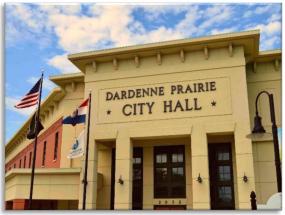
# COMPREHENSIVE PLAN VISION 2020









# October 2020







# ACKNOWLEDGEMENTS

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#### **EXECUTIVE SUMMARY**

#### CITY OF DARDENNE PRAIRIE COMPREHENSIVE PLAN - 2020

A Comprehensive Plan serves as a guide for making the community a better place in which to live and work over a 15- to 20-year timeframe. It communicates to residents, developers, and others what land use pattern is desired by the community in particular areas of the City.

The original "Comprehensive Plan of the City of Dardenne Prairie" was adopted in 2002 and a revised Comprehensive Plan was adopted in 2014. The City has undergone significant changes since even the most recent Comprehensive Plan was adopted as a result of annexations, residential and commercial development, environmental legislation, regional planning projects, changing real estate market conditions, and the implementation of the limited access Missouri State Highway 364 project. Current studies regarding the frontage roadway improvements along I-64 that will affect Technology Drive will impact the future land use potential of the properties in the City fronting on this roadway.

Because planning has a vital role in maintaining and improving the quality-of-life for all Dardenne Prairie residents, the City's Planning and Zoning Commission has undertaken to review and revise its Comprehensive Plan and to create a 2020 Comprehensive Plan for the City of Dardenne Prairie. The process to update the City's Comprehensive Plan was designed to be inclusive. All planning meetings of the Planning and Zoning Commission were public meetings, which offered stakeholders the opportunity to share their thoughts and visions for the City.

# How to Use this Plan

The intention of this Comprehensive Plan is to guide the City's future development and redevelopment. This Comprehensive Plan is a living document, and as such, should have periodic review to ensure that the City's vision is aligned with the changing conditions and our evolving community desires.

This Comprehensive Plan does not complete the City's planning of the development of our community, but continues the planning process. Working together, elected officials, City staff, residents, business owners and all community stakeholders can ensure that Dardenne Prairie continues to be the number one City in Missouri in which to raise a family.



# I. INTRODUCTION

#### **Planning for the Future**

In this update, many of the ideas, principles, and policies from the previous City of Dardenne Prairie Comprehensive Plan are carried forward, but adapted to reflect current conditions, new trends, community input, and innovations since the previous plan was approved. Many of the key trends that are anticipated to influence the community are identified in this Plan. The Plan, although general in nature, is primarily concerned with the allocation of future land uses within the defined planning area. This update of the Comprehensive Plan reflects the City's ongoing planning efforts including:

- Expansion of the City's parks and recreation offerings;
- Annexations that occurred since the previous (2014) Comprehensive Plan;
- Future land uses for certain key parcels within the City's boundaries; and
- The significant reduction of the Uptown Zoning District and related zoning, and the role these planning elements should continue to play in the City's ongoing development and growth.

It is the City of Dardenne Prairie's primary responsibility to provide public services and facilities, develop policies, and adopt regulations that ensure the public health, safety, and welfare of its citizens. The City government is also charged with managing the growth of the City so that the quality-of-life of the community and opportunities for its citizens remain high. The guide for Dardenne Prairie's growth and development is the Comprehensive Plan.

The City of Dardenne Prairie Comprehensive Plan is in compliance with the State law. Chapter 89 of the Missouri Revised Statutes requires the City's Planning and Zoning Commission to make and adopt a plan for the physical development of the municipality. The general content and scope of the city plan is set forth in Section 89.340 of Chapter 89:

"The city plan, with the accompanying maps, plats, charts and descriptive and explanatory matter, shall show the commission's recommendations for the physical development and uses of land, and may include, among other things, the general location, character and extent of streets and other public ways, grounds, places and spaces; the general location and extent of public utilities and terminals, whether publicly or privately owned, the acceptance, widening, removal, extension, relocation, narrowing, vacation, abandonment or change of use of any of the foregoing; the general character, extent and layout of the replanning of blighted districts and slum areas. The commission may also prepare a zoning plan for the regulation of the



height, area, bulk, location and use of private, nonprofit and public structures and premises, and of population density, but the adoption, enforcement and administration of the zoning plan shall conform to the provisions of sections 89.010 to 89.250."

The last sentence of this section creates a link between a City's Comprehensive Plan and the zoning ordinance. While a Comprehensive Plan has no legal underpinning since it is not adopted via ordinance and is intended to be a guide, it is to be, at least in part, the footing on which the City's zoning ordinances and districts are based. This relationship between the City plan and its zoning districts has been reinforced via litigation both in Missouri and elsewhere in the U.S. If the City has been consistent in its zoning decisions, those decisions will either have reflected direction set by the city plan or will be supported by valid reasons for deviation from direction set by the Comprehensive Plan. Where the City has lacked compliance with the direction of the Comprehensive Plan as a basis for a zoning denial and supported the decision with an appropriate record of findings, the courts have generally upheld municipal zoning decisions that are challenged. However, when the City consistently ignores its Comprehensive Plan's land use direction in making zoning decisions, it would be more difficult to defend a zoning denial that uses the Comprehensive Plan's direction as a basis for denial.

Dardenne Prairie's goals include provisions that protect property values of existing homes, encourage development of quality housing that can attract new residents, protect the environment, and encourage quality provision of adequate urban services. In addition to these requirements, the Plan is designed to accommodate future growth of the City and surrounding areas.

This Comprehensive Plan is a broad statement of community goals, objectives, and policies that directs the orderly and coordinated physical development of the City. Dardenne Prairie's Comprehensive Plan anticipates change and provides specific guidance for future legislative and administrative actions. It is the result of citizen involvement, technical analysis, and the creativity and experience of decision-makers in City government.

The vision, goals, objectives, policies, and maps of the Plan provide the foundation for the regulations, programs, and services that will implement the Plan. The Plan serves as a guide for designating land uses, infrastructure development, and community services. The Plan is designed to be a functional document that guides Dardenne Prairie's future development.

The basic principles of sustainability serve to form the City's vision and support all components of the Comprehensive Plan. These principals include looking to the future with a long-term



perspective, accepting the natural environmental boundaries of the community, and recognizing the interdependent economic, human, and environmental implications of policies and decisions.

Being a "connected community" extends beyond the physical connections of our City streets and trails system. It encompasses a community that is connected by a sense of belonging. Our vision embraces a City that connects its residents through safe and efficient travel, encourages community interactions, and fosters communication between residents, businesses, institutions, and local government. Finally, our vision promotes social connectivity through ongoing support of community organizations and volunteerism and by encouraging development patterns and creating gathering places that attract people and promote social interaction.

The City's boundaries and growth opportunities have been constrained by aggressive annexations by the City of O'Fallon and Lake Saint Louis followed by changes in State law limiting cities' powers to annex. This has thwarted the City's ability to create more regular boundaries. As a consequence, the City's growth and future development must depend upon wise use of existing open ground within the City and, to some extent, upon redevelopment of older sections as those parcels become available for purchase.

The City has approved several new residential developments since the 2014 Comprehensive Plan, adding 325 single-family homes. Attracting new commercial development remains a challenge, in spite of the additional "rooftops" in the City.

Future economic development of the City is critical to its growth and identifying areas for future commercial development is a key function of the Comprehensive Plan. As part of its ongoing planning efforts, in 2016 the City commissioned an analysis of commercial market potential for development. The study that was part of this process evaluated both the retail and office/service components of commercial land development.

As existing commercial space is absorbed and new entities show interest in St. Charles County locations, Dardenne Prairie will continue to be well-positioned by virtue of its market demographics and proximity to major roadways. As part of the its ongoing economic development efforts the City will continue to pursue two goals:

- To support existing, viable businesses that are presently located within the City so that they may continue to thrive; and
- To attract quality commercial development that creates jobs; provides goods or services for residents and customers in the market area; and provides property, sales, and other tax



revenues for the City and the other taxing districts which help to make the City a desirable place to live.

One particular factor that has actually inhibited commercial development is the impact that the Uptown Plan (adopted in 2007) and related Uptown zoning ordinance provisions have had on the areas that are subject to the concepts of the plan and zoning ordinance. The plan and zoning subject certain areas of the City to "new urbanism" design standards and "form-based" zoning code (called "smart code" in the document that provides the basis for the Uptown zoning district provisions). The Uptown Plan is an appendix to the 2014 Comprehensive Plan.

The concepts and zoning represented by those documents are difficult to implement in existing development environments, create added development costs, and have been met with resistance from developers and consumers in the St. Louis market. There is anecdotal evidence that these development concepts and zoning have stifled interest in the areas that are subject to this zoning. Addressing land use concepts for these areas and ongoing applicability of this zoning will be discussed in a later section of this Comprehensive Plan.

#### **Planning Policies**

This Comprehensive Plan by the Planning and Zoning Commission includes policy direction for land use, housing, capital facilities, parks and trails, flood prone areas, utilities, and transportation. All parts of the Plan should be consistent with each other and with adopted regional, and countywide planning goals.

One of the aspects of this Plan will be to address the needs of a growing community, including the appropriate development of land, the maintenance of transportation and infrastructure systems, the construction of municipal buildings and parks, provisions for municipal services, and the financing of capital improvements. The Comprehensive Plan will stress environmental responsibility and will strive above all else to provide a structure under which to maintain and to preserve the community through its continuous growth. In addition, the Plan also seeks to provide direction for development of attractive buildings and associated site amenities. While not intending to dictate architectural style or particular building materials, the Plan intends to promote buildings constructed of durable materials in styles, colors, and textures that present an image of the City that both property owners and residents desire.

A Comprehensive Plan is developed by a study of the trends in changes of the demographics for the City population and land uses in and around the City. Future needs of the City are identified, and the Plan is developed to provide for those needs in the future. It is essential to first identify

#### **COMPREHENSIVE PLAN – VISION 2020**



the current situation in many areas for the City including land use, population demographics, recreational facilities, administration facilities, transportation facilities, and utilities. Historical trends in the changes of these elements are identified and then projected into the future. Future needs are identified based on these projections. Finally, a plan to provide for those future needs is prepared.

A Comprehensive Plan is a living document that should be updated at least each decade. The optimum time for such an update is immediately after the publishing of census data. This provides for revisions as soon as base data for trend analysis is available. However, changes in real estate markets, housing preferences, new major commercial (retail, office, or industrial) development within or near the community, major roadway improvements, or other influencing factors may also dictate the need for revisiting the Comprehensive Plan and conducting an update. As an annual function, the Planning and Zoning Commission should conduct a review of the future land use plan component of the Comprehensive Plan. This review should be done with consideration of rezoning, conditional use permitting, variances, or other land use actions that have taken place during the year that may suggest the need for revision of the future land use map and any applicable supporting text.

#### **Geographic Location**

The City of Dardenne Prairie is located in St. Charles County in the western part of the Saint Louis, Missouri metropolitan area, approximately 28 miles west of St. Louis Lambert International Airport and about 16 miles southwest of historic downtown St. Charles. It lies at the western end of what is referred to as the Golden Triangle sector of St. Charles County; an area bounded by Interstate Highway 70 on the north, Interstate 64/U.S. Highway 40/61 on the southwest, and Missouri Route 94 on the east. Missouri Route 364 bisects the City east-to-west and Interstate 64/U.S. Highway 40/61 extends along the southwestern boundary<sup>1</sup>. Missouri Highway K is located to the east. The City, which is also served by several County roads, is bordered by the City of O'Fallon and the City of Lake Saint Louis with several unincorporated St. Charles County tracts of land throughout the City's corporate limits. A map of the City limits is provided in **Figure 1** of the Appendix. The City's current existing land uses are shown on **Figure 2** of the Appendix.

<sup>&</sup>lt;sup>1</sup> There is some variation in the boundaries of this area with some sources defining the eastern boundary as the Missouri River. The term "Golden Triangle" was coined in the 1980's by real estate and developer entities and planning and economic development professionals as an indicator of the rapid pace of real estate development in St. Charles County. Research shows that MO Route 94 is the more commonly defined eastern boundary.



#### **Early History**

In 1804, William Clark established an encampment in the Dardenne region, on his first night out of the St. Charles trading post that was the starting point for his and Meriwether Lewis' exploration of the land acquired in the Louisiana Purchase. In his diary that day, Clark described what he saw as "beautiful, gently rolling prairie land."<sup>2</sup> About a century later, the area evoked the praise of noteworthy early resident Onward Bates, who, in his 1912 volume *Of Virginia and Missouri*, writes, "the picture of this prairie land which lingers with me shows one of the most desirable places for living that I have seen in any country."<sup>3</sup>

Bates goes on to commend the area's farming potential and to conclude that he "cannot be expected to refrain from offering [his] tribute . . . to such a favored portion of the earth's surfaces."<sup>2</sup> The explorations of Lewis and Clark fueled the westward migration that had begun with Spanish land grants in the late eighteenth century. In those early years, settlers (including Daniel Boone) came from Virginia, Kentucky, and the Carolinas to establish homes along the frontier. The earliest settlers were primarily families of Presbyterian affiliation, and they built the first church in the area in 1819 (the present Presbyterian church, located on South Outer 364 near Bryan Road, was established in 1869). In the 1840s and 1850s, predominantly Catholic Irish settlers arrived, some having come to the United States to escape the famines in Ireland. About the same time, German Catholic immigrants leaving behind their unstable homeland, immigrated to the area. The first Catholic church was built in 1870, near what are now Feise and Stump Roads, and construction began on the site of the present church at Hanley Road and Town Square Avenue in 1880.

At that time, the Griesenauer Blacksmith shop across the street from the church was the primary gathering place for locals and strangers, while the Dickherber-Meyers General Store and Post Office, about one-quarter mile west, served the community's commodity needs. The agricultural community revolved around the Dickherber Mill, which was located at the present site of Caregiver's Inn on Feise Road. And, sometime later, residents of the Dardenne area could find employment at the munitions plant in the Howell-Hamburg area. In the late 1970s, the communities of Lake Saint Louis and O'Fallon began extending their boundaries southward and residents of the unincorporated area, commonly referred to as Dardenne, were concerned that one of these communities might annex the area and undermine its rural character. Until that time, residential development in the area, excepting the area immediately adjacent to the Immaculate Conception Catholic Church, had been limited to the occasional development of relatively few acres of farmland.

<sup>&</sup>lt;sup>2</sup> Kate Gregg, Westward with Dragoons, np, 1927. p. 21, excerpting Clark's travel diary.

<sup>&</sup>lt;sup>3</sup> Onward Bates, et al., Of Virginia and Missouri, np, 1912, p. 20-21.



With the general population boom in St. Charles County and the steadily approaching boundaries of O'Fallon and Lake Saint Louis, the residents of the Dardenne area realized that large tracts of land no longer being worked as farms would likely be subdivided and developed quite rapidly. The homeowners and landowners in the area therefore filed for incorporation and adopted the County's R1-A zoning. These steps were taken not to halt the growth of the area, but to control the growth in order to preserve the area of Dardenne's rural character. After diligent work, local residents established the Town of Dardenne Prairie on October 20, 1981, as St. Charles County's newest incorporated municipality. The new Town was originally comprised of 17 properties along Bates Road and St. Theresa Lane.

#### From Town to City

By voluntary annexation, the old Dardenne area was incorporated into the Town of Dardenne Prairie. Since that time, the area has grown more quickly than originally planned. In April of 2001, the people of the Town of Dardenne Prairie voted to incorporate the Town as a Fourth Class City. This was accomplished on April 19, 2001. At that time, three wards were established, Board of Trustee members were sworn in as Aldermen and the Chairman of the Board of Trustees, Marilyn Field, was sworn in as the City's first Mayor. In November 2002, the City of Dardenne Prairie City Hall was located at 96 Hubble Drive. In April 2004, the City of Dardenne Prairie began using offices and holding meetings at 2032 Hanley Road in a temporary modular building before moving to the new permanent City Hall building in August 2009.

There are currently three wards in the City with two aldermen elected from each ward. A copy of the City's ward map is provided in **Figure 3** of the Appendix.

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## **II. NATURAL ENVIRONMENT ELEMENT**

This element of the Comprehensive Plan describes the environmental features that influence development in the City of Dardenne Prairie. Additionally, it considers the possible environmental effects of development in the City.

#### Climate

The climate of central eastern Missouri is classified as modified continental, signifying the region's four distinct seasons, ranging from warm, humid summers to cold winters. Summer weather can produce thunderstorms and heavy rain, which may cause flash flooding. The Dardenne Creek drainage basin, including Schote Creek, poses danger of flash flooding. The winter season sometimes brings heavy snowstorms. In the spring and early summer, tornadoes do occasionally occur.

During the summer months, air originating from the Gulf of Mexico tends to dominate the area, producing warm and humid conditions. Since 1870, records indicate that temperatures of 90 degrees or higher occur on about 35-40 days per year. Extremely hot days (100 degrees or more) are expected on no more than five days per year.

Winters are brisk and stimulating, but prolonged periods of extremely cold weather are rare. Records show that temperatures drop to zero or below an average of two or three days per year, and temperatures as cold as 32 degrees or lower occur less than 25 days in most years. Snowfall has averaged a little over 18 inches per winter season, and snowfall of an inch or less is received on five to ten days in most years.

Normal annual precipitation for Dardenne Prairie is about 38 inches. The three winter months are the driest, with an average total of about six inches of precipitation. The spring months of March through May are normally the wettest, with normal total rainfall of just under 10.5 inches. It is not unusual to have extended dry periods of one to two weeks during the growing season.

Thunderstorms occur on between 40 and 50 days per year. Occasionally, there are a few of these thunderstorms that are severe, producing hail and damaging winds.

#### Topography/Geology

The Dardenne Prairie area is composed primarily of gently rolling land. The elevation of the area varies from approximately 450 feet to approximately 650 feet. The area features the watercourse



of Dardenne Creek and its smaller tributaries, many of which run dry in the summer months. According to the *General Soil Map* for the State of Missouri, published by the Missouri Department of Natural Resources and the U.S. Department of Agriculture, Natural Resources Conservation Service, the soils of Dardenne Prairie fall into one of two categories.<sup>4</sup>

- The western part of the City is characterized by soils of the Mexico-Armstrong-Leonard-Keswick Association which are characterized as *"very gently sloping to moderately sloping, loamy over clayey, and poorly drained to moderately well drained soils; on uplands".*
- The eastern part of the City is characterized by soils of the Menfro-Winfield-Goss Association which are characterized as "deep soils that formed in loess and are gently sloping to steep, and moderately well drained to well drained; on uplands".

#### Vegetation and Wildlife

The Dardenne Prairie area was originally comprised of both hardwood forests and meadows covered with tall grasses. The region's deciduous trees are largely oak, hickory, and walnut. Only relatively small, scattered areas of the original deciduous forests remain. The deciduous forests provided the habitat for a number of mammals (including whitetail deer, fox, coyote, and racoons) and game birds (including turkey, quail, Canada geese, and numerous species of duck).

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<sup>&</sup>lt;sup>4</sup> General Soil Map, State of Missouri; State Geographic Database (STATSGO), Missouri Soil Survey Staff, 2005, Natural Resources Conservation Service (NRCS) - U.S. Department of Agriculture



### **III. ENVIRONMENTAL RESOURCES PLAN**

#### **Resource Limitations**

St. Charles County as a whole, and the City of Dardenne Prairie, are projected to continue to grow significantly over the next several decades. Meeting growing demands for development in a sustainable manner, conserving the natural environment, and many other important considerations will need to be addressed.

#### **Goal and Objectives**

Goal: To provide for the continued growth of the City of Dardenne Prairie while ensuring the quality-of-life and maintaining property values.

- Objective 1: Maintain air quality in the area, focusing on regulating the removal and replacement of trees and shrubs throughout the City on public and private property.
- Objective 2: Preserve natural (but non-invasive) vegetation as part of development and site planning wherever possible and ensure that development practices do not contribute to soil erosion.

#### **Trees and Shrubs**

This Plan recognizes that the existence of trees and shrubs is the best means of maintaining or improving air quality. Regulations have been developed to preserve the City's existing trees and shrubs as well as to increase the total number of trees and shrubs in the City. The cutting of large trees during development is regulated, and developers are encouraged to plant indigenous, deciduous trees, as part of the required, environmentally responsible landscaping plan.

It is nearly impossible to overstate the value of trees and landscaping in our urban areas. Properly placed trees and landscape plantings reduce energy consumption, filter pollutants, and slow flooding. They stabilize soil, enhance the ecological environment, and increase property values. Urban plantings also provide an invaluable psychological relief from the concrete and asphalt of a city. The value of these benefits is immeasurable.

Trees reduce the demand for energy consumption by casting shade and blocking winds. By shading concrete and asphalt, trees reduce the absorbed and radiated heat that turns our cities into urban heat islands. Trees shade cars and houses, keeping them cooler in the summer months, and



blocking cold winter winds, allowing buildings and homes to remain warmer in the winter. This reduces the demand for air conditioning or heating, which results in less energy being used. Less energy expenditures mean fewer fossil fuels are burned and less carbon dioxide goes into the atmosphere. This cycle of energy conservation is perpetuated as trees and other urban plantings naturally reduce the demand for heating and cooling.

Trees and shrubs are beneficial as air filters. They absorb carbon dioxide as part of the photosynthesis process. Their leaves remove dust and pollutants from the air we breathe. In addition, many plants help to filter toxins and chemicals from groundwater as it works its way toward our lakes, rivers, and streams. An environment composed of cleaner air and water, is healthier for all the animals that live on earth, including humans. The presence of trees has been found to reduce stress and increase feelings of peace and well-being in people.

Urban plantings significantly reduce flooding and soil erosion by slowing water runoff and holding onto soil. When raindrops are intercepted by a tree's canopy, the rate at which the rainwater hits the ground is significantly reduced. The slowed rainwater absorbs into the soil as it filters across vegetation and roots; reducing the amount of water that reaches the creeks and storm sewers. In addition, soil movement is reduced as a result of plant roots holding onto the soil. Without plant roots, soil has no ability to resist the erosive effect of rushing water.

Trees and landscaping not only enhance the environment, they also increase property values. Planting allows people to interact with and observe nature because they signal the changing seasons and add different colors and forms at each time of the year. Trees define areas in the landscape by framing, emphasizing, and screening. Studies have shown most people prefer to live in an area that has trees and is landscaped attractively.

With all the benefits trees provide, it is easy to see the need to protect the City's urban forest. The City of Dardenne Prairie recognizes the importance of green areas and is making direct efforts to insure the continued development of this invaluable resource. The City's plans include aggressive planting and maintenance programs on City property, providing educational opportunities for residents, and most importantly, enacting legislation which protects the existing urban forest. This legislation allows Dardenne Prairie to move forward, knowing a better city environment will be left to all those who follow.

#### **Stormwater Control**

The City has adopted the St. Charles County "Design Criteria for the Preparation of Improvement Plans" in regards to erosion and siltation control implementation and regulation.



The City has also adopted the Metropolitan St. Louis Sewer District "Rules and Regulations and Engineering Design Requirements for Sanitary Sewage and Storm Water Drainage Facilities" in regard to storm sewer construction regulation. In regard to the design requirements for stormwater quality, the City has adopted the Mid-America Regional Council (MARC) "Manual of Best Management Practices for Storm Water Quality." These standards and regulations provide for the control of erosion during and after development by regulating the removal and replacement of vegetation with large areas of pavement through requiring improvements such as detention or retaining basins for stormwater runoff when necessary. They apply to all new development and certain modifications to existing development within the City. Site and regulations.

During the plan approval process for developments, best management practices for siltation and erosion control are required. Periodic field inspections of such measures are made after developments are under construction. Maintenance of these measures is also required.

Areas of land immediately adjacent to streams, known as riparian zones, are essential to the health of a stream system. Riparian zones provide a buffer from development. The City of Dardenne Prairie's municipal code (Section 550.170(H) establishes requirements and regulations as follows:

Open Channel Setback Requirement. Development along natural watercourses shall have residential lot lines, commercial or industrial improvements, parking areas or driveways set back a minimum of twenty five (25) feet from the top of existing stream bank or 15-year, twenty (20) minute water surface elevation, where no defined bank exists. The watercourse and twenty-five (25) foot setback area shall be maintained and made the responsibility of the subdivision trustees. Residential lots having an area of one (1) acre or greater which shall be exempt from this regulation if the stream bank is not erosive. In the case of a site plan, commercial or industrial site, the watercourse and twenty-five (25) foot setback area shall be maintained and made the responsibility of the property owner. Permanent native vegetation and existing ground elevation and grades within the twenty-five (25) foot setback shall be left intact and undisturbed. Variances will include designed stream bank erosion control measures and shall be approved by the appropriate government agency, which has jurisdiction over the land and/or development in question. FEMA and U.S. Army Corps of Engineers guidelines shall be followed where applicable regarding site development areas designated as floodplains and wetlands.



#### **Floodplains**

Residential and commercial development in the one percent (1%) annual chance floodplain in the City can only be performed in accordance with the Municipal Code, which is in compliance with the provisions of the Federal Emergency Management Agency's National Flood Insurance Program (NFIP). The Municipal Code requires that the City Engineer issue a floodplain development permit for any development within the 1% annual chance floodplain. The 1% chance annual floodplain in the City of Dardenne Prairie is delineated in the NFIP Flood Insurance Study. A map showing the 1% chance floodplain in the City is provided in **Figure 4** of the Appendix.

The adopted regulatory floodway, a part of the 1% chance floodplain, is an extremely hazardous area due to the velocity of floodwaters that carry debris and potential projectiles. Any encroachments, including fill, new construction, substantial improvements, and other development is prohibited within the floodway unless it has been demonstrated, through hydrologic and hydraulic analyses performed in accordance with standard engineering practice, that the proposed encroachment will not result in an increase in flood levels during the occurrence of the 1% chance flood discharge.

A large amount of the flood prone areas in the City of Dardenne Prairie are currently being used for recreational and agricultural purposes. Encouragement and preference should be given to the continuation of recreation and agriculture in the floodplain.

#### **Earthquakes and Steep Slopes**

Earthquake resistance measures are included in the building code, as the City of Dardenne Prairie does lie within the zone of the New Madrid fault. Requiring such measures protects against collateral damage and injury to residents should an earthquake occur. Building codes also prohibit building on slopes of more than ten percent (10%). Such slopes constitute significant construction hazards with erosion problems and are unsuitable for home construction.

#### **Archaeological Sites**

If during the course of development, archaeological artifacts are discovered, the developer or builder is required to inform the Department of Natural Resources of the State of Missouri. Efforts should be taken to preserve sites or artifacts of historical or cultural significance.



This element of the Comprehensive Plan reviews the socioeconomic data for the City of Dardenne Prairie between 1981 and 2017. The U.S. Census Bureau data demonstrates the growth of the population of City of Dardenne Prairie, as well as the current social and economic characteristics of the City. Note that, for some of the data, 2017 is the only information available from the U.S Census Bureau derived from the American Community Survey (ACS) estimates. Limited 2018 ACS data is available for some information and is noted, as appropriate.

#### Population

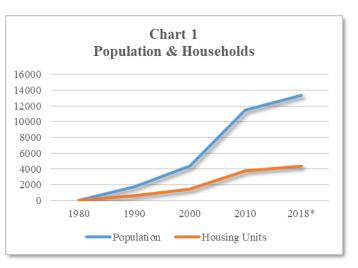
The City of Dardenne Prairie has witnessed continuous population growth since its incorporation in 1981. This population growth was rapid up until 2010 growing by 550 percent over the 1990 population. Between 2010 and the 2018 estimate, the population was expected to have grown by another 8.6 percent.

Although this data indicates the growth rate has slowed, on an annual basis it has generally

paralleled the estimated growth of St. Charles County for the same period. **Table 1** and **Chart 1**, to the right, provide data from the U.S. Census Bureau depicting the population for each decennial census and their most recent estimate, which in this instance, is for 2018. It should be noted that the 2018 population estimate for the City reflects the same number as the 2017 estimate indicating that there was no growth between those years. Table 1Population & HouseholdsCity of Dardenne Prairie

Year	Population	Housing Units
1980	0	Not Incorporated
1990	1,769	593
2000	4,384	1,431
2010	11,494	3,768
2018*	13,360	4,353

\* US Census Estimate







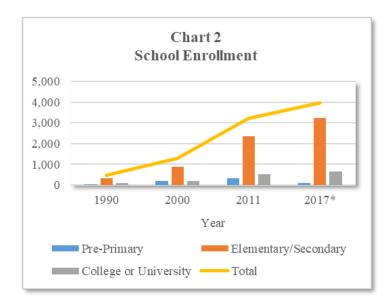
#### **Social Characteristics**

In the year 2017, approximately 30 percent of Dardenne Prairie's residents were enrolled in school. The number of persons at least three years old enrolled in school in the years 1990, 2000, 2011, and 2017 are listed in **Table 2**, on the right, and shown in **Chart 2**, below.

Table 2School EnrollmentCity of Dardenne Prairie

Sahaal Tura	Year					
School Type	1990	2000	2011	2017*		
Pre-Primary	37	190	329	98		
Elementary/Secondary	327	878	2,351	3,223		
College or University	112	206	527	659		
Total	476	1,274	3,207	3,980		

\* US Census Estimate



This data shows a population maturing. The number of Pre-Primary students has decreased while the number of Elementary/Secondary students has increased dramatically. By comparing the 2011 data with the 2017 data, it's clear that this is the result of children growing up and advancing through the education system.

The number of Dardenne Prairie residents at least 25 years old that were high school graduates and college graduates has continually increased as shown is **Table 3**, below.

Table 3Resident Graduation RatesCity of Dardenne Prairie

Sahaal Tyma	Year				
School Type	1990	2000	2011	2017*	
High School Graduates	84.0%	95.4%	97.0%	98.1%	
College Graduates	17.5%	37.6%	45.6%	50.6%	

\* US Census Estimate



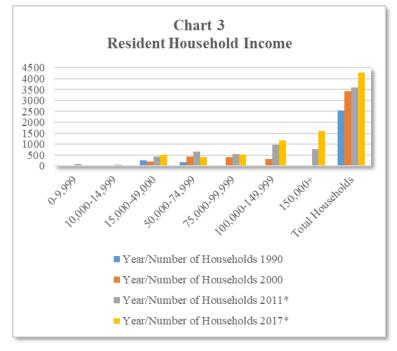
#### **Economic Characteristics**

**Table 4**, to the right, and **Chart 3**, below, depict the trends in household incomes in the City of Dardenne Prairie over the past few decades. There has been a very significant shift in household incomes in the City since 2000, especially in the \$100,000-\$149,000 and \$150, 000+ income brackets of the population. The U.S. Census Bureau data indicates that nearly 65 percent of all City households' annual incomes are greater than \$100,000.

#### Table 4 Resident Household Income City of Dardenne Prairie

Household Income	Year/Number of Households					
in \$\$	1990	1990 2000 2011*				
0-9,999	7	11	96	9		
10,000-14,999	36	0	69	49		
15,000-49,000	269	215	444	511		
50,000-74,999	174	440	673	398		
75,000-99,999	49	406	556	529		
100,000-149,999	12	313	977	1183		
150,000+	10	42	785	1593		
Total Households	lds 2547 3427 3600 4272					

\* US Census Estimate



There are 950 cities in the State of Missouri. Based on 2017 Census Bureau population estimates, the City of Dardenne Prairie is the 64<sup>th</sup> largest incorporated City in the State. The series of tables (**Tables 5, 6, and 7**) on the following page provide key population data for the City and the State. This data is derived from the 2010 Census of Population conducted by the US Census Bureau and the most recent (2017) comparable population estimates for the same information from the American Community

Survey (ACS) component of the Census Bureau's Population Estimates Program. It is important to note that the post-Census estimates from the ACS use extrapolation methodology to derive the estimate numbers. Therefore, where current actual data can be derived (such as housing unit counts per year shown later in **Table 9**), there may be a difference in the numbers.

#### **COMPREHENSIVE PLAN – VISION 2020**



Table 5
General Population Data
City of Dardenne Prairie & State of Missouri

Conoral Characteristic	Darden	ie Prairie	Missouri		
General Characteristic	2010	2017*	2010	2017*	
Population	11,494	13,360	5,988,927	6,075,300	
Persons under 5 years, percent	6.8%	3.7%	6.5%	6.1%	
Persons under 19 years, percent	35.5%	30.9%	23.8%	25.5%	
Persons 65 and over, percent	9.7%	13.6%	14.0%	15.7%	
Female persons, percent	51.0%	49.9%	51.0%	50.9%	
Male persons, percent	49.0%	50.1%	49.0%	49.1%	
Median Age (Years)	37.9	41.9	36.1	38.4	
* LIC Course Estimate					

\* US Census Estimate

(NOTE: Amercian FactFinder population data for 2018 contains only the total estimated population figure. The 2017 estimate for Dardenne Prairie is the same as that for 2017. The 2017 estimate for the State was revised to 6,108,612 after the original 2017 estimate shown above was published. The 2018 estimate for the State increases to 6,126,452 in the latest published data.)

 Table 6

 Population Racial Characteristics

 State of Decision & State of Mission

City of Dardenne	Prairie a	& State	of Missouri
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Concernal Characteristic	Dardenn	e Prairie	Missouri	
General Characteristic	2010	2017*	2010	2017*
White	90.7%	91.4%	82.8%	82.4%
African American	3.5%	3.4%	11.6%	11.6%
American Indian or Alaska Native	0.1%	0.1%	0.5%	0.4%
Asian	3.5%	2.8%	1.6%	1.9%
Native Hawaiian & Other Pacific Islander	0.6%	0.0%	0.1%	0.1%
Two or More Races	1.6%	2.2%	2.1%	2.5%
Hispanic or Latino	2.0%	3.3%	3.5%	4.0%
* US Census Estimate				

Table 7

#### Other Selected Population Characteristics

City of Dardenne Prairie & State of Missouri

Other Calented Characteristics	Dardenne Prairie		Missouri	
Other Selected Characteristics	2010	2017*	2010	2017*
High school graduate or higher, persons age 25+	97.0%	98.1%	86.8%	88.8%
Bachelor's degree or higher, persons age 25+	45.6%	50.6%	25.4%	27.6%
Veterans, 2007-2011	526	790	503,720	438,100
Mean travel time to work (minutes), workers age 16+	28.9	26.7	23.3	23.4
Housing units, 2010	3,768	4,353	2,712,729	2,738,774
Homeownership rate	98.3%	98.1%	69.5%	66.8%
Housing units in multi-unit structures, percent	1.8%	2.8%	19.6%	20.0%
Median value of owner-occupied housing units**	\$265,500	\$277,100	\$138,900	\$141,200
Number of Households	3,600	3,670	2,354,104	2,375,611
Persons per household	3.01	3.13	2.46	2.45
Per capita income	\$38,829	\$47,306	\$25,371	\$27,044
Median household income	\$99,050	\$128,449	\$47,202	\$49,593
Persons below poverty level, percent	4.1%	1.3%	14.3%	15.3%

\* US Census Estimate

\*\* In order to maintain data consistency, these values (as others in this table) are based on US Census data. The 2017 numbers are based on the latest Census survey information using various methods that may not be representative of Dardenne Prairie home values. This information suggests a 4% increase between 2010 and 2017. Other real estate data sources investigated show the median home value in Dardenne Prairie to be approximately \$322,000 in 2020 representing a 21% increase since 2010 and a 16% increase over the 2017 Census estimate.



# V. LAND USE

Land use is an important consideration in the growth of the City of Dardenne Prairie. This element of the Comprehensive Plan considers the land use plan set forth by the City founders at the time of incorporation and looks at current land use in order to create a plan for future land use and development in the City.

#### Land Use Plan Established by the City Founders

In the late 1970s, as the City of Lake Saint Louis and the City of O'Fallon began rapidly extending their boundaries toward the Dardenne Prairie area, Dardenne residents realized that the only way to preserve the community atmosphere for the area they desired was to incorporate. The residents of the Dardenne area established the City of Dardenne Prairie and adopted St. Charles County's R-1A zoning classification.

This plan promoted the following restrictions:

- residential units were to be developed on no less than one acre of land;
- limited commercial development would be allowed in the area of Interstate 64/U.S. Highway 40/61 and Missouri Highway N; and
- a very limited amount of land would be set-aside for industrial uses.

#### **Existing Land Use**

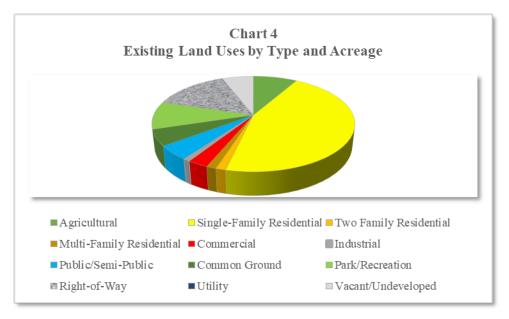
Land development in the City of Dardenne Prairie between 1981 and 1992 consisted mainly of large, single-family, ranch-style residential units on oneto five -acre tracts. **Table 8**, to the right, and **Chart 4**, on the next page, show the breakdown of existing land uses within the City according to acreage and percentage. **Figure 2** in the Appendix shows the largely residential character of the City's land uses. Since 1992, however, residential development has been largely composed of singlefamily residential units on tracts of land subdivided into lots of 10,000 to 12,000 square feet. Thus, as time progressed, the goal of maintaining a large-lot standard for residential development was not realized.

#### Table 8 Existing Land Uses by Type and Acreage City of Dardenne Prairie

Land Use Type	Acres	Percent of Total	
Agricultural	283	8.4%	
Single-Family Residential	1535	45.3%	
Two-Family Residential	45	1.3%	
Multi-Family Residential	45	1.3%	
Commercial	95	2.8%	
Industrial	31	0.9%	
Public/Semi-Public	162	4.8%	
Common Ground	184	5.4%	
Park/Recreation	319	9.4%	
Right-of-Way	483	14.3%	
Utility	2	0.1%	
Vacant/Undeveloped	203	6.0%	
Grand Total	3387	100.0%	

#### **COMPREHENSIVE PLAN – VISION 2020**





While lot sizes have decreased substantially, the average size of each unit has increased, and the average value has also increased, due to real estate market value increases and recognition of the City as a desirable place to live. **Table 9**, to the right, shows the number of building permits issued for housing by year in the City. The number of permits peaked in 2002 with 38 building permits for housing issued in 2019.

At the time the 2014 Comprehensive Plan was developed, it was noted that a small backlog of approximately 50 platted, vacant lots existed in the City. Based on the field survey of land uses conducted for this 2020 Comprehensive Plan, there were 138 lots currently available in the City. The earlier mid-decade decline in new housing development has now reversed itself. This has created a very strong demand for existing units, but supply has continued to be tight, and as a result, prices have risen. Concurrently, the demand for new units has

#### Table 9 Total Number of Housing Units Building Permits Issued by Year

City of Dardenne Prairie

Year	Building Permits	Year	Building Permits
1996	197	2008	36
1997	240	2009	37
1998	220	2010	68
1999	387	2011	59
2000	358	2012	80
2001	433	2013	63
2002	428	2014	45
2003	422	2015	45
2004	251	2016	23
2005	152	2017	19
2006	123	2018	13
2007	118	2019	38

been strong as well. The City has recently approved development of three residential neighborhoods which, when fully built-out, will comprise over 320 homes.

Commercial development in Dardenne Prairie has remained relatively stagnant. To date, the most significant commercial development in the City was the 45-acre Dardenne Town Square



retail center developed in 2006. This center contains anchor stores that include Target, JC Penney, and Schnucks. A multi-screen theater, and other retail and restaurant uses are located on adjacent properties. In recent years, vacancies have occurred in some of the ancillary retail buildings and the primary shopping center property recently changed ownership (The Shop 'N' Save grocery chain was purchased by Schnucks Supermarkets in 2018).

#### **Current Real Estate Market Trends**

Retail development in the metro areas in the U.S. continues to experience major changes as traditional "brick-and-mortar" retailers adjust to the impacts of online sales. Also, the amount of retail development in the U.S. and its metro areas (including St. Louis and St. Charles Counties) was significantly overbuilt. The effects of the recession, which began in 2007, exacerbated this condition and have resulted in a drastic slowdown of retail development and an increase in vacant retail space. The bulk of the space that was waiting to "backfill" has now been absorbed, particularly where it exists in well-located, contemporary developments and areas with the most desirable demographic composition. Although it should be noted that some of this space has been filled with non-retail uses such as various kinds of entertainment/recreation uses, restaurants, offices, and in some case institutional uses. This picture has now evolved to a point where in parts of the St. Louis metro market, retail vacancies are very low. The latest market data from the St. Louis office of Newmark Grubb Zimmer for the fourth quarter of 2019 showed that retail vacancy in the St. Charles County market to has shrunk to 3.4 percent. By typical retail development owner standards, this would be the equivalent to a "fully occupied" condition.

The prime competition for retail and related space (bars, restaurants, entertainment/recreation venues, etc.) for Dardenne Prairie continues to be the Meadows development in Lake Saint Louis and the similar retail developments in Wentzville. The commercial development in Wentzville is heavily influenced by the exploding housing development in that market area. Dardenne Prairie has some prime locations highly suitable for new retail uses and a market area with excellent demographics. The current market trend with very low vacancy provides an opportunity for the City to promote the attraction of new business in this category. At the same time, the City should continue to focus on supporting and promoting its existing retailers and other businesses. For example, the Town Square development received a significant "boost" when Schnucks occupied the former Shop 'N' Save store. This center is beginning to show a need for site and building improvements and the City should be proactive in engaging the owner in discussions about its plans and needs. Lastly, a major factor impacting retail development in St. Charles County is the outlet malls located in Chesterfield. The redevelopment of the Taubman development and redevelopment of Chesterfield Mall will take retail uses out of the larger market area. This should ultimately benefit the St. Charles County market.

A section of Dardenne Prairie located along Interstate 64/U.S. Highway 40/61 has been identified regionally as a High-Tech Corridor. The 2014 Comprehensive Plan proposed the preservation of the area (generally the frontage along Technology Drive) through the zoning process to ensure development as high-technology offices with some supporting commercial development. Much of the Technology Drive corridor was zoned in the "Uptown" district which



carries development limitations and very specific aesthetic development controls. As noted previously in this 2020 Comprehensive Plan, the Uptown zoning and Uptown Plan that supports it, has actually hampered development in those areas so designated. Subsequent discussion for future land use direction will provide direction for future land use in this corridor.

The 64 West Business Park located in the southwestern most portion of the City is the only area in the City zoned for industrial use. The 64 West Business Park was zoned straight I-1 Light Industrial, with no planned unit development (PUD) being proposed. The City did ask that the aesthetic provisions of the High-Tech Corridor District be incorporated into the covenants. However, lenient enforcement of those provisions prompted the Board of Aldermen to amend the provisions of Zoning Ordinance to make those provisions a part of the I-1 Light Industrial District requirements. There are nine (9) buildings existing in the development. Lots are not platted where buildings do not yet exist. As developments are proposed, the requisite land area is defined, and a new lot added by means of a revised subdivision plat.

Police services are provided in the City via a contract with St. Charles County government. Ambulance services are provided in the City by the St. Charles County Ambulance District. Fire protection services are provided in the City via three fire protection districts (Cottleville Fire Protection District, O'Fallon Fire Protection District, and Wentzville Fire Protection District). A map showing the boundaries of fire protection district areas within the City is provided in **Figure 5** of the Appendix.

There are three public school districts serving families in the City; Fort Zumwalt R-II, Francis Howell R-III, and Wentzville R-IV. Public schools in Dardenne Prairie at this time are: Cindy Ostmann Elementary, grades K-5, in the Fort Zumwalt School District; John Weldon Elementary, grades K-5, in the Francis Howell School District; and Prairie View Elementary, grades K-5, in the Wentzville School District. A map showing the boundaries of these three public school districts is provided in **Figure 6** of the Appendix. Also located in the City is Immaculate Conception Catholic Elementary School, grades K-8, and a private school called Classical Academy de Lafayette. Churches with established sites within the City include Immaculate Conception of Dardenne Catholic Church, Dardenne Presbyterian Church, Morning Star Church, First Baptist Church, Christ Alone Lutheran Church, StoneBridge Community Church, Connection Christian Church, and the First Church of Christ the Scientist (also known as the Christian Science Reading Room). The 2 Rivers Church does not currently have a church building in the City, but holds services at an office building in the 64 West Business Park.

A significant number of public parks and green spaces have been developed in the City since the original Comprehensive Plan was prepared in 2002. Existing and proposed park and recreation facilities (including bikeways and trails) are discussed in Section VIII of this Comprehensive Plan. Existing and planned parks areas and trails are provided in **Figure 7** of the Appendix.



# **VI. TRANSPORTATION PLAN**

Rapid growth in St. Charles County, Missouri, has placed greater demands on highways, streets, and connector roads throughout much of the County. The City of Dardenne Prairie's future road system will need to adjust to our growing populations and future development.

#### **Existing Road System**

The existing road system in Dardenne Prairie consists primarily of the following two-lane roads: Bates Road, Feise Road, Hanley Road, Henning Road, McCluer Road, Post Road, Stump Road, Weldon Spring Road, Town Square Avenue and Missouri Highway N. Portions of these roadways have been improved and upgraded in accordance with the City's Transportation Plan; however, significant deficiencies still exist. Highway N and Town Square Avenue carry the bulk of the traffic through the City of Dardenne Prairie with considerable traffic at the junction of Highway N and Interstate 64 (U.S. Highway 40/61).

The Missouri Department of Transportation (MoDOT) completed the upgrade of U.S. Highway 40/61 to a full controlled-access status as Interstate 64. Additionally, in 2014 MoDOT completed the construction of Missouri Route 364, a four-lane limited access highway from Interstate 270 in St. Louis County (known there as Page Avenue) to Interstate 64/U.S. Highway 40/61 in St. Charles County just beyond the edge of the City's western boundary. The highway traverses the entire northern sector of the City of Dardenne Prairie.

#### **Road Classification**

The City's existing roads can be categorized by the volume and type of traffic each carries and the function it performs. The roads in the City of Dardenne Prairie can be classified as principal arterials, minor arterials, and collectors.

#### **Principal Arterials**

Principal arterials are roads that carry the majority of the trips entering and leaving the urban area. The principal arterial roads moving traffic through Dardenne Prairie are Highway N, Town Square Avenue, Bryan Road, South Outer 364, and MO Route 364.



#### **Minor Arterials**

Minor arterials are roads that provide direct interconnection to the principal arterial system. Within the City of Dardenne Prairie, the minor arterials are Bates Road, Feise Road, Hanley Road, Henning Road, McCluer Road, Post Road, Stump Road, and Weldon Spring Road.

#### Collectors

The remaining roads and streets can be considered collectors. These channel traffic into the minor and principal arterials.

#### **Transportation Improvement Plan**

The City of Dardenne Prairie has previously developed a comprehensive transportation plan for extension, improvement, and maintenance of its roads and streets. That plan has been implemented effectively over the last several years through multiple improvement projects.

Most collector streets in the City have been upgraded from narrow two-lane streets to three-lane roadways. The City will continue to revise and implement its transportation plan through identifying and preserving roadway corridors, utilizing available transportation funding sources for new improvement projects, working closely with MoDOT and St. Charles County government plans, evaluating traffic movement throughout the City, and generally seeking to enhance transportation for its citizens. Proposals for new subdivisions and the associated roadways will be evaluated to ensure dedication of sufficient rights-of-way to provide for future street widening. This evaluation will also ensure that appropriate connections to existing streets are made where necessary to maintain safe traffic flow and access for emergency vehicles. Subdivision developers are required to provide a portion of the cost of improving affected roads and streets. The improvements include widening, and subdivisions must be planned in such a way as to avoid steep grades which produce runoff, erosion, flooding problems, or unsafe conditions in inclement weather.

The City of Dardenne Prairie currently contracts with St. Charles County for street and storm sewer maintenance and snow removal services. Under the current contract, the County Highway Department responds to City-identified maintenance needs on all City streets and storm sewer systems and provides snow removal services as a part of County roadway operations. Under this contract, the City is able to maintain City roadways using a five-year maintenance plan that includes scheduled crack sealing, seal coating, culvert and ditch cleaning, slab and joint replacement, bridge maintenance and various unscheduled repair and maintenance items.



#### Planned Transportation Improvement Projects

**Table 10,** below, summarizes the planned transportation improvement projects. Funding for these projects will be requested from St. Charles County, private developers, MoDOT, and East/West Gateway as warranted. As funds are available, the City of Dardenne Prairie will contribute toward covering project costs. The Board of Aldermen will set priorities on an annual basis. These planned transportation improvement projects are included in **Figure 8** in the Appendix, along with desired future roadway improvements.

Project Name	Length (feet)	Location
Missouri Route 364 Improved Access	-	Technology Drive
I-64 Improved Access	-	Between Missouri Route 364 and WingHaven Boulevard/Route DD
Hanley Road	2,300	Feise Road to Pleasant Meadow Drive
A.D.A. Compliant Facilities Upgrades	-	City-Wide
Feise Road Sidewalks	1,000	Stonewall Creek Drive to Dardenne Woods Drive
Stump Road	2,000	Highway N to Feise Road
Post Road	4,200	Technology Drive to Town Square Avenue
Weldon Spring Road	7,200	Technology Drive to Fieldstone Farms Drive
Highway N	9,500	Stump Road to Highway K
Comprehensive Trail Network	-	Connections between neighborhoods/parks/businesses
Dardenne Greenway Connection to August A. Busch Memorial Conservation Area	1,000	Dardenne Greenway at BaratHaven
Dardenne Greenway Connection to O'Fallon Sport Park	1,700	Dardenne Greenway Bluebird Meadow Park

Planned Transportation Improvement Projects City of Dardenne Prairie

Table 10

The City of Dardenne Prairie has identified the need to improve local access to and from Interstate 64 and Missouri Route 364. The Cities of O'Fallon and Dardenne Prairie are currently conducting a study of the I-64 corridor between Missouri Route 364 and WingHaven Boulevard/Highway DD. The goal of the study is to improve local access to the Technology Drive corridor and the corresponding area along the southwest side of I-64. The Cities of Dardenne Prairie and Lake Saint Louis, and St. Charles County are all participants in this study with reviews by MoDOT and FHWA.

The results of the Interstate 64 Outer Road Study envision the creation of north and south outer roads between Missouri Route 364 and WingHaven Boulevard/Route DD. The south outer road



will be in the City of O'Fallon and is intended, in part, to support a major planned mixed-use development in the City of O'Fallon. The north outer road will be in the City of Dardenne Prairie and is intended to provide local access to Technology Drive near Post Road. Technology Drive can remain a two-way roadway by employing ramps with a roundabout at the intersection. The improved local access to and from Interstate 64 and Missouri Route 364 will create the "front door" to Dardenne Prairie and the nearby Dardenne Town Square shopping center. In addition, improved local access will facilitate development or redevelopment of areas along Technology Drive, Town Square Avenue, and Post Road.

The limited access to and from Missouri Route 364, in the vicinity of Town Square shopping center and the residential neighborhoods of Dardenne Prairie and Lake Saint Louis, poses a serious impediment to economic development and a serious inconvenience to residents.

The City is pursuing a plan to build an interchange for Missouri Route 364 at Technology Drive which would provide full highway access for eastbound and westbound traffic and direct access to the Dardenne Town Square shopping center. The Missouri Route 364 improved access at Technology Drive would also provide direct access to the existing St. Charles County Youth Activity Park. The Youth Activity Park is planned to be a destination venue expected to draw an estimated 500,000 annual visitors located near the Dardenne Town Square shopping center. The design concept for this transportation improvement project has been completed and the City is seeking funding for preliminary engineering.

The improvements envisioned by these transportation projects will further enhance the development potential of the Technology Drive corridor for commercial or light industrial uses and will provide further long-term benefit to the Dardenne Town Square shopping center and surrounding area. Future land use recommendations discussed later in this document will provide additional information.

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# VII. UTILITY INFRASTRUCTURE PLAN

Electrical, natural gas, and telecommunications are provided by private and public utility companies to the City of Dardenne Prairie. Ameren and the Cuivre River Electric Cooperative provide electricity, and Laclede Gas Company serves the City's natural gas needs. CenturyLink, Charter Communications, and AT&T provide telecommunication services to various portions of the City.

AT&T generally provides service to the City south of Dardenne Creek and CenturyLink serves the City north of Dardenne Creek. Charter Communications provides cable television, telephone and internet access services throughout the City.

#### **Potable Water**

Two (2) separate potable water districts service the Corporate Limits of the City of Dardenne Prairie. These districts are Public Water Supply District No. 2 of St. Charles County (PWSD#2) and Missouri-American Water Company. The service areas, within the Corporate Limits of the City of Dardenne Prairie, of these two (2) water entities is depicted on **Figure 9** in the Appendix based on boundary agreements between these two (2) districts.

Continued improvements to the water systems of these service providers has ensured the availability of potable water serving the future growth areas of the City. Missouri-American Water Company constructed a large transmission line beneath the Missouri River more than a decade ago and has connected this line to the City of St. Louis, Howard Bend Water Plant. This line has been sized to provide water for all areas of the City, including that served by PWSD#2. As potable water infrastructure improvements are made, almost all new homes and many existing homes are connecting to one of these water suppliers' water mains.

#### **Sanitary Sewers**

Sanitary sewer service for the City of Dardenne Prairie is provided by three entities: the Duckett Creek Sanitary District, Public Water Supply District #2, and the City of O'Fallon. All large developments in the twenty years up to about 2014 were designed and constructed with sewers provided from the Duckett Creek Sanitary District. The Duckett Creek Sanitary District constructed additional sanitary sewer interceptors through the southern portion of the City, as well as an additional treatment facility located in the Missouri Research Park and a lift station located at the intersection of Highway K and Dardenne Creek.

#### **COMPREHENSIVE PLAN – VISION 2020**



The part of the City north of Feise Road and east and west of Hanley Road is served by Public Water Supply District #2. The City of O'Fallon provides service to the parts of the City generally north of Feise Road and along either side of Bryan Road. New developments in the parts of the City that are located within the service area of one of the districts are required to connect to one of these systems.

The addition and expansion of sanitary sewers was spurred by the significant increase in new development of areas within the City. EPA and Missouri DNR regulations essentially eliminated the use of individual septic systems or package treatment facilities serving individual properties or developments in urban areas where proper treatment facilities exist that meet EPA and DNR requirements. Based on 2012 data obtained from St. Charles County mapping sources, there were 7,500 such systems throughout the County. This data shows six of these systems existed within the City of Dardenne Prairie at the time (although it is not known if these still exist). These facilities are subject to inspection and permitting by the County. If they fail inspection, it is typically required that connection be made to the nearest sanitary sewer system (with certain allowances generally based on distance to a connection).

As areas are developed, sanitary sewer service is extended to developments in the City that are serviced by one of the districts based on the area of the service provider. As the newer developments bring sanitary sewer service near or through existing developments, property owners of these older developments that may still be on septic or package systems can usually connect to the sanitary sewer system at a reasonable expense.

Another method that existing residents or groups of residents can use to connect to the sanitary sewer system is through line extensions of the existing system. This method requires the resident(s) to have plans developed and the sewer line constructed per the particular district's standards. Due to the cost of these extensions, most residents or groups of residents are required to have these projects financed. An optional financing mechanism available to property owners is to develop a "Neighborhood Improvement District." This allows the property owners to obtain low interest loans for the design and construction of the sanitary sewer project.

The City has developed an enclosed **Possible Sanitary Sewer Projects** map (shown in **Figure 10** of the Appendix) that identifies groups of properties within the Corporate Limits of the City that currently are not provided with sanitary sewer service. The Sanitary Sewer Map identifies eight (8) potential sanitary sewer extension projects that would provide sanitary sewers to these areas. The projects are shown in **Table 11**, on the next page. The estimated project lengths are based on the future development constructing sewers to the limits of these areas. No line extensions beyond the limits of these areas have been considered.



#### Table 11 Possible Sanitary Sewer Projects City of Dardenne Prairie

Project Location	Project Length in Lineal Feet (estimated)
Stoney Brook Subdivision	4,900
Les Petite Chateaux Subdivision	3,000
Longview Subdivision	2,700
Fiese Road Parcels (Gentemann)	2,200
Oak View Estates	2,600
Brookside Acres Subdivision	1,900
Hanley Road Parcels (north)	1,500
Hanley Road Parcels (south)	2,200

#### **Storm Sewer Pollution Prevention Plan**

The City of Dardenne has adopted a Stormwater Management Program (SWMP), which provides a comprehensive approach to stormwater pollution management within the City. Specifically, the Program is designed to oversee the implementation of the National Pollutant Discharge Elimination System (NPDES) Phase II requirements within the City. The City is currently operating under MDNR NPDES Phase II Permit No. MOR040024, which was originally approved in April 2003, and renewed in April 2008, April 2013, and December of 2016.

#### **Five-Year Plan**

The Program has established a five-year action plan that will direct Dardenne Prairie's stormwater management. The primary means of improving stormwater runoff quality is through the use of best management practices (BMPs). This report outlines the one -year update to the approved Program and the current status of BMPs under the six program areas. These six program areas are:

- 1. Public education and outreach on stormwater impacts;
- 2. Public involvement/participation;
- 3. Illicit discharge detection and elimination;
- 4. Construction site stormwater runoff control;



- 5. Post-construction stormwater management in new/re-development;
- 6. Pollution prevention/good housekeeping for municipal operations.

Apart from temporary sediment control measures during construction, water quality concerns in developing areas focus on the polluting substances washed from paved surfaces and carried onto adjacent properties and/or into streams and other bodies of water during storm events. Pollutants carried in runoff include sediments, nutrients, chemicals, disease-carrying organisms, and heavy metals. Sources of these pollutants include grass clippings, eroded soil, fertilizer particles, oil and gasoline drippings, animal droppings, and heavy metals from vehicles. Retention ponds remove most of these suspended substances from runoff by retaining stormwater long enough to allow chemical-laden particles to settle out.

#### **Stormwater Detention**

The adverse effects of stormwater management in traditional developments mainly occur because of changes made to the character of the land surface. Developments introduce roofs and large areas of pavement, referred to as impervious surfaces, which substantially reduce the amount of rainfall soaking into the soil and substantially increase the amount of runoff. In addition, front yard setbacks necessitate more pavement areas to connect garages and front doors to streets.

Because pavements and roofs have less surface area to wet in a rainstorm compared to plantcovered lands, more water is also free to run off these impervious smooth surfaces. Because they are smoother, water also runs off of them faster. Instead of flowing off slowly over a longer period of time, a larger volume of water arrives downstream more quickly. More stormwater running more quickly may cause downstream flooding.

Development under conventional zoning does little to minimize, much less prevent, these ill effects. Curbs hold water in the roadway, requiring storm sewers to carry stormwater away. The pipes used for storm sewers move stormwater very efficiently. Instead of moving runoff slowly over natural surfaces allowing absorption, runoff moves rapidly inside storm sewers, with no opportunity to infiltrate into the ground. The higher speed of stormwater flow allows pollutants to remain suspended in the runoff. Since storm sewers are designed to flow by gravity, stormwater basins are designed for construction in the lower elevations of the development in natural drainage-ways. Streets then follow this drainage pattern. Thus, when storm sewers overflow, the street's smooth, uninterrupted, impervious surfaces become the paths that flood flows follow.

#### **COMPREHENSIVE PLAN – VISION 2020**



Developers are required to provide emergency relief swales at low areas of the street systems that safely carry away larger storm flows overland between buildings. Three considerations largely shape the design of stormwater management systems in Dardenne Prairie: flooding, convenience, and water quality. Developers must address these three considerations with both major and minor stormwater management systems in their projects.

Detention and retention basins, swales, streets, and storm sewers are all part of the major stormwater management systems. These systems should be designed specifically to avoid flooding that could cause injury and/or property damage. Where the effects of large storms are not specifically considered or planned for in developing areas, flood damage can be substantial. Swales, streets, and storm sewers are all part of the minor stormwater management systems. Minor systems should be designed with convenience in mind. Minor systems should quickly remove runoff water from areas such as streets, yards, and sidewalks to prevent the long-term ponding of water. Minor systems are typically designed to handle smaller storms. As noted previously in this Section, the City of Dardenne Prairie has ordinances in place to address stormwater management, but continually reviews these ordinances with the intent to improve them as needed to protect persons and properties downstream of developing areas.

#### **Stormwater Master Plan**

The City of Dardenne Prairie is in the process of developing a city-wide stormwater master plan to identify and prioritize needed stormwater projects. This stormwater master plan is being prepared so that prioritized projects comply with state and federal sources of funding such as Missouri's Storm Water Grant and Loan Program (10 CSR 20-4.061). The stormwater plan elements will address the Grant Programs' specific requirements including:

- An introduction that defines terms and discusses the purpose, scope, hydrology, and alternatives considered;
- Discussion of the data and methodology used in plan development;
- Description of the existing system (as applicable);
- A list of proposed stormwater projects;
- Description of the methodology used to evaluate and establish project priority ranking;
- Estimates of cost for full implementation of the plan;
- Description of the maintenance plan for existing and new systems;
- A geomorphological assessment of the plan area;
- Description of the rainfall/runoff modeling data for the plan area;
- Modeling data, structure data and photographs, public survey response forms; and
- Watershed map, public response map, floodplain map, maps showing project areas.



The root causes of flooding, bed and bank erosion, and sediment deposition will also be addressed. A map that shows major watersheds within the City is provided as **Figure 11** of the Appendix.

After a stormwater master plan is developed, the City will be able to apply for grants and lowinterest loans to make necessary improvements. With proper planning, the City may be able to incorporate stormwater management construction projects with planned unit development and transportation improvement projects to lessen the City's economic responsibility.

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### **VIII. PARKS, RECREATION AND TRAIL PLAN**

#### **Parks and Recreation Facilities**

Through public participation, innovation, and planning, the City of Dardenne Prairie can preserve and enhance the environment and the quality-of-life of its citizens with park areas. The City of Dardenne Prairie plans to work with such organizations Great Rivers Greenway (Metropolitan Park and Recreation District) in securing and planning park areas and trail connections.

In the past, the City has considered looking at proposed development plans with the intention that public park area contributions could be incorporated as a condition of approval, particularly for large developments. This type of cooperative effort with private investors, in certain circumstances, can decrease the City's cost of developing park areas. However, this scenario should be approached with caution, especially implementation via written policy which is not recommended. This would present the potential to create smaller parks that will be difficult to maintain rather than establishment of facilities of more substantial size that can serve a neighborhood or subarea of the City. In situations where a proposed development is located adjacent to an existing park facility or establishing a smaller park of sufficient size to serve the proposed development and adjacent neighborhoods, negotiating a land contribution for a portion of the development area as part of the development approval process would not be inappropriate.

Some cities use a system as part of the permitting process where the developer is required to contribute a one-time fee to a park fund that can be used to acquire park land. This technique is also not recommended. This could be construed as an "impact fee". Such mechanisms are subject to legal tests that are difficult to meet and could be subject to legal challenge. Impact fees for any purpose have not fared well in the courts and have proven to inhibit development and drive-up the costs. Lastly, in a suburban environment with cities competing for development, implementing either of these mechanisms will often drive development to adjacent and nearby communities where these mechanisms do not exist.

The City should set qualitative recommendations for the functional, environmental, cultural, and aesthetic character of the park areas as an integral part of forging the City's identity. The unification of residential and commercial areas and their functional and aesthetic links to park areas will create a public space of high value. Citizen participation is a determining force for the preservation of the City's heritage and identity. Future citizens will not be looked upon as only recipients of, but as participants in, these processes. Existing and planned parks areas and trails are provided in **Figure 7** of the Appendix.



#### **Existing Facilities**

A significant number of public parks and green spaces have been developed in the City since the original Comprehensive Plan was prepared in 2002. These include the park and green space facilities shown in **Table 12** below.

Description	Acres	Features
City Hall Park (2011 - City Park)	3	Amphitheater, shelter, swing set, playgrounds, concessions, fountain, spray ground, 44-space parking area
Dardenne Prairie Athletic Complex	6.5	3 softball fields, 95-space parking area, 4 pickleball courts, restrooms, plaza, equipment storage building
Dardenne Greenway – Barat Haven Park (2007 – leased City Park)	92.4	15-acre lake with 3 outlooks, 3.05 miles of trails, 22-space parking area, 3 soccer fields, cricket pitch
Dardenne Greenway - Bluebird Meadow Park (2013 – leased City Park)	75	1.3 miles of multi-use trail, 35-space parking area, playing field suitable for lacrosse and socccer
Georgetown Park (2006 - City Park)	0.5	Civil War Memorial

Public Parks and Green Spaces City of Dardenne Prairie

Table 12

A 1.70-mile multi-use trail was also constructed along Henning Road in 2003 (Phase I, outside of the Dardenne Creek floodplain limits) and in 2013 (Phase II, within the Dardenne Creek floodplain limits).

The City installed a cricket pitch at Barathaven Park which is used extensively by the American Cricket Academy and Club of St. Louis. Additional cricket facilities are being considered.

The St. Charles County Youth Activity Park is located next to Dardenne Town Square. This 26acre park includes a variety of facilities with several geared to "extreme" sports. According to the park's website it contains:

- A state-of-the-art 33,000-square foot skate course is equipped with nighttime lighting and has beginner, intermediate and advanced bowls, a street course, and a snake run scattered with ramps, gaps, hubbas, etc.
- In 2020 this park will include the addition of a 30,000 square foot pump track, consisting of a circuit of paved rollers, banked turns and features designed to be ridden by riders "pumping" (generating momentum by up and down body movements, instead of pedaling or pushing).
- The facility also features a 30-foot indoor rock-climbing wall, a sand volleyball court, halfcourt basketball, an open play area, table tennis, foosball table, air hockey and large video



gaming area equipped with two flat screen televisions. The YAP Café is available for visitors to purchase a variety of snacks and drinks.

• An indoor recreation room and meeting room are available to rent for up to 20 guests.

There are also plans for significant future further development of this park.

#### 2019 Parks and Recreation Master Plan

Planning for recreational areas for citizens should be considered a vital part of the continued development of the City of Dardenne Prairie. These planned recreation areas include public and private park areas, and public and private trail systems. The City should plan to protect and enhance areas of recreation, the character and appearance of parts of the environment that are of special interest including wooded areas, prairies, and streams.

In in the Spring of 2018, the City of Dardenne Prairie commissioned the development of a Parks and Recreation Master Plan which was completed in January of 2019. The preparation of this Plan was conducted by Planning Design Studio in association with Ballard\*King. This is an extensive document that contains an evaluation of the City's current parks and recreation facilities, recommendations for improvements and enhancements, cost estimates for recommended improvements, and suggested methods for phasing and financing. The Parks and Recreation Master Plan should be considered a companion document and additional appendix to this Comprehensive Plan. Given the scope and size of this document, it is not included as an appendix to this document. It its available for review on the City's website:

#### (www.dardenneprairie.org)

Hovering on the "Parks & Recreation" tab at the top of the webpage and then selecting the "Administration" from the drop down menu item will take the reader to the full "Parks Master Plan" document in the items listed to the right (the link is provided below).

#### https://cms9files.revize.com/dardenne//parks/Parks%20Master%20Plan.pdf

The Parks and Recreation Master Plan has a principal focus on the existing City recreation facilities. Section 5 of the document provides the analysis, development concepts, and estimated costs associated with the various recommendations.

The Parks Master Plan suggests the following priorities to guide the City's path forward:

#### **COMPREHENSIVE PLAN – VISION 2020**



- 1. Receive donation of Dardenne Athletic fields, acquire an additional 2 acres to accommodate the Dardenne Prairie Athletic Complex (currently under construction to be completed in the Spring of 2021).
- 2. Pursue potential partners for development of a shared indoor recreation facility.
- 3. Implement near-term improvements to City Hall Park and Barathaven Park.
- 4. Connect to the Dardenne Greenway east of Bluebird Meadow to O'Fallon Sports Park.

#### Trails

Multi-use trails are not only an environmentally-friendly investment, but also an economic and aesthetic investment in a community. The City of Dardenne Prairie was founded with the goal of creating a community that preserved the natural beauty and rural character of the area. Recognizing early-on that the area would develop, the City has worked diligently to ensure that developments provided green space and amenities. A comprehensive trail network through the City is a desirable adjunct to such a concept.

Surrounding communities and St. Charles County have recognized the value of trails as well. The Dardenne Prairie Trail system attempts to link the systems planned by other agencies with these in existence within development at this time. Evolution of the system may be slow due to funding constraints. The primary means for funding the system will be to request that developers construct portions of the system as part of their improvements. To expedite system implementation, grants from the Transportation Enhancement Fund Program should also be sought.

There are several potential projects for which the City could assume responsibility. The most important projects will require a cooperative effort with the County and/or the City of O'Fallon. To conserve financial resources of the City, responsibility for projects should be relinquished to other entities whenever possible. Further, whenever development occurs adjacent to a planned trail route, the developer should be required to include that portion of the trail system in the development.

Timing of project construction and prioritization of projects will be dependent on the timing of trail construction by other agencies. As trails in adjacent areas are constructed, links through Dardenne Prairie will be needed. In any case, whenever development occurs, the developer



should provide trails which link to planned, future trails regardless of the timing for those future trails.

**Section 2** of the Parks and Recreation Master Plan included a review of existing and proposed trails in Dardenne Prairie and surrounding communities. The review was based on existing available studies to determine potential for park connections and links to adjacent recreation facilities. Since it represents a summary and update of the data provided in the 2014 Comprehensive Plan, the text of this section regarding the existing facilities is provided below.<sup>5</sup>

Dardenne Prairie has an existing loop of bike lanes surrounding the lower portion of the municipality. The bike lanes run along Technology Drive parallel to 1-64 from Highway K to WingHaven Blvd. The bike route turns east and becomes a "Share the Road" bike route along WingHaven Blvd. to S. Outer Road and continues along S. Outer Road 364 to Bates Road. At Bates Road, the route returns to separated bike lanes along S. Outer Road 364 east to Highway K. The bike route turns south along Highway K to complete the loop at Technology Drive. There are also existing bike lanes along Twin Chimneys Blvd., which start at S. Outer Road 364 and end at Lee Ridge Drive, just short of forming a loop with S. Outer Road 364.

In addition, two existing multi-use paths intersect with Dardenne Prairie. The Feise Road path runs along the north side of Feise Road from just east of Brook Hollow Drive east to Highway K. The Bryan Road multi-use path runs along the east side of Bryan Road from Feise Road north to Veteran's Memorial Parkway. (See Figure 6 on Page 36 of the Parks and Recreation Master Plan).

Great Rivers Greenway (GRG) has a River Ring Master plan that identifies greenways throughout St. Charles County, St. Louis County and the city of St. Louis. In Dardenne Prairie, GRG has identified an interest in extending the trail that runs through Barathaven and Bluebird Meadow Parks towards O'Fallon but no timetable has been established.

The River Ring Plan shows the Dardenne Greenway extending west and south through the August A. Busch conservation area to connect with the Busch Greenway. The eastward expansion will connect with existing portions of the greenway at St. Charles Community College, and will eventually extend through Dardenne Park in St. Peters, and follow Dardenne Creek north to the St. Louis Youth Soccer Association (SLYSA) soccer complex.

<sup>&</sup>lt;sup>5</sup> Parks and Recreation Master Plan, pages 35 through 41, Planning Design Studios in association with Ballard\*King, January 2019.



The St. Louis Region Gateway Bicycle Plan (GBP), St. Charles County and the City of O'Fallon have proposed trail connections that intersect with Dardenne Prairie, shown in Figure 7 (See page . The GBP has proposed extensions to the Dardenne Prairie bicycle network along:

- Phoenix Parkway from Technology Drive east and north to WingHaven Blvd.
- Red Hawk Parkway/McClure Road from Phoenix Parkway east to S. Outer Road 364
- Henning Road from Bates Road 364 south to Weldon Spring Road
- *Highway K from S. Outer Road 364 north to Mexico Road*
- Technology Drive from Merz Farm Lane north to Veteran's Memorial Parkway
- Technology Drive from the existing bike lanes to Post Road

The GBP has proposed further extensions of the bike network around Dardenne Prairie with "Share the Road" bike markings. The markings include signs and road striping to alert drivers that their lane is to be shared with bicycles. The proposed "Share the Road" routes are along:

- Post Road (which becomes Hanley Road) from Technology Dr. north to Pleasant Meadow Dr.
- Stump Road from Highway N north to Feise Road
- Highway N from Technology Road west to Highway N NE

The GBP also has plans for widened outside lanes and paved shoulders to accommodate bicycles on roads without a designated bicycle lane. These improvements are planned along:

- WingHaven Road from Technology Drive west to Sommers Road
- Technology Drive from Post Road north to Merz Farm Lane
- Feise Road from Technology Drive to the start of a multi-use path near Brook Hollow Drive
- Highway N from Technology Drive east to WingHaven Road and from Sump Road east to Weiss Road
- Weldon Spring Road from Technology Drive heading east, and turning south on Weldon Spring Road to reconnect with Technology Drive

Finally, the GBP proposes to extend the Bryan Road multi-use path south so that it connects with the bike lanes along WingHaven Blvd.

The City of O'Fallon has proposed a city greenway connecting to GRG's Dardenne Greenway in Bluebird Meadow running north along the Dardenne Prairie/O'Fallon



municipal boundary, crossing through Dardenne Prairie near the Waterford Crossing and McGregor Circle neighborhoods, to terminate at the bike lanes along Twin Chimneys Blvd. O'Fallon has proposed a second greenway running west from the Dardenne Greenway in Barathaven Park and turning north to end near O'Fallon's O'Day Park.

The Dardenne Prairie Parks and Recreation Master Plan recommends prioritizing a trail connection between City Hall and the GRG Dardenne Greenway In Barathaven Park, and the extension of the Dardenne Greenway east of Bluebird Meadow to connect with O'Fallon Sports Park and the existing stretch of greenway leading to St. Charles Community College. Second priorities would be creating a connection from City Hall to the Youth Activity Park and completing the bike lane loop on Twin Chimneys Blvd.

The City Hall to Dardenne Greenway connection could take several alternate routes. The preferred route starts at City Hall on Hanley Road and travels south as Hanley changes to Post Road. The route turns south on Technology Drive, following the existing bike lane towards Barathaven Park. Technology Drive currently runs adjacent to but does not intersect with Barathaven Park. A new connection between the road and the park needs to be designed, including finding a solution to the significant change in grade between the Technology Drive and the Dardenne Greenway.

The second route option begins at City Hall and travels south along Hanley Road to Town Square Avenue. Here it turns east to meet with the existing "Share the Road" route along WingHaven Blvd. It turns south at Bates Road, and follows Bates Road as it turns east at Redhawk Pkwy. The route then turns south onto Henning Road, which leads into Barathaven Park. A new connection is needed between Henning Road and the Dardenne Greenway, as the greenway currently passes underneath a Henning Road overpass. (See Figure 8 on Page 39 of the Parks and Recreation Master Plan).

As noted previously in the Plan, **Figure 7** in the Appendix provides a map of the existing park and recreation facilities and trails.

#### **Existing Trail and Bicycle Facilities Plans of Other Entities**

Several subdivisions/developments have trail plans. Private residential subdivision trails in the City of Dardenne Prairie include the McCluer Village, Westfield Woods, Aberdeen, and Inverness subdivisions. The WingHaven and Twin Chimneys subdivisions in the City of O'Fallon have trails and on-street bicycle facilities.



The City of O'Fallon Multi-use Trail System provides for numerous projects in the Dardenne Prairie area. A trail is planned along Highway K, which will extend from Highway 79 over Interstate 70 to Interstate 64/U.S. Highway 40/61. A trail is planned along Interstate 64/U.S. Highway 40/61, which will link to the County's Motherhead Road Trail via O'Fallon's Highway 94 Trail. It will extend up Interstate 64/U.S. Highway 40/61 to the proposed Henke Road Trail and continue past Interstate 70. A trail is planned along Highway N from Interstate 64/U.S. Highway 40/61 past Highway K to a proposed Creek Trail. There is a plan to connect the existing trails along Dardenne Creek to the existing trail along Highway K to the east and to Interstate 64/U.S. Highway 40/61 to the west.

The trail networks within developments provide some assistance in linking the previously mentioned arterial trails. The network in Campbell Village is located within dedicated residential street rights-of-way and is available for public use. It makes a connection to both McCluer Road and Henning Road. However, it does not provide a trail or sidewalk alongside either of these roads. The Aberdeen subdivision trail runs alongside of McCluer Road eastward from Bates Road to a point approximately 1,000 feet south of Highway N. The trail is located on a public access easement. This trail provides a cross-road connection into Campbell Village. Further south along Henning Road, the Westfield Woods trail runs a short distance along Henning Road. It is not located on a public easement. Such an easement should be requested from the homeowner's association of that development once the connection to a public trail is planned. The new residential development of IVERNESS, northwest of the Bryan Road/Feise Road intersection plans to build miles of concrete paths for bikes and pedestrians. Those trails will connect to paths in the neighboring Bainbridge subdivision and the nearby Lake Forest Country Club in Lake Saint Louis

The final subdivision trail network in the Dardenne Prairie area is located in the City of O'Fallon, WingHaven development. Plans for this development provide for trails located on public right-of-way. Much of the system is in the form of single sidewalk along streets. It does make several key connections by linking Highway N southward to Highway 40/61 along an arterial street named WingHaven Drive and also links that connection to Post Road at Interstate 64/U.S. Highway 40/61. It connects Red Hawk Parkway southeastward to Post Road and continues further southward, again connecting to Interstate 64/U.S. Highway 40/61. These links will preclude the need for a trail along the north-south leg of Post Road and will create a portion of the Interstate 64/U.S. Highway 40/61 Trail and the Highway N Trail.



#### **Potential Trail Projects**

As noted previously in this Section, the Parks and Recreation Master Plan makes certain trail recommendations that are discussed above. Certain more specific recommendations originally discussed in the 2014 Comprehensive Plan remain relevant and are discussed below.

#### Weldon Spring Road

A trail along Weldon Spring Road could be constructed in two segments. The western segment would connect Interstate 64/U.S. Highway 40/61 to Henning Road. This trail, if constructed on the north side of the road to serve the Carriage Hills subdivision, would lie mostly in the City of O'Fallon. It would link the Henning Road trail to Interstate 64/U.S. Highway 40/61. The eastern segment would connect Henning Road to Highway K. It would also serve the new Fieldstone Farms subdivision in O'Fallon. Since a major portion of this trail would lie in O'Fallon and the City of O'Fallon has, by agreement, assumed responsibility for Weldon Spring Road, some form of cooperative effort would be needed for its completion. It would serve as another link to the Highway K and Technology Drive trails.

#### Highway N

A trail along Highway N from Interstate 64/U.S. Highway 40/61 to Highway K would be a vital link for the City of Dardenne Prairie network as it connects the Bryan Road Trail to the WingHaven development. It will also eventually bridge over Missouri Highway 364. This is a major trail, which should be two-way, having a minimum width of eight feet.

Although the St. Charles County Bikeway Plan does not include a trail along Interstate 64/U.S. Highway 40/61, the O'Fallon Master Plan does. This trail will link the City of Dardenne Prairie system southward to Highway 94 and to the trails within the Missouri Research Park. To the north, this trail will link, by the Henke Road Trail, to the Railroad Trail, north of Interstate 70.

There are two small portions of this trail that lie in Dardenne Prairie. The most northern portion extends southeastward from Highway N to Post Road. The southern portion extends southeastward from Weldon Spring Road to Schote Creek. An area identified by agreement to be in the City of O'Fallon growth area, which contains the WingHaven development, separates them.



#### **Dardenne Creek Trail**

The trail along the Dardenne Creek channel could be extended to connect to the proposed Interstate 64/U.S. Highway 40/61 Trail and existing Highway K Trail. These connections would link the Dardenne Prairie trail system with Highway N and Motherhead Road to eventually connect northward to Mexico Road and on to I-70. Such a trail could lie within the 25-foot setback from all open channels as provided for in the "2008 St. Charles County Design Criteria for the Preparation of Improvement Plans."

#### **Trail Development Standards**

The following are recommended standards for Dardenne Prairie Trails.

- 1. Minimum 8' wide asphaltic concrete, 2" thick with 4" compacted aggregate base.
- 2. Separate trail from roadway/shoulder by at least a 2' green space (where right-of-way width permits).
- 3. Use sidewalks only where low-volume traffic is present on adjacent, residential street (direct bicycles onto street).
- 4. Require ADA ramps at curbed roadways.
- 5. Use standard signs directing trail traffic through developments.
- 6. Construct network map signs at major intersections and develop network signs within developments.
- 7. Provide bicycle safe inlet gratings in bikeway path.
- 8. Design according to AASHTO guidelines.
- 9. Separate equestrian trails from paved trails where appropriate.

#### **Trail Project Funding**

Funding of the trail projects undertaken by Dardenne Prairie can be provided from a number of sources, including:

- 1. General Funds
- 2. Donations of Property
- 3. Construction as a Part of a Development
- 4. Cost Sharing with St. Charles County and/or the City of O'Fallon
- 5. Metropolitan Park and Recreation District (Great Rivers Greenway) Lease Agreement
- 6. Missouri Transportation Enhancement Fund Program
- 7. Parks and Stormwater Sales Tax

#### **COMPREHENSIVE PLAN – VISION 2020**



*General Funds* - Although very limited for the City of Dardenne Prairie, use of monies from the General Fund is certainly permissible for design and construction of trails. This is not perceived to be a major source of funding for the trail network. These funds should only be used as participative seed money for grants or to fill in minor connections between developments to finish a trail system.

**Donations of Property** - Wherever trails are planned that require easements or right-of-way in addition to existing easements and rights-of-way, an attempt should be made to get the needed property donated. Especially in the case of equestrian trails and other trails along watercourses, the owner may be willing to make a donation. Particularly in cases of proposed development, after adoption of this Plan, these easements are to be required as part of the approval process. Another incentive would be to have the value of the donation assessed and a letter provided to the owner for tax deduction purposes. In these cases, the trails could be located within the standard 25-foot open channel setback. This would be at essentially no loss of developable land to the owner. Further, owners may be agreeable to donating such easements to ensure preservation of the scenic watercourse and adjacent foliage. Responsibility for maintenance of such property donations may be able to be transferred, by agreement, to the St. Charles County Parks and Recreation Department. Further, insurance covering landowner liability for accidents on the donated easements may be furnished by an agreement with the County.

*Construction as Part of a Development* - During the development planning process, developers have generally been willing to provide trails as an amenity for their residents. Further, they have been willing to plat widening strips of land adjacent to existing roadways. This should continue to be a source of property for trails and for the actual construction of trails.

*Cost Sharing* - Since many of the trails planned within the City of Dardenne Prairie will be partially constructed in the unincorporated County and in the City of O'Fallon, joint funding of these projects should be possible. This is especially true considering that many of the planned trails were included in the O'Fallon Master Plan. It would be reasonable to assume that, at a minimum, O'Fallon would finance those portions of the trails within their municipal boundaries. Missouri Transportation Enhancement Fund Program - Funds are available for trails through this State program. Projects compete for available funds annually. One requirement for these funds is that there must be a minimum of 20 percent local cost match. Dedicated easements acquired from developments can be included in this match. All of the preceding funding sources can be utilized for the local match. Another limitation is that a municipality may submit only one project application each year. The City of O'Fallon may be willing to finance the local share of trails included in their plan if Dardenne Prairie is willing to act as the applicant and sponsor for the project.



*Parks and Stormwater Sales Tax* – In 1995 the General Assembly enacted legislation to allow any city in the State to levy a sales tax of up to  $\frac{1}{2}$  cent for municipal parks and stormwater control. The City of Dardenne Prairie has levied such a tax (at the  $\frac{1}{2}$  cent rate). Therefore, revenue accrual to this tax will be dependent on the health of the existing sales tax generators in the City and can only show significant increase as a result of the addition of new retail sales tax generators.

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### **IX. FUTURE LAND USE AND DEVELOPMENT**

#### **Future Development**

A map of the City's neighborhoods is provided as **Figure 12** of the Appendix. As depicted on this map, the City of Dardenne Prairie will not grow significantly in land size due to previous annexations made by the City of O'Fallon and the City of Lake Saint Louis. A majority of the area within the City has been developed. However, there are still hundreds of acres of undeveloped and re-developable land within the City of Dardenne Prairie's growth area. Several of these areas include potential for mixed-use development, including Route 364 near Bryan Road on the north side of Route 364 east of Bryan Road, the areas along the north outer road along Interstate 64 between WingHaven Boulevard and Town Square Avenue, and the areas along Town Square Avenue as further described herein. A map depicting the Future Land Plan is provided as **Figure 13** of the Appendix.

#### **Future Land Use**

The City's Future Land Use Plan is provided as **Figure 13** of the Appendix. This map is based upon the current goals of City leaders, the existing land use patterns, and the anticipated growth of the area. This plan deals with land use within the planning area including within the City limits of the City of Dardenne Prairie as well as within unincorporated areas within the growth area that may be annexed into the City in the future. The Plan emphasizes providing reasonable residential, public, commercial, industrial, and recreational development while maintaining the City's high-quality housing character. The Plan is intended to provide for an optimum quality-of-life for the residents. Residential development will remain the primary land use in the City of Dardenne Prairie. Churches, schools, parks, open spaces, and public buildings are allowed in areas designated as residential.

The following discussion correlates to the future land use designations as shown on the Future Land Use Plan map, **Figure 13**.

**364 COMMERCIAL** – This area consists of properties in the vicinity of the MO Route 364 and the Bryan Road interchange on the northwest, southwest, and southeast sides of the interchange. Route N also interchanges with Bryan Road just to the north of the 364 interchange. The properties on the northwest side of the interchange have visibility from Route 364 and access to both of the interchanges. However, with a couple of exceptions, the developable parcels adjacent to the interchange are generally smaller in size, are bordered by significant drainageways, and have topography challenges. This limits their development potential for larger



buildings. Some retail and service commercial uses are already located in these areas, but they are generally of the type that provide goods and services to the residents of the local area as opposed to uses that serve the larger region or sub-regional market. Retail and service uses that support the needs of residents in the general vicinity, particularly north of Route 364, would be appropriate. Such uses might include offices, service businesses such as dry cleaning and laundry establishments, convenience stores with gasoline sales, specialty grocery stores, medical or dental clinics, restaurants, etc. These uses would be housed in free-standing buildings dedicated to the individual business or multi-tenant buildings.

It is the intent of this Future Land Use Plan to recognize that many of these tracts are bordered by single-family residential developments. If developed commercially, appropriate buffers should be incorporated into any development plan. Also, development for residential uses is recognized as a potential alternate land use. However, any new residential development should consist of multiple parcels and no new residential development should be "sandwiched" between commercial uses.

There is a 10-acre parcel situated between the Cordoba subdivision to the west and Dardenne Center, a small commercial development, to the east. Access is limited, with one access point on Bryan Road shared with the property and the strip-commercial building to the east. Traffic at this location, particularly during peak traffic times, will make access to commercial uses potentially challenging. Development of commercial uses on this parcel should be subject to a traffic study that investigates the potential access issues and how Bryan Road and interchange traffic may be impacted. It should be noted that the existing access point on Bryan Road is about 700 feet north of the signal at the interchange ramps. Single-family residential land uses border the tracts to the west, the north, and (across Bryan Road) to the east. Like the other properties on the north side of Route 364 further east, development of these properties for single-family residential uses represents a logical alternative that might have lesser traffic impact.

A large tract of about 16 acres is located at the southwest quadrant of the interchange. This property, known as the Gilmer tract, has frontage to 364, Bryan Road, and Town Square Avenue. It is bordered by residential development on the west and across Town Square Avenue on the south. The larger size of this property presents the potential for mixed-use development that could combine residential development, probably of higher density than nearby subdivisions, with commercial uses. This site has an opportunity to provide a combination of residential and commercial uses where an upscale, multi-family component would have ground floor shop space for restaurants, coffee shops, and other commercial uses that support the residents of the development and nearby residential areas.



**NORTH BRYAN ROAD COMMERCIAL** – This area of about 80 acres is located at the northwest quadrant of the intersection of Bryan and Feise Roads. This is part of the largest single undeveloped tract of land in the City known as the Bopp tract (the name of the family ownership). This is the one location in the City where a larger retail development could be feasible given the ability to configure the proper site width to depth relationships that larger retail developments require. At least for the foreseeable future, the City and the property owners should reserve at least some part of the frontage of the property for such uses. These might include any of the uses that can be found in larger shopping centers such as home improvement stores, furniture stores, discount department stores, home goods stores, clothing stores, and other such land uses along with service businesses, restaurants, and small office spaces (dentists, insurance agents, mobile phone providers, etc.).

At the same time it is recognized that real estate market conditions for the foreseeable future may not support commercial use of the entire area. The Future Land Use Plan (**Figure 13**) provides a Residential Alternative (North Bryan Road Commercial) land use designation for the western portion while preserving the Bryan Road frontage for non-residential development. The area designated as commercial and its general shape is only intended to indicate that the acreage at the corner of Bryan and Feise Roads and the Bryan Road frontage should be preserved for commercial use in the form of enough acreage and appropriate depth to provide for a quality commercial development. It should also be recognized that a roadway connection to Bryan Road, that also serves the adjacent Residential Alternative sector and the Inverness residential development that is adjacent on the west, may also be needed. Figure 13 is not intended to dictate the ultimate configuration of the area of commercial development or its size. This would be determined by subsequent zoning action by the City of Dardenne Prairie.

**I-64 COMMERCIAL** – The properties fronting I-64 along Technology Drive between Post Road and Town Square Avenue are parcels that vary in size from 36 acres to less than one acre. Some of these properties are comprised of uses that represent a significant underutilization of the land and contain buildings in deteriorating condition. At the same time, this area represents one of the few developable I-64 frontage areas. It extends for approximately 1.25 miles from the intersection of Technology Drive and Post Road almost to the Route 364/I-64 interchange. Most of the properties have depth from the Technology Drive frontage of approximately 600 feet. The eastern property line of these parcels follows a significant drainageway and some of them have significant topography changes. This is part of a "technology corridor" envisioned in municipal and County planning for the area. This planning concept has a land use focus for the area of office uses and technology businesses as a primary target. In addition, other uses such as regional corporate offices, and companies with combined office and light manufacturing or assembly operations (e.g. aerospace, automotive, or computing-technology related). Supporting retail and

#### **COMPREHENSIVE PLAN – VISION 2020**



service uses are also appropriate. It is important that any retail uses in this area be complementary to, and not competitive with, the Town Square shopping development at the northern end of the Technology Drive area. This is the City's single largest source of retail sales taxes with major retailers whose existence should be protected. The proposed I-64 Outer Road Project will have significant impact on this part of the City (See Section VI, Transportation Plan).

Parts of this area may be suitable for residential development. However, the only portion of this corridor where residential development should be considered is a portion of the southernmost part of the largest tract in the area (the so-called Hemsath parcel of about 32 acres). This parcel has frontage to both Technology Drive and Post Road, a significant topography change on the southern end of the parcel and is separated by a drainageway from the rest of the parcel at this location. Residential development is already located to the east across Post Road. It is possible to develop this part of the property for single-family uses while preserving the part of the parcel facing Technology Drive for commercial uses. Losing the commercial development potential of the remainder of this corridor would be unfortunate. Also, the proposed improvements to the access to I-64 for Technology Drive will further enhance commercial market development interest for the types of uses discussed above. The City should rezone this area to a new district that permits the desired uses, requires site plan review, and includes some basic design standards.

Another parcel of approximately 11 acres fronts the eastern side of I-64 and Technology Drive between Bararthaven Boulevard and Twin Island Lake Road. This parcel is adjacent to St. Charles Community College on the northwest and a nursing home (Barathaven Alzheimer's Special Care Center) on the southeast. It has no immediate access to I-64 with the closest interchanges being Winghaven Boulevard to the northwest and Highway K to the southeast. As a result, while the property has great visibility to the highway, the access limitations make its commercial potential suitable largely to office-type uses or institutional uses. As noted previously, it is located between existing educational and institutional residential uses and it is bordered by residential uses to the east. The Future Land Use Plan in the City's previous Comprehensive Plan designates this property for commercial use. Given the parcel's I-64/Technology Drive frontage, commercial or institutional uses would not be inappropriate in the context of existing surrounding uses. However, somewhat like the situation with the Hemsath tract farther to the northwest and discussed above, this parcel could be developed for residential purposes and remain compatible with the surrounding uses.

**OTHER FUTURE COMMERCIAL DEVELOPMENT** – Certain other properties on the Future Land Use Plan map have been simply designated "commercial." These locations represent existing commercial uses or are properties adjacent to existing commercial



development that represent potential for future commercial uses. In this context, commercial uses may include offices and other service businesses.

**OTHER AREAS OF THE CITY** – The Future Land Use Plan for the remainder of the City generally reflects the existing land uses that are present throughout the community. Dardenne Prairie has limited potential for growth except through annexation. While there are portions of unincorporated St. Charles County adjacent to the City's boundaries, not all of this territory is vacant land. Other adjacent areas are within the boundaries of Lake Saint Louis or O'Fallon. The City has had success with annexation of some key vacant parcels and this process should continue. Annexation of developed areas can be beneficial from a revenue-production standpoint; however, the costs of services to such areas should be carefully analyzed. The Future Land Use Plan and other mapping in this Comprehensive Plan reflects the boundaries of the City as of the date of the document. On at least an annual basis, City maps depicting current boundaries, existing land uses, future land uses, and zoning districts should be updated.

**RESIDENTIAL DEVELOPMENT** – In terms of residential development, Dardenne Prairie is largely a city of single-family homes. While there are subdivisions comprised of larger lot sizes (one-half acre or greater), the average single-family lot size is slightly less than a third of an acre (approximately 14,000 square feet). During Planning and Zoning Commission discussions, there have been debates for and against preference for larger lot sizes. However, based on input from development community representatives and current market trends, the desire for large lots (one-half acre or larger) has been declining in the St. Charles County market area and the St. Louis region generally. While this hasn't diminished the desire for larger homes, the desire for those to be situated on large lots has waned. This is partly a function of demographic trends and age group preferences. "Family-sized" lots become less desirable as the children age and move out. Family-size has also been declining. Middle-age professionals and even today's seniors have active lifestyles and the effort to maintain larger lots is no longer desirable. On the other hand, the individuals representing this market sector don't necessarily want a significantly smaller living unit.

These demographic trends and desires have also fueled a market for large-unit villa style development where the housing units are clustered closer together on smaller lot sizes with a greater proportion of the overall development devoted to green space. The maintenance of the common areas, yards, and landscaping is handled by a homeowner or condominium association. These residential development types, while higher in overall site density on a given site than traditional single-family residential uses, do not represent typical multi-family unit densities. Dardenne Prairie residential development patterns indicate a desire on the part of residents to maintain lower densities. Therefore, this Plan suggests close scrutiny of proposals for multi-



family development (walk-up or garden apartments, duplexes, townhouses, etc.). Residential developments that are not conventional single-family types should be restricted to properties that have unique size, shape, and/or topographic characteristics that would not support a typical single-family layout. Other types of residential units can be built at greater densities than that of adjoining single-family developments but the density of such development should not be so great as to impact the character of the adjacent area.

Another trend driven by the aging population is the desire for various types of housing for senior citizens. This covers various types of housing developments that include properties where certain services including cleaning, laundry, and meals can be accessed on-site. Demand for assisted-living senior housing is also increasing. This type of housing provides greater levels of service for persons that need care and assistance, but not at a level that might be provided in a nursing home or memory-care facility.

Where the Future Land Use Plan proposes residential development for properties that are currently vacant, there is no attempt to make a distinction between the types of development. Rather this Plan recommends that consideration for the type and density of residential development be dictated by the adjacent land uses, roadway access, and other development considerations unique to the site. Any residential development that deviates from the underlying zoning densities, or is not traditional single-family detached in nature, should only be developed in accord with the City's planned unit development zoning regulations. This will allow the establishment of unit type, site plan, site amenities, and other such factors to be established by ordinance and unique to the development. Generally, intense developments such as villas (single-family attached housing), apartments and condominiums should be clustered and located along arterial streets to minimize traffic impact and the impact on single-family detached housing.

**INDUSTRIAL DEVELOPMENT** – In the context of current Dardenne Prairie development and future land uses, industrial uses really represent uses that are more commercial in nature. Current City zoning limits industrial uses to an area east of Technology Drive and south of Weldon Spring Road called the 64 West Business Park. Uses in this this area are largely corporate offices while any manufacturing or warehousing is a secondary component of the land use. This type of land use is typically called "light industrial" since it does not include manufacturing or assembly operations that have environmental impacts related to dust, noise, or odor. Similar types of uses to those already located in this area of the City could also be appropriate along the Technology Drive area north of Post Road. This concept is noted in the discussion of that area early in this Section. There are no other areas of the City where industrial development is appropriate.



**ROAD IMPROVEMENTS** – A separate section of this Comprehensive Plan relates to future road improvements throughout the community (See Section VI). However, for purposes of the Future Land Use Plan, certain road improvements are noted here because of their importance to the future land uses discussed above.

As a result of a larger roadway planning project that included participation by MoDOT, St. Charles County, and the Cities of Dardenne Prairie, O'Fallon, and Lake Saint Louis, certain roadway recommendations and designs are planned to improve access to Route 364 and I-64. These improvements are shown on the Major Street Plan and Future Land Use Plan and (**Figure 8** and **Figure 13**). These improvements are critical for improved access to the City's commercial base and enhance the value and marketability of these areas both as support for existing uses and for adjacent undeveloped tracts.

Another roadway improvement that may be needed as a result of implementation of the Future Land Use Plan is related to Post Road. This roadway carries an ever-increasing level of traffic that may also increase as a result of future commercial development along Technology Drive. Post Road is a relatively narrow roadway that is not constructed to modern standards for its current function. By contemporary standards, and since it continues northward as Hanley Road at Town Square Avenue, its status is that of a secondary arterial roadway (or at the very least a major collector roadway). The average existing width of Post Road pavement is not more than 24 feet. St. Charles County standards for a major collector roadway would require a pavement width of 38 feet. Even minor collector design standards would require pavement width of 32 feet. The existing roadway does not have contemporary curbing and drainage standards. Three existing residential developments (all outside the City's boundaries) access this roadway and its intersection with Technology Drive is also substandard. Any future development at this location should include improvement of this intersection.

#### **GOALS AND OBJECTIVES**

The Goals and Objectives outlined below are general in nature representing community planning and land use direction and, in some instances, relate to elements such as parks and recreation and transportation. These are not intended to be all inclusive. The various preceding sections of this Comprehensive Plan discuss specific projects and direction that relate to the subject of those sections. These include:

Section V. Land Use, Section VI. Transportation Plan, Section VII. Utility Infrastructure Plan, and Section VIII. Parks, Recreation, and Trail Plan



#### General

- Goal: To provide a high-quality, diverse-housing environment for City residents.
  - Objective 1: Control the density of residential developments by encouraging developments with lot line setbacks greater than those permitted in nearby cities and limiting overall development densities through the zoning process.
  - Objective 2. Encourage creative and innovative alternate types of single-family developments on those unique parcels which would not accommodate typical detached single-family residential homes due to property size, configuration, and/or topography constraints.
  - Objective 3: Closely control development amenities such as trails, common ground, vegetative buffers, boulevards, mini-parks and waterway preservation through the use of Planned Unit Development procedures.
  - Objective 4: Actively pursue the preservation of wooded areas and floodplains as passive park areas, common ground and easements by working with neighboring communities, the County and the State to secure funding.
- Goal: To provide high-quality municipal services to City residents while maintaining a modest tax burden.
- Goal: To provide residents with convenient shopping opportunities while deriving sources of funding for City services.
  - Objective 1: Entice unique retail commercial endeavors that represent uses new to the market area to locate in the City.
- Goal: Continue to expand the City's employment base with high-quality jobs that support the City's existing retail uses and which can generate retail expansion and expand the City's housing development.
  - Objective 1: Encourage a mix of office, light industrial, and retail development to locate along the Technology Drive frontage.



#### Transportation

- Goal: Upgrade the roadway system to provide a safe and adequate system of thoroughfares for the City of Dardenne Prairie's citizens.
  - Objective 1: Review the present roadway network including current improvements to determine its adequacy for future development.
  - Objective 2: Continue to preserve identified corridors and require the dedication of right-of-way from developers.
  - Objective 3: Monitor and coordinate with MoDOT's regional plans to ensure compatibility with Dardenne Prairie's transportation plan.
  - Objective 4: Work with surrounding municipalities and government entities (e.g., East-West Gateway Council of Governments) to identify various transportation needs, corridors and alternative modes.
  - Objective 5: Continue to seek alternative or innovative funding sources for needed road improvement projects.
- Goal: Provide for the preservation and maintenance of the roadway system within Dardenne Prairie.
  - Objective 1: Review the City's public maintenance contract with St. Charles County through their Highway Department to coordinate with their plans, policies, and procedures.

#### **Parks and Recreation**

- Goal: Continue to expand and improve the City's existing parks and recreation facilities and look for opportunities to add land and/or activity areas.
- Goal: Continue to pursue planning and development of trail and bikeway systems as set forth in Section VIII. of this Comprehensive Plan.



#### Annexations

The existence of the City of Dardenne Prairie was made possible by voluntary annexations. As a result, some pockets of land within the City's boundaries are still unincorporated. The remaining unincorporated land should be annexed into the City through the following steps:

Goal: Develop an annexation plan.

- Goal: To annex all unincorporated areas within the City growth boundaries through voluntary or involuntary annexation within the next five (5) years.
  - Objective 1: Increase the City's population and create more contiguous and uniform municipal boundaries.

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### X. UPDATES AND AMENDMENTS

#### PLAN UPDATES AND REVISIONS

The City's Comprehensive Plan should be used to guide decision-making in Dardenne Prairie and its Future Growth Area. The purpose of this Comprehensive Plan update is to thoroughly reevaluate and update the vision, principles, and policies contained within the Plan, develop new principles and policies if necessary, and make sure that the components of the Plan align, are headed in an appropriate direction, and represent the direction set by the process of developing the Plan. It should always be recognized that the process of creating the Plan involves input from community residents and businesses and reflects their desires as an ideal place to live, work, and play. Missouri Statutes dictate that the Planning and Zoning Commission is responsible for the Comprehensive Plan development process with input and assistance from City staff, the Board of Aldermen, and the various stakeholders (residents, businesses, neighborhood group, etc.).

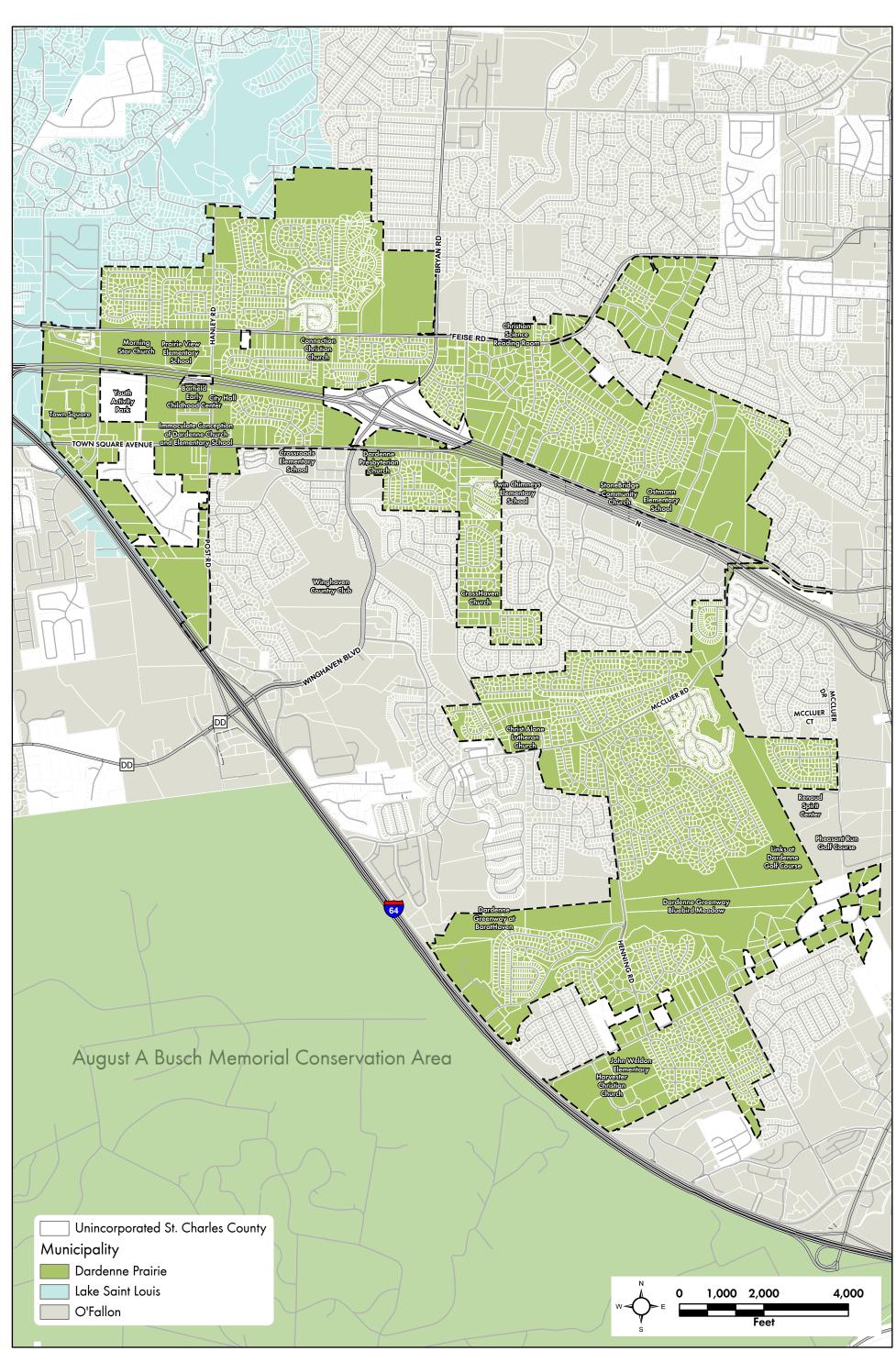
In order for the City's planning efforts to function and serve the community well over time, they must be reviewed, revised, and updated periodically. Standard urban planning practice recommends updating the City's Comprehensive Plan and related elements every ten (10) years, ideally to coincide with the availability of decennial census data and a concurrent process involving update of the City's Capital Improvements Plan. However, changes in real estate market demand, unanticipated housing growth, major transportation improvements, or other unusual influences may dictate interim amendments to the Comprehensive Plan that are relatively minor in nature. The Planning and Zoning Commission with the assistance of City staff, should perform an annual review of the Comprehensive Plan to determine if updates of any element are appropriate and to recap or update of the status of Plan implementation activities, goals, or objectives. This annual review should focus, as a minimum, on the existing and future land use elements with an emphasis on any site plan, subdivision, variances, or rezoning actions that have occurred during the year. The intent is to determine what, if any, amendments to the Comprehensive Plan might be appropriate.

Chapter 89 of the Revised Statutes of Missouri, Sections 89.010 through 89.491 establishes the process of developing or amending a Comprehensive Plan and, as noted previously, vest the process in the Planning and Zoning Commission. The process of creating the Comprehensive Plan, a major 10-year update, or a less involved amendment resulting from an annual review, requires the same process. The Planning and Zoning Commission is the entity that adopts the Comprehensive Plan following community input and a public hearing. While not required by Chapter 89, the Comprehensive Plan is typically also adopted by the Board of Aldermen with a Resolution in support of the Plan.

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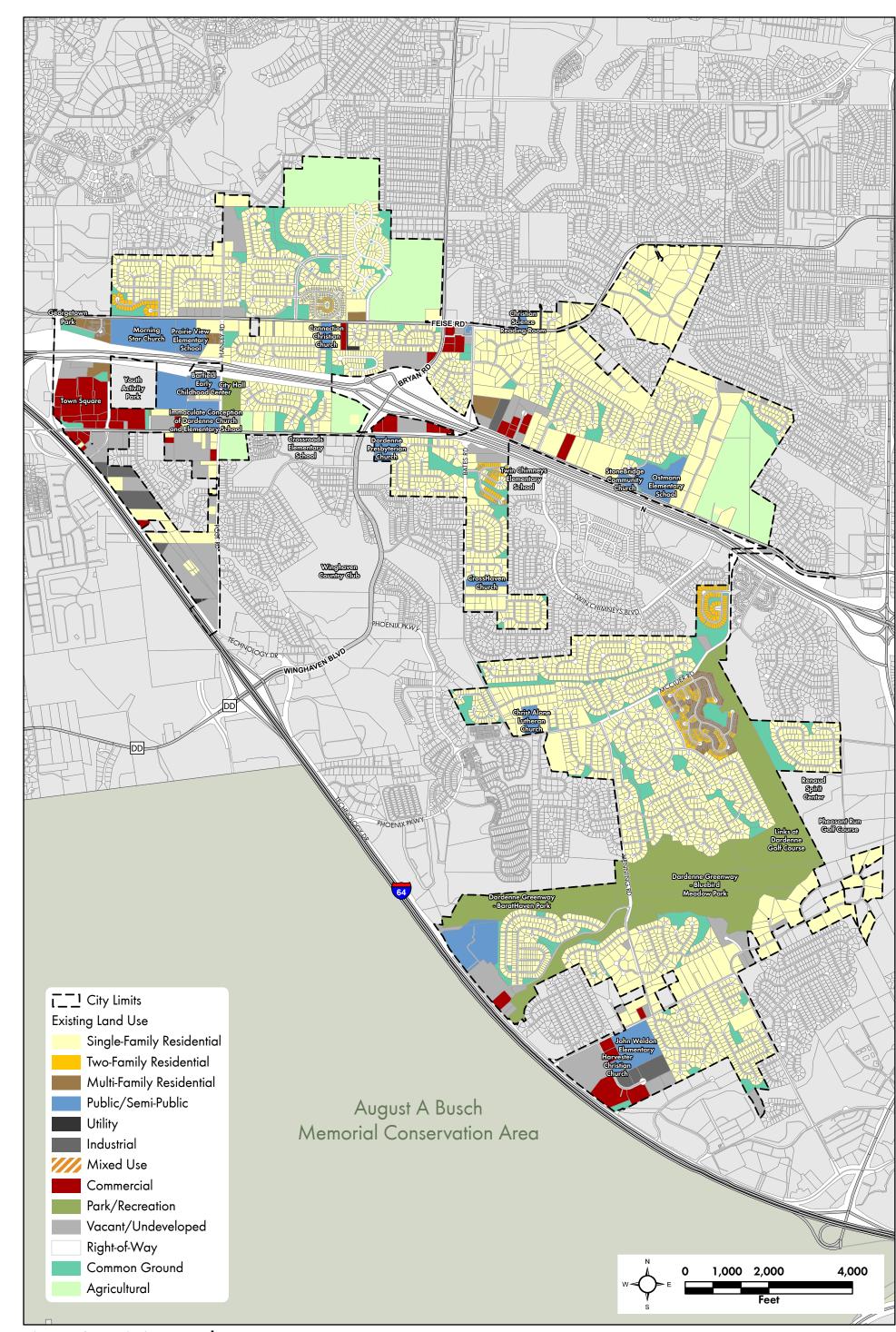


# APPENDIX



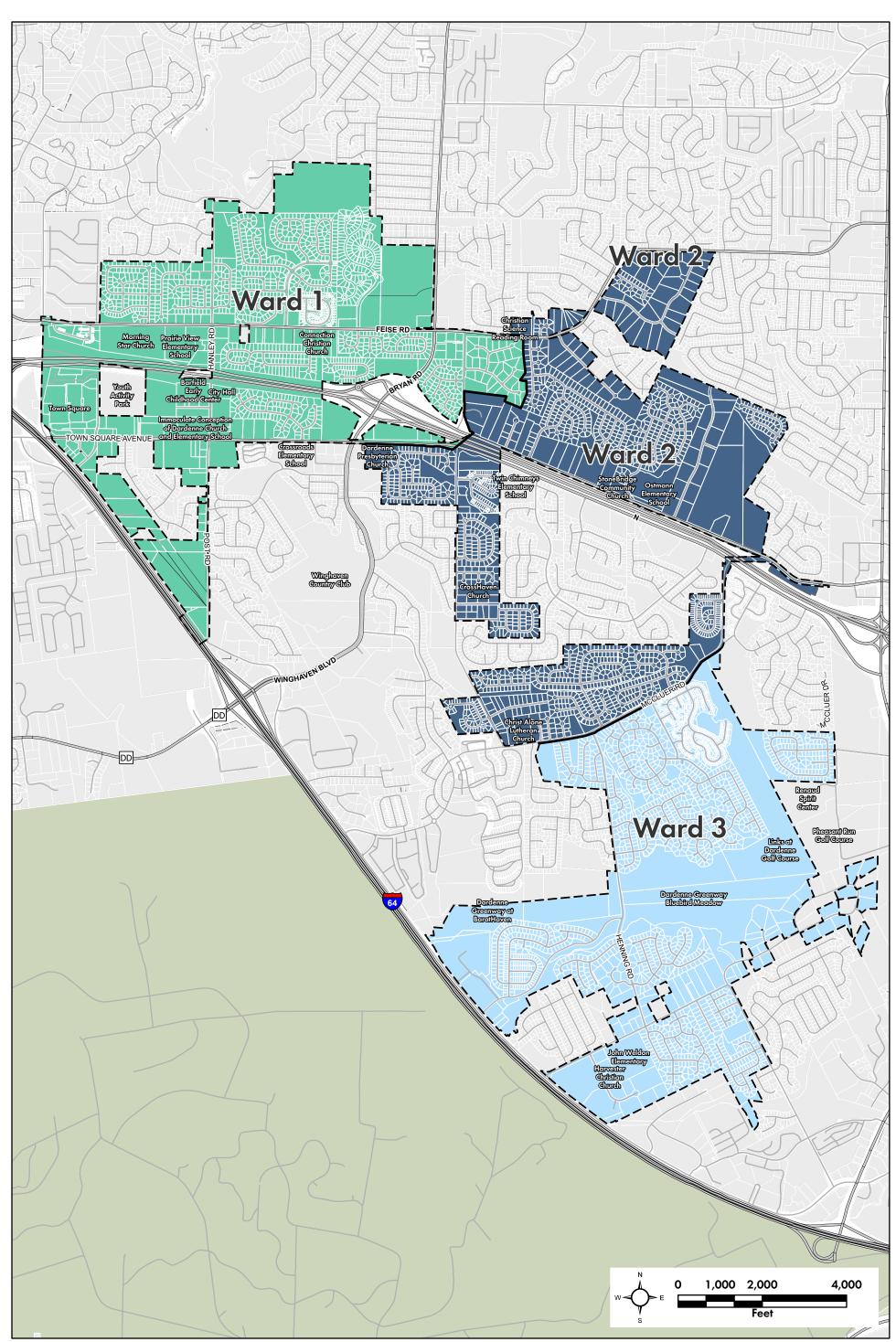
# Figure 1 - City Limits





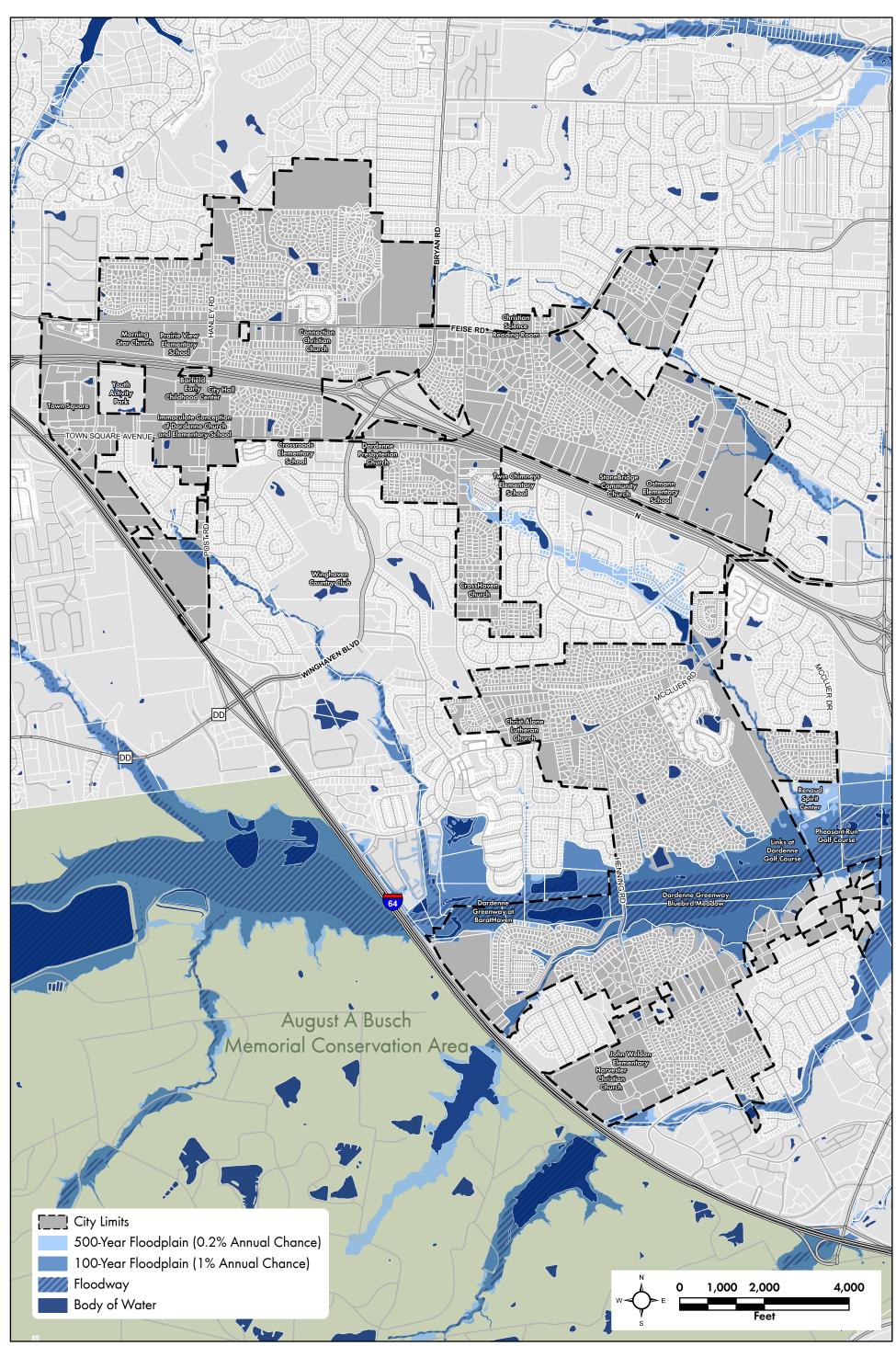
# Figure 2 - Existing Land Use





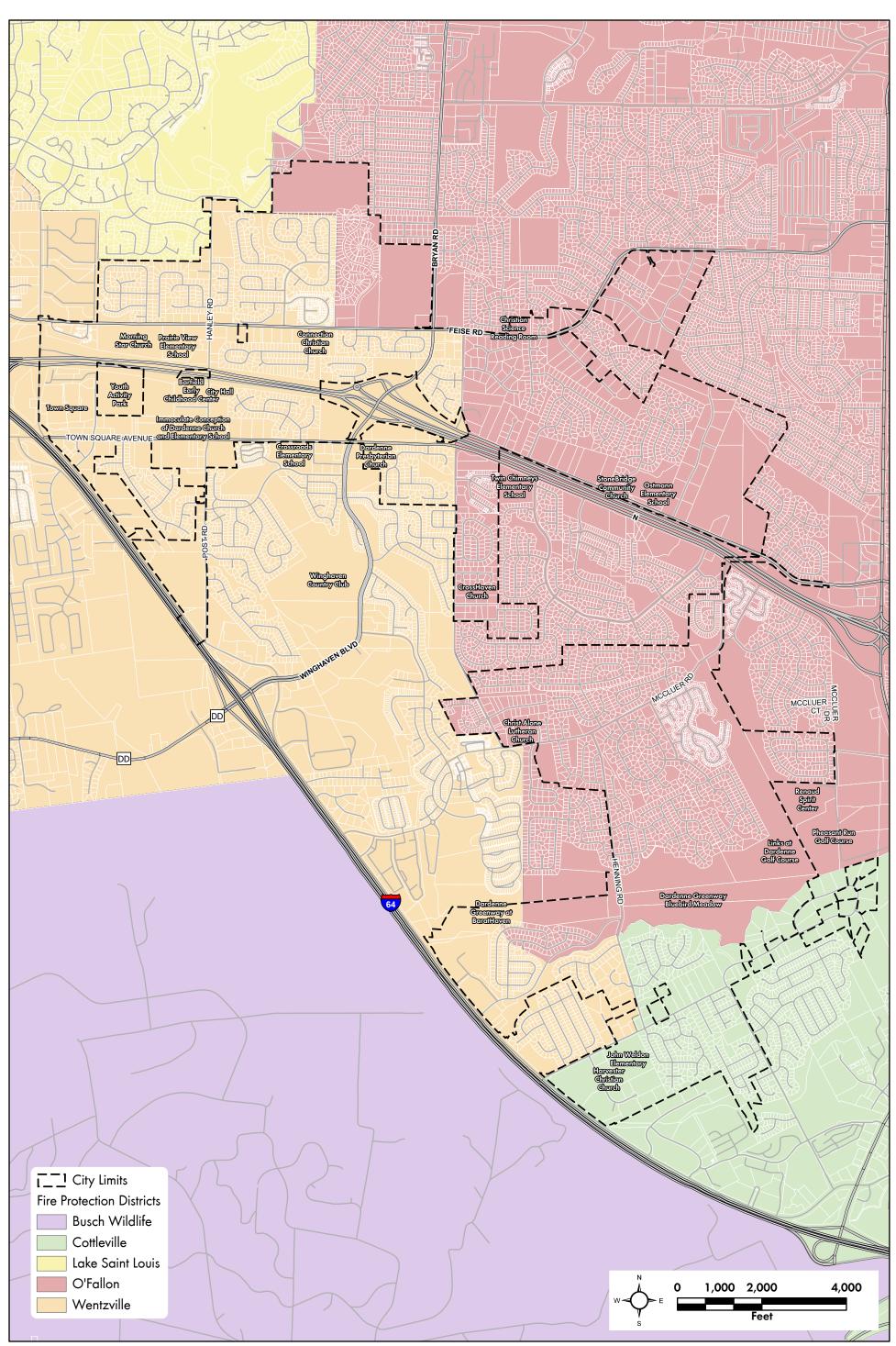
# Figure 3 - Ward Map





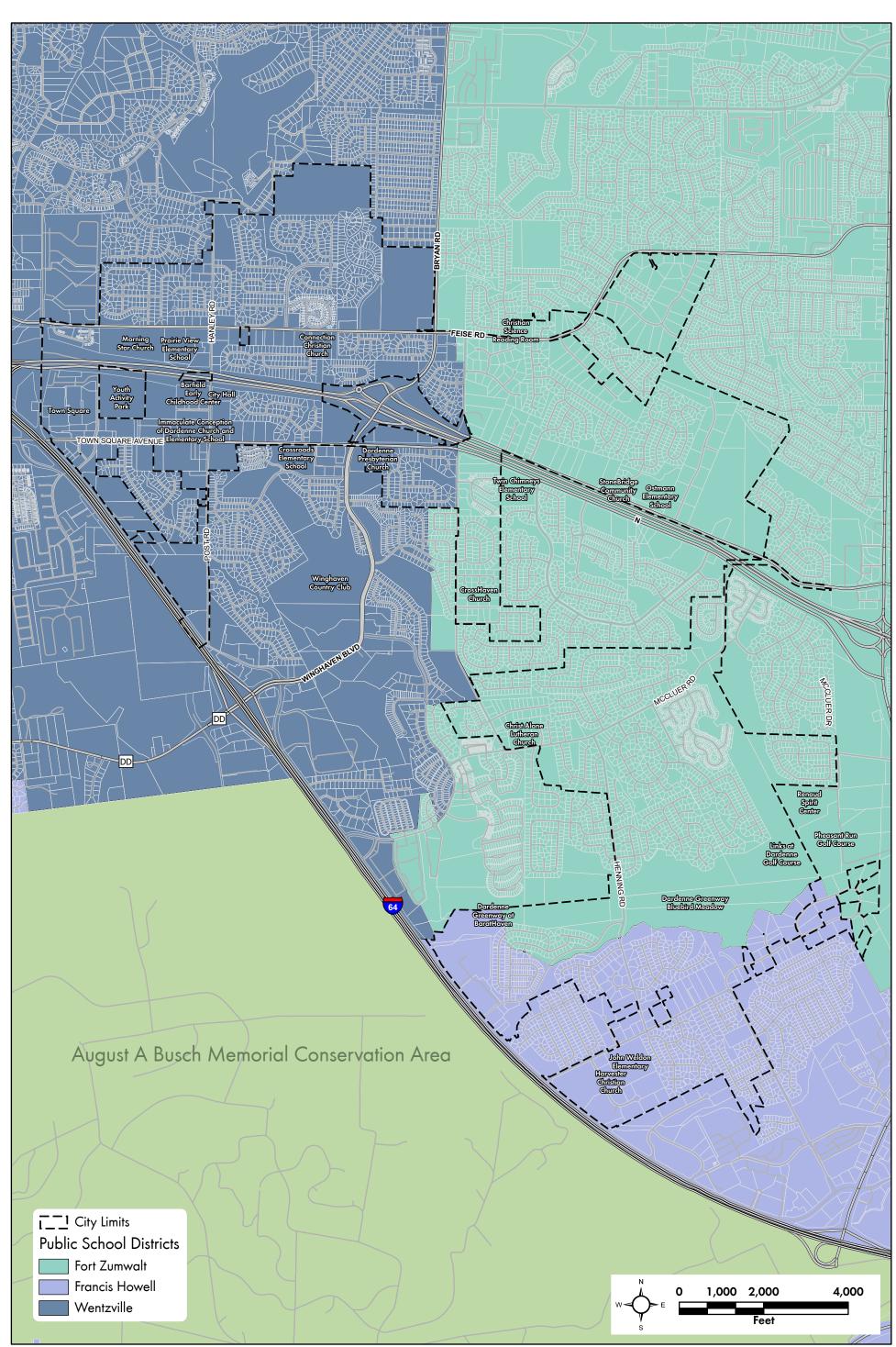
# Figure 4 - Flood Prone Areas





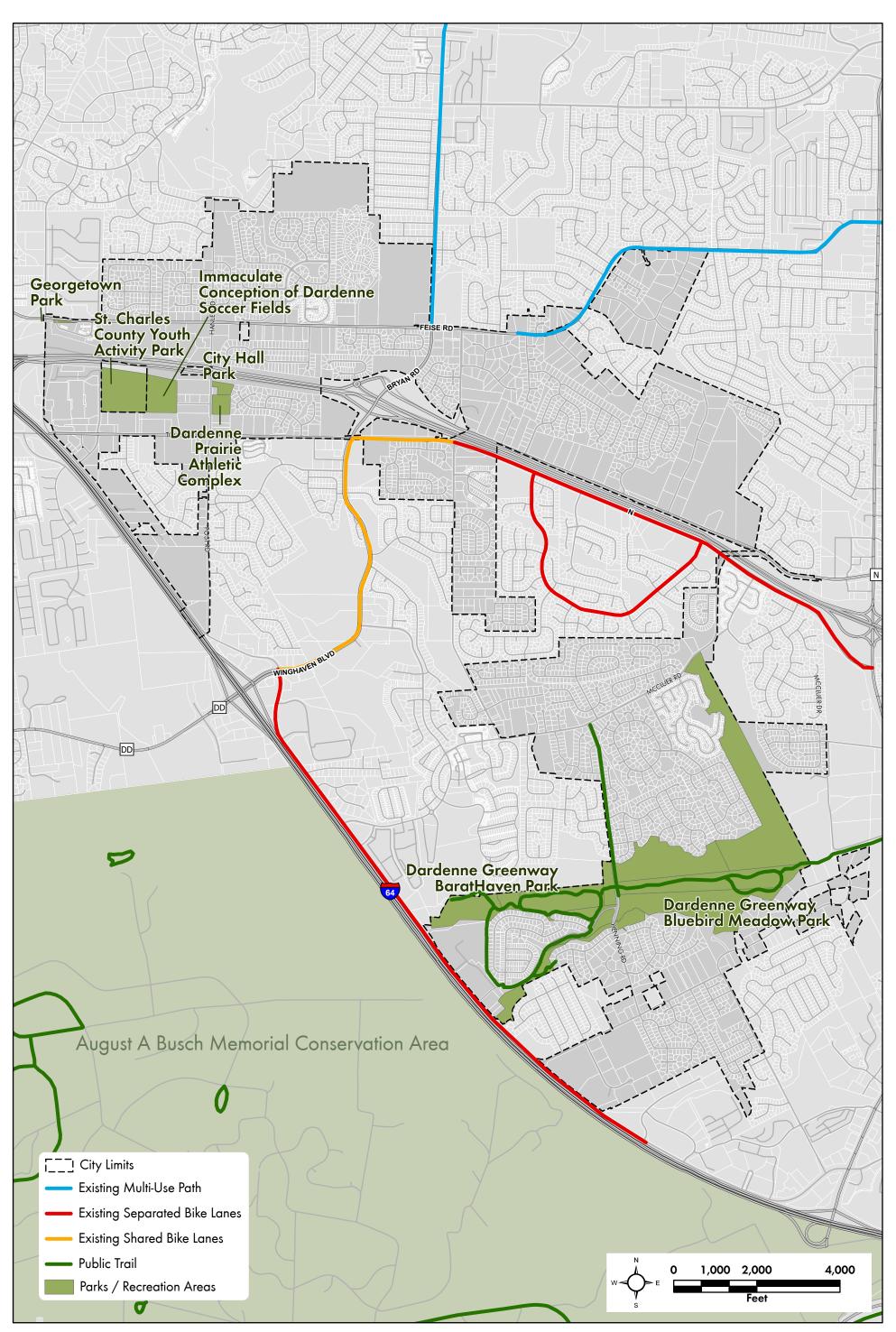
### Figure 5 - Fire Protection District Areas





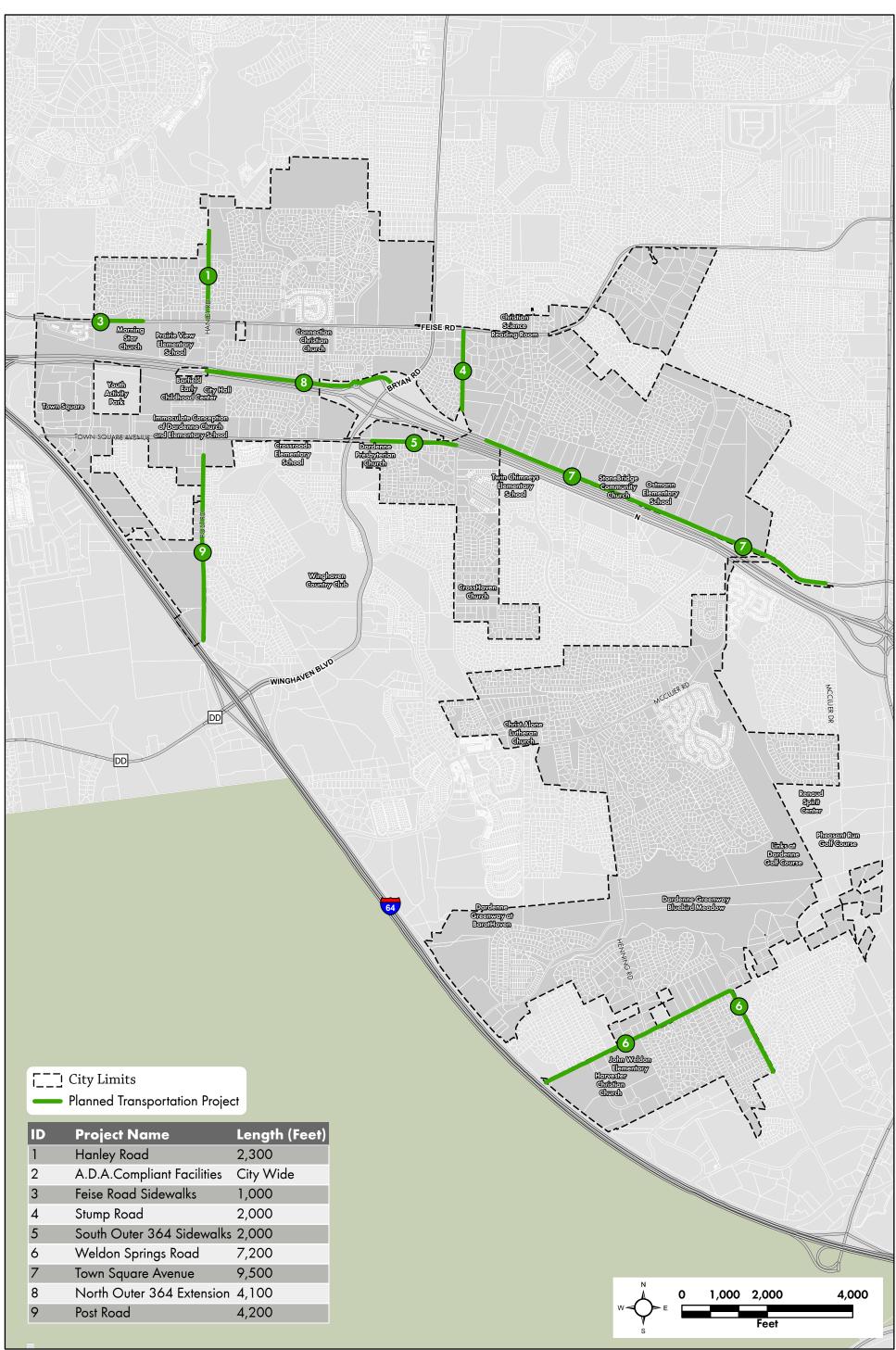
# Figure 6 - Public School District Areas





### Figure 7 - Public Parks and Green Spaces

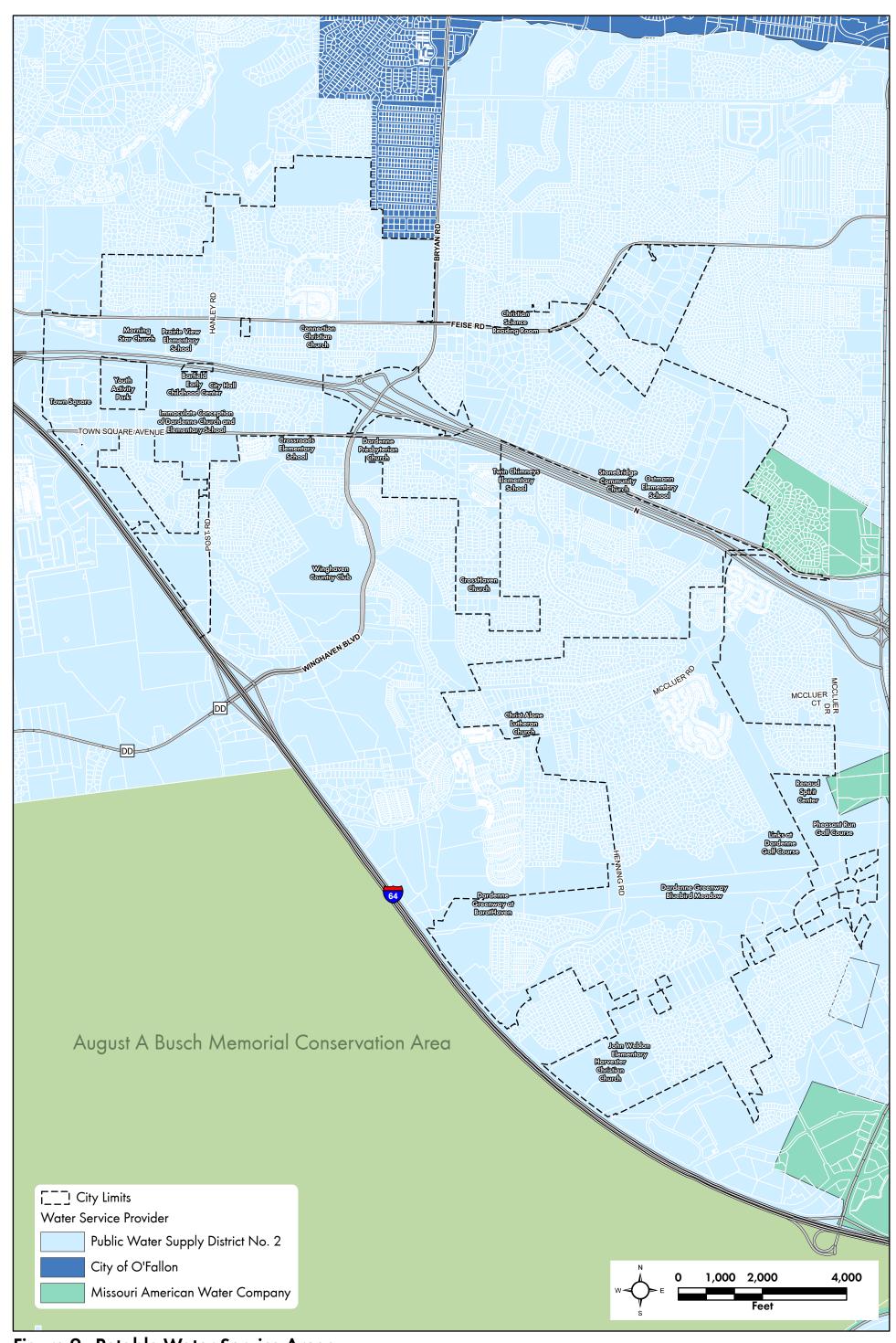




ID	Project Name	Length (Feet)
1	Hanley Road	2,300
2	A.D.A.Compliant Facilities	City Wide
3	Feise Road Sidewalks	1,000
4	Stump Road	2,000
5	South Outer 364 Sidewalks	2,000
6	Weldon Springs Road	7,200
7	Town Square Avenue	9,500
8	North Outer 364 Extension	4,100
9	Post Road	4,200

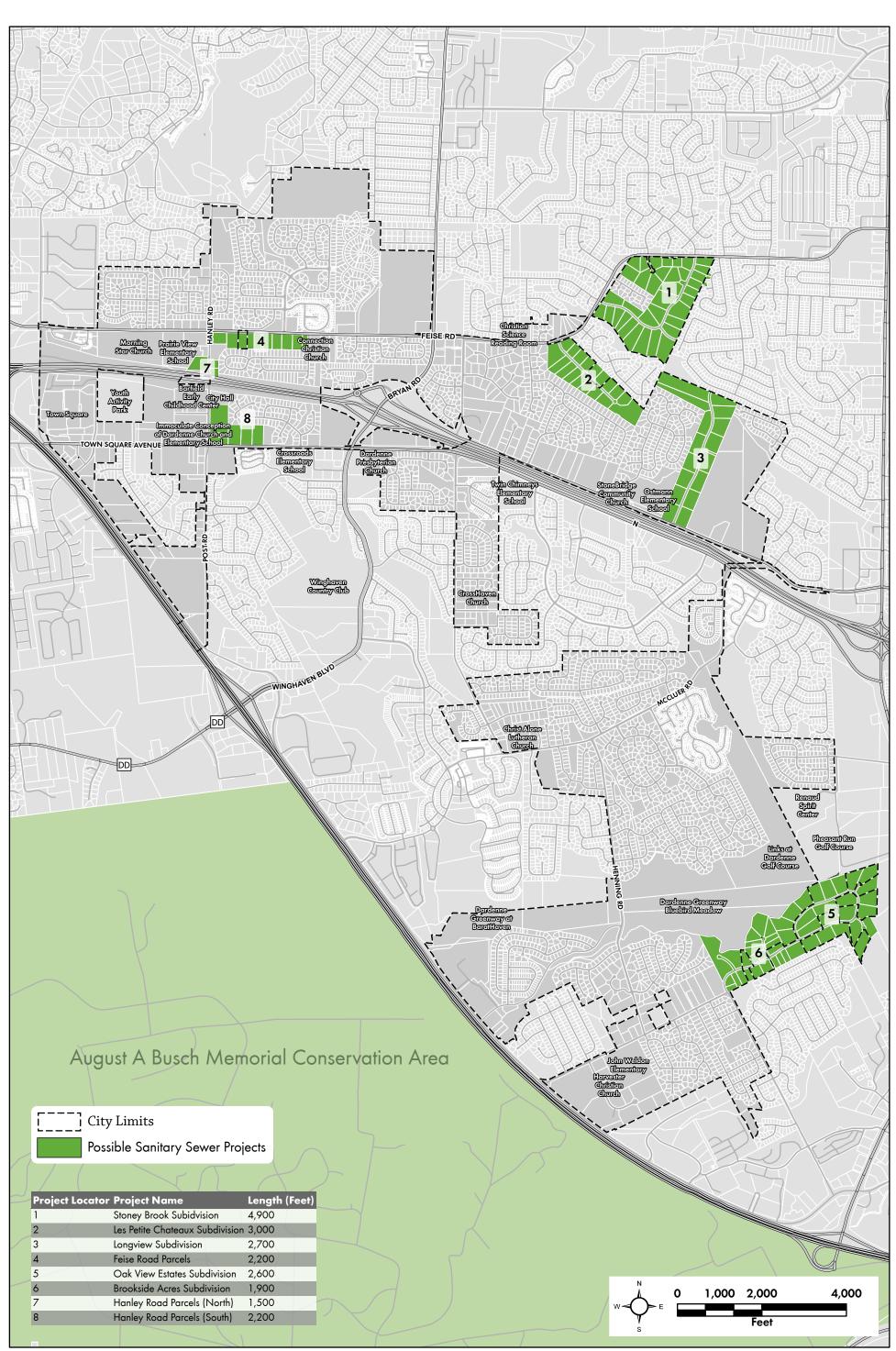
### Figure 8 - Major Street Plan





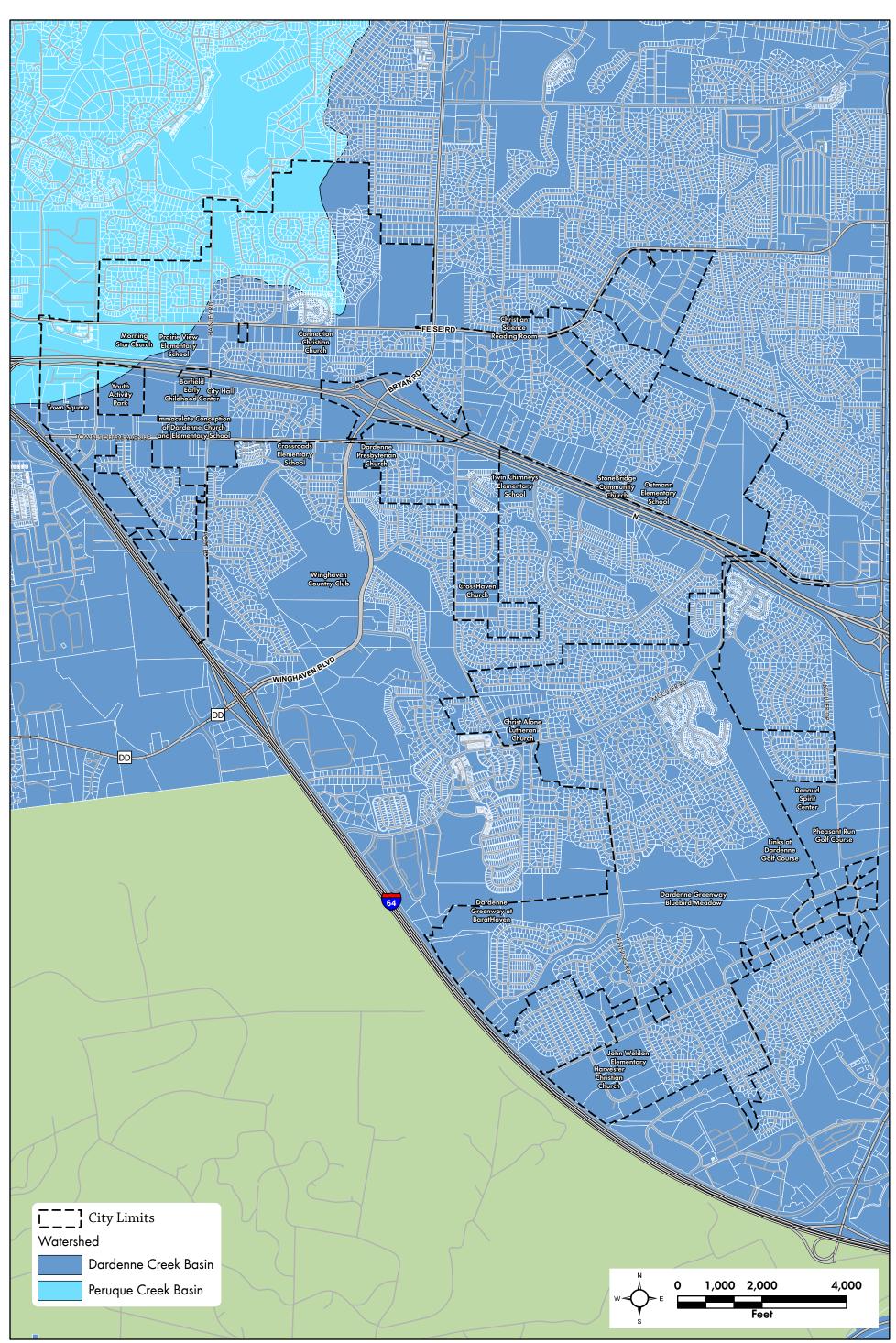
# Figure 9 - Potable Water Service Areas





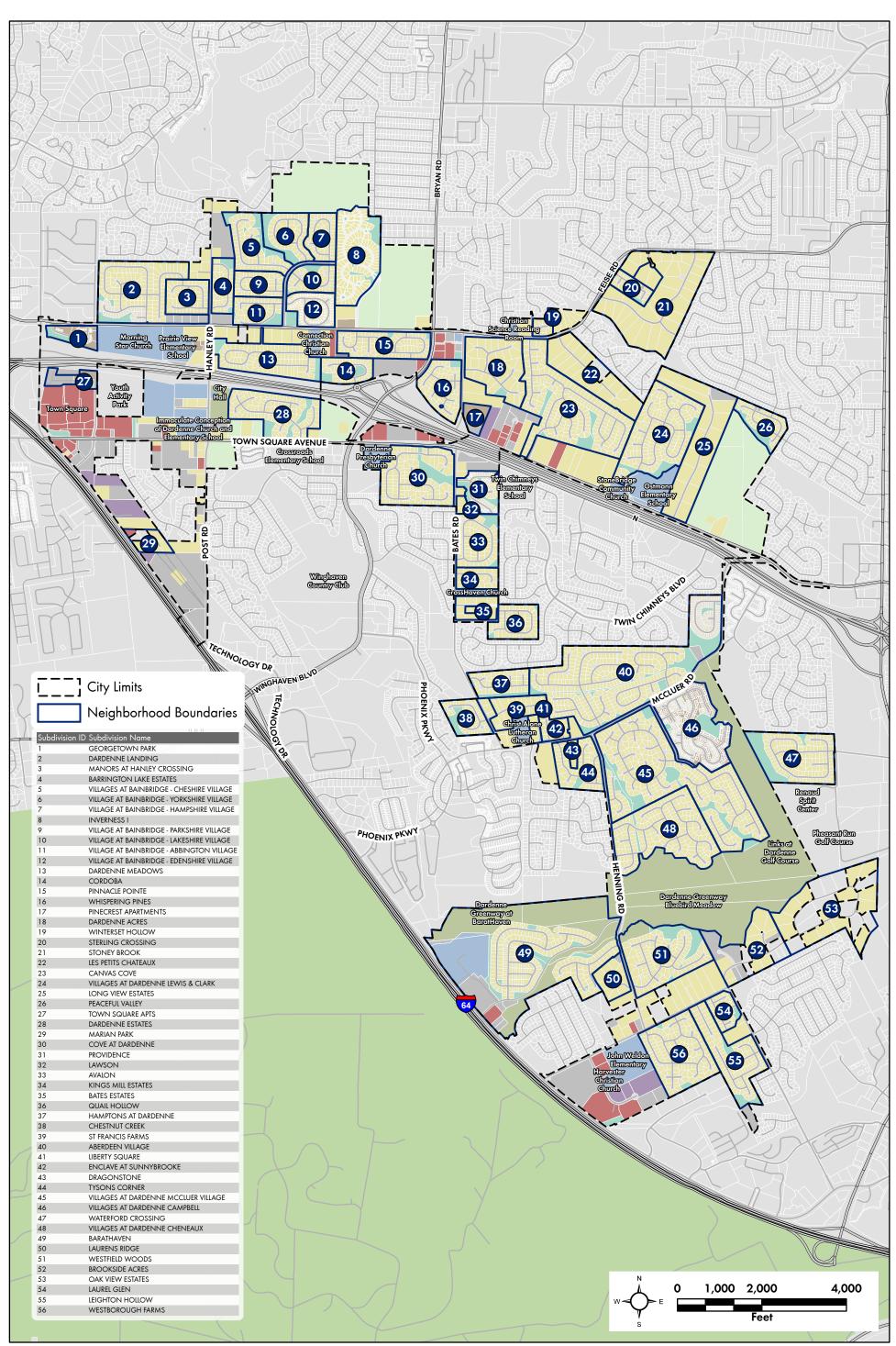
### Figure 10 - Possible Sanitary Sewer Projects





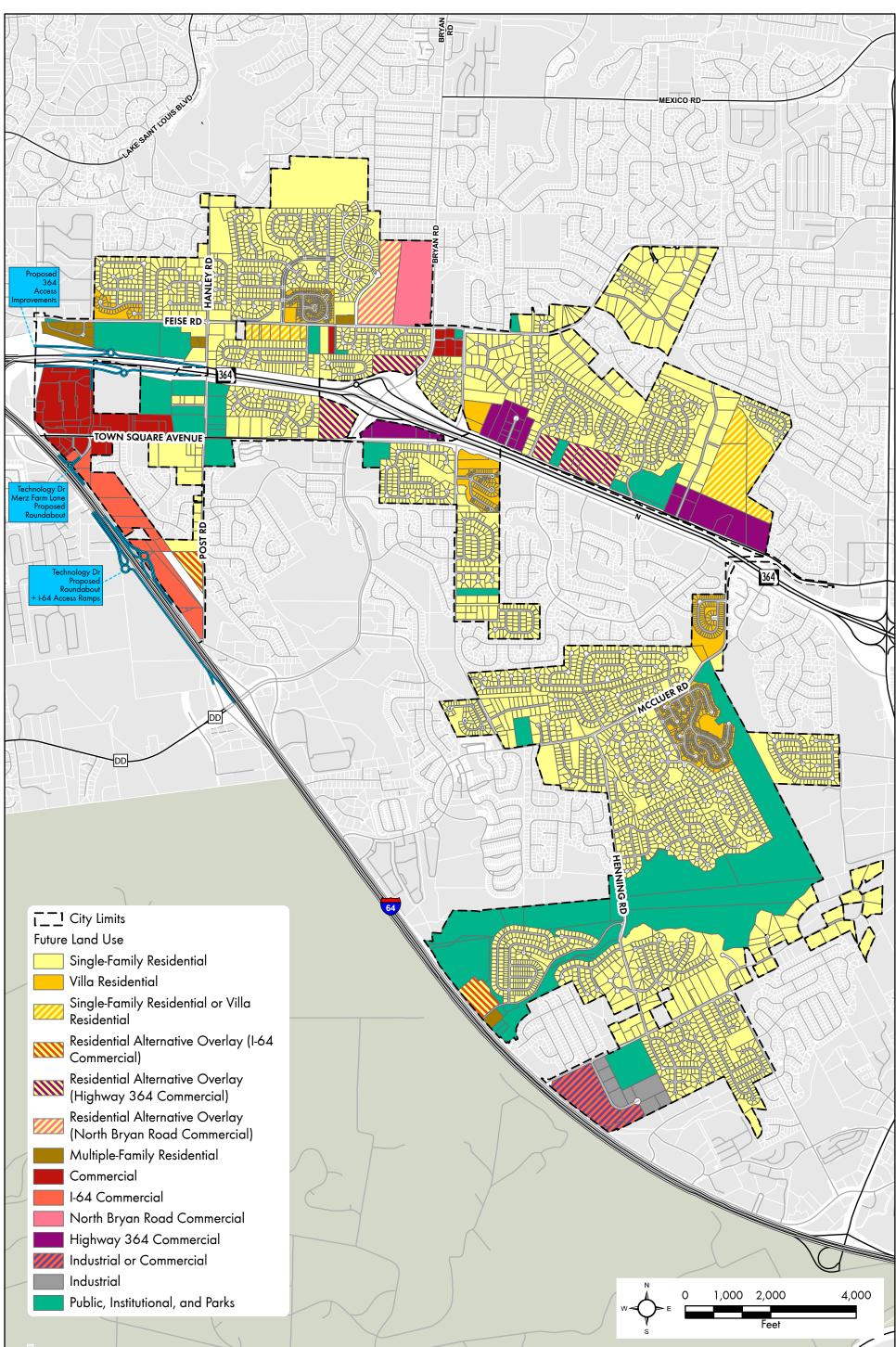
# Figure 11 - Watersheds





### Figure 12 - Neighborhoods









### Figure 13 - Future Land Use Map

