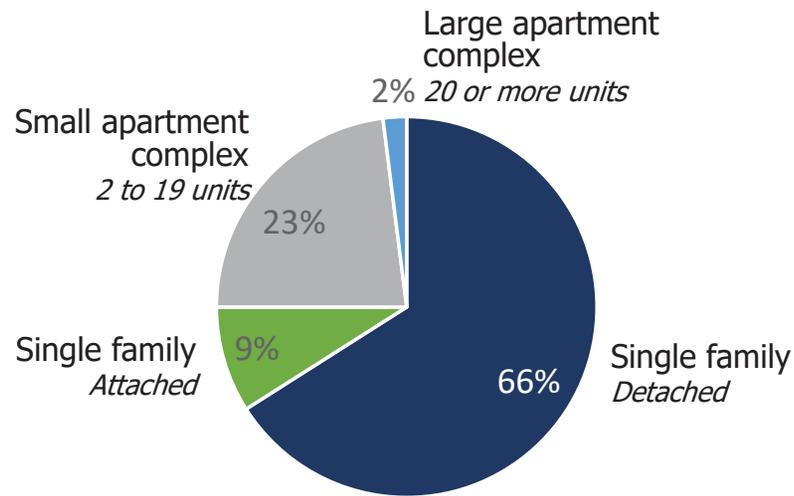
Lake Saint Louis includes housing at a variety of middle- and upper-class price points. There are very few “starter homes” valued at \$100,000 or less, but at the other end of the distribution, there are also few very high value housing units worth \$500,000 or more. The median home in Lake Saint Louis is valued at \$247,000, which compares favorably to the county (\$207,000) and the region as a whole (\$187,000). Over one-third of homes in Lake Saint Louis fall in the \$200,000 to \$300,000 price range.



HOUSING TYPES

Lake Saint Louis is noted for its high quality of housing and, in fact, for a wide range of housing alternatives within the city, including modestly and expensively priced homes. Single family detached housing is the predominant housing type in Lake Saint Louis, accounting for two-thirds of housing. Units within smaller apartment complexes (between two and 19 units) make up about one-fourth of housing, or 23 percent.

Single family attached housing (such as townhomes or villas) make up about one-tenth of housing units. Finally, a small percentage of housing units are within larger apartment complexes of 20 units or more.



Source: American Community Survey, 2014 (5 Year Profile)

Housing by Type



HOUSING OCCUPANCY

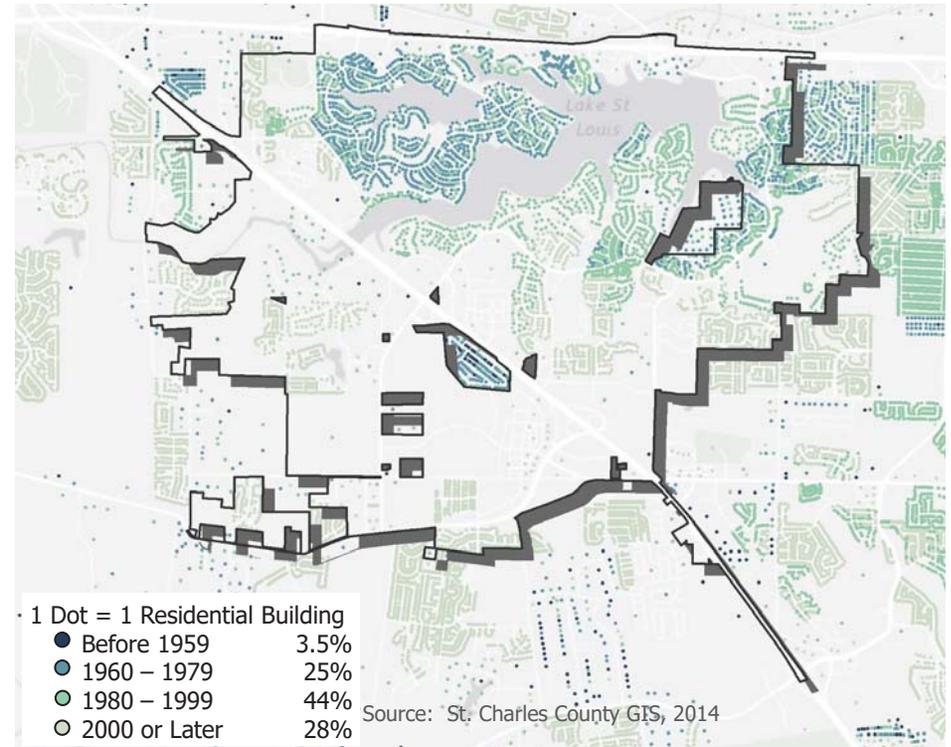
Three quarters (75 percent) of Lake Saint Louis homes are owner occupied, which is high compared to the metro region (63 percent), but almost equal to that of St. Charles County (76 percent). The proportion of renters is about the same in Lake Saint Louis (19 percent) as in St. Charles County, and there is a slightly higher proportion of vacant units, likely due to a small number of second homes found in the city.

AGE OF DEVELOPMENT

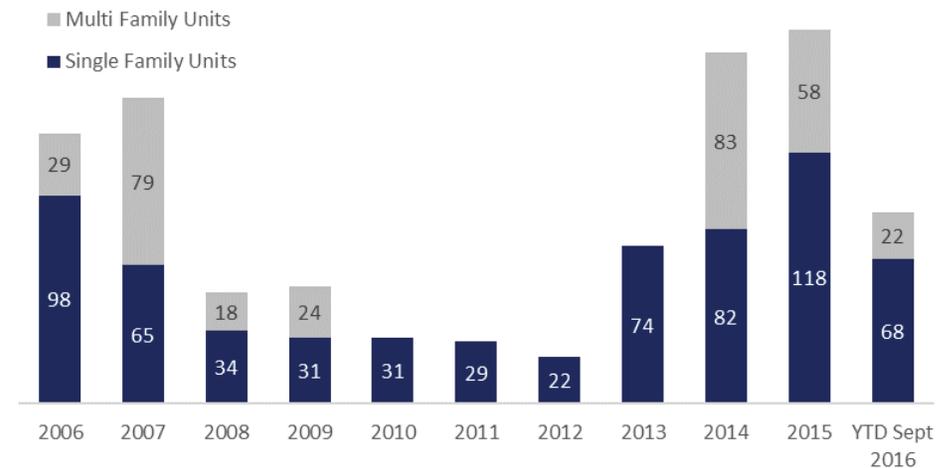
The oldest housing in Lake Saint Louis is found around Lake Sainte Louise, the initial site of development. Housing around Lake Sainte Louise largely dates from the 1970's and 1980's. On the southern bank of that lake, housing dates from the 1980's and later. Beyond these original areas of Lake Saint Louis, housing is newer, dating from the 2000's or later. As shown on the map on this page, the age of housing and the density of housing development is similar to that of neighboring communities. There is very little housing dating to the 1950s or earlier (only about 3.5 percent), while there is a great deal of housing built since the turn of the century (28 percent).

RECENT GROWTH

A review of building permits issued in the past ten years shows that from 2006 to September 2016, building permits were issued for 965 units of housing. Of these, 652 permits, or 68 percent, were issued for single family housing, while the remaining 313, or 32 percent, were issued for multifamily housing. New housing construction diminished considerably from 2007 to 2012 as a result of the Great Recession, but began to increase again in 2013. As of September 2016, several large residential building projects were in progress, including Mason Glen, Wyndmere, Brookfield Crossings, the Villas at Ridgepointe, Lake Ridge Senior Apartments, Oak Bluff Estates, Prospect Place Apartments, and Wyndstone.



Housing by Decade of Construction



Source: HUD State of the Cities Data System, 2016

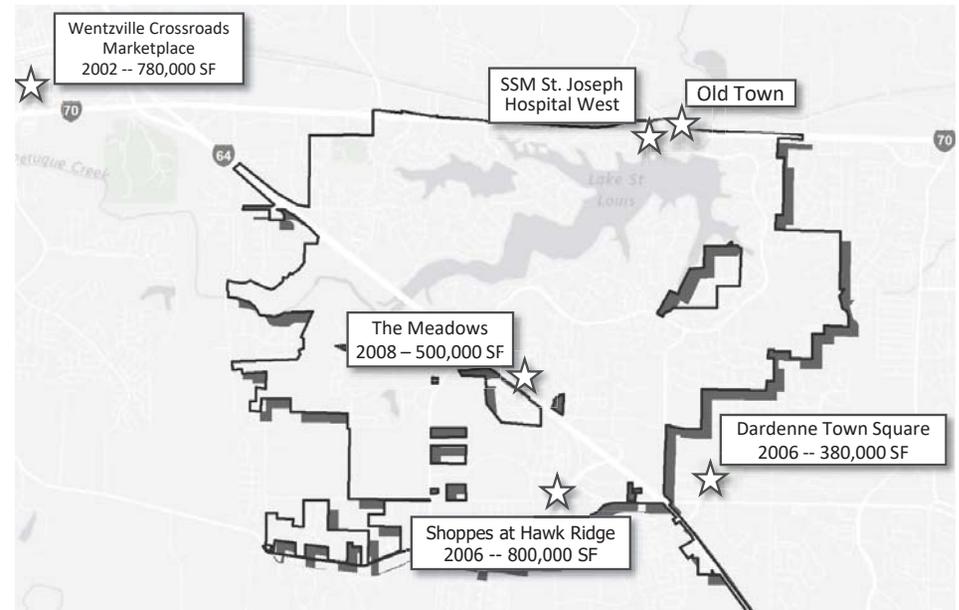
New Dwelling Units Permits Issued in Lake Saint Louis 2006 – 2016 (YTD)

RETAIL DEVELOPMENT

There are two principal retail centers in Lake Saint Louis. The 800,000 square foot Shoppes at Hawk Ridge was built in 2006 and includes a Walmart Supercenter, a Lowe’s, a Dollar Tree, a T.J. Maxx, various strip retailers, and an assortment of dining options ranging from fast food to full-service restaurants. The Meadows, a 500,000 square foot shopping center built in 2008, is an upscale outdoor shopping mall with more than 20 shops anchored by Bed Bath & Beyond, Nike, Old Navy, and Von Maur. The Meadows also functions as a “town center” with public space and a calendar of events, including a farmers’ market and winter ice skating rink.

The two retail centers closest to Lake Saint Louis are Wentzville Crossroads Marketplace and Dardenne Town Square. Wentzville Crossroads Marketplace opened in 2002 about four miles to the northwest of Lake Saint Louis and is home to 780,000 square feet of retail, including a Walmart, Target, Lowe’s, and Best Buy. Dardenne Town Square is located just beyond the borders of Lake Saint Louis along Interstate 64. Built in 2006, the shopping center features 380,000 square feet of retail, including Target, JC Penney, Shop ‘N Save, and Wehrenberg Theatre. In total, these four retail centers have added nearly 2.5 million square feet of retail to St. Charles County since 2002.

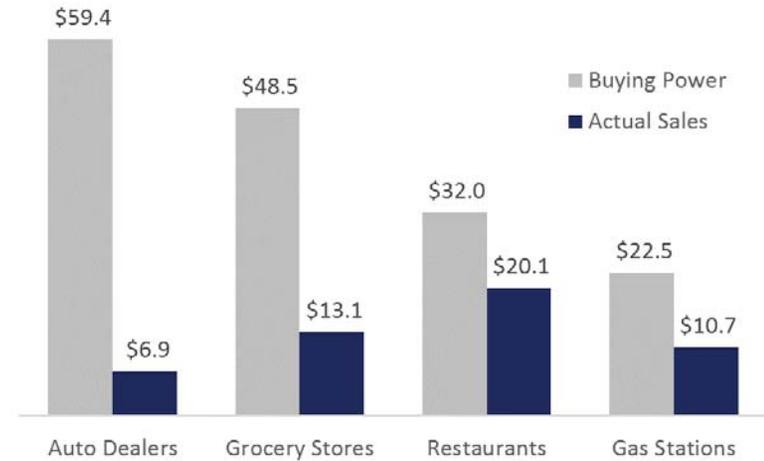
Areas of Retail Development



RETAIL STRENGTHS AND WEAKNESSES

Comparing the purchasing power of Lake Saint Louis residents to the amount of spending currently taking place within the community gives an idea of Lake Saint Louis' retail strengths and weaknesses. Retail strengths include electronics stores, general merchandise stores, and clothing accessory stores. Spending data shows that these stores bring in customers from outside of Lake Saint Louis.

On the other hand, spending patterns show that Lake Saint Louis residents often leave the community to access auto dealers, grocery stores, restaurants, and gas stations.



Source: ESRI, 2015

Particular Retail Weaknesses (\$millions)



Source: ESRI, 2015

Particular Retail Strengths (\$millions)



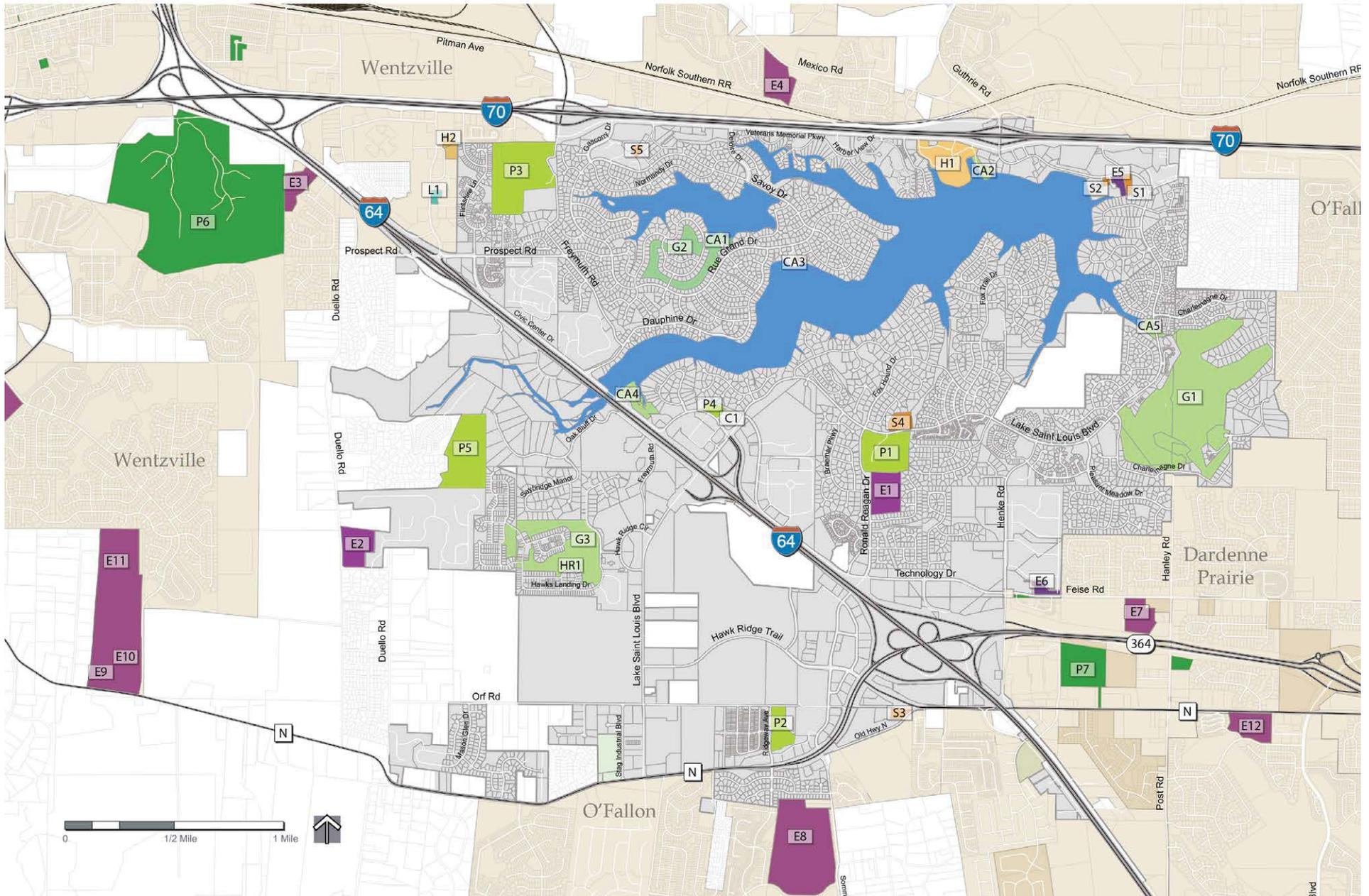
Community Assets and Institutions

OVERVIEW

A strength of Lake Saint Louis is the number and quality of community assets and institutions available to City residents. This section highlights key community facilities including:

- Civic Buildings
- Education
- Health
- Libraries
- Public Safety
- Utilities
- Homeowner Associations





Map: Existing Community Assets and Institutions

Legend: Existing Community Assets and Institutions

Civic

C1 Lake Saint Louis City Hall

Education

- E1** Green Tree Elementary
- E2** Duello Elementary
- E3** Quail Ridge Early Childhood
- E4** Lakeview Elementary
- E5** Hope Montessori Academy
- E6** Andrews Academy
- E7** Prairie View Elementary
- E8** Liberty High School
- E9** Boone Trail Elementary
- E10** Wentzville South Middle School
- E11** Timberland High School
- E12** Crossroads Elementary

Health

- H1** SSM Health St. Joseph Hospital
- H2** Crider Health Center

Public Safety

- S1** Lake Saint Louis Fire Protection District (Facility Opening in 2018/19)
- S2** St. Charles County Ambulance District
- S3** Wentzville Fire Protection District
- S4** Lake Saint Louis Fire Protection District (Facility relocating in 2018/19)
- S5** Lake Saint Louis Fire Protection District (Facility relocating in 2018/19)

Parks

- P1** Boulevard Park
- P2** Hawk Ridge Park
- P3** Founders Park
- P4** Veterans Park
- P5** "No Name" Park
- P6** Quail Ridge Park (St. Charles County)
- P7** Youth Activity Park (St. Charles County)

Community Association Amenities

- CA1** Clubhouse (LSL CA)
- CA2** Windjammer Point (LSL CA)
- CA3** Marina (LSL CA)
- CA4** Jefferson Point (LSL CA)
- CA5** Lakewood Park (LSL CA)
- HR1** Clubhouse (HHR CA)

Libraries

- L1** St. Charles City-County Library District

Golf Courses

- G1** Lake Forest Golf and Country Club
- G2** LSL Community Association Par 3 Course
- G3** Heritage of Hawk Ridge Golf Course



P2 Hawk Ridge Park



H1 SSM St. Joseph Hospital



E2 Duello Elementary



H2 Crider Health Center



CA2 Windjammer Point



L1 Library District



CA1 LSL CA Clubhouse



HR1 HHR Clubhouse

EDUCATION

Public Primary and Secondary Schools

Lake Saint Louis is served by the Wentzville School District. The Wentzville School District has 22 facilities and serves over 15,000 students.

Green Tree Elementary is the only public school located within the city limits of Lake Saint Louis. However, City residents are served by a number of schools within the districts that are just outside of the city limits. Elementary schools include Discovery Ridge Elementary, Duello Elementary, Lakeview Elementary, and Prairie View Elementary. Middle schools include Frontier Middle and Wentzville South Middle School. High schools include Holt High School, Liberty High School and Timberland High School.

The school district is highly regarded and has been cited by families in the City as being one of the key reasons for living in the City.

The Wentzville School District has been one of the fastest growing school districts in the state in recent years. Enrollment has increased by more than 8,000 students since 2001, averaging between 500 and 600 new

students every year. The District is now the 11th largest school district in the State of Missouri.

Growth is expected to continue in the school district. In 2015, the Wentzville School District Board of Education adopted a “K-6 Plan for Growth” which included two new elementary schools in the district for the 2017-2018 school year and adjustment of all elementary schools to K-6.

In 2016 the school district initiated a boundary study for its elementary schools.

Private Schools

Lake Saint Louis is served by several private schools including Hope Montessori Academy and Andrews Academy within the City. A number of private and parochial schools are in adjacent communities.

Higher Education

Maryville University has a satellite location at 3401 Technology Drive. Outside the City, the region is home to a number of top ranked universities.

HEALTH

SSM Health St. Joseph Hospital

Lake Saint Louis is home to a major hospital, SSM Health St. Joseph Hospital. The hospital was originally built in 1986 and is a 122-bed facility. The hospital employs over 900 and is home to over 300 physicians.

SSM Health St. Joseph Hospital is currently undergoing a major expansion that is expected to be complete in 2018. A three story patient tower and rehabilitation facility are part of the approximately \$90 million expansion. Capacity will increase to over 200-beds plus 30 beds for rehabilitation out-patient.

Crider Health Center

Crider Health Center is located just outside the city limits at 1032 Crosswinds Court. Crider Health Center provides health care for adults and children, oral health care, and mental health care.

LIBRARIES

St. Charles City-County Library District

Lake Saint Louis is served by the Corporate Parkway Branch of the St. Charles City-County Library District. The library is located just outside the city limits at 1200 Corporate Parkway. No library is located within the city limits.

PUBLIC SAFETY

Fire Protection Districts

Lake Saint Louis is served by three fire districts: the Lake Saint Louis Fire District, the O’Fallon Fire District, and the Wentzville Fire Protection District. The majority of the City is covered by the Lake Saint Louis Fire District and the Wentzville Fire District. The O’Fallon Fire District covers a small area in the northeast part of the City.

The Lake Saint Louis Fire District has stations at 2533 Lake Saint Louis Boulevard and 26 South Ellerman Rd. The District serves the eastern and northern sections of the City. The District has 13 career staff, 20 reserve firefighters, and 8 support services members.

The Lake Saint Louis Fire District had 1351 calls in 2015. Call volume has increased from 940 in 2005, although volume has not always been a steady growth. The District is anticipating an increase to 1430 calls by 2020.

The Wentzville Fire Protection District serves the southern and western sections of the City. The District has 52 career full-time paid employees. The District has four fire stations,

with one in the City of Lake Saint Louis at 8200 Orf Road. The District has experience significant growth in the volume of calls. According to the District in 2014, growth in calls increased by 268 percent since 1999.

Police Department

The City is served by the Lake Saint Louis Police Department. The Department is headquartered adjacent to City Hall at 200 Civic Center Drive.

Low crime was rated by residents as one of top strengths of living or working in Lake Saint Louis.

UTILITIES

Lake Saint Louis is served by a number of regional utilities in providing drinking water, sewer, electric, gas, and telephone.

Wastewater / Sanitary Sewer

Two utilities provide sanitary sewer service in the City. Public Water Supply District #2 provides coverage for most of the City. However, Duckett Creek Sanitary District provides coverage for the southern edge of the City, mostly south of Highway N.

For areas of new growth, especially in the southern and western portions of the City, the utilities have planned for needed capacity. Lift stations may be required as part of new development, especially in western sections of the City.

A major current project is the Lake Saint Louis Sewer Improvement Program which is a long-term capital improvement project to upgrade or relocate approximately eight miles of sanitary sewer mains that currently run underneath or adjacent to both lakes Saint Louis and Saint Louise. According to the Public Water Supply District #2, the project is a proactive

solution to address the area’s aging sewer system and to protect the environment and quality of life in the Lake Saint Louis community today and in the future. Without the preemptive approach, the sewer mains will continue to age and could develop unsafe and costly leaks or breaks, or ultimately fail.

An 2011 Alternatives Report (Lake Saint Louis Subaqueous Conceptual Improvement Plan) recommended replacing the underground sewer system by installing 30 new pump stations and force mains.

In 2016, Public Water Supply District #2 contracted for inspection, location, and condition assessment of the existing sanitary sewer mains located underneath lake Saint Louis and lake Saint Louise. In addition, five new access structures were to be constructed within the lakes to enhance future access to the sanitary sewer system. The inspection and work is expected to be complete by the end of 2017. It is expected that the inspection report at the end of 2017 will assist the District in determining next steps in regards to the Improvement Program.

Water Distribution

Public Water Supply District #2 supplies water to the City of Lake Saint Louis. The District provides water distribution to a population of over 75,000. The District commissioned a growth study and Water System Master Plan in 2012 to plan for future growth and capacity. The District has a capital improvements program to ensure upgrades and new facilities to meet expected demand and growth within the District.

Electric

Cuivre River Electric Cooperative, Inc provides electricity to the City of Lake Saint Louis. Cuivre River has a branch office in Lake Saint Louis at 8757 Highway N.

Residential areas in Lake Saint Louis are primarily served by underground lines. Major overhead line corridors include Highway N and a north-side line that is just east of lake Sainte Louise and crosses lake Saint Louis near Marina Drive and Waters Edge Court, then follows Ronald Reagan Drive. Two substations are located in the City - east of the lake Sainte Louise dam and near Hawk Ridge Drive and Spring Borough Drive.

Other Utilities

Other utilities in the City include Laclede Gas for natural gas, CenturyTel for phone, and Charter Communications for cable.

HOMEOWNER ASSOCIATIONS

The City of Lake Saint Louis is most closely associated with the Lake Saint Louis Community Association. For twelve years, the Lake Saint Louis Community Association was the sole governing body in the community until the City was incorporated in 1975.

Today, the City has numerous homeowner associations.

Lake Saint Louis Community Association

More than 8,600 residents representing over 4,000 residential properties are members of the Lake Saint Louis Community Association (LSLCA). The boundaries of the LSLCA were established before the City of Lake Saint Louis was incorporated in 1975.

The LSLCA is a private homeowner association and not all homes in the City of Lake Saint Louis have access to LSLCA amenities. Amenities of the LSLCA include two lakes (the 75 acre lake Sainte Louise and the 650 acre lake Saint Louis), par 3 golf course, 20,000 square feet club house, olympic size swimming pool, children swimming pool, four tennis courts,

five parks, and three marinas.

Membership of the LSLCA is limited to property owners within the boundaries of the LSLCA. Guests are limited to four per household for LSLCA events and entertainment. Outside membership is permitted for LSLCA groups and clubs, however, outside membership is limited to 1/3 of the group or club total membership.

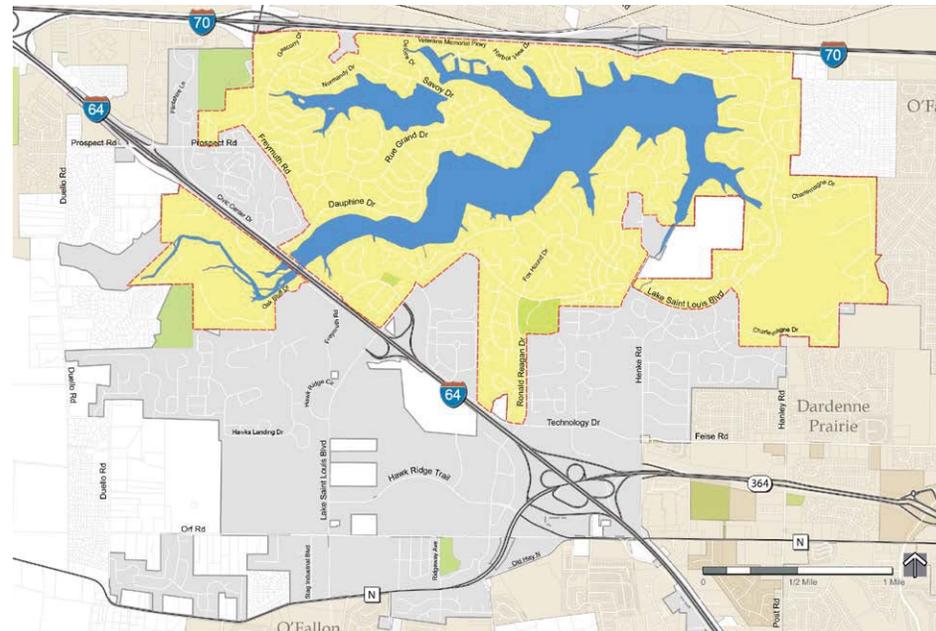
Heritage at Hawk Ridge

The Heritage at Hawk Ridge is a active adult, 55+ age housing community. Amenities include a par 3 golf course, 10,000 square foot clubhouse, outdoor pool, two tennis courts, and a fitness center.

Additional Homeowner Associations

There are 14 additional homeowner associations. They include:

- Estates at Hawk Ridge
- Green Tree Meadows
- Hawk Ridge on the Green
- Locksley Crossing
- Locksley Manor
- Manors at Meadowbrook
- Mason Glen
- Prospect Village
- Ridgepoint Place Villas
- Saratoga
- Seasons at Lake Saint Louis
- Sommers Landing
- Stonecrest
- Waterford Villas



Boundaries of the Lake Saint Louis Community Association

Existing Transportation

OVERVIEW

Mobility is crucial for any community. Whether it is commuting to work, walking to school, biking to a park, delivering a package, or responding to an emergency call, the ability to efficiently move by different forms of transportation is important for community quality of life and economic success.

The City of Lake Saint Louis is well served by vehicular transportation. The City is at the intersection of two major regional interstates: I-64 and I-70. I-64 and I-70 provide easy access to regional employment centers and destinations. In addition to interstate access, Highway 364 is another major limited access highway that connects to the City.

CURRENT AND PLANNED PROJECTS

Highway N

The Highway N corridor west of I-64 is a major focus for the City, St. Charles County, and MoDOT. The corridor has seen rapid growth in the last decade which has severely impacted traffic on the road. In the short term, improvements include signalization at the intersection of Highway N and Lake Saint Louis Boulevard. Long term, there is strong interest in a Highway N study that would guide future improvements. Currently, Highway N is not listed as a Tier 1 or Tier 2 (high priority) project on the East-West Gateway Council of Government's Long Range Transportation Plan. The Long Range Transportation Plan guides federal allocation of transportation funding in the region. As part of St. Charles County's 2013 comprehensive plan, Highway N was shown as a future thoroughfare with 120' right-of-way width. St. Charles County Transportation Plan 2030, which was completed in 2007, called for Highway N to be reconstructed to three lanes from Sommers Road to Highway T.



Round-a-bout at I-70 and Lake Saint Louis Boulevard

A round-a-bout is proposed for the intersection of I-70 and Lake Saint Louis Boulevard. The round-a-bout will help traffic flow and also be an opportunity to enhance the gateway into the City. A concept study is expected to be complete in 2016-2017.

Traffic Signals at I-70 and Hwy A

Traffic signals are planned at the intersection of I-70 and Hwy A to replace existing stop signs at the intersection.

Interstate 70 Study

In 2017, the Missouri Department of Transportation (MoDOT) will re-start a corridor study of I-70 from Wentzville to downtown St. Louis.

Interstate 64 Improvements

A third lane on I-64 from Route K to I-70 is planned by MoDOT. The project is on the East-West Gateway Council of Government’s Long Range Transportation Plan, but funding has not been allocated. The project is not expected to have any right-of-way impacts.

Lake Saint Louis Boulevard Improvements

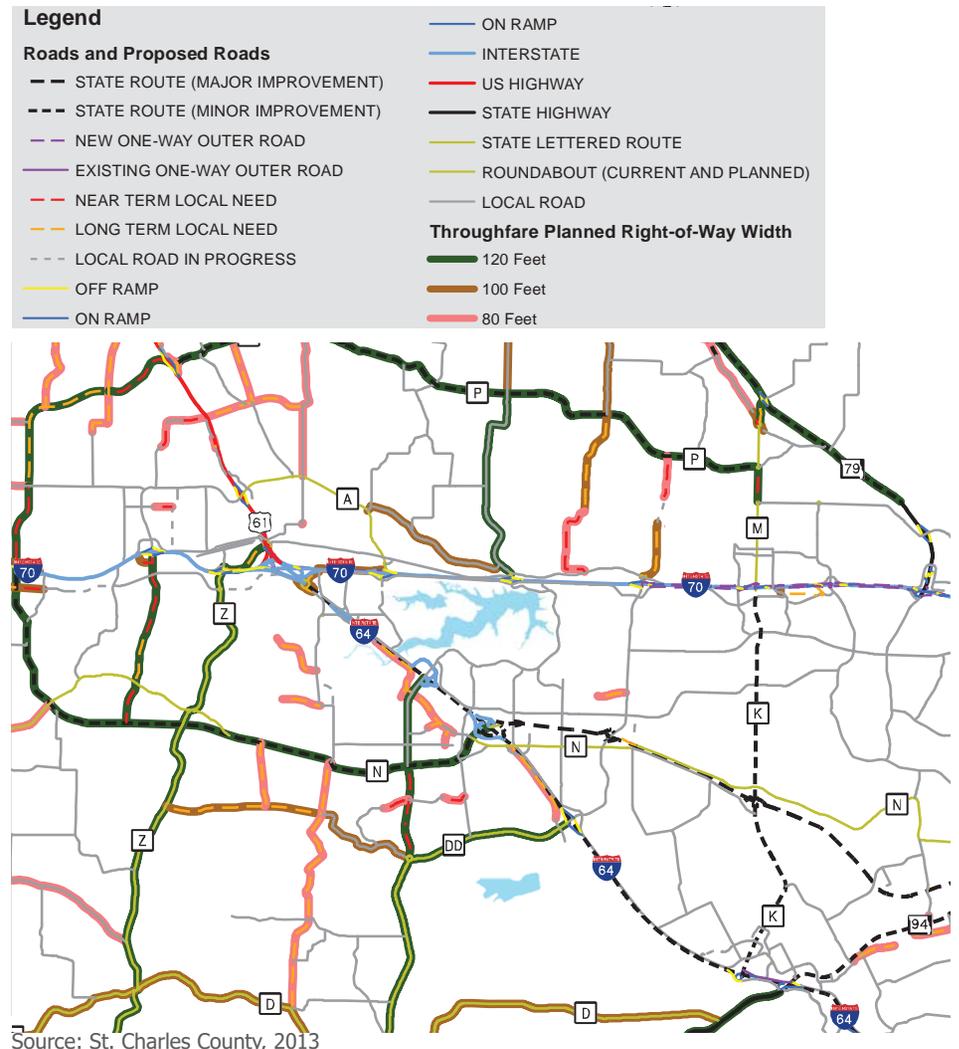
Phase 1 improvements from Chase Court to Pleasant Meadow Drive are expected to be designed in 2016-2017. Future improvements to Lake Saint Louis Boulevard will continue west of I-64.

Duello Road Improvements

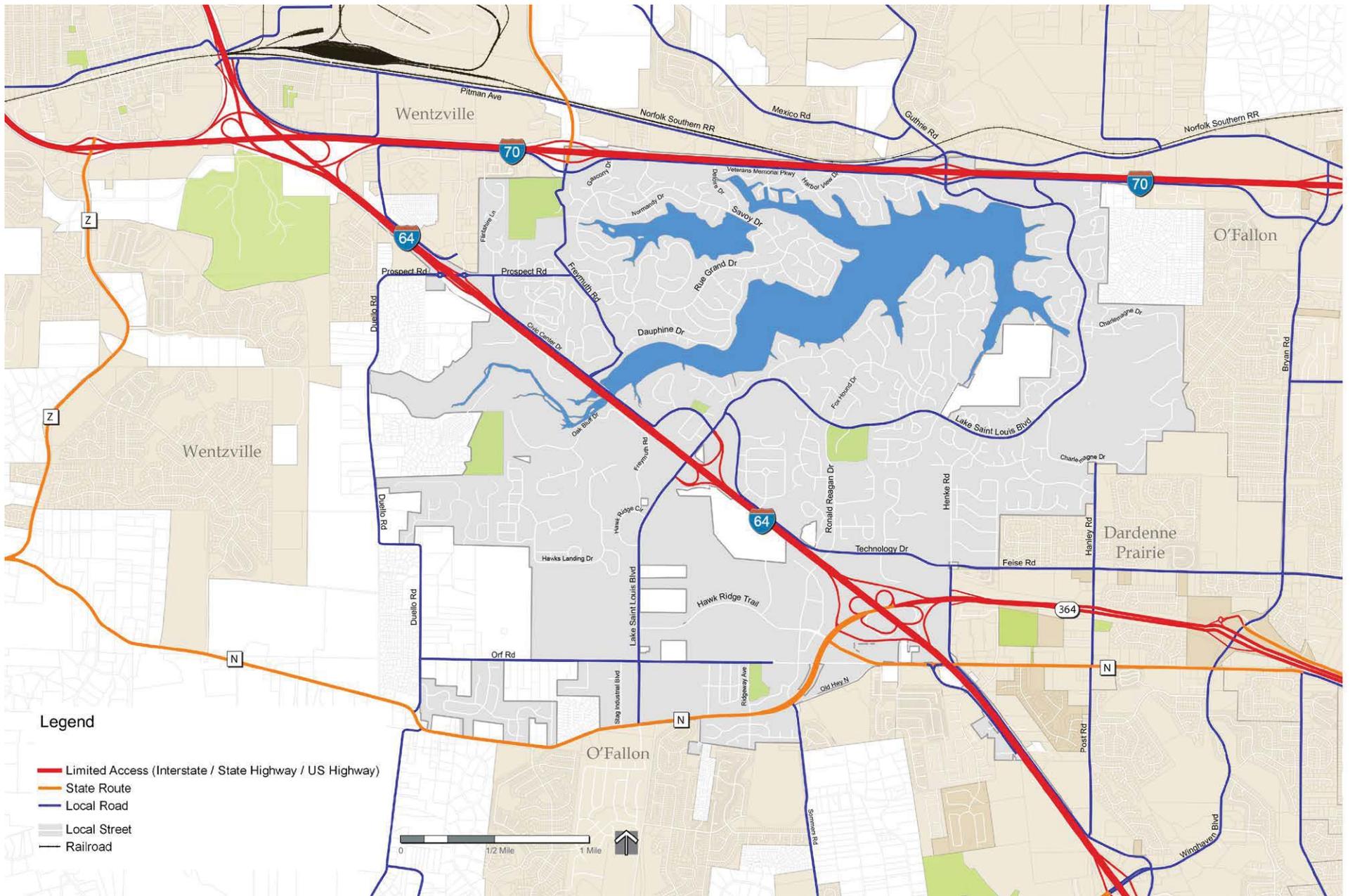
St. Charles County is planning improvements to Duello Road to improve alignment and safety. Work is expected to include alignment modifications and a new intersection of Duello Road and Highway N.

Hawk Ridge Trail Extension

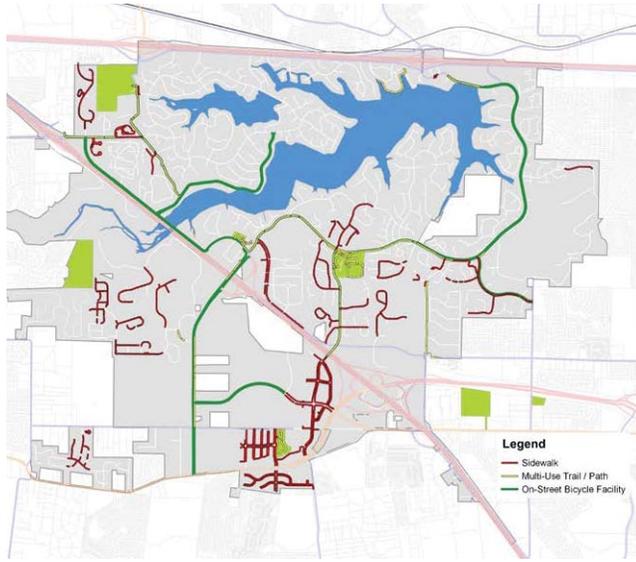
The extension of Hawk Ridge Trail has been shown as a local long term need.



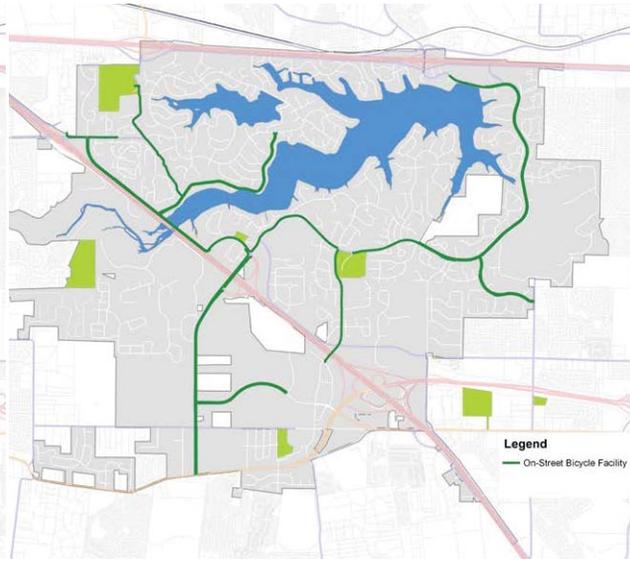
2013 St. Charles County Thoroughfare Plan - Detail of LSL



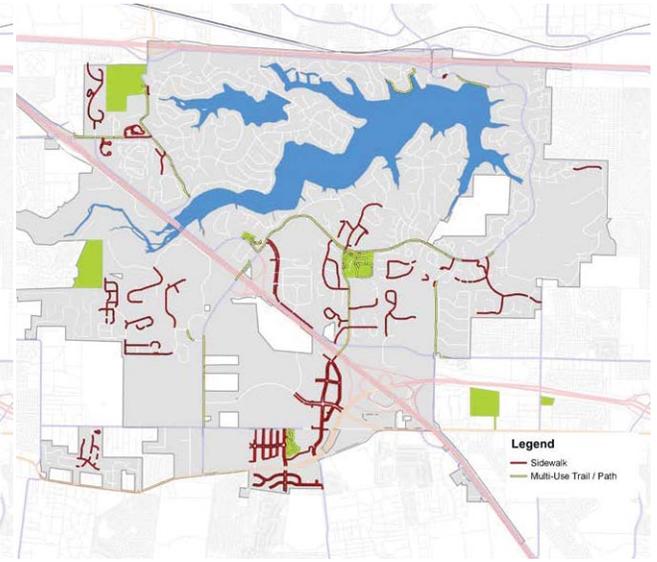
Map: Existing Vehicular Transportation Network



Active Transportation: All



Active Transportation: On-Street Bicycle Facilities



Active Transportation: Off-Road (Sidewalks and Trails)

Active Transportation - All

The City of Lake Saint Louis has a strong existing network of active transportation (bicycle and pedestrian). However, significant gaps exist in the active transportation network and there are opportunities to significantly expand bicycling and pedestrian facilities. Active transportation is one of the top priorities for residents in the City including additional trails and improved bicycle and pedestrian conditions.

In 2015, the City completed a draft Sidewalk Prioritization Model. The process inventoried existing sidewalks and developed a scoring methodology to rank future sidewalk projects.



Existing urban shoulder along Dauphine Drive.

On-Street Bicycle Facilities

Streets with existing on-street bicycle facilities include Lake Saint Louis Boulevard, Civic Center Drive, Dauphine Drive, Freymuth Road, Ronald Reagan Drive, and Hawk Ridge Trail. The type of on-street bicycle facility varies between streets. The different types of bicycle facilities include bike lanes, bike shoulders, and “urban shoulders”. An urban shoulder is a road where there is a striped lane for bikes, but the lane width does not meet the standard width (4’ or 5’) for a full “bike lane”. Normally the street is too narrow to accommodate a full-width bike lane. Dauphine Drive is an example of an “urban shoulder”.

Most intersections within the City lack accommodations for bicycles such as bicycle left turn lanes or bike through lanes.

Off-Road Facilities (Sidewalks and Trails)

Existing multi-use trails are adjacent to sections of Lake Saint Louis Boulevard, Ronald Reagan Drive, and Freymuth Road. Newer development in the City have typically included sidewalks. To be classified as a multi-use trail, the trail should be a minimum of 8’ in width. Sidewalks should be a minimum 5’ width for two-way travel.

I-64 acts as a major barrier for pedestrian and bicycle circulation within the City. Bridges over the interstate and exit/on ramps are conflict points between vehicles and bicyclists/pedestrians.

Hwy N is a current barrier for bicycle and pedestrian circulations as there are limited existing controlled intersections.

Existing Parks and Recreation

OVERVIEW

Lake Saint Louis has a strong existing park and recreation system. Parks and recreation has been cited by residents as one of the top quality of life benefits of living in the City.

The City owns and maintains five city-owned parks totaling 131 acres. In addition to City parks, two St. Charles County Parks (Quail Ridge and Youth Activity Park) are in close proximity to the City.

Lake Saint Louis Parks & Recreation Department's mission is "encouraging and supporting active lifestyles by creating equal environments where people of all ages and abilities can thrive and become physically and emotionally healthy." The department is separated into two divisions. The parks division, along with the horticultural technician, oversees maintenance of parks grounds, recreational facilities, playgrounds, and landscaping. The recreation division is responsible for programming, leagues, and special events.

The Parks and Recreation Department organizes a number of programs, events, and classes including:

- Art classes
- Yoga
- Summer youth day camps
- Youth sport leagues
- Summer concert series
- Movies in the park
- Community-wide garage sale
- Community tree lighting ceremony
- Lake Saint Louis Triathlon

In addition to public amenities provided by the City, private homeowner associations provide recreation opportunities for their members.



EXISTING PARKS

Boulevard Park

Boulevard Park is a 20-acre park located at the corner of Lake Saint Louis Boulevard and Ronald Reagan Drive. The park is adjacent to Green Tree Elementary School and is frequently utilized by the school. Boulevard park is a mix of passive and active uses including a large pavilion, picnic facilities, amphitheater, softball/baseball field, soccer field, walking path, playground, and ponds.

Founders Park

Founders Park is a 55-acre park that primarily focuses on active recreation with multiple baseball/softball diamonds and soccer fields. The park has two side by side playgrounds, picnic facilities, a walking trail, and a half basketball court. The park is located at 7 Freymuth Road.

“No Name” Park

“No Name” Park is a new 36-acre park located on the western edge of the City. Currently, the park is undeveloped and is not accessible to residents. The park is expected to be more of a passive use park.

Hawk Ridge Park

Hawk Ridge Park is a 17-acre park located at 8392 Orf Road. The park is home to “All Inclusive” Zachary’s Playground which was ranked the No. 1 playground in America by Early Childhood Education Zone. The park includes a spray pad, pavilions, 1/2 mile walking trail, and restrooms with a separate family friendly restroom.

Veterans Park

Veterans Park is a small park located at 200 Civic Center Drive. The park honors veterans and members of the armed services. Flags of all branches of the service are included at a memorial in the park. The park includes small pavilions with picnic tables and a entry water feature.



Boulevard Park



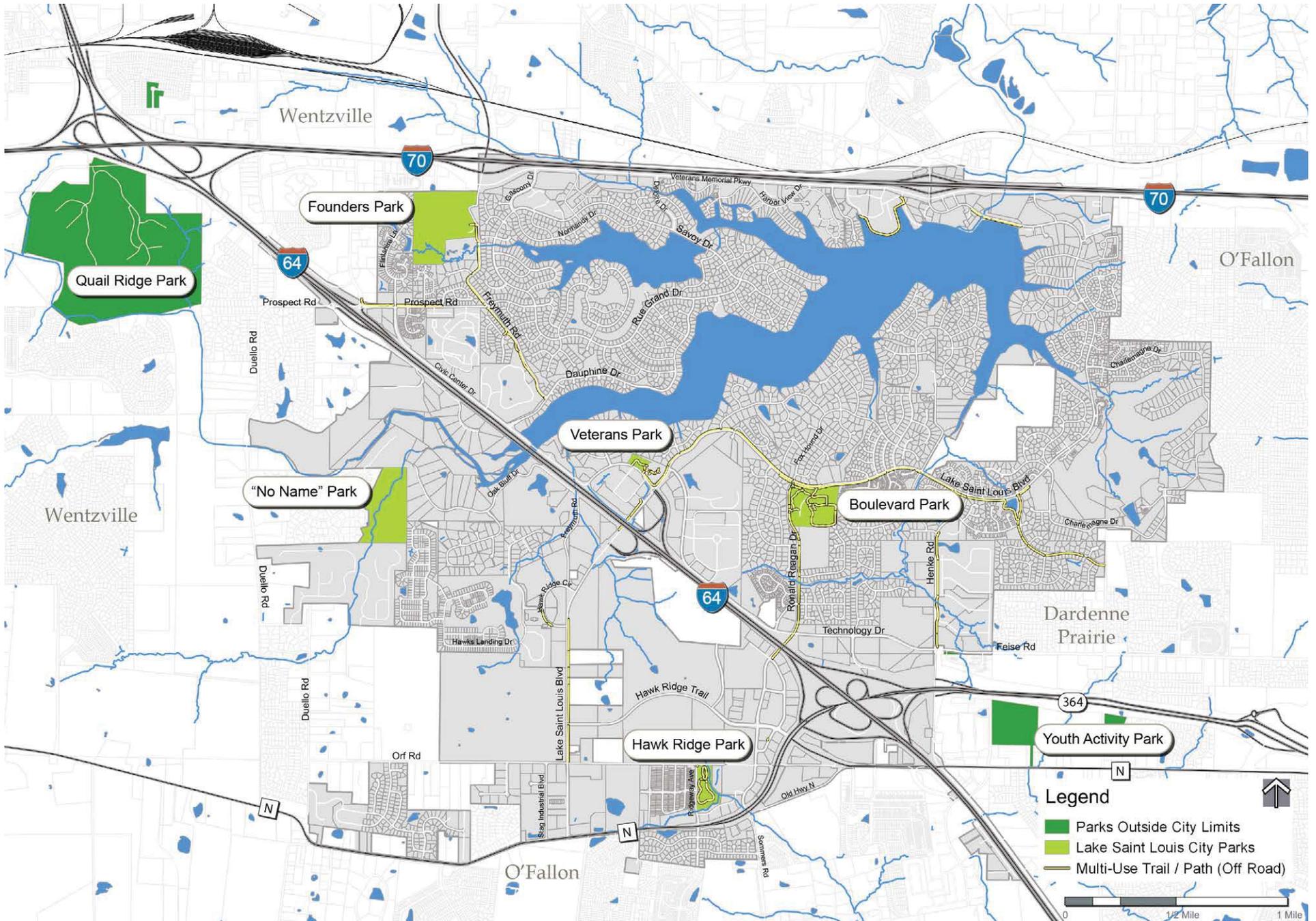
Founders Park



Veterans Park



Hawk Ridge Park



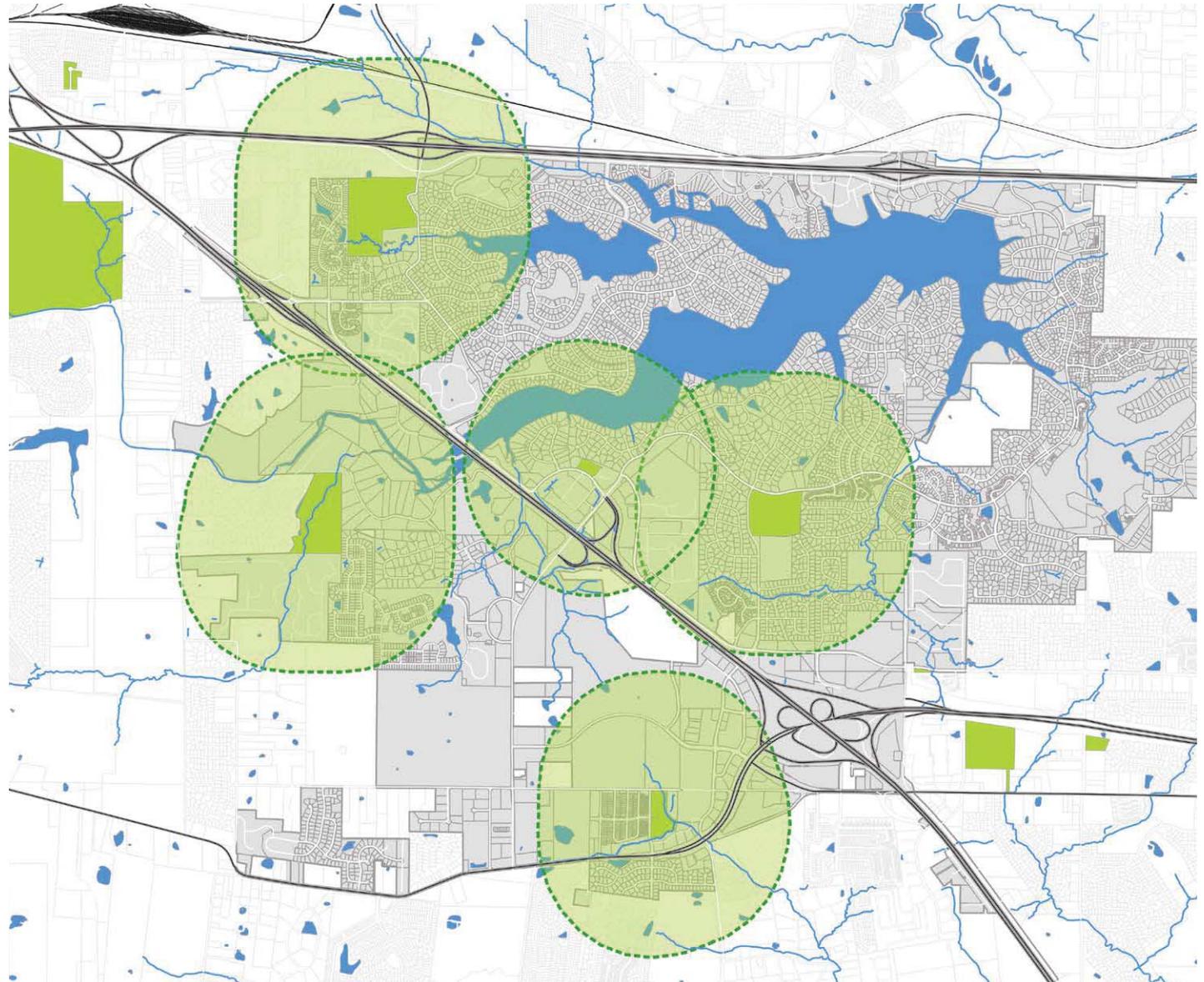
Map: Existing Parks and Multi-Use Trails

EXISTING PARK PROXIMITY

The circles on the park proximity map represents a 1/2 mile radius from each park. A 1/2 mile represents a typical walkable distance. The walkable distance does not include barriers such as busy and limited access roads. Interstate 64 and Route N are major barriers to access parks by walking or biking.

Lake Saint Louis lacks existing parks in the southwest section of the City.

There is also a lack of City parks in the north and east sections of the City. However, these areas are served by playgrounds, open space, and amenities for members of the Lake Saint Louis Community Association.



Park Proximity

EXISTING METRICS

Benchmarking existing parks and recreation is often not a precise endeavor. In the past, communities have often benchmarked to recommended ratios from the National Recreation and Park Association (NRPA). However, these ratios often did not take into account size of facilities (i.e. size of playgrounds versus number of playgrounds) and regional differences.

Today, a better metric is to compare against averages from other communities. Compared to other communities, Lake Saint Louis is on the low end of park acreage per population. In terms of facilities, Lake Saint Louis compares favorably with other communities.

The metrics do not take into account private facilities offered by the Lake Saint Louis Community Association and other homeowner associations in the City.

Another factor is current trends. Based on the '2013-2017 Missouri Statewide Outdoor Recreation Plan', future trends in outdoor recreation include increased demand for trails, soccer fields, multi-purpose fields, and playgrounds.

For urban and suburban areas, additional trends include natural play / naturescapes and increased demand for dog parks.

Park Acreage Metric

	Acres
Boulevard Park	20
Founders Park Sports Complex	55
Hawk Ridge Park / Zachary Playground	17
No Name Park	36
Veterans Park	3
Total	131
Lake Saint Louis Population	14,545
Acreage per 1,000 Population - Lake Saint Louis ¹	9.01
Acreage per 1,000 Population -Median for Midwest ²	10.97

(1) Population based on 2010 census.

(2) Source: National Recreation and Park Association 2016 'NRPA Field Report'

Population per Facility Metric

	Lower Quartile ¹	Median ¹	Upper Quartile ¹	Average ¹	Potential Need in	
					LSL (Based on Median)	Existing Facilities in LSL
Recreation/Community center	13,942	24,804	46,358	35,092	1	0
Playground	2,211	3,899	6,667	7,801	4	4
Tennis Court (outdoor)	2,725	4,413	8,637	7,686	3	0
Basketball Court (outdoor)	4,583	7,526	14,055	15,123	2	0.5
Soccer Field	2,205	3,929	8,124	7,899	4	3
Softball/Baseball Field	1,916	3,333	5,837	7,127	4	8
Dog Park	27,000	53,915	101,372	84,331	0	0

(1) Source: National Recreation and Park Association 2015 'NRPA Field Report'

CURRENT AND RECENT PLANS

In 2009, the City of Lake Saint Louis completed a Community Interest and Opinion Survey for the Parks and Recreation Department. The survey was a 28 question in-depth survey examining parks and recreation in the City.

Major findings of the survey included priorities of amenities to improve. Top responses were walking and biking trails (44%), restroom facilities (29%), playground equipment (25%), and picnic facilities (22%). Top responses for the most important projects for the City to develop were additional picnic pavilions in the park system (26%), build restrooms and concessions at Founders Park (21%), new water spray parks (20%), and dog park (20%).

The survey also examined the desire and demand for an indoor recreation center. Thirty-three percent (33%) of those surveyed were either very supportive or somewhat supportive of using City general fund money to fund a new indoor recreation center if it could not support its operations through user fees. Forty-three percent (43%) were not supportive of using City general fund money, twenty-two percent (22%) were not sure.

CURRENT AND PLANNED PROJECTS

Recently completed improvements have included ball field lighting and restroom updates.

Current park projects are focused on updating and improving existing park infrastructure including new roofs, facility updates, sidewalk repairs, and replacing playground surfaces.

A master plan for “No Name” Park is expected to begin in 2017.

PRIVATE PARKS AND RECREATION

For a large segment of the Lake Saint Louis population, park and recreation opportunities are enhanced by amenities provided by the Lake Saint Louis Community Association (LSLCA).

Amenities of the LSLCA include two lakes (the 75 acre lake Sainte Louise and the 650 acre lake Saint Louis), par 3 golf course, 20,000 square feet club house, olympic size swimming pool, children swimming pool, four tennis courts, five parks, and three marinas. The lakes offer recreational opportunities including boating, fishing, swimming, water skiing, and other water activities.



Over 4,000 households in the City are members of the Lake Saint Louis Community Association which gives them access to two lakes and other recreational amenities.

Existing Natural Resources

OVERVIEW

Lake Saint Louis has many strengths in regards to natural resources. The lakes, mature trees, and open space contribute to the overall natural character of the community. The “natural setting” of the city is often mentioned by residents as a key strength of the City. This section will examine green infrastructure, water resources, biodiversity, and topography.

GREEN INFRASTRUCTURE

Green infrastructure is defined as both a verb and a noun. As a noun, green infrastructure refers to the parks, open space, trees, and vegetation that is within and adjacent to the study area. As a verb, green infrastructure refers to mimicking natural processes, especially in dealing with stormwater.

The most significant green infrastructure in the City are the mature trees. Older residential areas have many mature canopy trees. Existing stands of woodland are prevalent in undeveloped sections of the City, especially along Peruque Creek. In addition, there are wetlands in the City located along Peruque Creek.

WATER RESOURCES

Water Quality

Existing water bodies in the City are largely defined by the Peruque Creek watershed. Lake Saint Louis and lake Sainte Louise are formed by dams on Peruque Creek.

Peruque Creek is listed by the Missouri Department of Natural Resources as an 303d impaired stream (2014 data). The impaired use includes protection of aquatic life. The source of pollutants are nonpoint.

Lake Saint Louis (650 acres) and lake Sainte Louise (75 acres) are listed by the Missouri Department of Natural Resources as impaired for mercury in fish tissue (2016 data). Mercury in fish tissue is a common impairment for lakes in Missouri. Other beneficial uses such as whole body contact recreation (swimming) and boating are not impacted.



Water Quality in Lake Saint Louis and Lake Sainte Louise

The Lake Saint Louis Community Association monitors the water quality in both lakes during the recreational season by testing for fecal coliform. Samples are taken regularly, and analyzed by PDC Laboratories as colony-forming units per 100 milliliters (CFU), with the results posted to the Lake Saint Louis Community Association website. The Community Association notes that levels fluctuate during the season and are known to be higher after heavy rains.

Stormwater Runoff

Rainfall that does infiltrate into the soil is known as stormwater runoff. Urbanization and development cause changes to the flow of stormwater. In undeveloped areas, the natural process is that up to 50 percent of stormwater is infiltrated, 35-40 percent is evaporated, and 10-15 percent is surface runoff. In Missouri, clay soils and shallow rock can decrease infiltration and increase runoff.

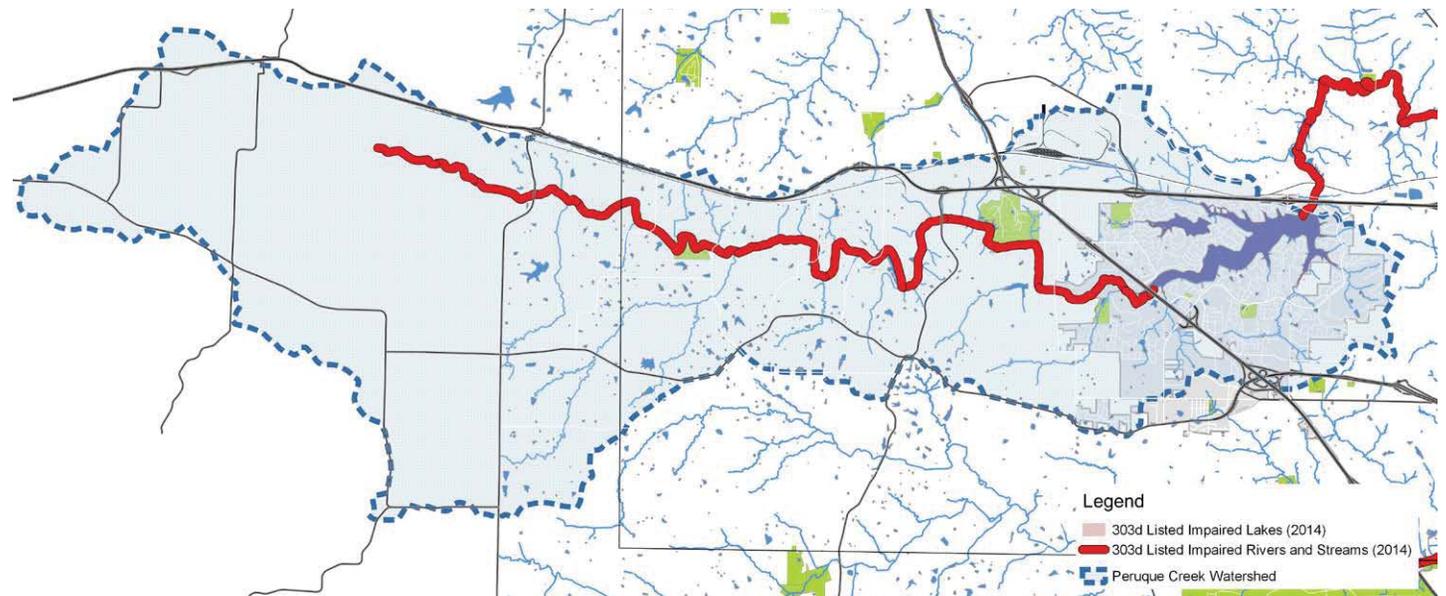
As residential and commercial growth occurs, stormwater runoff can exceed 55-60 percent or higher. The effects of increased stormwater runoff have several negative impacts on water quality and volume. Increased water volumes lead to flooding and higher velocities in streams and rivers causing erosion and stream bank degradation. In addition, the increased water volume can lead to “urban flooding” where streets and properties are flooded in areas that are not typically designated as potential flood zones.

Urban flooding does not appear to be a major problem in the City. However, siltation in the lakes indicates erosion coming from multiple sources including stream bank degradation and residential and urban development.

Areas along Peruque Creek and tributaries into the lakes are within the 100-year flood zone. Flood insurance required for federally insured loans through the National Flood Insurance Program (NFIP) is currently provided to 24 different properties within Lake Saint Louis.

Watershed Impacts

The watershed of Peruque Creek extends well past the city limits of Lake Saint Louis. The watershed that feeds lake Saint Louis covers over 36,000 acres. In comparison, the area within the City limits of Lake Saint Louis is approximately 6,000 acres. The watershed extends west of St. Charles County into Warren County. Communities of Wentzville, Foristell, and unincorporated St. Charles County all impact Peruque Creek upstream of Lake Saint Louis.



Map: Limits of Peruque Creek Watershed - Impaired Lakes and Streams

BIODIVERSITY

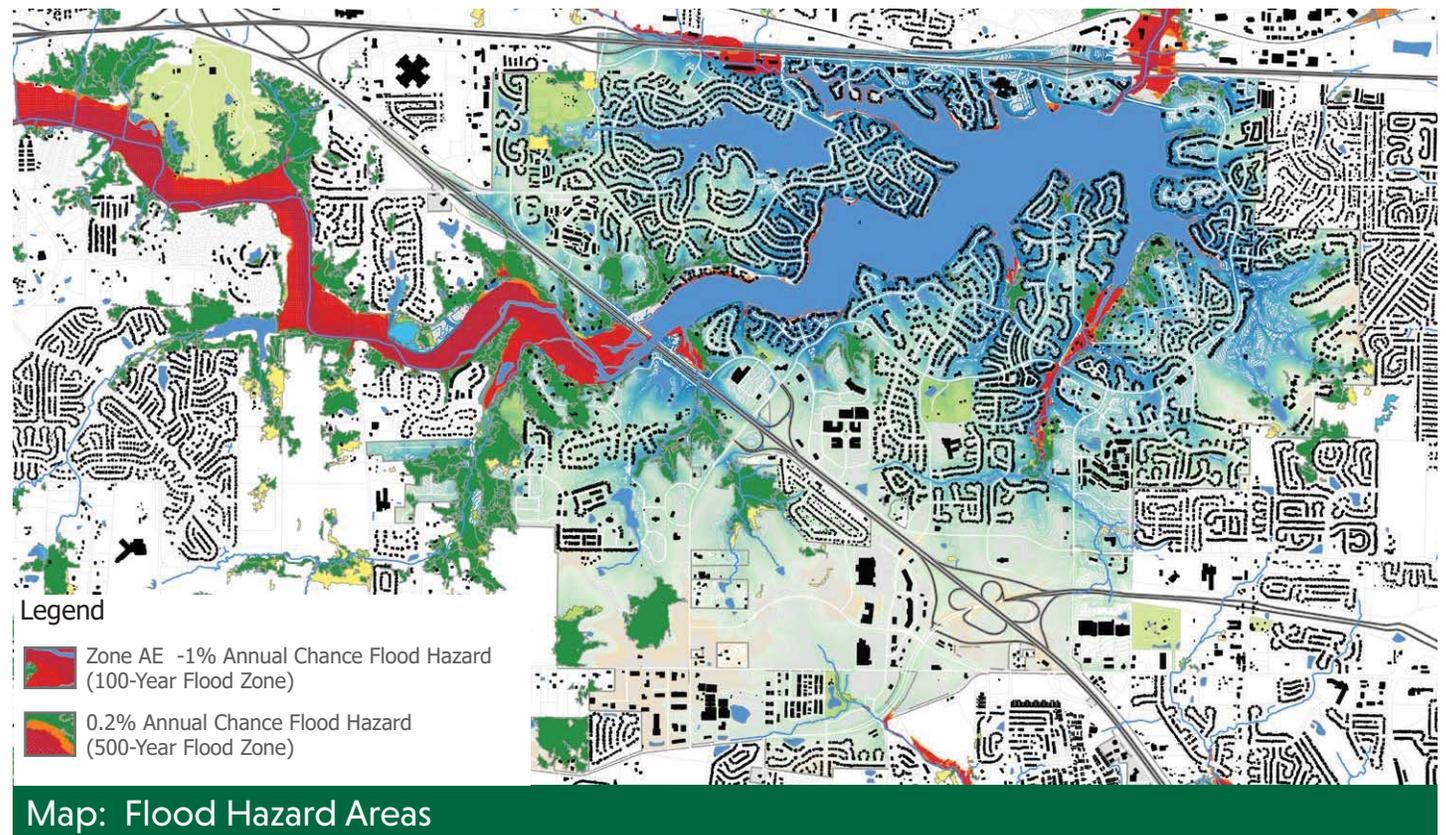
Biodiversity is the variety of plant and animal life. Often, biodiversity is thought of as “large natural areas” outside of urban cores. However, biodiversity is extremely important in urban and suburban settings as a way to help mitigate and restore fragmented habitats that have resulted from urbanization.

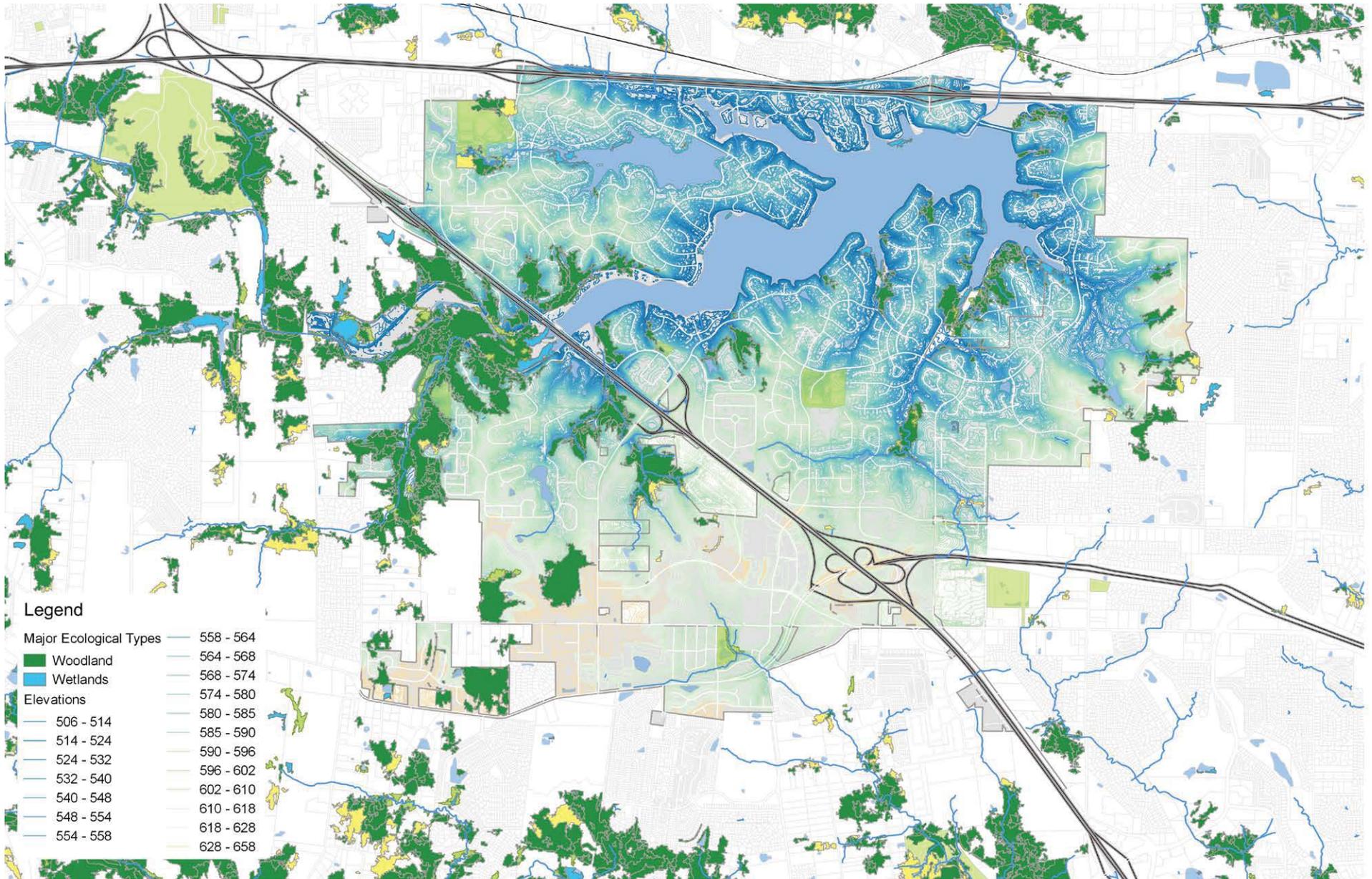
As is typical of suburban development, much of the vegetation in residential areas is non-native. However, there is also a large amount of native vegetation, especially tree species such as oak. The City has also undertaken efforts to increase biodiversity through efforts as native plant edges and butterfly gardens.



TOPOGRAPHY

The topography of Lake Saint Louis is gently rolling with the majority of the City located in the valley of Peruque Creek. There is over 140’ of elevation change in the City. The high point of the City is near the intersection of Orf Road and Lake Saint Louis Boulevard.





Map: Existing Natural Resources