



DEFINING GOALS & IMPLEMENTING STRATEGIES

DEFINING GOALS & IMPLEMENTING STRATEGIES

This section identifies defined goals along with detailed strategies that will help the City realize the community-supported vision. The recommendations and specific strategies, or action steps, are in no particular order. They are presented to enable those involved in implementation to effectively evaluate and determine priorities, and identify short-, mid-, and long-term tasks.

This section contains goals for the City of Chesterfield that are in line with the vision for the City moving forward. These goals are separated into five categories identified below. Within each of these categories are more actionable strategies, and in some cases objectives to achieve those strategies. These items are more measurable in nature, which allows the City to monitor progress of plan implementation.

DEFINING GOALS

DEVELOPMENT: SUPPORT DESIRED DEVELOPMENT AND REDEVELOPMENT

RESIDENTIAL: STRENGTHEN NEIGHBORHOODS AND HOUSING CHOICES

OPEN SPACE: PROVIDE QUALITY PARKS AND RECREATION SERVICES

TRANSPORTATION: SOLIDIFY LONG RANGE TRANSPORTATION PLAN

RESILIENCY: INCREASE COMMUNITY RESILIENCY

GENERAL GOAL: SUPPORT DESIRED DEVELOPMENT & REDEVELOPMENT

The plan establishes a new framework for growth and development in the City. The plan suggests more growth and development should occur within and near established and planned centers of activity in the future. The following policy recommendations seek to guide the form and intensity of development by clustering development in appropriate areas, establishing walkable centers, defining edges and limiting encroachment on conservation areas.

Strategy: Guide development in a manner consistent with the Land Use Plan

The land use plan depicts the distribution of land uses and the corresponding character area definitions. The relationships across the various areas deliberately protect existing assets and promote development opportunities while establishing positive, compatible transitions. The city should guide development accordingly.

Strategy: Promote infill development and redevelopment.

The City is faced with making decisions about where to intensify development and how. A few key areas identified during the process are the ideal candidates for additional density and a broader mix of uses. In the near term, the downtown and mall sites in combination offer an opportunity to create a strong, identifiable and vibrant center for the city. Long term strategies include the retail on the west side of the city and how it may be suitable for phased infill and redevelopment to introduce other nonresidential uses and remain relevant and viable.

Objectives in this strategy include the following:

- Facilitate Downtown/Mall redevelopment
- Facilitate the transformation of retail sites

Objective: Facilitate Downtown / Mall redevelopment.

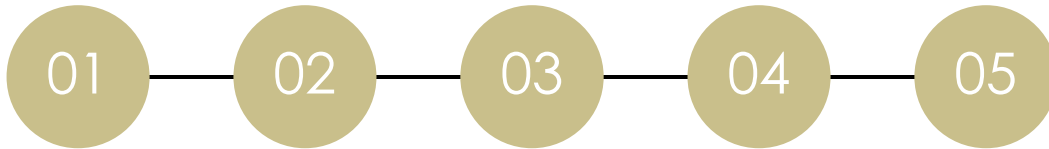
- Support redevelopment consistent with the changes desired by the community and private investors. Phase development and acknowledge that early stages will depend on drive-by visibility for early success.
- Consider zoning amendments:
 - » Rezone the mall site to allow residential: Often units above commercial and office, multifamily
 - » Encourage and facilitate vertical mixed use, particularly at downtown core: commercial (especially retail, dining, lodging, entertainment), office, and residential.
 - » Address the maximum building heights to align with the vision. Specify where and how to strike a balance: accommodating taller buildings to maximize return on real estate investment while maintaining the appropriate scale of the place.
- Design and programming combine to ensure the creation of a “Main Street” and public spaces in downtown core that offer a vibrant 24/7 experience.
- Deliver a memorable experience and justification for an extended visit. Enhance the area with a mix of uses. Also, consider variety in the design and form by introducing a mix of materials, building heights, an observation tower, and a civic gathering space large enough to be programmed for events. Integrate and enhance existing features, such as the movie theater (an important anchor) and the lake, which lends itself as a focal point and a recreation destination.
- Maintain views to lake. As the terminus of views from key streets and civic spaces, this body of water—and the activity it supports—should draw visitors through the site.
- Create a walkable and bikeable environment that prioritizes pedestrian comfort and safety, a high level of connectivity, and good circulation. A grid network of streets is essential, as it creates a basic structure of blocks that enable reasonable walking distances and distributes traffic ensuring street widths can be maintained at a scale appropriate for pedestrian safety and comfort. Integrate structured parking in key locations to ensure a compact development pattern uninterrupted by large surface lots. Aid orientation and navigation with key features that are visible from a distance, such as towers and other architectural appurtenances.
- Connect the mall site to downtown, and do not be deterred by grade change. Utilize the topography to add interest to the development and organize uses along a terraced path.
- Residential and office uses should be organized around open space and connected.
- Support the creation of an “innovation district” within the downtown. It may be focused on plant sciences but should include a mix of employment uses surrounded by and connected to amenities that help create attractive, competitive work environment.

Objective: Facilitate the transformation of retail sites.

Support the future retrofit “big box” commercial in the Valley. In the short-term, such retail centers are stable and expected to remain viable, but over the long-term as shopping habits change, there may be a need to facilitate the transition of these areas. These centers lend themselves to infill development and redevelopment phased in over a period of several years. The combination of new construction and the reinvention of existing tenant space to accommodate different users would increase the mix of uses and redefine the centers, allowing them to be modernized to remain relevant in the market. The nature of these future centers should be distinguished from the downtown redevelopment. They should complement, not compete with, downtown. In comparison to downtown, the future of development would differ from downtown in terms of scale and mix of uses. Timing of development will also help avoid such competition, as the downtown redevelopment is more likely in the near term.

The City should amend the code to remove potential barriers and facilitate such transitions. Relaxed parking standards, for example, can help infill development. Temporary parking shortages can be addressed with subsequent redevelopment that includes sufficient parking.

The currently viable regional shopping centers may need to transition into mixed-use destinations in the future. Infill and redevelopment should be phased over time to transform these centers. This series indicates the following:



01
INFILL



02
INFILL



03
REDEVELOPMENT



04
REDEVELOPMENT



05
REDEVELOPMENT

Strategy: Facilitate the diversification of housing.

The diversification of housing is encouraged with a focus on multigenerational living that offers opportunities for older segments of the population to age in place while young professionals find affordable options. Amend the UDC to allow the incorporation of a variety of housing types into the urban core, controlling for scale and mitigating the impacts of parking and other features.

Strategy: Allow the enhancement of existing neighborhood centers.

With local-serving commercial uses, particularly convenience retail (i.e., grocery stores, drug stores, personal services, and gas stations with pumps ideally located to the rear), neighborhood centers meet the daily and weekly needs of area residents. Providing basic amenities for the neighborhoods they serve, existing neighborhood centers may need to be enhanced to maintain quality over time. Such enhancements should be limited to existing sites, be contextually sensitive, and continue to respect surrounding neighborhoods in terms of use, scale, and character.



Strategy: Improve development design.

Allow and encourage variety in new development and redevelopment. The use of red brick does not guarantee quality development. Adherence to the principles of good design should achieve desired results and therefore provide the basis for design standards.

- Develop design standards for public and private development. In amending the City’s Unified Development Code, the City should clarify design standards that aim to enhance the physical environment to protect property values and preserve community character as change occurs. Through a menu of options and examples of possible applications, the standards should convey what is intended by provisions referring to “harmonious” and “compatible” design.
 - » Consider standards for various sub-areas of the City. The standards that apply to downtown, for example, may differ from those established for development in the Chesterfield Valley (which could build on the design recommendations for the valley in the current comprehensive plan).
 - » Lead by example. The City’s commitment to quality has been consistently promoted and should continue to be reflected in public investments. Continue to demonstrate the City’s willingness to impose the same standards on public projects, such as new park buildings, government offices, and the sites on which they are located, and in doing so, increase investor confidence.
- Continue to emphasize the importance of façade articulation and materials in the City’s architectural design standards. The rhythm established by fenestration (the arrangement of windows and doors on a building facade), vertical elements break down the mass of a long structure, and horizontal elements such as a water table, gable, or porte cochere can add interest while reinforcing a human scale at the base of a tall building (street level). The City should continue to encourage balance in the selection of materials, as there is a fine line between avoiding monotony and introducing visual clutter.
- While there may be several ways to achieve a desired result and while flexibility is important, clarity is paramount. The process should not be unnecessarily burdened or lengthened by vague provisions in regulations or guidelines or by unpredictable review procedures and outcomes. Clearly define options for meeting standards and establish objectives, measures, and easily understood review procedures.

Strategy: Ensure a sense of place that is uniquely Chesterfield.

Through art, design standards, and programming, create destinations in the community that are both memorable and authentic.

- Public art serves many purposes. At a minimum, support installations that celebrate the history and heritage of the city. As part of a well-designed system of public spaces suitable for large and small, informal and formal gatherings, the art can be functional while adding visual interest and telling the story of the place.
- Encourage private participation in the creation of the art collection. Integrate private installations throughout the city to weave the culture of art throughout the community. Partner with private collectors to display art on public property, and create incentives for private developers to incorporate art within the publicly visible spaces of private development.



Strategy: Create Chesterfield destination brand identity and apply it to the marketing program.

The City of Chesterfield should consider developing a consistent and up-to-date brand identity as well as specific marketing tools to communicate its quality of life. The City is one of many suburban communities in the St. Louis Metro area and needs a system that will distinguish it from these other places. This is particularly important for economic development and recruiting when positioning Chesterfield as a place to invest.

While the City currently has the logo with the trees, it is important to note that a community brand is not just the creation of a single logo. Rather, it is a graphic identity, tag line, and style set that presents the overall vision and values within the community. Ultimately it will be the foundation of a seamless system to market the City as a destination, for business recruitment, targeting new residents, and communicating to local citizens.

ELEMENTS OF A CONSISTENT BRAND

- 1. Brand Position Statement – This narrative connects the values and assets within the City and lays the foundation for the identity of the place, including the key messages and targets that will be addressed in the marketing strategies.
- 2. Graphic Identity – This is the overall style set of the brand identity including typeface, color palette, and icon. The identity will be represented in graphic form, and the design elements that make up the logo will be used as the graphic foundation for the rest of the system.
- 3. Tag Line - This is the phrase that presents the brand statement narrative as a concise description of the graphic identity and market position.

BRAND POSITION
STATEMENT

01

GRAPHIC
IDENTITY

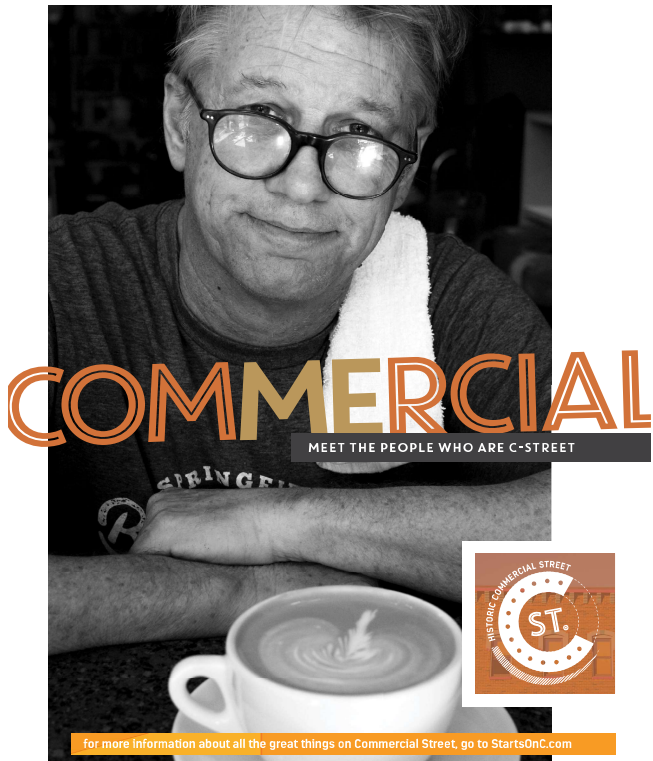
02

TAG
LINE

03

The steps to creating a brand identity are as follows:

- Develop a consistent brand system that distinguishes Chesterfield in the St. Louis suburban metro. External messaging should focus on economic development, while internal messaging should focus on quality of life, provision of municipal services, and improved communication with the citizenry.
- Extend the brand style and graphics to Downtown Chesterfield and establish the identity of the place that is tied to the comprehensive plan vision. This can be used to market the site and recruit development and would include destination identity, brand extension to events and activity, downtown destination website, etc.
- Create a Historic Chesterfield identity to differentiate it as a character district and the historic center of the community.
- Apply the brand to a consistent wayfinding system that directs visitors and locals to the various character districts, civic and cultural destinations, community parks, etc.



RESIDENTIAL GOAL: STRENGTHEN NEIGHBORHOODS AND EXPAND HOUSING CHOICE

A key concern of the community is maintaining the stability of neighborhoods and the value of properties over the long term. Attracting new residents to the city and retaining the people who already enjoy the quality of life the city offers is also of primary importance. As the city continues to evolve, providing housing choices that appeal to a broad range of people will be critical to diversification of the city’s population and employment. More choice means options for more people to live in Chesterfield feasibly, which can have two related benefits: (1) reductions in congestion, the need for public investment in roads, and transportation costs for individuals currently commuting into the city, and (2) more spending locally as people who live and work in the same community are more likely to shop in that community thereby helping to strengthen and diversify the local economy.

Strategy: Allow and encourage more housing variety to recognize differences in age, income, and lifestyle preferences.

As indicated previously in the plan, there are many livability factors that influence why people choose to live where they do. In an effort to encourage a diverse and vibrant community, the City of Chesterfield should promote more housing variety within its housing stock.

Objectives in this strategy include the following:

- Respond to resident’s desire to age in place
- Address the ‘missing middle’

Objective: Respond to residents’ desire to age in place.

Of course, assisted living and other facilities that cater to an aging population may be an increasingly necessary component of the city. But housing for independent seniors who want to downsize perhaps because they can no longer maintain a single-family detached dwelling on a large lot (or choose not to) should be readily available. We should not have to move from our community simply because we have no options that meet our changing needs as we age. Multigenerational neighborhoods with a variety of housing types, including units that are designed with seniors in mind, can appeal to all ages. While the features of the units for seniors are important (i.e., size, number of floors, and universal design), the elements of the neighborhood are also important. The product mix can contribute to the creation of a neighborhood that is conducive to social interaction among neighbors and a level of activity that can minimize feelings of isolation that so many seniors endure. Potentially surrounded by a network of support, seniors living in a multigenerational neighborhood have a lower likelihood of depression, as such arrangements can foster an environment of neighbors helping neighbors. Neighborhoods that offer a safe system of sidewalk connections to nearby convenience retail and services can help seniors with mobility issues maintain their independence longer.

Objective: Address the “missing middle”

Current housing options fall primarily into two categories: detached single-family homes and apartments. To increase the range of options, consider amending lot sizes and other design standards in the Unified Development Code to facilitate the development of a broader array. The following are examples of product types that the city might consider, but the types that are permitted would be subject to additional public review as part of a related code amendment.





COTTAGE COURT HOMES

Small units, which may be attached or detached, are organized around a common green. The occupants are one- and two-person households, which represent more than 60 percent of households in America. Though residents may differ in age, they are attracted to the lower maintenance afforded by the size of the units (usually less than 1,000 square feet) and little or no private yards. These products can help expand the range of affordable options and help facilitate a multigenerational living.



TOWNHOUSES

Put townhouses in town. We typically associate townhomes with urban living. Such units are attractive to on-the-go Millennials as well as empty nesters, as they feature little or no yard maintenance. Interestingly, townhouses are often separate from “town.” Improperly located, townhome developments can create pockets of density where it cannot be supported, such as within areas that have insufficient road capacity. A desirable type of housing, such units should be encouraged in “in-town” locations. Ideally, townhomes should be located close to retail, services, and jobs and accessible via sidewalk connections to reduce the dependence on automobiles.



LIVE/WORK

Living units above places of work (i.e., first floor shops, restaurants, and other businesses) were once a very common arrangement in town centers. This and other forms of vertical mixed-use development are appropriate ways to introduce more housing in commercial areas that depend on more than weekday activity to survive. Though they might work in places other than the spaces below their units, the residents comprise the evening and weekend population that helps create a vibrant, “24/7” environment.



APARTMENT HOMES

Rethink the definition of “apartment.” Apartment complexes typically have 150 or more units. Often, they are enclosed on a parcel with a single entrance and disconnected from surrounding development. In contrast, apartment homes contain between 2 and 8 units and can be designed with the architectural features of single-family homes. Scaled to complement new single-family homes within the same new development, they can be located to be part of the fabric of a new neighborhood.



DUPLEXES

This product consists of two units attached in a single structure that resembles a home. Like apartment homes, these products can be easily integrated into future neighborhoods. And, if one unit is owner-occupied, rental units have the benefit of a landlord on site. While adding to the range of affordable options, these housing units are particularly attractive to owners who value opportunities for rental income in the early years followed by on-site housing for a family member or caregiver in later years.



MICRO-UNITS AND “TINY HOMES”

Usually under 500 square feet, micro-units pack basic elements of a home efficiently into a small space. While some micro-units are constructed within multifamily and vertically mixed-use buildings, tiny homes are stand-alone units. They are growing in popularity and could make up a significant percentage of micro-units in the future. Considered a reasonable option between renting an apartment and owning a conventional single-family home, they are a preferred alternative in areas where affordable homes are increasingly scarce. Over time, tiny homes may take the place of some manufactured homes, including mobile homes. In terms of size and price, they could satisfy demand currently met by some manufactured homes, and today’s trailer parks could be converted into neighborhoods of “micro-estates.”

OPEN SPACE GOALS: PROVIDE QUALITY PARKS AND RECREATION SERVICES

Parks and recreation programs in Chesterfield contribute to economic development (through sports tourism), family living, healthy lifestyles, and a higher quality-of-life for residents. A detailed assessment of local parks and recreation programs is summarized in the City’s Parks, Recreation, and Arts 2019 Comprehensive Master Plan.

The City operates eleven parks and maintains approximately 540 acres of land used for nature preserves, playgrounds, dog parks, skateboard parks, park shelters, swimming pools, athletic courts, and athletic fields. The City also shares approximately eleven acres of land with the Parkway and Rockwood School Districts for athletic fields. A 200-acre regional park, Faust Park, maintained by St. Louis County preserves the Thornhill Grounds, and provides a surrounding ‘historic village’, large picnic shelter, carousel, playground, butterfly house, and trails. Approximately sixteen miles of paved and unpaved trails in Chesterfield are owned and maintained by City, County, or non-profit agencies.

Youth and adult programs offered through the department range from recreation to dance to art to education. The Sounds of Summer Concert Series attracts visitors to Chesterfield from all over the St. Louis Metropolitan Area. Community events programmed throughout the year support youth and adult recreation activities and celebrate national holidays. The Get Active Program, in partnership with St. Luke’s Hospital, provides healthy lifestyle opportunities for city residents and visitors.

Strategy: Recognize the economic impacts of large events, tournaments, activities, etc. hosted or supported by the City of Chesterfield.

Information about the economic impacts will help determine appropriate levels of public investment to commit to events held in the community in the future. The City may consider doing an evaluation on the impact to focus on out-of-town visitors and their expenditures on hotels, restaurants, gas, groceries, souvenirs, and entertainment.

Strategy: Identify sites in the City for new parks, fields, courts, and trails that help address deficits identified in the Parks, Recreation and Arts 2019 Comprehensive Master Plan.

Future improvements for parks and recreation facilities in the City will focus on deficits identified in the 2019 Comprehensive Master Plan, including: neighborhood parks, community parks, nature preserves, paved and unpaved trails, various court categories, and various field categories. Programming and phasing of improvements to parks and recreation facilities in the city should also consider viable opportunities to emphasize sports tourism in the community as one means to increase the amount of spending in Chesterfield.

Strategy: Emphasize sports tourism as one means to increase the amount of spending in the community.

Year-round sports opportunities should be targeted. A year-round, multi-sport complex could bring in sports tourism dollars.

TRANSPORTATION GOAL:
SOLIDIFY LONG RANGE
TRANSPORTATION PLAN

Chesterfield’s transportation paradigm has historically been defined by intercity commuting—primarily by car. While more than 47,000 jobs are in the city, the vast majority of jobs in Chesterfield are held by people that live in other cities. Most workers that live in Chesterfield commute east of the city for jobs. Transit service from Chesterfield to downtown St. Louis exists, but is the lowest-utilized corridor in the system.

With significant commuting on I-64, there is a substantial amount of rush hour automobile travel into, out of, and through the community on weekdays, and the transportation network has been designed since Chesterfield’s founding to prioritize the quick, contained movement of this rush hour traffic over everything else.

Traffic congestion on surface streets in Chesterfield is limited to morning and evening rush hours; most of the major roadways are underutilized the other 20 to 22 hours of the day. Adding lanes to attempt to solve these short periods of traffic congestion is not a strategy that benefits people living or working in Chesterfield. For one, the phenomenon of “induced demand” demonstrates that adding lanes to roadways does not reduce traffic congestion in the long term. Furthermore, the community does not benefit from widening roadways, which requires significant financial outlay, consumes developable land and open space, impacts community character, and often requires eminent domain.

In fact, a substantial side effect of wide roadways is that they feel like racetracks and encourage speeding during non-peak periods. This means that arterial and collector streets in Chesterfield are wide, often operate at high speeds, and are not always comfortable or safe for people walking, biking, using transit, or driving.

Rather than relying solely on improvements to the existing roadways to solve traffic congestion, the focus for the future of Chesterfield’s transportation system should be on reducing the need for people to drive (or the need to drive as far), especially during rush hour, and giving people options for how they move about the community. Chesterfield should center their transportation strategy around the development of a Long Range Transportation Plan.

A Long Range Transportation Plan provides the direction for the development of the future transportation system. This approach will develop street typologies for the roadway network that outline infrastructure improvements that should happen in conjunction with development. These typologies will account for all modes of transportation, including automobile, biking and walking. It is key to develop the transportation system in this manner to make streets safer and more comfortable for users of all ages and abilities.

Strategy: Adopt a Complete Streets policy.

Complete Streets is an approach to street design that provides space for everyone, supports context, emphasizes safety, and gives people choices for how they move about the community. The Complete Streets approach encourages slower (and therefore safer) traffic speeds, more and higher-quality bicycle infrastructure and safer street and intersection designs that improve walking and biking conditions.

The City of Chesterfield, in keeping in line with the plan’s vision and goals, should consider developing and adopting its own Complete Streets policy. A Complete Streets policy outlines decision-making processes, design decision documentation, street design parameters (such as design speed, roadway width, and lane configuration), and the approach to accommodating for bicycling and walking.

The implementation of a Complete Streets policy is more likely to be successful when the policy is integrated into other city documents, plans, procedures, or processes. The City of Chesterfield should review the elements of typical roadway design projects and ensure that they support the Complete Streets policy. For example, engineering standards are often the default reference for roadway projects; they should be flexible and supportive of design approaches that balance the needs of bicyclists with other modes of transportation.

**COMPLETE STREETS
POLICY ELEMENTS**

- A purpose and vision for the policy, including how and why the community wants to develop Complete Streets.
- A comprehensive approach that includes all users and is applicable on all streets.
- Guidance on how and when community input should occur to guide the planning and design process.
- Application to both new and retrofit street design projects.
- Tailored solutions that complement existing conditions and the context in the community.
- Specific next steps for policy implementation, including planning, design, construction, operation, and maintenance.
- Exceptions to the policy that are clear and require a procedure for approval.
- Performance standards and measurable outcomes to allow for evaluation of completed projects.

Strategy: Design streets to enhance the community.

Whereas the Complete Streets policy will outline the approach and process for designing context-sensitive streets that enhance Chesterfield, the City should also develop guidelines for how it wants the various types of streets in the community to be designed (whether the streets are owned by the City, County, or DOT).

Objectives in this strategy refer to the following types of streets:

- Arterial Streets
- Urban Streets
- Neighborhood Connector Streets

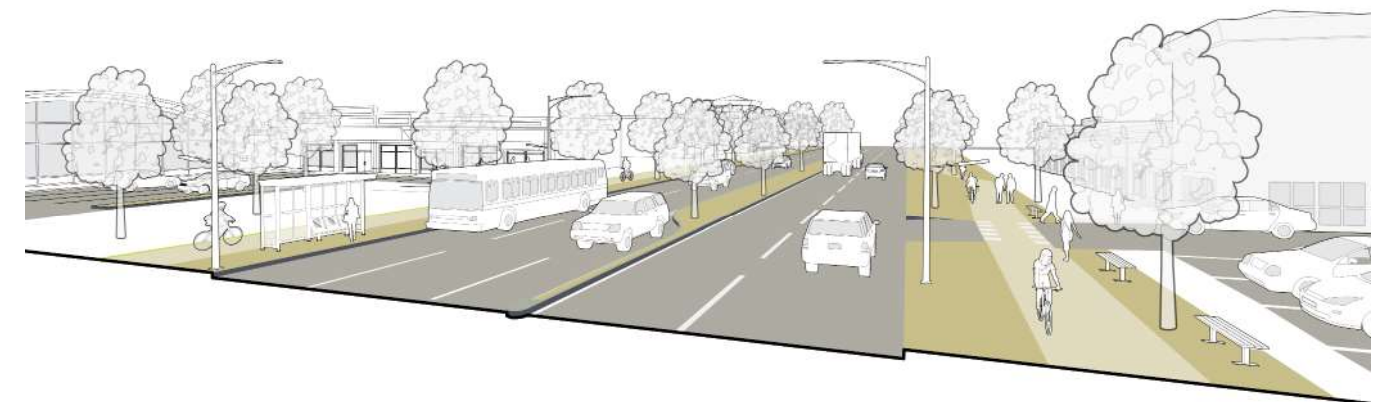


Objective: Arterial Streets (e.g., Clarkson and Olive)

Major multilane arterial streets—such as Clarkson Road, Olive Boulevard, and Chesterfield Airport Road—will continue to emphasize the efficient movement of auto traffic. However, they should be designed to improve safety for all modes and provide consistent accommodations for people walking, biking, and using transit. Features that should be included on all arterial streets are lower speed limits (30 to 40 miles per hour, depending on context), continuous shared use paths for biking and walking, crosswalks and pedestrian signals at every signalized intersection, and

medians with left turn lanes and pedestrian refuge. Where feasible, roundabouts—which more efficiently convey traffic, reduce crash severity, and are more cost-efficient than traffic signals—should be considered.

As previously discussed, widening these streets is not a viable solution to reduce traffic congestion. Rather, solutions that address traffic congestion will revolve around improving intersection operations and reducing conflict points.



Arterials Streets Illustration

Objective: Urban Streets

Streets in the future downtown, Old Chesterfield, and any future mixed-use areas should be designed to reflect the urban character and travel patterns that go along with these development types. They should have low speed limits (25 or 30 miles per hour) and be pedestrian-focused with wide sidewalks, space for furnishings and sidewalk cafes, and tight intersections that slow turning auto traffic in order to make pedestrian crossings

safer. Most urban streets should have only one lane in each direction. Higher traffic streets may have maximum two lanes per direction and may include medians or center turn lanes. They should include on-street bike lanes when traffic volumes exceed 2,000 vehicles per day. If traffic volumes exceed 6,000 vehicles per day or speeds exceed 25 miles per hour, protected bike lanes should be considered.

Objective: Neighborhood Connector Streets

Sometimes referred to as collector streets or minor arterials, streets such as Baxter Road and Ladue Road convey less traffic than arterial streets and rural roads but are important elements of the transportation system. They are also often streets on which people live, so it is important that they temper the demands of through traffic in order to maintain or increase neighborhood quality. This

means enacting low speed limits (25 or 30 miles per hour), providing continuous sidewalks, and including provisions for bicycling. Bicycling can be accommodated through bike lanes, if space allows, or by traffic calming to slow auto traffic to 25 miles per hour or below; traffic calming can also increase pedestrian comfort and quality of life for people living along the street.



Urban Streets Illustration



Neighborhood Connector Streets Illustration

Strategy: Inventory existing streets and opportunities for enhancement.

Many existing streets and roads in Chesterfield are compatible with the guidelines described above. However, some are not, and in fact do not meet other standards of design. The City should inventory existing local, county, and state streets and roads and classify each street according to the guidelines outlined above. It should then identify aspects of each existing street or road that deviates from these guidelines and from local, state, and national standards and guidelines for street design.

The City should then develop a strategy for bringing each street up to compliance with the guidelines and relevant standards. This may include case-by-case retrofit, but it is more likely that changes to streets and roads will occur as part of larger roadway reconstruction projects, underground utility projects, or along with larger-scale land development.

Strategy: Strengthen County and DOT partnerships.

St. Louis County and the Missouri Department of Transportation own, design, and maintain most of the through streets in Chesterfield, including many of the arterial streets and rural roads discussed above. It is therefore important for the City to maintain and strengthen its relationships with these agencies in order to achieve the outcomes it desires for streets in the community. The City's partnerships with the County and DOT should focus on a collaborative approach to developing the intent and priorities for roadway projects.

For example, working with partner agencies to consolidate commercial driveways during street reconstruction (known as "access management") can reduce conflict points, thereby improving traffic flow and increasing safety. Strengthening these partnerships can also be an opportunity to make intersection design more context-sensitive, safer for everyone, and more pedestrian-friendly. Especially in the future downtown and other areas with higher levels of pedestrian activity, intersection design should avoid including free-flow right turn lanes.

Strategy: Leverage local improvements as catalyst for broader improvements.

By participating in street project scoping and conceptual design, the City can work to incorporate its Complete Streets-related priorities into the design of streets. Consider the feasibility of accomplishing street improvements in connection with planned infrastructure projects. For example, a project to address the replacement of a water line could be completed with the redesign of a street to accommodate wider sidewalks, bike lanes, on-street parking and/or street trees in accordance with the guidelines of the proposed typology (above). With an expanded scope, the City should pursue grants to cover both direct and indirect opportunities.

Strategy: Ensure connectivity in new development.

As previously described, there are very few street connections between most neighborhoods in Chesterfield. In addition to prohibiting cut-through auto traffic, this also means that it is impossible to walk or bike between many neighborhoods without using high-traffic (and often high-speed) major streets. Many people in Chesterfield are understandably opposed to adding new street connections to their neighborhoods, which could increase auto traffic. However, opportunities to create connections for people walking and bicycling (e.g., short segments of shared-use path) should be seriously considered.

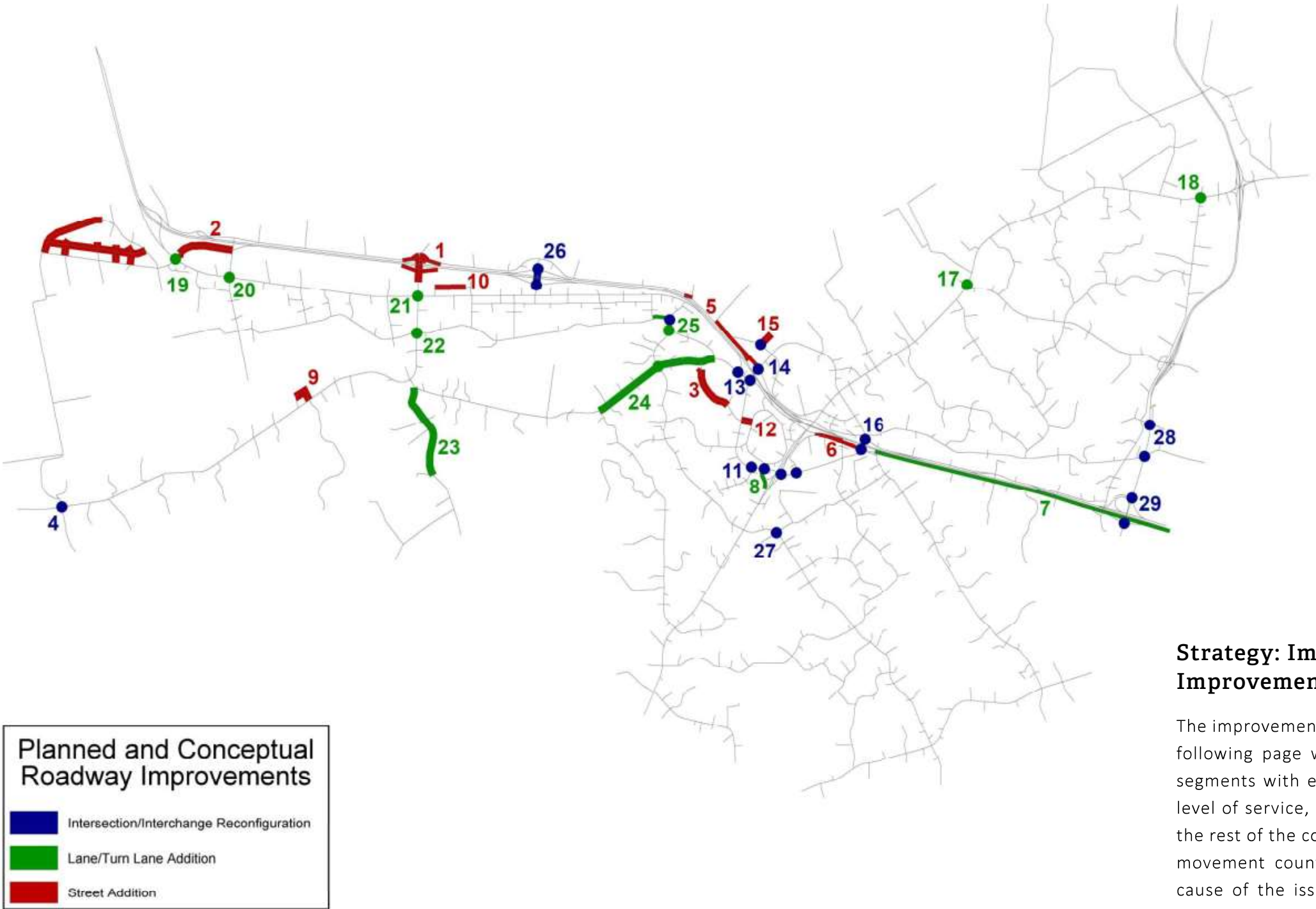
For new development, the City should build or require developers to build continuous collector streets that form a secondary grid between arterial streets, as well as requirements to provide street access on each side of new subdivisions. Steps can be taken to minimize cut-through traffic on local streets, including traffic calming, while still allowing alternate routes.

CITY OF CHESTERFIELD - TRAVEL DEMAND MODEL

Legislation enabling planning in the State of Missouri specifically calls out that in creating a plan for the physical development and uses of land, the Planning Commission may include the “general location, character and extent of streets and other public ways.” In order to closely align land use and transportation planning, the City has historically embedded the transportation element, a required element of the Comprehensive Plan dictated by City Code, into the Comprehensive Plan process. While this adds complexity to the process, the end result has been very positive in providing a clear vision for the future of the transportation network when evaluating private developments and when coordinating with other local agencies (MoDOT and St. Louis County Department of Transportation) to promote a transportation network that supports the vision of the City of Chesterfield.

Strategy: Implement Future Recommended Improvements

The improvements identified on the neighboring image and descibed on the following page were selected after evaluating intersections and roadway segments with either poor overall level of service, significantly decreased level of service, or a level of service or capacity that was inconsistent with the rest of the corridor. Intersection and roadway segment capacity, turning movement counts, and overall demand were analyzed to determine the cause of the issue. The number of lanes, intersection configuration, and corridor characteristics improvements were considered to determine which improvement would be most appropriate to address the concern. These improvement recommendations stem from a system evaluation to ensure localized improvements in one area do not have unintended impacts in other areas of the system.



Future Recommended Improvements

- 1. Full diamond interchange
- 2. Olive Street Road extension to Spirit of St. Louis Boulevard/I-64 eastbound on-ramp intersection
- 3. Burkhardt extension to Wild Horse Creek Road
- 4. Wild Horse Creek Road and Route 109 roundabout
- 5. North Outer Road extension and Swingley Ridge connection
- 6. South Outer Road extension and connection to Chesterfield Parkway East
- 7. I-64 eastbound auxiliary lane from Clarkson Road to MO-141
- 8. Westbound double left turn lane at intersection of Chesterfield Parkway W and Fontaine Drive/Clarkson Road southbound on-ramp. Widen ramp to two lanes and drop one lane prior to merge
- 9. Silver Buck Lane extension to Wild Horse Creek Road
- 10. Arnage Road extension
- 11. Corridor improvements on Chesterfield Parkway between Justus Post Road and Elbridge Payne Road including geometric and signal timings
- 12. Burkhardt Place extension east to Chesterfield Center Road; existing grades will impact connection
- 13. Southbound double right turn lane, two through lanes and double left turn lane at Chesterfield Parkway West at Wild Horse Creek Road
- 14. Interchange improvements at Chesterfield Parkway W and I-64 to increase capacity
- 15. Additional access to Bayer facility

- 16. Interchange improvements at Chesterfield Parkway E and I-64 to increase capacity
- 17. Westbound double left turn lane at Olive Boulevard and Ladue Road intersection
- 18. Westbound double left turn lane at Olive Boulevard and Woods Mill intersection
- 19. New four leg intersection at Olive Street Road and Chesterfield Airport Road with appropriate turn lanes
- 20. Northbound double left turn lane at Spirit of St. Louis Boulevard and Chesterfield Airport Road intersection intersection
- 21. Two through lanes northbound and southbound and eastbound double left turn lane at Long Road and Chesterfield Airport Road intersection
- 22. Northbound right turn lane and westbound double left turn lane at Long Road and Edison Avenue intersection
- 23. Capacity improvements along Kehrs Mill Road to serve as alternate route between Chesterfield Airport Road/I-64 and Clarkson Road
- 24. Capacity improvements on Wild Horse Creek Road between Wilson Avenue and Old Chesterfield Road
- 25. Improvements along Baxter Road between Old Chesterfield Road and Edison Avenue including coordinated signal timings and intersection improvements
- 26. Interchange improvements at Boone’s Crossing and I-64 to increase capacity
- 27. Intersection capacity improvements at Baxter Road at Old Clarkson Road/Highcroft Drive intersection
- 28. Improvements at Conway Road and MO-141 intersection and at Brooking Park Drive and MO-141 intersection; convert to interchanges
- 29. Interchange improvements at MO-141 and I-64 to increase capacity

It is important that the recommended improvments were evaluated from a network perspective and the set of improvements were derived based on the output of the model to address deficiencies that were shown to alleviate the congestion and are consistent with the goals and vision of the plan.

In addition to the improvements listed above other areas experiencing poor levels of service based on the model were examined. Grade seperated intersections or additional through lane improvements along Clarkson Road would improve corridor operations and decrease travel time during critical peak hours. Likewise, an extension of Baxter Road north of I-64 would alleviate congestion along Olive Boulevard.

Although these improvements would be very beneficial to the operation of the corridor, they would be very costly and significantly impact adjacent properties. Other less costly capacity improvements along the corridor could include geometric intersection improvements, updated/ revised traffic signal

phasing and timing, or installation of technology for adaptive traffic control or automated traffic signal performance measures (ATSPMs). Any improvements along the corridor however, need to focus on the corridor as a whole. While individual intersections have poor levels of service, these are not bottlenecks that can be improved in isolation, as the capacity of the corridor must be improved as a whole. Any isolated improvements are likely to cause greater delay at the next downstream intersection or roadway segment.

Costly capacity improvements were also identified along the Clayton Road corridor between the western city limit and Schoettler Road. Due to project cost and property impacts, other low cost, technology-based improvements should be considered, such as coordinated signal timings and adaptive signal systems. As with Clarkson Road, isolated intersection improvements should be avoided, because the primary cause of poor levels of service is overall corridor capacity, rather than bottlenecks at specific intersections or roadway segments.

RESILIENCY GOAL: INCREASE
COMMUNITY RESILIENCY

The City of Chesterfield is situated on the banks of the Missouri River, also known as “The Big Muddy” due to its brown color created when the current lifts the dark sandy silt of the river bottom and suspends it in the water. Known as America’s longest river, it is also a fast-moving waterway that frequently overflows its banks. With permanent flood protection in the form of an upgraded levee following the Great Flood of 1993, additional land for development was created in the city along the Interstate-64 corridor. While the levee effectively shields much of the developed area from flooding during most major storm events, the city remains subject to stormwater management challenges and the potential for future levee breaks. For this and many other reasons, choosing where to develop and how requires careful consideration of and an appreciation for the potential impacts to lives and properties.

Development is surrounded by open space, creating the appearance that the city has room to grow its development footprint. Roughly 3.9% of Chesterfield’s municipal limits is undeveloped or permanently protected as federally maintained wildlife preserves or as local parks. In addition, over 2,100 acres are existing or former agricultural lands that remain relatively undeveloped. Flanking the river, an area on the north side of the levee is a patchwork of all such open space types. While this area is a healthy ecosystem supporting a variety of native plant and animal species, it is not the only area in the city valued for its natural habitats and environmental resources. Mature stands of trees that are part of an old-growth forest thrive in Central Park, which lies in the heart of Chesterfield. The open space in its varying forms provides Chesterfield an attractive natural amenity.

The environmental constraints, particularly those of the floodplain and wetland areas, present obstacles for development, limiting the city’s potential for additional growth. Conversely, poorly managed development can have an adverse impact on natural resources, reducing the storage capacity of floodplains through encroachment, affecting water quality with stormwater runoff, and undermining the integrity of important habitats and ecological processes. By striking a balance between the two, development and conservation areas can be compatible neighbors. For this reason, this plan features the Conservation and Growth Framework Map. Through thoughtful design, the positive relationship created between the two can be environmentally, economically, and socially beneficial to the community. Taking care of these aspects can help strengthen Chesterfield, preparing the city for natural disasters and other unpredictable circumstances that arise, which is the ultimate test of resiliency.



Strategy: Create an interconnected network of green space.

In addition to connecting people with the natural environment, a network of contiguous open space helps preserve critical natural areas, particularly those that contain native plant communities with endangered and threatened species, support wildlife habitats, help manage stormwater, and protect water quality and quantity. The City should delineate a system of public and private spaces to be implemented over time.

- Using the Parks & Trails Map as a starting point, develop a system map that delineates the locations and extents of the potential network components:
 - » Federally owned and maintained lands, such as the Big Muddy Fish & Wildlife Refuge Area
 - » State-owned and state-maintained lands, such as the Monarch Levee Trail
 - » County-owned and county-maintained lands, such as Faust Park
 - » City parks, especially River's Edge Park, Central Park, and the Riparian Trail
 - » Private lands, including conservation easements, that are publicly accessible
- Prioritize expenditures on improvements. For example, direct available funding to system components that contribute to the identity and sense of place of Chesterfield and offer other benefits: recreational trails, passive recreation opportunities (i.e., bird watching, meditation, forest bathing, etc.), and buffers to minimize encroachment and other impacts of development on agricultural operations.

- Leave open the possibility of creating future linkages to other destinations in the Great Rivers Greenway District and the region, such as the Boone's Crossing Refuge Unit (Johnson Island), the Katy Trail, and the Busch Memorial Conservation Area.



Boone's Crossing Refuge

Strategy: Leverage existing city, county, state, and federal resources within Chesterfield to advance conservation objectives.

Examine opportunities for access and improvements to the Big Muddy Fish & Wildlife Refuge Area, Wetlands Park, River’s Edge Park, and Faust Park for expanded conservation programs, including revegetation, conservation-related education, and passive recreation. Partner with the entities that have ownership and maintenance responsibilities to determine the types and timing of improvements and potential funding sources.

Through agreements with partner agencies, utilize areas within existing facilities for specific pilot conservation projects and programs, such as city-sponsored demonstration gardens (i.e., pollinator, native plant, and organic food gardens).



Community people on nature walk at River’s Edge Park

Strategy: Support healthy living.

Health promotion refers to proactive measures to influence people’s choices, encourage healthy behaviors, and essentially minimize the demand for treatment. Heart disease and cancer have been the top two leading causes of death in the county for over a decade, and a primary determinant of these two health issues is the environment in which we live. While Chesterfield has a comparatively healthy population, the City can take steps to ensure the development pattern and public infrastructure effectively contribute to better health outcomes and disease prevention. The built environment and food access are among key areas of focus. Features to consider include the following:

- Mixed-use compact development to enable “active transportation”, such as walking and biking.
- Multimodal transportation network with complete streets to make walking and biking more feasible transportation choices.

- Greenways and other trails to encourage walking for transportation and exercise in addition to supporting residents’ desire for more trails.
- Parks and other recreation facilities within easy walking and biking distance of most households to facilitate regular exercise.
- Open space to increase access to nature, which has a number of health benefits. A study published by Nature Research in June 2019 revealed that just two hours spent outside each week is enough to improve both physical and mental health. (<https://www.nature.com/articles/s41598-019-44097-3>)
- Public spaces to accommodate community gatherings to build and maintain social networks.
- Community gardens, which can be part of private development and incorporated into public spaces such as parks, to encourage healthy eating habits.



Bridge over lake in Central Park

Strategy: Promote tree preservation.

In addition to improving air quality, preserving—and increasing—the trees and the tree canopy helps support natural habitats, minimizes soil erosion, improves water quality by absorbing and filtering stormwater, and moderates the negative effects of sun, rain, and wind.

- Enforce code requirements for tree preservation as well as protection during construction to minimize impacts to trees on developing sites.
- Promote the City's Residential Street Tree Program to increase homeowner participation.



Tree protection during construction



Street Tree and Tree Preservation



Street Trees



Street Trees

