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# Executive Summary

As the City of Creve Coeur matures, it is entering a critical phase. For the last several decades, most of the City’s planning has been related to land use planning – deciding how best to use vacant parcels or large assemblages of land. Now that the community is largely built out, the basic land use pattern of the City is set. Attention is now being turned to the challenge of improving the community’s livability, quality of life, and the first round of redevelopment of older, under utilized properties.

With this plan, the City is making a fundamental change in the way that it plans for the future. With few “green field” sites, the City’s planning resources will be focused on protecting its community assets and strengthening its community character. Neighborhood preservation, business district revitalization, improved livability, and quality economic development will be the themes of the future.

This comprehensive plan is intended to guide the City in this process. It serves as a vision for the community that establishes a framework for the variety of decisions in the future, ranging from requests for private development approval to public investments in infrastructure and facilities.

The Plan begins with a statement of guiding principles that directed the planning process and will continue to serve as themes in the future.

1. The City of Creve Coeur is an attractive, well-planned suburban community that is almost fully developed. It has strong residential neighborhoods, a strong retail corridor, a solid employment center, and strong educational and health institutions. There is much to value and protect in Creve Coeur. This plan urges gradual, but important changes that build on the existing community, not wholesale changes that alter its basic fabric.
2. “Big ideas” can be pursued in a mature, stable community such as Creve Coeur. The City can and should implement substantial changes in certain areas. Specifically, there is a desire to improve the “livability” of the community. This concept means different things to different people, but it generally involves several themes:
  - Addressing mounting vehicular traffic congestion including providing alternatives to automobile-only transportation, and creating a more pedestrian-friendly and “walkable” community with a network of pedestrian connections throughout the community.
  - Creating a system of recreational bicycle trails and commuter bike lanes/routes, which provide connections between residential areas, schools, parks and activity centers.

- Protecting the residential neighborhoods from adverse land use and traffic impacts created by non-residential land uses.
  - Improving the overall appearance of new development and redevelopment.
  - Creating a town center to give the community a focal point and a more distinct identity, and
  - Sustaining a strong economic base that continues to generate funding for community improvements. With the long-term future of major employers in question, there are both opportunities and challenges that must be managed.
3. There are constraints to making significant changes to a community that is largely developed. As Creve Coeur embarks on a new phase of community planning, it must do so with recognition of the implications of planning in a mature suburb. Some of these implications are:
- Because of the built-up nature of the City, changes will be *gradual* in nature. There will be little ability to implement major changes to the community in a short period of time.
  - With a gradual approach to improvements, it will be important to have consensus on a *long-range vision*, and to keep that vision in the forefront of the decision making process. This plan establishes that vision.
  - Implementing real change will be challenging and will require *perseverance* over time.
  - The community leadership must be *strong, creative and innovative* in how it proceeds with implementation of the Plan. Within the broad-brush vision of the Plan, there will be many different ways in which actions can be pursued over time.
  - The community will need to be *opportunistic and proactive* if the Plan is to succeed. Creative ways to implement the Plan should be explored as property redevelops and as routine public improvements are made.

These guiding principles set the stage for a unique approach to planning. This plan includes sound planning guidance and specific recommendations for five different geographic areas of the City.

These recommendations relate to residential protection and economic development; community health and connectivity; community image and identity; transportation and movement; and public facilities. The Plan also includes a summary of tools needed to implement the Plan.

First, the “foundation” of the Plan must be established – how it will be used, how it was put together, and the factual basis of the Plan.

# Foundation

## How This Plan Will Be Used

This comprehensive plan takes a different approach to planning. With an established land use pattern, a framework is needed for decisions, guided by a vision for the long-range improvements needed to achieve better quality of life. Rather than identify a specific “end state” for the City of Creve Coeur, this plan is structured as a guide and as a call to future action, based upon a 20-year vision for the City.

This plan presents goals, strategies, and recommendations for the City, which are reasonable, feasible, and important to the welfare of the entire community; however, the value of the Plan will be measured by the degree of success the community achieves in its implementation. The effectiveness of the Plan is directly related to the continual recognition of the proposals which are included herein, by the Planning and Zoning Commission, the City Council, City staff, and the appointed boards and commissions of the City.

This plan recognizes that no planning system can be entirely quantitative and objective. There will always be a need for subjective judgment to be exercised by elected and appointed officials, particularly in a mature community with established patterns and institutions. The key to successful planning in this environment is to make subjective decisions that are wise, forward thinking, and consistent over time.

The Planning and Zoning Commission plays a critical role in the planning process and must be alert to the needs of the community and bring such needs to the attention of the City Council, as well as other agencies within the community having direct responsibility for public improvements. The appraisal of local needs and the continued application of the planning principles set forth herein will assure maximum benefits from the Plan and will result in the orderly and economical attainment of the goals established in the Plan.

After formal adoption of the Plan, it becomes a tool for communicating the City’s land use policy and coordinating individual decisions into a consistent set of actions that harmoniously shape the City’s growth and redevelopment. The Plan supercedes all land use plans previously adopted by the City. It should be used in conjunction with the City’s existing planning tools, which include, but may not be limited to the following:

- Zoning Ordinance (Chapter 26)
- Subdivision Ordinance (Chapter 22A)
- City of Creve Coeur Design Guidelines
- Creve Coeur Pedestrian Plan
- Traffic Calming/Traffic Mitigation Program
- 1999 Stormwater Evaluation Final Report
- Capital Improvement Program (Five-Year Plan)

The purpose of this plan is *not*, however, to control exact land usage through specific zoning regulations or the use of eminent domain, but to serve as a general guide to development in the City. Thus, this Land Use Plan does not attempt to either invalidate or enforce any private deed restrictions or indentures, nor does it recommend condemnation of single-family residences to implement the Plan. A list of Creve Coeur's plans and ordinances should be maintained by City staff and made available to the Planning & Zoning Commission, City Council, and the public.

The Planning and Zoning Commission has an ongoing responsibility to see that the Plan is implemented and updated as needed, and to be responsive to changing conditions. City staff and appointed boards and commissions will have the Plan to guide them in decision-making. Close cooperation between the City Council and the Planning and Zoning Commission is essential to proper administration of the Plan, and coordination with other governmental entities and jurisdictions is equally important to the realization of the City's planning goals and recommendations.

To that end, the Plan will be used in several ways:

#### **1. Guide Future Land Use Decisions**

- To provide the Planning and Zoning Commission and City Council with an explicit statement of public policy to assist them in their weekly, monthly and annual decision making on specific development and land use issues.
- To remove as much uncertainty as possible from the development process, and thereby facilitate optimal location decisions on the part of individual businesses, households, and developers.
- To provide administrative continuity through successive City administrations in dealing with development proposals, both public and private.
- To provide the community with confidence that recommendations in the Plan are based on the public's participation and input, and that changes made in the community will be gradual and sensitive to the public's needs and interests.

## 2. Outline Public Facility Decisions

- To provide a framework for an orderly and reasonable sequence for implementation of the improvement projects recommended by the Plan, such as street improvements, streetscape improvements, sidewalks, storm water improvements, and communication technology.
- To furnish a means of insuring that improvement projects will be carried out concurrently with the community's ability to pay so that their completion will not create an excessive tax burden.

## 3. Call to Action

As a call to action on City initiatives, such as the creation of a town center, development of a network of pedestrian and bicycle facilities, and additional open space.

This plan represents a long-range (20-year) vision for the community. However, the Plan must be periodically reviewed and updated. It is suggested that the Planning and Zoning Commission conduct a workshop on an annual basis for the purpose of assessing progress in implementing the Plan and to determine whether adjustments are needed to the Plan. It is also suggested that the Plan be formally updated every five years. This update should involve a comprehensive analysis of land use, economic, and public facility changes, reassessment of community attitude, reassessment of the planning goals, and review of the Plan recommendations.

The Plan is intended to be flexible, so that it can respond to changing community conditions. At the same time however, the Plan should facilitate a proactive approach to the planning and decision making process for the City. It recognizes that the City cannot predict the future, but it should equip itself to respond to and guide events to achieve a vision for the community.

## How The Plan Was Put Together

This plan is prepared and approved pursuant to Chapter 89 of the RSMo. under the auspices of the Creve Coeur Planning and Zoning Commission.

This plan was developed through a community-based planning process throughout which Creve Coeur residents and business owners interacted with elected officials, appointed officials, City staff, and consultants. During this process, efforts were made to deal with both long-range community-wide issues and “micro” level issues that deal with individual parcels or assemblages of parcels.

Specifically, the following steps were taken in creating this plan.

### 1. Advisory Committee

A Plan Advisory Committee consisting of representatives from City Council, Planning and Zoning Commission, the business community, and residents, guided the planning process. The Advisory Committee met repeatedly during the 18 months that it took to prepare the Plan. Close involvement by the Advisory Committee ensured that the Plan incorporates the concerns and attitudes of the local population and reflects a vision crafted by as well as for the community. Creve Coeur Planning staff and consultants assisted the Advisory Committee with their work.

### 2. Public Outreach

Extensive efforts were made to provide an opportunity for community participation and to reach out to encourage that participation. These efforts included:

- Public workshops.
- Issue identification and priority-setting sessions with the Advisory Committee, Planning and Zoning Commission, City Council, and business groups.
- One-on-one interviews with representatives of a cross section of the community.
- Focus group discussions with representatives of various community interests.
- Comprehensive Plan Student Forum and Student Survey.

### Future Leaders Plan Their Community



Representatives from six schools in Creve Coeur took part in the Student Forum event Wednesday, November 29, 2000.

Selected by school officials, over 20 students, ranging from grades 6 to 12, took part in the all-day, city planning activity.

The Student Forum was designed to accomplish the following objectives:

- Educate children about the importance of and their ability to shape their community;
- Obtain a perspective on Creve Coeur through the eyes of the City’s future leaders, and;
- Have fun participating in hands-on planning activities.

- A statistically valid community survey exploring community attitudes and values.
- Updates on the planning process posted on the City’s web site.
- Updates on the planning process published in the City’s newsletter.
- A public meeting to review the Plan’s goals and objectives.
- Advisory Committee members forming and leading groups to conduct detailed analysis of issues in various areas of the City as a prelude to the development of Plan Goals (see below).

An independent firm conducted a statistically valid survey of Creve Coeur residents and businesses. A Student Survey was also conducted in conjunction with the Student Forum.



### 3. Research and Analysis

The Plan is built on a solid factual foundation. The consultant team conducted research on a wide range of land use, zoning, economic, demographic, public facility, transportation, and community character issues. This information is summarized in this plan. In addition, the City’s planning staff worked with the consultant to identify key properties in the City that are judged most likely to experience pressures for change in the future. Pressure for change could be due to the parcel’s location, underutilization, relationship to other land uses, or other factors. These properties are given focused attention in this plan.



Survey highlights will be denoted throughout the plan by this symbol.

### 4. Plan Goals

An understanding of the forces and trends shaping the community and of community values provides a solid foundation for developing the goals of the Plan. The Goals are based in part on work conducted by groups led by Advisory Committee members. These 6 subcommittees worked to develop issue statements and visions for different geographic areas of the City. Their work was invaluable in developing the Goals and subsequent policy recommendations. These Goals relate to:

- Residential Preservation and Economic Development.
- Community Health and Connectivity.
- Community Image and Identity.
- Transportation and Movement.
- Public Facilities.

The purpose of the Goals is to serve as a compass for the community. These statements of direction form the framework for the more

### Public Outreach

Extensive efforts were made to provide an opportunity for community participation and to reach out to the public to encourage that participation.



Director of Community Development discusses the Comprehensive Plan with a resident during Creve Coeur's Crime Prevention and Safety Fair in October, 2000.

detailed recommendations of the Plan. The Goals help to establish an overall, long-range vision, to guide the City as it conducts its planning and development business on a day-to-day basis.

### 5. Plan Policies and Recommendations

With the Goals setting the direction, specific recommendations are made by geographic area. These recommendations relate to land use, parks and open space, community character, transportation, and public facilities. The intent is to create a plan that contains recommendations for individual areas of the City while providing an over-arching community vision and direction.

### 6. Implementation Recommendations

The ability to achieve the goals is a constant consideration. This plan identifies actions that must be taken to implement the Plan. It is a challenge to create a comprehensive plan that achieves consensus among many different interests, is visionary, and can be accomplished. Great efforts were made during this planning process to accomplish just that: an achievable plan with bold ideas and a strong base of support.

Through this interactive planning process, hundreds of people influenced this plan. This solid rooting in the community helps to insure a plan that is sensitive to the needs of its people. The principles that grew out of this process are summarized in the following section.

## Community Priorities

In order to manage change, it is important to understand what residents and businesses value in a community. The process that was used in preparing this plan yielded a solid understanding of community attitudes.

The following are the top six quality of life issues of concern to residents and businesses in Creve Coeur:

1. **Traffic Congestion** – Traffic has continued to increase and cause frustration, particularly on Olive Boulevard. This congestion is caused by a number of factors, including increases in both Creve Coeur and regional traffic, an increased number of driveways (curb cuts) for business access, too many traffic signals, which makes it difficult to provide for good signal progression, lack of coordinated site planning, and increasing reliance on automobiles for transportation. Traffic congestion is a major source of frustration for Creve Coeur residents.
2. **Residential Protection** – Many residents feel threatened by potential intrusion of commercial uses into residential areas. The border between the businesses along Olive Boulevard and the residents to the south has been the source of numerous community controversies in the past. Traffic generated by businesses may also spill over into residential areas, upsetting the quiet peace of the neighborhoods.
3. **A “Walkable and Bikeable” Community** – Pedestrian and bicycle facilities are insufficient and inconsistent in Creve Coeur. Without a comprehensive system of sidewalks and bike lanes, residents and businesses do not have a transportation mode choice. The lack of transportation options is one of the reasons for traffic congestion.
4. **Town Center** – Creve Coeur does not have a downtown. There is no focal point to the community, and it therefore lacks a critical element of community identity. Having a pedestrian-friendly area where businesses, residents, government uses, and parks coincide in a mixed-use environment would be a source of pride and identity to Creve Coeur.
5. **Parks, Trails, and Greenways** – People value the “green” appearance of Creve Coeur and want to see it expanded. They especially want to see a more organized and connected network of parks and linear green spaces.



### Traffic Congestion Issue Survey Results

Nearly three-fourths of participants in the resident and business surveys (76.1 and 74.6, respectively) answered that traffic in commercial areas is a serious problem. In fact, both businesses and residents ranked traffic in commercial areas as the most critical problem in Creve Coeur.

6. **Business Preservation** – While business expansion can sometimes create conflicts with residents, maintaining a strong economic base is critical for the long-range success of the City. It is important to establish a positive business environment for small businesses providing local goods and services, as well as large regional employers located in the City. The ability of the City to provide improvements recommended in this plan is dependent, in part, on a strong economic base.

These priorities served as the compass for the creation of this plan, and helped to shape the *Goals* that serve as the foundation for the Plan.

## Major Trends and Patterns Facing Creve Coeur

While the public outreach program yielded an important understanding of community attitudes, it also is important to understand the forces and trends that are shaping the community, along with opportunities for and constraints to improvements. This section summarizes the results of research and analysis of several important factors that relate to the quality of life issues raised by the community.

### Land Use, Economic, and Demographic

Creve Coeur is a city of neighborhoods. The primary land use in the City is low density single-family residential. Approximately 50% of the land area of the City is devoted to single-family uses, which is a pattern that has remained unchanged for the last 30-years. Another 25% of the City is devoted to schools, churches, parks, and other open spaces. Businesses make up less than 20% of the City’s land area, and are concentrated along the Olive and Lindbergh Boulevard corridors. (Map 1, Appendix A)

The City’s zoning map generally reflects the existing land use pattern. There is no reason to expect to see this relationship change, nor is there any desire to change this basic pattern. (Map 2, Appendix A)

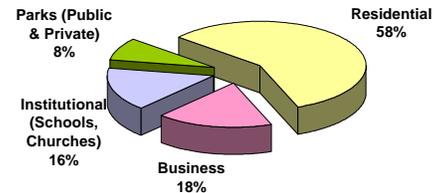
The current population of Creve Coeur is approximately 17,000, which represents an increase of almost 5,000 persons since 1990. However, most of the population gain came as a result of annexing land that was already developed.

The population of Creve Coeur is generally older, more educated, and more white collar than that of other communities in St. Louis County. The average age of Creve Coeur residents is six years older than the County average. The percentage of adults with a college education is more than twice the national average, and more than 90% of Creve Coeur residents were employed in traditional white-collar occupations and professions. The median household income in Creve Coeur is 20% higher than in the metropolitan area.

The City has a proud history of working with area school districts. These efforts will continue to ensure that both districts remain top-rated among all the metro school districts, an important factor when young families are searching for a community in which to live.

An aging Creve Coeur population offers a planning challenge. While population is aging nationwide, the trend is particularly pronounced in

Figure 1. Major Land Uses in Creve Coeur



Creve Coeur. This trend will create housing planning issues in the future. Senior citizens often require or desire housing other than single-family homes on large lots. How Creve Coeur faces this challenge will determine whether its residents will be able to remain in the City as they age.

There are approximately 5,400 dwelling units in Creve Coeur, 60% of which are single-family and 40% of which are multi-family. The percentage of multi-family is somewhat higher than the national average, which is approximately 30%. However, of the estimated total multi-family units, almost 15% are owner-occupied. Many of the rental units are concentrated in large apartment complexes.

While some may view this relatively high amount of multi-family as a negative, it provides the City with a diverse housing stock and housing choices.

With the upscale housing market, high land values, and shrinking supply of remaining land, the City of Creve Coeur also can expect to continue to experience pressure for “tear-downs” of older homes and replacement with larger more expensive homes, as well as potential consolidation of larger lots for re-subdivision. This is a trend that some find disturbing in that it prices many people out of the Creve Coeur market. However, a wide variety of housing options in surrounding communities are available.

With regard to the unincorporated areas of St. Louis County to the north, the City will explore potential annexation of these areas. In July 1999, the City of Creve Coeur submitted a Map Plan, as requested, to the St. Louis Boundary Commission, pursuant to Article IV of the Boundary Commission Rules. The submitted Map Plan is a map that identifies the general area or areas for which a municipality may consider submitting a formal annexation petition. Annexation petitions submitted between April 15, 2001 and July 1, 2004 will not be authorized by the Boundary Commission until April 1, 2005, at the earliest. The City maintains the right to withdraw its Map Plan at anytime during this process. Any consideration of future annexations will include the possibility of the newly annexed areas bearing the financial burden of upgrading existing infrastructure (e.g. streets) through various mechanisms, such as Special Assessment Districts (SAD) or Neighborhood Improvement Districts (NID).

With regard to employment, Creve Coeur continues to be very well positioned in terms of demand. Approximately 15% of the jobs in St. Louis County are in the “Olive-West Port” area, and Creve Coeur captures a substantial share of those jobs. Monsanto, St. John’s Mercy Medical Center, and Barnes-Jewish Hospital are leading employers. Creve Coeur is likely to capitalize on the Plant and Life Science trend in the St. Louis region, led by the Donald Danforth Plant Science Center and the NIDUS Center for Scientific Enterprise. Creve Coeur is located near the geographical center of the St.

**Annexation Issue  
Survey Results**



When asked “should the City consider annexing a portion of the unincorporated area north of Creve Coeur to ensure quality development,” 59% of residents and 66% of businesses favored such an effort.

Louis metropolitan area and enjoys excellent access to the regional highway network, including I-270 and I-40.

The greatest challenge to continued economic development in Creve Coeur is the shrinking supply of easily developable land. Assuming an adequate land supply, the market would support a wide range of uses including office development, meeting and conference center development, flexible research and development-related spaces including office and warehouse space, and related restaurant and convenient services.

In sum, Creve Coeur has a strong housing and employment market. Demand is high, and with a scarcity of land, pressures to meet this demand will be realized primarily through redevelopment or the intensified use of existing developed property, both residential and commercial. The challenge will be to manage the redevelopment process to preserve and protect those things that people value while avoiding adverse impacts to existing residents and businesses.

## Community Health and Connectivity

Creve Coeur is a City of neighborhoods with a wonderful sense of green, open space. Compared to its urban neighbors to the east, the City of Creve Coeur is much more suburban and almost rural in its character. Houses sit on large lots covered with mature trees. Major institutions, public and private, are surrounded by ample expanses of open space. City parks are scattered throughout the community.



Not surprisingly, the community surveys conducted as part of the planning process confirm that City residents highly value this open space and park-like character. The surveys also help to explain why, although the City does not have an abundance of major public parks, students and citizens alike are generally satisfied with the City's park system. For example, 66% of the students surveyed said they were either very satisfied or satisfied with the parks that the City provides for sports and other activities. While 27% felt that "not enough parks" was a very serious or serious problem, 38% said it was not a serious issue. Adults expressed similar feelings.

However, these figures do not paint the complete picture. As shown in the table on page 14, the City has relatively little in the way of *public* parks and open space. The bulk of open space (Map 4, Appendix A) is in private ownership, maintained either by homeowners associations, or major institutions such as schools and private clubs.

### Creve Coeur Pedestrian Plan

Properly designed and constructed sidewalks throughout Creve Coeur will enhance Creve Coeur, promote traffic calming, and make it a safer, more attractive place in which to work,



live, and play. Adequate widths, separation from moving traffic, street trees, and connectivity are priorities of the Creve Coeur Pedestrian Plan.

Creve Coeur's Pedestrian Plan is an effort to guide the development of a walkable community and the integration of bike lanes and networked trails.



These guidelines were developed with specific standards, obtainable goals, and implementation policies, which are flexible and achievable. Location of sidewalks throughout the community have been prioritized and integrated into the Plan – largely based on defined criteria, street classifications, and pedestrian usage.

#### Pedestrian Plan's Design Principles...

- should be safe
- should be accessible and networked to all
- should connect to places people want to go
- should be easy to use
- should be inviting and used for many things
- should be feasible and economical

**Table 1. City Parks**

| Park                             | Location                            | Acres | Fields | Tennis | Trails            | Play-ground | Rest-rooms | Other                                   |
|----------------------------------|-------------------------------------|-------|--------|--------|-------------------|-------------|------------|---|
| Beirne                           | 10630 County View                   | 7.7   | 2      | 3      | ½ mile            | 2           | ✓          | Meeting rooms, pavilion                 |
| Conway                           | Conway and I-270                    | 29.4  | 0      | 2      | 1 mile            | 2           | ✓          | 2 historic cabins                       |
| Dielmann Complex                 | 11400 Olde Cabin                    | 55.8  | 0      | 0      | 0                 | 0           | ✓          | Golf course; ice arena                  |
| Fountain                         | Olive, east of I-270                | 1     | 0      | 0      | 0                 | 1           |            | Fountain, benches, picnic area          |
| Lake School                      | Coeur de Ville                      | 6.3   | 1      | 3      | 0                 | 2           | ✓          | Historic building                       |
| Laverne Collins                  | Olive, between Old Olive and Spoede | 1.5   | 0      | 0      | ¼ mile (proposed) | 0           |            | Gazebo, benches (proposed)              |
| Malcolm Terrace                  | S. of Ladue west of Mosley          | 25    | 0      | 0      | 2 miles           | 1           | ✓          | Nature area<br>Serenity Grove           |
| Millennium (to open Summer 2002) | E. of Mason/S. of Olive             | 26    | 2      | 0      | 1 mile            | 1           | ✓          | Pavilion, future Phase III Improvements |

**Natural Features in Creve Coeur**

The Natural Features Map (Map No. 3) illustrates existing natural features that may influence future development in the City. As a mature community, the presence of floodplain areas and sloped areas will have a minimal impact on land use patterns.

This base information will be useful as the community begins to identify open space linkage and natural resource protection.



Thus, the total public park inventory is about 154 acres, or just over 9 acres per 1,000 persons. A large portion of this total acreage is a golf course, which while a valuable and popular community asset, is not used by a large percentage of citizens. Without the golf course, the public park ratio is less than 6 acres per 1,000 persons. In comparison, the National Parks and Recreation Association recommends a standard for public neighborhood and community parks of 10 acres per 1,000 persons.

A more significant deficit, one recognized by many in the citizens survey, is the lack of trails and sidewalks throughout Creve Coeur. None of the public parks are connected by sidewalks or trails. To walk or bike around Creve Coeur is a real challenge—there are simply too many missing links and busy streets like Ladue Road and Olive Boulevard, which are uninviting and unsafe for bicyclists and pedestrians. Walking from home to school or to shopping areas is simply not possible for most citizens and students due to lack of connections between the parks.

The City does have two major drainage ways – Creve Coeur Creek, which flows to the northwest and Deer Creek that flows to the southeast. These land along these creeks and their tributaries that could be the foundation of a more extensive trail system. About 1.5 miles of trails have been developed in Malcolm Terrace Park.

Similarly, there are miles of utility/power-lines and old railroad corridors that could contribute to a trail system. Two good examples are the power-line corridor on the west side of the City, which intersects Creve Coeur Creek, and the abandoned railroad corridor that runs between Malcolm Terrace Park northwest to behind City Hall.

The City government has recognized some of these opportunities and has moved aggressively to improve the parks and trails. For example, the City purchased land for Millennium Park and began Phase I with a groundbreaking ceremony October 13, 2001. In a recent study of potential program elements for Millennium Park, citizens identified specific facility needs, including playgrounds, outdoor multi-purpose courts for basketball or in-line hockey, softball/baseball fields, trails, picnic grounds, undeveloped natural areas, and soccer fields.

The City has also adopted an extensive Pedestrian Plan that sets out ambitious priorities for building sidewalks and crosswalks throughout the community. As part of the Capital Improvement Program, a major sidewalk improvement program was recently completed along Ladue Road and Warson Road, and sidewalk and related improvements along Olive Boulevard, Mosley Road, Conway Road, and Mason Road are underway. Installation of sidewalks and purchase of land for public parks ranked Nos. 1 and 2 respectively in priority for City projects in the citizen survey, demonstrating that these initiatives enjoy widespread citizen support. The location of pedestrian improvements proposed in the Pedestrian Plan is illustrated on Map 4 (Appendix A).



There is also a need for an indoor community recreation center serving all ages. This need was identified by residents of all ages throughout the public input process. In the Comprehensive Plan’s Student Survey, 84 percent of the respondents indicated they would like to have a youth center in Creve Coeur, and 87 percent indicated they would like to have an indoor sports complex.

The City currently operates other facilities including the Golf Course, Ice Arena/Dielmann Recreation Complex, and the Community Center. The ice rink is heavily subsidized and is in need of significant repair. Conway Park is the City’s only linear facility, which for a linear park is relatively small in size (29 acres).

This system is complemented by two smaller park facilities – the Tappmeyer Homestead (presently closed), and the playground at Bellerive Elementary School, which is operated as a joint use facility with the school.

## Community Image and Identity

Creve Coeur is a community with two distinct characters. The first is captured in the attractive, secluded residential areas nestled in a heavy tree canopy that covers most of the city. They are green, quiet, and sheltered from the hubbub of the major arterials and thoroughfares



### Survey Support for New Sidewalks

Installation of sidewalks was the No. 1 priority for City projects in the resident survey. Incorporating preferred sidewalk widths and street trees into sidewalk projects, as specified in the Creve Coeur Pedestrian Plan, is a priority for the City as well.

like Olive Boulevard and Lindbergh Boulevard to the north and east. This is Creve Coeur’s image to many people in the area. The community survey makes clear that this image is at the core of what most citizens value about Creve Coeur.

The second character is markedly different—that of the City’s commercial areas, particularly along Olive Boulevard which runs east to west across the city’s northern tier. These areas have a much different character than the residential areas of the City.

Olive Boulevard, the northern stretch of Ballas Road, and Lindbergh Boulevard are thriving commercial areas that contribute heavily to the City’s revenue base. With the exception of a short length of east Olive Boulevard, between Graeser and Spoede, where smaller-scale residential structures and mature trees predominate, these areas are heavily dominated by the automobile and have a strip commercial suburban character. There is no unifying architectural style. Buildings are often set back long distances from these arteries behind seas of parking. Site planning is fragmented, creating a hodge-podge appearance in which buildings and developments do not relate well to the street or to one another. Utility lines loom over the scene, and sidewalks are poor or non-existent. In the citizen survey, almost 40% of respondents identified the appearance of commercial areas as a serious problem. In an effort to improve this area, the City should discourage new billboards and encourage the removal of existing billboards to the extent permitted by law.

Creve Coeur also lacks a defined commercial center – there is no “there” in Creve Coeur. And there is little to distinguish these areas from those in neighboring communities. There are no “gateways” that announce to visitors that they are arriving in Creve Coeur, just more of the same strip development that typifies Olive Boulevard. A gateway feature is symbolic and signifies a celebrated entrance, but can take a number of different forms. Gateways can be physical features such as sculpture, entrance monuments, and landscaping, or quality development elements, such as visually attractive buildings.

Several recent trends pose some significant challenges to maintaining the character of residential areas and improving that of the commercial districts. As market demand increases, there is growing pressure to convert residential areas, particularly adjacent to the Olive Boulevard corridor, to commercial uses. A majority (55%) of the residents surveyed identified this as a serious problem for the City – second only to traffic. At the same time, the combination of market pressure and commercial sites available for redevelopment means that there is a great opportunity to improve the appearance and functionality of existing commercial areas, especially along Olive Boulevard around I-270 and west.

The City has enacted Design Guidelines that are already producing more attractive commercial development. Standardized franchise architecture is

### Creve Coeur Design Guidelines

With a long-standing commitment to community aesthetics and design excellence, Creve Coeur is facilitating the continuation of such efforts through the City’s Design Guidelines.

New developments and major renovations of commercial structures may affect Creve Coeur’s overall form and character. The City’s commitment to design relates not only to the appearance of a specific building or site, but also to the appropriateness of the design within the overall fabric of the community.

The Design Guidelines focus on...

- Site relationships and layout
- Building configuration and location
- Streetscape
- Pedestrian and vehicular circulation
- General architectural standards
- Scale/Design/Materials
- Signage and lighting

discouraged, and more attention to the relationship between buildings, pedestrians, and the street is required. The recent development along Olive Boulevard between Tempo and Questover is a good example of how the quality of commercial development in Creve Coeur can attain higher standards while protecting adjacent residential neighborhoods.

The City has also undertaken an ambitious streetscape improvement program. These improvements have already greatly enhanced the appearance of Ballas Road, and grants are being sought to carry out further streetscaping projects along Olive Boulevard.

At the same time, the City is considering the benefits of planning for a town center that would serve as a civic gathering place with a mixture of offices, shops, restaurants, entertainment venues, and residential units. In the community survey, 68% of respondents favored the notion of the City helping to create a town center.

Perhaps underlining the importance of community character as an issue to the citizens of Creve Coeur, four of the top six challenges facing the City identified by survey respondents were directly related to community character. Each of the top five City initiatives favored by City residents revolve around community character: installation of sidewalks; beautification improvements; purchase of parkland; burial of overhead wires; and assisting in the development of a town center.

## Transportation and Movement

In terms of ground transportation, Creve Coeur is strategically located within the St. Louis Metropolitan Area. Easily accessed by Interstate 270 and convenient to Interstates 70, 40/64, and regional highways 364 (Page Avenue extension) and 141, the City is at the heart of a metropolitan area of 2.6 million people. Congestion is an increasing problem in the City, especially along Olive Boulevard, Lindbergh Boulevard, New Ballas Road and Ladue Road.

The Creve Coeur street system can be classified into categories of interstate highways, arterials, collectors, and local roads, depending on their function and purpose. These are illustrated on Map 5 (Appendix A).

Creve Coeur, like many communities throughout the United States, has experienced both the benefits and impacts of automobile mobility. The benefits include being able to live or work in the City of Creve Coeur and have regional access to places of work, business, and shopping via a comprehensive regional arterial and interstate system. Creve Coeur is strategically located at the interchange of I-270 and Olive Boulevard. The transportation attractiveness of Creve Coeur,



### Business Survey Support for Proposals to Improve Quality of Development

- Require better landscaping of commercial development (81.2%)
- Enhance streets with additional medians, landscaping, lighting and better signs (81.2%)
- Improve architectural design standards of commercial development (77.1%)
- Require new developments to install public areas with fountains, benches, etc. within their development (68.9%)
- Require new developments to pay extra fees to help offset additional traffic due to new business (52.5%)

Resident Survey Support  
for Proposals to Improve  
Quality of Development



- Require better landscaping of commercial development (88.8%)
  - Enhance streets with additional medians, landscaping, lighting and better signs (80.3%)
- Improve architectural design standards of commercial development (84.2%)
- Require new developments to install public areas with fountains, benches, etc. within their development (78.2%)
- Require new developments to pay extra fees to help offset additional traffic due to new business (76.1%)

however, has also resulted in negative traffic congestion impacts. Congestion at the I-270/Olive interchange and travel along Olive Boulevard has become a major quality of life concern for residents and businesses in the City.

The Creve Coeur street system has resulted in intensively developed and redeveloped commercial and retail land uses, both at the I-270/Olive interchange as well as along the entire segment of Olive Boulevard within the City’s boundaries. The past development of Creve Coeur has resulted in the primary flow of traffic through the City taking place along Olive Boulevard, with relatively low traffic volumes within most residential areas.

The amount of traffic on Olive Boulevard can be explained in terms of vehicle origin and destination. In addition to Creve Coeur residents’ use of Olive Boulevard, a significant amount of vehicular traffic on Olive originates from external sources. Numerous vehicles originate from outside the City in order to utilize the City’s commercial activities. Other vehicles use Olive Boulevard to access neighboring municipalities. As a result, the volume of cars on the roadway has increased causing significant congestion on Olive.

Historically, congestion within the City has been addressed through increasing the capacity of the existing street system. As an example, intersections along Olive Boulevard have been systematically improved with additional through, left, and right turn lanes. Signals have been strategically installed to control traffic, and access controls have been implemented to preserve what little residual capacity might remain. Currently major reconstruction of the I-270/Olive interchange is underway (completion anticipated by 2003) and additional circulation improvements along Olive Boulevard to increase the capacity of this critical east/west major arterial.

However, as in many cities, roadway construction solutions are no longer easily implemented. Local impacts and right-of-way limitations to accommodate the improvements often result in controversial and expensive solutions that are yielding fewer and fewer benefits.

In addition, many cities are questioning the impacts of capacity improvements on alternative transportation modes. For example, as intersections are widened to include additional through, left turn, or right turn lanes, the pedestrian crossing the street is exposed to more traffic and for a longer time. Street widening also encroaches into bicycle lanes creating safety concerns.

Even with these improvements, travel patterns are changing as drivers seek ways to avoid the congestion along Olive Boulevard. Some of this traffic diversion is affecting residents in adjacent neighborhoods. Without regional and local alternative transportation solutions or parallel facilities,

the interstate and arterial system that began as an opportunity for relatively free flow mobility, has become today's traffic jam.

There are other transportation issues within the City of Creve Coeur, in addition to congestion around I-270 and Olive Boulevard. One is discontinuity in north-south travel west of I-270. Because of this discontinuity, some residential streets are experiencing higher than normal levels of cut-through traffic. Even with the current roadways, transportation system management solutions, such as synchronizing signals, strategic spot improvements, and elimination of some offset intersections, would improve overall flow along Olive Boulevard. In an effort to resolve traffic problems throughout the community, particularly in residential neighborhoods, the City has adopted the *Traffic Calming/Traffic Mitigation Program*.

Over 225,000 vehicles travel through the I270/Olive intersection daily—one of Missouri's busiest intersections.

## Public Facilities

As a mature city, Creve Coeur has well-developed water, communications, electric utility, and public sewer systems. The City continues to maintain and improve its infrastructure; for example, the City is in the process of implementing a \$20 million Storm Water Management Plan.

Fiber optic installations have been initiated along Olive Boulevard and other sections of the City; however, they have not yet been evenly developed as a citywide system. With regard to other telecommunications facilities, the community is served by Charter Cable Television, Direct TV, and Southwestern Bell Digital Service Line (DSL) systems.

Fiber optics activity in Creve Coeur reflects a major change that is occurring in the telecommunications sector of the economy. Dramatic growth is occurring in the wireless and Internet communications portion of the sector, as companies reconfigure to serve new needs.

Creve Coeur's electric service infrastructure, provided by AmerenUE, has historically been more than adequate to meet conventional needs of the city's industrial, commercial, and residential base. However, the advent of high tech business development in the City, coupled with its intent to attract more of these businesses, has resulted in the need for a higher benchmark of reliable electrical service, with power which is less subject to outage, transient spikes, sags, and surges.

Adequate technical infrastructure is an important issue to high-tech firms such as those being sought by Creve Coeur. In addition to fiber optics, other important infrastructure elements include water and electric service and fire protection, which are sensitive to the demands

Fiber optic installations are occurring throughout the City, but more work is needed to ensure the adequate and even development of a citywide system.



An active directional bore machine installs fiber optic cable.

of high-tech businesses. Consistent water quality is another important need for industries such as biotechnology chip manufacturing.

## **Conclusion**

In summary, Creve Coeur is a maturing, high-quality community with well-maintained infrastructure. It has potential demand for new development, but little land to accommodate that growth. Therefore, the City must take great care to insist upon high quality in new development and redevelopment, both to preserve its character and to maximize benefits to the City. Community character is a central concern: the quality of development, community amenities such as parks, trails, and open space, and adequate infrastructure are all important factors in keeping Creve Coeur livable.

# The Plan

## Goals and Strategies

With this base of understanding of economic forces and local attitudes, the community established a series of goals and strategies, to provide community direction. These Goals and Strategies relate to land use, parks and trails, community character, transportation, and public facilities.

### Residential Preservation and Economic Development

The basic mix of land uses in Creve Coeur will not change. Residential neighborhoods will be preserved and protected from commercial encroachment. Commercial areas will be located in clearly defined districts and will consist of high quality developments sensitive to nearby or abutting properties. The City will continue to strengthen its position as a major regional business center. Specifically, the City will:

1. Preserve the existing overall pattern of land uses.
2. Mitigate the impact of non-residential uses such as lighting, noise, and trash on residential uses where they are adjacent.
3. Define, protect, and reinforce the distinct identity of residential neighborhoods, centers of retail activity, a mixed-use town center, and an employment center.
4. Protect residential areas from encroachment of non-residential uses.
5. Limit the development of buildings greater than ninety (90) feet in height to the Central Business District. Buildings greater than ninety (90) feet in these areas may be permitted with a Conditional Use Permit.
6. Guide regional retail use to the Central Business District area. Other business areas should be limited to local retail designed to serve the Creve Coeur area.
7. Preserve the long-term economic strength of the City. Establish the Commerce Center as a regional focus of the life science industry in the St. Louis region. Ensure that Monsanto and the Lindbergh-Warson Industrial Park remain strong economic anchors for the City.

## Community Health and Connectivity

Creve Coeur will have a network of parks, open spaces, green corridors, and pedestrian connections that link the neighborhoods, schools, shopping areas, jobs, and town center. The City will increase the net amount of open space, which is a part of this network. The City will actively pursue the respectful integration of trails and bikeways, and the preservation, protection, and acquisition of open spaces, natural areas, and creeks in an effort to improve the quality of life, environment, and air. The City will:

1. Build on the City’s existing Pedestrian Plan to design and create a comprehensive community wide network of off-street and on-street connections for pedestrians between parks and open spaces, the town center, schools, and neighborhoods. The City will enhance its Pedestrian Plan to utilize drainage, floodplains, stream corridors, utility rights-of-way, and existing trails and sidewalks to complete the system. Work with the Missouri Department of Transportation to incorporate designated bike lanes along state routes. (See also Bikeway Plan under Transportation Goals.) It will also connect to and implement the regional bike system.
2. Create a linear “green-line” park along Olive Boulevard connecting the Central Business District and other activity nodes. This feature will be developed primarily through additional landscaping and streetscaping, preservation of existing trees, and construction of sidewalks, with only such limited land acquisition as is necessary to fill in missing links.
3. Require new commercial, institutional, and multi-family development or redevelopment to include public amenities such as pedestrian connections, bicycle facilities, public sitting/gathering areas, and open space, as appropriate.
4. Explore the development of recreation facilities such as a central urban park (perhaps as part of the Central Business District), community recreation center, youth center, library, or community center.
5. Ensure that significant amounts of open space are preserved if the Monsanto Campus is redeveloped, including the provision of public parks, open spaces, and trails.
6. Expand the use of cooperative agreements with local schools to provide access to recreational facilities, school playgrounds, and open space.
7. Complete the Millennium Park Phase III improvements. Link parks with planned trail systems via floodplains, drainage ways, and utility right-of-ways.



Utility right-of-way can be preserved for future trail development.

## Community Image and Identity

Creve Coeur will establish a unique regional identity and “sense of place” through improved quality of development, historic preservation, gateways, streetscape improvements, and development of a town center. That identity will be one of high architectural and development quality, an abundance of cultural arts and entertainment opportunities, and a quality place to live, shop, work, and play. The City will strive to:

1. Improve the quality of commercial development by strengthening the Design Guidelines to provide more detailed guidance regarding building orientation, connectivity, and compatibility with adjacent residential development, as well as illustrations of desired development patterns.
2. Preserve its historic properties, such as the Clester Cabin, the Hackmann Cabin, Lake School, and Tappmeyer Homestead.
3. Develop a system of gateway features at various locations, including entrances to the City and key locations that serve as defining points within the City.
4. Maintain the City’s strong low-density residential image and character.
5. Ensure that non-residential development is compatible with adjacent residential development.
6. Implement streetscape improvements along major streets and gateways.
7. Foster development of a town center, which would include the design and construction of a public gathering place or places.
8. Explore a program of placing utility lines underground along major arterials throughout the City.
9. Encourage public arts throughout the community.

The City actively supports public art projects, both on its own and through public-private partnerships with individuals and local businesses.



## Transportation and Movement

As the photo below indicates, Olive Boulevard suffers from extremely high traffic congestion.



Creve Coeur will better manage automobile traffic to reduce congestion and will provide better opportunities for non-vehicular transportation. To accomplish this, the City will:

1. Reduce traffic congestion on major arterials.
2. Reduce traffic impact and cut-through traffic in residential areas.
3. Promote improvements on arterial roadways that will relieve residential streets from use by non-local traffic.
4. Improve north-south vehicular flow in the western half of the City.
5. Promote the design of multi-modal streets that provide safe and efficient mobility for automobiles, bicycles, and pedestrians, and for transit on selected streets.
6. Increase and improve pedestrian facilities. The pedestrian network shall be direct and continuous between places of residence and schools, parks, transit, local commercial shopping, and local employment. Pedestrian crossings will be safe and not impacted significantly by roadway improvements.
7. Develop a citywide Bikeway Plan as part of the Pedestrian Plan, which identifies an interconnected system for bicycle movement between neighborhoods, parks, schools, commercial areas, and other activity centers. The plan should provide for Class I Bike Trails or Paths (a right-of-way separated from the roadway); Class II Bike Lanes (a portion of a roadway designated for the preferential or exclusive use of bicycles – with striping, signage, and pavement markings); Class III Bicycle Routes (a portion of a bikeway system that is designated with Bike Route signs and other markers), and other bicycle facilities. It should also contain education, encouragement, and enforcement elements to maximize the safe use of the public right-of-way for all modes.
8. Educate citizens that bicycles are increasingly used for transportation (as well as recreation), that they are intended road users, and that Creve Coeur's road system is being modified to accommodate bicycles. Encourage the use of streets by bicycle riders who are knowledgeable of the rules of the road including the rights and responsibilities of riders.
9. Promote regional fixed and non-fixed transit including park-and-ride and explore local mass transit options. Improve regional transit connections to major activity centers and the airport. Consider additional transit improvements such as regional light rail stops, local transit, and shuttle services.

10. Support regional improvements such as the extension of Highway 141 that help alleviate congestion and improve vehicular movement in and around Creve Coeur.
11. Strengthen relationship with MODOT to ensure coordination of local and regional transportation needs, including signal interconnection and progression timing plans, and access control plans.
12. Promote and implement *Gateway Guide*, MoDOT’s Intelligent Transportation System (ITS), which is designed to improve roadway efficiency and safety throughout the St. Louis metro area through communication technology.
13. Reconsider community-wide transportation demand management, including reformation of the Creve Coeur Transportation Management Organization, to reduce vehicular demand, particularly during the critical peak hours. Program elements might include staggered work hours (“flex-time”) through collaboration with major employers and car-pooling, including the development of a car pool matching service.
14. Improve coordination with East-West Gateway Coordinating Council (EWGCC) to increase the City’s role in regional transportation planning and transportation initiatives, and incorporate key roadway projects in the region’s Transportation Improvement Plan (TIP).
15. Garner regional support to encourage and pursue a MetroLink route to serve Creve Coeur and West St. Louis County.
16. Implement lane, signal, and other physical improvements to improve traffic flow and mitigate local congestion issues.
17. Periodically (every 2-3 years) update the City’s signal-timing plan to enhance signal performance. Timing plans shall be updated based on current turn movement counts and separate timing plans for morning, noon and evening peak hour and off-peak conditions.
18. Develop modified engineering and design standards for streets that do not adversely affect pedestrian and bicycle performance including:
  - Streets and arterials that incorporate safe bicycle lanes,
  - Intersections that provide acceptable levels of service for pedestrians to cross the intersection, and
  - Automobile capacity improvements that do not negatively impact transit, bicycle, or pedestrian travel.

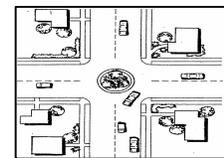
Creve Coeur’s Traffic Calming/Traffic Mitigation Program

The purpose of the Program is to reduce traffic speeds to acceptable levels in residential neighborhoods, reduce the volume of cut-through traffic, and to increase traffic safety

Traffic calming and traffic mitigation is a form of traffic planning that seeks to balance the use of streets among automobiles, pedestrians, bicyclists, residents, and playing children.

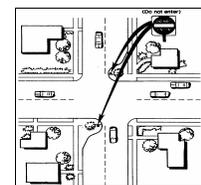
Traffic calming measures may include:

- public awareness and education
- traffic enforcement
- road design changes
- installation of traffic calming devices.



Traffic Circle

Traffic Circles and Semi-diverters are examples of traffic calming devices. Additional examples can be found in the City’s Traffic Calming/Traffic Mitigation Program.



Semi-diverter

**Stormwater Management in Creve Coeur**

A key component of maintaining and improving the City's infrastructure is the implementation of the City's prioritized stormwater projects. Completed in July 1999, the City's Stormwater Evaluation Final Report identifies and prioritizes 88 projects totaling over \$20 million.



Flooding and erosion along Smith Creek threatens homes on Hammermill Drive

Identified projects encompass ten different types of stormwater problems, from street and intersection flooding to sanitary sewer backups.



Creek channel improvements completed and yards restored along Smith Creek

Projects were identified through a questionnaire mailed to all Creve Coeur residents. Coordination between projects identified in the 1999 report and MSD's Creve Coeur Creek and Deer Creek Watershed studies will help accelerate the implementation of the City's priority stormwater and erosion control project.

19. Develop procedures for addressing requests for local traffic calming. The procedure will include the development of a definition of traffic calming that is based on local needs, that can be applied to local streets as needed and is consistent with evolving definitions being developed by the Institute for Traffic Engineering (ITE).
20. Establish minimum level of service standards for residents and visitors and require new development and redevelopment in the Creve Coeur area to mitigate traffic impacts to meet or exceed minimum standards.

**Public Facilities**

Creve Coeur will maintain a high level of public facilities for its businesses and residents. The City will:

1. Continue the current City policy of high quality maintenance of public facilities that sets a standard for private property owners to emulate.
2. Continue to actively develop and implement the Capital Improvement Program that addresses the needs and desires of the community.
3. Develop a mechanism or mechanisms to map all fiber optic infrastructure within the City; encourage and facilitate deployment of fiber optic lines more evenly throughout the City; establish a procedure to measure the amount of fiber optic infrastructure by mileage.
4. Ensure that the Creve Coeur, West Overland, and Chesterfield Fire Protection Districts continue to provide quality services to residents of the City, maintain a water system which provides for acceptable fire flow rates, and ensure the continuation of a strong level of police services.
5. Continue to develop projects that address the high-priority storm water and erosion problems identified by Metropolitan St. Louis Sewer District in its Creve Coeur and Deer Creek Watershed reports; establish a storm water level-of-service and prioritize the problems identified in the City's storm water study based on those criteria; accelerate the implementation of the City's Storm Water Master Plan to deal with the prioritized storm water problems.
6. Continue to work with the Metropolitan St. Louis Sewer District to ensure that the needs of the community are met and that the current high quality level is maintained.
7. Expand partnership and cooperative agreements with the various government entities and public and private institutions within the region.

8. Reexamine the City's relationship with the County to determine the extent and quality of the provision of services shared by the City and County.
9. The City should become an active and integral participant with the Regional Commerce and Growth Association (RCGA).
10. Conduct a detailed inventory of present and potential future power needs within the city, particularly along Olive Boulevard and as they relate to needs of the emerging high tech businesses. Explore and define strategies with AmerenUE and high tech businesses to ensure highly reliable electric service within the public infrastructure. Mechanisms to accomplish this could include redundant electrical substation investments, primary selective or open loop distribution, and others. Private, on-site supplements could include generators and un-interruptible power supply (UPS) systems.
11. Establish a High-Tech Users Group comprised of representatives of the city, members of the affected business community, and possibly AmerenUE, to guide discussion and develop specific recommendations related to electrical and other infrastructure issues

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## Transportation Improvements

The central purpose of the Creve Coeur Comprehensive Plan Transportation Element is to identify strategies and actions that define the changes that need to be made to accommodate projected development and provide multi-modal mobility for current and future City of Creve Coeur residents and businesses. This task requires new, creative responses to today's growing transportation problems. Key concepts include:

- Multi-modal streets and highways that provide safe and efficient mobility for automobiles, transit, bicycles, and pedestrians.
- Evaluation methods to measure the performance of all transportation modes and establishment of minimum performance standards.
- Explore opportunities to connect residential streets, where appropriate, to collectors in order to improve traffic flow on major arterials such as Olive and Lindbergh Boulevards.
- Develop an Access Management Program for major arterials in the community.
- Transportation Fee Program to fund major new transportation improvements.
- Identification of east/west connections across I-270, as well as the preservation of the identified future corridors, as an alternative to Olive Boulevard.
- Promotion of Creve Coeur's role in regional transportation planning efforts to advance the City's policies and interests regarding transportation improvements including but not limited to Highway 141 improvements, future MetroLink expansion, interstate highway modifications and improvements, and congestion mitigation on or near state and county roads, such as Olive Road, Lindbergh Boulevard, and Mason Road.
- Implementation of Creve Coeur's Pedestrian Plan
- Develop a bikeway/trail plan in cooperation with Trailnet, as conceptualized in the *Primary Pedestrian Corridors Map* (Map 6, Appendix A).

### Access Management

Access management is a set of guiding principles used to help improve the efficiency of entrances to, exits from, and movement along a roadway.

#### Goals of Access Management

- Limit the number of conflicts
- Separate the conflict points
- Remove turning volumes and queues from through movements
- Provide sufficient spacing for at-grade, signalized intersections
- Provide adequate on-site circulation and storage

#### Benefits of Access Management

- Fewer accidents
- Increased capacity
- Shorter travel times
- Protects the value of private investments
- Preserves the public investment in the transportation infrastructure

Source: [Access Management, Sensible Solutions for Tomorrow's Traffic](#), 1998, USDOT/FHWA

## Transportation Improvement Projects

Community Priorities and the Goals and Strategies sections of this plan introduce a number of transportation issues the City needs to address, either through study, planning and budgeting, or implementation. These issues include reducing traffic congestion, improving the roadway network, protecting residential areas from spillover traffic from arterial roadways, creating a network of pedestrian and bicycle trails, promoting mass transit, and coordinating transportation related activities with other agencies and jurisdictions. A number of specific transportation projects have been recommended throughout the development of the Creve Coeur Comprehensive Plan in an effort to resolve/address these issues.

The following is a summary of the transportation improvement projects recommended in the Plan that pertain to all the planning areas:

- Encourage sidewalks and pedestrian facilities, bicycle accommodations, traffic improvement mitigation, and traffic calming techniques for all new development or redevelopment.
- Encourage pedestrian facilities and linkage for all new development or redevelopment.
- Develop an access management plan.
- Improve local sidewalks in accordance with the City's Pedestrian Plan.
- Continue to maintain the City's Pedestrian Plan and update as needed, to ensure safe pedestrian travel and provide safe street crossing areas.

The following is a summary of the specific transportation improvement projects recommended in the Comprehensive Plan, listed by planning area:

### 1. Residential Neighborhoods

- Advance Mason Road alignment to straighten the roadway from Olive Boulevard to Ladue Road.
- Maintain or improve the level of service on the various streets in the area.
- Preserve existing predominately residential streets.
- Develop a network of interconnecting bicycle and pedestrian routes throughout the area.
- Explore additional pedestrian and bicycle connections between subdivisions.

### 2. East Olive Corridor

- Minimize conflicts between pedestrian and vehicular traffic.
- Develop a potential improvement strategy between Graeser and Schulte Roads.
- Eliminate the off set at the Olive Boulevard intersection(s) of Old Olive and Spoede Roads.
- Develop an east-west bicycle path along Olive Boulevard to connect the Central Business District and Commerce Center and other activity areas along the East Olive Corridor.

- Provide shuttle service between the Central Business District and Commerce Center, which will also provide service to activity areas along the East Olive Corridor.
- Develop beautification and enhancement strategies along Olive Boulevard.

### 3. West Olive Corridor

- Construct Olive Boulevard sidewalk and median enhancements between Mason Road and I-270.
- Explore the possibility of providing additional north-south access for uses in the Fernwood, Bellerive Estates, and Bellerive Farms area.
- Reduce congestion on Olive Boulevard.

### 4. Commerce Center

- Encourage developers to take advantage of the potential MetroLink route and station.
- Encourage development of a future MetroLink route and station.
- Add bus shelters where possible and appropriate.
- Accommodate public transportation access.
- Develop Olive Boulevard signal progression and access management plan.
- Encourage employer transportation programs.
- Develop a conceptual plan for streetscape and transportation enhancements along Lindbergh Boulevard between the Frontenac city limits and Baur Boulevard.

### 5. Central Business District

- Develop a grid system within the Central Business District road network, including the creation of multiple connections between roadways and developments.
- Promote pedestrian and bicycle access, particularly along New Ballas Road and Old Ballas Road.
- Develop a transit plan to provide shuttle service along Olive Boulevard and activity centers to the east and west.
- Explore the possibility of a multi-modal transit center, which would attract pedestrian, bicyclists, and other alternative transportation modes.
- Explore an additional crossing over I-270.

## Multi-Modal Street and Highway System

Developing and maintaining a comprehensive network of streets and highways that support safe automobile travel, transit, bicycle lanes, and sidewalks is critical to improving mobility within the City of Creve Coeur. Whenever possible, the construction of bicycle lanes and sidewalks should be included as part of future street improvement

projects in order to create a truly multi-modal street and highway system.

The basis for the Multi-Modal Street and Highway System is the Arterial Street Plan presented in Map 4. This plan depicts the primary arterial and collector transportation system that provides mobility within and through the City of Creve Coeur. Map 5 depicts locations for minimum pedestrian improvements that will provide short trip connections between residences and activities. Bicycle facilities would include a combination of trails and on-street facilities where possible (Maps 1-7 found in Appendix A).

## **Evaluation Methods to Measure Transportation Performance and Minimum Standards**

The City of Creve Coeur typically requires traffic studies of applicants proposing large developments. The objectives of these studies are to disclose the expected traffic increase resulting from the development, define what impacts might result if the project were to be built, and recommend mitigation actions to offset those impacts. The City, however, does not currently have specific traffic impact analysis requirements. There is no standard as to when a traffic study should be provided or what constitutes the minimum level of service. It is therefore recommended that the City of Creve Coeur develop traffic impact analysis guidelines and requirements that address the following issues:

- Definition of when traffic study is required.
- Procedures for establishing the extent of the study area.
- Methodology that defines cumulative development and background traffic growth.
- Accountability for reducing trips based on pass-by traffic or transportation demand management (TDM).
- Acceptable procedures for determining the project's trip distribution patterns.
- Definitions for short- and long-term horizon years for the purpose of assessing impacts.
- Procedures for determining whether a signal is needed, where signals would be permitted and responsibility for installation.
- Define intersection level of service analysis methodology and minimum threshold standards.
- Require the traffic study to identify the minimum improvements to accommodate both short-term and long-term traffic projections.
- Develop a traffic impact analysis checklist that must be complete before a study can be submitted for review.
- Refine the regional transportation model to be of sufficient detail to assist in the development of trip distribution patterns and traffic impacts for a proposed project.
- Retain an independent consultant to review specific elements or all of the traffic study as necessary.

It should further be noted that past traffic studies have required evaluation only of automobiles, even when roadway mitigations might impact alternative modes. With an objective for the City of Creve Coeur to promote multi-modal transportation opportunities, the transportation impact analysis guidelines should address methods for evaluating pedestrian and bicycle mobility.

### Automobile Level of Service Performance Measures

The industry standard for measuring automobile performance is Level of Service as defined by the Highway Capacity Manual. Levels of service are performance measurements from A to F, where A is excellent (free traffic flow with little restriction on maneuverability caused by other vehicles) and F is failure (subject to severe congestion and extreme delays). The measurement is based on average vehicular waiting time for intersections and average travel speed for arterial streets. Level of Service “D” is acceptable for intersections along Olive Boulevard and “C” for all other locations. If a development is proposed that results in lower levels of service, then the applicant should either mitigate or contribute to mitigation of the impacts.

### Pedestrian Levels of Service Performance Measures

National examples of pedestrian network performance are limited. One example was developed as part of the City of Fort Collins, CO Pedestrian Plan. As this plan was being developed, it was recognized that a procedure for measuring pedestrian performance did not exist elsewhere in the United States. The procedure developed for the Fort Collins plan was adapted from pedestrian performance methodologies developed in Europe and includes the following five performance measures:

- *Directness*: Measurement of the walking trip length.
- *Continuity*: Measurement of the completeness of the sidewalk system.
- *Street Crossings*: Measurement of the pedestrian safety in crossing a street.
- *Visual Interest and Amenity*: Measurement of the pedestrian system’s attractiveness and features.
- *Security*: Measurement of the pedestrian’s sense of security.

Although these measures can be applied throughout the City, the acceptable performance thresholds will vary by type of activity area. As

| Level of Service | Signal Control Average Total Delay (seconds/vehicle) |
|------------------|--|
| A                | ≤10  |
| B                | >10 to 20  |
| C                | >20 to 35  |
| D                | >35 to 55  |
| E                | >55 to 80  |
| F                | >80  |

| Level of Service | Stop Sign Control Average Total Delay (seconds/vehicle) |
|------------------|---|
| A                | ≤10   |
| B                | >10 to 15   |
| C                | >15 to 25   |
| D                | >25 to 35   |
| E                | >5 to 50  |
| F                | >50   |

an example, a high pedestrian performance level will be of greater importance in the Central Business District than in outlying, lower density subdivisions with light vehicular and pedestrian traffic. The following activity areas to which differential performance standards would be applied are proposed:

- *Activity Corridors and Central Business District:* This area is defined by the primary commercial and employment centers primarily along Olive Boulevard. Providing direct linkages of these centers will increase local pedestrian travel to these destinations.
- *School/Recreation Walking Areas:* The City should develop a sidewalk network to accommodate school district walking requirements.
- *Transit Corridors:* These include areas within a minimum of one-half mile of existing transit and future local and regional transit plans.
- *Other:* This category includes all locations not falling within one of the four previous areas.

## Bicycle Level of Service Performance Measures

Determining how existing traffic operations and geometric conditions impact a bicyclist's decision to use or not use a specific roadway is the first step in defining the bicycle compatibility or performance of the roadway. In December 1998, the U.S. Department of Transportation developed a Bicycle Compatibility Index (BCI) to evaluate existing facilities. This index also assists in determining what geometric improvements may be required for new facilities to achieve the desired level of service performance for bicycles. The BCI can be applied to the City of Creve Coeur in the following three ways:

1. Evaluating all existing and planned bicycle routes using the BCI will provide an accurate assessment of the bicycle network, not just a map showing where bicycle lanes may or may not happen to be.
2. The BCI is the first of its kind to provide a direct correlation of facilities to performance, which allow bicycle plan designers to examine the field variables to improve bicycle lane performance. Weak links in the existing and planned network can be determined, and sites needing improvements can be prioritized based on index values.
3. The BCI provides for performance measures that can be used in combination with traffic engineering standards to balance a street or corridor's level of service. As an example, one could argue that widening a roadway to improve automobile level of service must be done in balance with the bicycle level of service. Hence new roadways or roadways that are being redesigned or retrofitted can be assessed to

determine if they are bicycle compatible. If the roadway does not meet the desired level of performance, the model can be used to evaluate changes in the design necessary to improve performance for bicycles.

## Transportation Fee Program

As redevelopment occurs and traffic volumes rise, major transportation improvements will be required to accommodate the increased traffic generated by such change. Whereas traffic impact studies are important to determine a project's local impact to the transportation system in which project mitigation might be required, the cumulative effect from many projects becomes the responsibility of collective growth. Many communities have established impact fees on new development to capture the increased cost of fire, police, library, parks, and transportation services. St. Louis County is currently implementing a traffic generation fee.

The impacts of growth on the transportation system can be calculated using different methodologies. In general, specific costs are based on local data and current dollars to estimate the total long-range (20-year) transportation needs for the City. The demand for the transportation improvements is based on the total projected trip generation of the estimated future development. Residential and nonresidential fees are then paid at time of building permit based on the number of trips the project will generate. These transportation impact fees are collected for all development proposals from one dwelling unit to a major mixed-use center. The fees are collected and administered by the City to implement the transportation improvements as necessary.

Policies related to site-specific credits will need to be addressed; however, the general concept is that developers may be eligible for site-specific credits only if they provide system improvements that are included in the overall City of Creve Coeur transportation project lists. Project improvements normally required as part of the development approval process are not eligible for credits against the impact fee, since these kinds of improvements are not included in the fee calculation.

## Promote Creve Coeur's Regional Transportation Planning Efforts

Given the interdependence of transportation between the City of Creve Coeur and the region, it is important for the City to aggressively participate in regional transportation planning efforts and to promote Creve Coeur's needs in future planning solutions. In particular, the City should work closely with MODOT to advance its policies and interests regarding the extension of Highway 141 to the west, as



### Transportation Fee Issue Survey Results

76.1% of respondents to Creve Coeur's resident survey and 52.5% of respondents to the business survey favored requiring developers to pay extra fees to help offset additional traffic due to new business.

described in Resolution No. 506 (October 10, 2000). The Highway 141 improvement should minimize the change in traffic volumes between Ladue Road and Conway Road, and improve access for emergency vehicles. The City’s preferred alignment should also minimize the impact of road expansion on residents in adjacent neighborhoods. The City’s active participation in regional transportation planning efforts will help ensure implementation of these and other regional transportation studies, including planning efforts to provide regional roadway improvements that will divert through-traffic away from Creve Coeur.

The City should also continue close involvement in other regional efforts, including MetroLink studies exploring the feasibility of regional transit service to other regional commerce centers and the airport. The 2000 MTIA Report identified a station for the future western leg at Bauer and Lindbergh along the Rock Island Railroad Line. The City should consider making enhancements near the potential future Metro Link station, and develop incentives, such as increased-density, to encourage transit-oriented development. For example, when the anticipated MetroLink station (along the future western leg) is developed, the City should foster transit-oriented development that would be integrated into the transit node. Transit-oriented development proposals can include higher-densities, mixed-use development, and park-and-ride lots. It is the intention of the City to assist in improving regional transit mobility.

Providing public transportation services that enhance the mobility and safety of City residents and businesses is key to developing a balanced, multi-modal transportation system. This concept encompasses both existing and regional transit. The goal is to increase per capita ridership by providing enhanced service, including an expanded park-and-ride lot system that complements local (and potential future regional) transit.

Creative options for expanding the current services, such as free bus passes and on-demand shuttles, need to be explored if transit ridership is to be increased. All possible route and operational improvements should be considered, including changes in route structure, extended and expanded weeknight and weekend service, and expanded park-and-ride service.

Areas with high concentrations such as the Central Business District and businesses along Olive Boulevard are prime candidates for expanded transit service. Incorporating transit in a Central Business District Multi-Modal Transportation Center developed in conjunction with other public or private developments would serve the needs of passengers who must transfer frequently and would encourage greater use of local and regional transit.

Reducing the percentage of trips made by single-occupancy vehicles and encouraging transportation by alternate modes is essential if auto-dependency and associated traffic congestion are to be reduced. Because

Employing nearly 5,000 health care professionals, St. John’s Mercy Medical Center hosts a bus transfer shelter on its campus to address the transportation needs of its employees and visitors.



employees commuting to and from work typically cause congested conditions, employer transportation programs are commonly used to promote alternatives to driving alone. Establishment of a dedicated transportation management organization for major business centers will be needed if Creve Coeur is to develop an effective transportation demand management program. This organization could be supported and coordinated by the efforts of major employers. The organization would develop an overall transportation management plan and work with employers to promote transportation alternatives such as carpool/vanpools, transit, and bicycling. The transportation demand organization could also work with private developers to prepare and implement accountable transportation management plans for developments projected to generate significant levels of traffic.

In order to promote a vital multi-modal town center, it is critical to provide an adequate (but not excessive) supply of convenient, on-street and off-street parking. Short-term parking is typically needed to serve discretionary trips. A person can choose to shop or eat at a number of alternative locations. Based on industry studies, discretionary trips are affected when parking occupancy exceeds 85 percent of available supply. Therefore, when considering town center parking requirements, provision of short-term parking is critical to maintain economic vitality, whereas limitation of long-term parking helps promote use of alternative modes.

The distance of parking to a destination is also a factor to consider. Typically, the maximum distance a customer is willing to walk is 250 feet. Vast parking lots are also aesthetically displeasing. Therefore, to improve service through reduced walk time and to minimize “sprawl” parking, it may be desirable to limit all parking to within 250 feet of the intended use. Where parking requirements exceed the capacity of a 250-foot radius, parking structures should be considered.

Shared parking is another element of a comprehensive parking strategy. Because of the large amount of land necessary to accommodate the parked car, opportunities to share parking between various uses minimizes parking requirements. Uses that are logical candidates for shared parking include office developments where employee parking occurs during the day and theatre uses where parking is at night. Large church and synagogue parking lots, which are typically used on Saturday and Sunday and some evenings, are potential park-and-ride locations during the weekdays.



### Survey Support for the City’s Provision of Parking Facilities

Nearly half (49%) the resident survey respondents and over half (56.6%) the business survey respondents favored the City’s provision or construction of public parking facilities as a way to encourage and support town center development.

## East/West Connections Across I-270 as An Alternative To Olive Boulevard

### Support for Alternative East/West Connections Across I-270



When survey respondents were given a list of possible ways to reduce traffic and congestion, 61.1% of residents, and 75.4% of businesses supported creating additional roads over I-270 near Olive to reduce congestion over the bridge.

With the City of Creve Coeur limited to just one major east-west arterial, Olive Boulevard, coupled with the fact that Olive Boulevard provides the City’s primary access to the regionally significant I-270, the importance of Olive Boulevard at its interchange with I-270 is critical to the transportation mobility for Creve Coeur. It is recognized that with the construction of the proposed Olive/I-270 interchange, current congestion will significantly diminish. However, if the traffic impacts caused by new development are not mitigated, congestion along Olive will continue to increase and result, once again, in unacceptable levels.

Because of the east-west barrier created by I-270, the long term planning issue becomes whether there might exist additional east-west opportunities to cross I-270 and if there are, if these potential crossings could be preserved as a future option.

Based on a review of existing development, there appear to be two potential options. The first would be an extension of Woodcrest Executive Drive to the east, crossing I-270 and extending to the North New Ballas Extension. A second alternative is south of Olive Boulevard, which would generally be defined as a continuation of Old Ballas Road.

### A Pedestrian Corridor Plan

In order for the City to be successful in achieving the goal of developing a citywide network of connected facilities, it must identify the general routes of a “backbone” to the system. There are already many pieces of the potential system in place. Sidewalks, existing trails, stream corridors, subdivision common areas, utility corridors, and existing parks and schools all offer a starting point in designing a system. In order to identify the scope of a system, Map 6 (Appendix A) illustrates a proposed primary pedestrian corridor that builds on existing features. With such a network in place, it would then be a matter of connecting particular institutions, subdivisions, and business areas to the system. This proposal is intended to generally illustrate the possible configuration of a system; the precise location of the corridors, their design and configuration, the nature of ownership, and the timing of construction would all have to be addressed in a more detailed planning effort.



The Kelly Memorial Bridge, located in West St. Louis County, is an example of a limited access connector overpass

## Capital Improvement Plan

The Capital Improvement Plan (CIP) is intended to insure that policymakers are responsible to the residents and businesses of Creve Coeur with respect to the expenditure of City funds for capital improvements. The goals of the CIP are to provide planned replacement and repair of deteriorating infrastructure and to add new facilities that enhance the quality of life in Creve Coeur. A Capital Improvement Plan is a tool to assess the long-term capital needs of a city and to establish funding of high-priority projects in a timely and cost-effective fashion.

The CIP lists projects, describes them, offers cost estimates, and outlines the funding method to be utilized. Projects in the CIP were identified by citizens and business representatives, standing committees of the City, and operating departments. A multi-month process is established to solicit project ideas, gather information, ascertain public input, and prepare the CIP document. The Planning & Zoning Commission's responsibility is an integral element of the CIP process. Prior to forwarding a recommendation to the Creve Coeur City Council, the Commission reviews the document and suggests project prioritization. The City Council is the governing body responsible for final prioritization and adoption of the CIP.

The Capital Improvement Plan spans a five-year period. It is intended that in each subsequent fiscal year a new CIP will be prepared that updates the first four years of the plan, adds a fifth year to the plan, and integrates the capital projects and acquisitions for the then current fiscal year in the City's annual budget.

Revenues are comprised of reserves (fund balance) of the Capital Improvement Fund, revenues from the City's capital improvement sales tax, revenue bonds, certificates of participation, grants, and other intergovernmental revenue, and other funding sources, as opportunities occur in the future.

Within the Comprehensive Plan, many projects are identified or implied, as specific projects or as conceptual ideas. These projects and others, resulting from recommendations of the Comprehensive Plan, should be developed and incorporated in the City's annual CIP review process. Further detail and refinement of identified and conceptual projects, facilities, or infrastructure improvement needs will be required as the implementation of the Comprehensive Plan occurs. The Comprehensive Plan does not specifically identify or outline every project for the next 20 years, and it does not preclude other projects or infrastructure ideas/needs from coming to the forefront, as long as they do not contradict the goals and recommendations of the Comprehensive Plan.

### Creve Coeur Capital Improvement Plan

The Capital Improvement Plan (CIP) is the City's long-range plan for improvements to infrastructure (e.g. streets and sidewalks), parks, and other community facilities.

### CIP Goals

- Provide planned replacement of deteriorating infrastructure
- Repair deteriorated infrastructure
- Improve operational or functional aspects of existing infrastructure
- Add new facilities and improve the community's infrastructure to enhance the quality of life in Creve Coeur

Below are some of the identified projects/facilities/needs or conceptual projects/programs suggested in the Comprehensive Plan:

- Storm Water Management Plan (identified projects)
- Pedestrian Plan (identified projects)
- Lindbergh Boulevard Sidewalk/Median Enhancement Project
- Olive Boulevard Sidewalk/Median Enhancement Project (remaining stretches)
- Graeser/Schulte/Mary Meadows Intersection Improvements
- Spoede/Old Olive Intersection Realignment
- Mason Road Alignment/Straightening Project
- I-270 “Flyover” (limited access crossing)
- Central Business District Street System Improvements
- Provision of north-south access for uses in the Fernwood, Bellerive Estates, and Bellerive Farms areas.

## Neighborhood and Business Areas

Certain land use patterns have emerged in Creve Coeur over the years. The location, intensity, and character of different land uses create identifiable clusters of activities with particular themes or focuses in different geographic areas of the City. In some cases, these clusters take the form of neighborhoods, in some cases business districts, and other cases employment centers. One of the mistakes suburban communities make is to allow different areas to run together, creating a bland mix that is indistinguishable from one community to another. Creve Coeur is in danger of this same mistake. The Creve Coeur Comprehensive Plan is intended to provide a way to create and reinforce unique and positive aspects of different areas, to allow diversity to become a strength. The Plan attempts to enhance these areas – to emphasize and build upon their strengths, to correct their problems, and to use them as a way to create identifiable “places” in the City.

There are five different geographic areas identified in the Plan.

- The Residential Neighborhoods
- The East Olive Corridor
- The West Olive Corridor
- The Commerce Center
- The Central Business District

Each area is described in the following sections, along with a “Vision” for the area, an identification of possible appropriate future land uses, policies to guide development approvals by the City, possible City initiatives for improvement, and recommendations for key properties in the area. Recommendations for transportation, parks and trails, and public facilities are also presented. The Neighborhoods and Business Areas are illustrated on Map 7, along with key properties (Appendix A).

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# Residential Neighborhoods

## Planning Context

The Residential Neighborhoods area includes the residential areas on the east and west of I-270, bounded on the south, east and west by the city limits.

As the name implies, this area is primarily single-family residential in character. The area is almost fully developed with stable single-family neighborhoods. Almost all of the single-family areas were developed in a post 1950's subdivision pattern with large lots, curvilinear streets and numerous cul-de-sacs. The area has many mature trees with substantial canopies, creating a "green" feel to the area. The changes that are taking place primarily involve the razing of existing homes and replacing them with larger homes, a trend that is accelerating.



As a series of individual subdivisions, the various residential areas are not well connected with streets, sidewalks, or trails. This lack of connectivity encourages increased reliance upon the automobile for movement, and concentrates traffic on those streets that do connect through the area. The City will continue to improve pedestrian access through the implementation of the Creve Coeur Pedestrian Plan.

Along with the single-family residential uses, there are a variety of institutional uses such as the St. John's Mercy Medical Center (with over 4,000 employees) and numerous schools. In most cases these institutional uses coexist in a compatible way with the residential neighborhoods.

There are several small, but well-maintained and attractive city parks scattered throughout the area, including Malcolm Terrace (25 acres), Beirne (7.7 acres), and Conway (29.4 acres).

The largest undeveloped parcel is located at the northeast corner of Mason Road and Ladue Road, adjacent to the Bellerive Country Club. The proposed relocation of Mason Road would bisect this property.

There are other parcels in the area, particularly along Ladue Road, that are large enough to offer the potential for subdivision, although these are isolated instances. An example of this is the 4-acre parcel located just west of Chatfield Place Subdivision. This parcel is currently developed and used by a long-standing children's convalescent home, but may experience redevelopment in the future. If subdivided and redeveloped, this parcel's current "A" zoning designation should be maintained.

## Vision

This area will continue to exist as high quality stable single-family neighborhoods peacefully co-existing with existing institutional uses. The various residential subdivisions will be well connected with improved pedestrian facilities both to each other, to parks and institutions, and to business and government uses on the north end of the City.

## Residential Preservation and Economic Development

This area will be devoted primarily to single-family uses and related parks and open spaces. Existing institutional uses (i.e. schools, churches, and hospital) will remain, but are to be expanded beyond their current boundaries only in accordance with the recommendations listed below. These recommendations pertain to the single family and related uses in this area as well.

1. Preserve the safe and quiet integrity of the single-family neighborhoods. Maintain the same basic mix of land uses in this area; strongly discourage new non-residential uses. Single-family zoning will not be changed to other classifications unless it is demonstrated that the existing zoning no longer advances a public benefit by maintaining the residential character of the subject property.
2. Encourage the continued preservation of the suburban landscape character of the area, its open green spaces, and stream corridors. New development or redevelopment should protect and enhance stream channels, preserving remaining riparian corridors, preserve trees and encourage re-establishment of natural streams, where feasible. The use of pervious paving materials and vegetated swales to manage storm water in new development and redeveloping areas is encouraged.
3. When lots are consolidated and re-subdivided for residential uses, the gross density permitted by existing zoning should not be exceeded. However, smaller individual lots could be considered, provided that they are no smaller than 75% of the area required under zoning. The remaining land should be preserved as open space, either as a buffer to surrounding areas or as part of a greenway system or stream corridor that connects to adjacent greenways or pedestrian facilities.
4. New construction or development within the boundaries of existing institutional uses will be permitted only upon demonstration that negative impacts on surrounding residential areas related to site planning, building design and material, landscaping, buffering, access, signage, and other land use impacts will be mitigated.
5. The expansion of institutional uses beyond existing property boundaries will be permitted only as part of a City-approved master



plan for the institution, and upon a demonstration that negative impacts on surrounding residential areas with regard to site planning, building design and materials, landscaping, buffering, access, signage, and other land use impacts will be mitigated.

6. Require that new development or redevelopment be compatible with the character of the surrounding neighborhood with regard to lot frontage, building setbacks, building lines, building scale, and lot coverage.
7. Consider the creation of residential design standards for new construction. These standards could include provisions for building design, building placement on lots, tree preservation, land disturbances and other issues associated with residential quality.
8. Monitor housing conditions and periodically assess the need for targeted building and zoning code enforcement programs.

## Community Health and Connectivity

1. Create improved pedestrian/bicycle connections between residential areas, parks, schools, and business uses, particularly the town center, as part of a citywide trail and pedestrian system that builds on the foundation of the Pedestrian Plan and the sidewalk improvement schedule it sets forth. New development or redevelopment should be required to make pedestrian and bicycle connections to adjacent properties or subdivisions, where possible, as a way to create a sense of neighborhood beyond individual subdivisions. The pedestrian/bicycle system should utilize trails along streams, utility corridors, and abandoned rail corridors, in addition to traditional means such as sidewalks. It should also connect with and enhance the regional bicycle system, which currently utilizes several road corridors through Creve Coeur.
2. Examine the utilization of public park or open space to determine if its benefit to the City is being maximized. Consider the sale of park property determined to be of little park value in order to purchase land better suited to park uses.
3. In addition to off-street trails, the City should take steps on selected roads to accommodate bicyclists seeking access to parks, schools, and shopping areas. Passive accommodation would include measures such as “Share the Road with Bicycles” signs and improvement of sight lines at intersections to improve bicycle safety.

### Millenium Park Phase III Improvements

- Zero Depth Fountain
- Multi-purpose Court
- Tree House
- Amphitheatre
- Pedestrian Bridges
- Mulch Paths
- Toddler Play Structure
- Grand Pavilion Park Shelter
- Gazebo



4. Accelerate completion of Millennium Park improvements to provide needed public open space in the Northwest area.
5. Programs should be considered to make citizens aware of the use of the road system by recreational bicycle riders; educate them on rights and responsibilities of all road users; and to encourage shared use of the road.

## Transportation and Movement



The alignment of Mason Road would entail extending Mason Road north (as noted in no. 1 above) from the eastern intersection of Ladue and Mason (pictured here).

1. Advance the alignment of Mason Road in order to improve north-south access in the western portion of the City, from Olive Boulevard to Conway Road. The alignment would be located through the Baer parcel (N-6) by combining the two Ladue/Mason intersections, resulting in an extension of Mason Road east of Bellerive Country Club.

Mason Road should be maintained as two lanes, with sidewalks and bike lanes, street tree plantings, and the addition of turn lanes at intersections. Landscape medians should be included, but only if Mason Road remains two lanes.

2. Explore the acquisition of Ladue Road (west of I-270) from MODOT, Mason Road from St. Louis County, and other jurisdictional roadways in order for the City to obtain greater control over the planning for and improvements of its roadway network.
3. Improve local sidewalks and pedestrian crosswalks in accordance with the City of Creve Coeur Recommended Short- and Long-Term Sidewalk Location Map.
4. Maintain or improve the level of service on the various streets in the area.
5. Preserve existing predominantly residential roads (including Spoede, Mosley, Graeser, Mason, Conway, Warson, Emerson, Coeur de Ville, Ladue, and others) as two-lane roads, which have through passage at intersections, along with the addition of bike lanes and pedestrian walkways.
6. Develop a network of interconnecting bicycle and pedestrian routes through the various subdivisions within the area, to key destinations

such as schools, parks, and commercial centers. Establish routes that will allow for travel within the neighborhood subdivisions as well as to areas outside of the neighborhood. The City will also explore connections between subdivisions and nearby shopping areas and civic areas such as parks, schools, and the Central Business District. Bicycle routes can be created by re-striping or narrowing street lanes wherever appropriate.

7. Develop a traffic-calming program to address citizen complaints regarding actual or perceived residential through traffic resulting in high speeds, high volumes and unsafe conditions. The City should solicit neighborhood input for defining the problem, including neighborhood traffic count programs or speed surveys. The program should define process, area of participation, and funding of temporary or permanent solutions.
8. Explore ways to mitigate noise issues along I-270 and impacts on the residential neighborhoods. Noise reduction can include landscaping, berms, sound barriers, or other methods of noise absorption. Any new development or redevelopment needs to consider the impact of noise on the area and needs to work with the City to mitigate noise impacts. The City will work with MoDOT, East-West Gateway Coordinating Council, and the U.S. EPA to determine best practices and potential resolution of noise impacts.

## Public Facilities

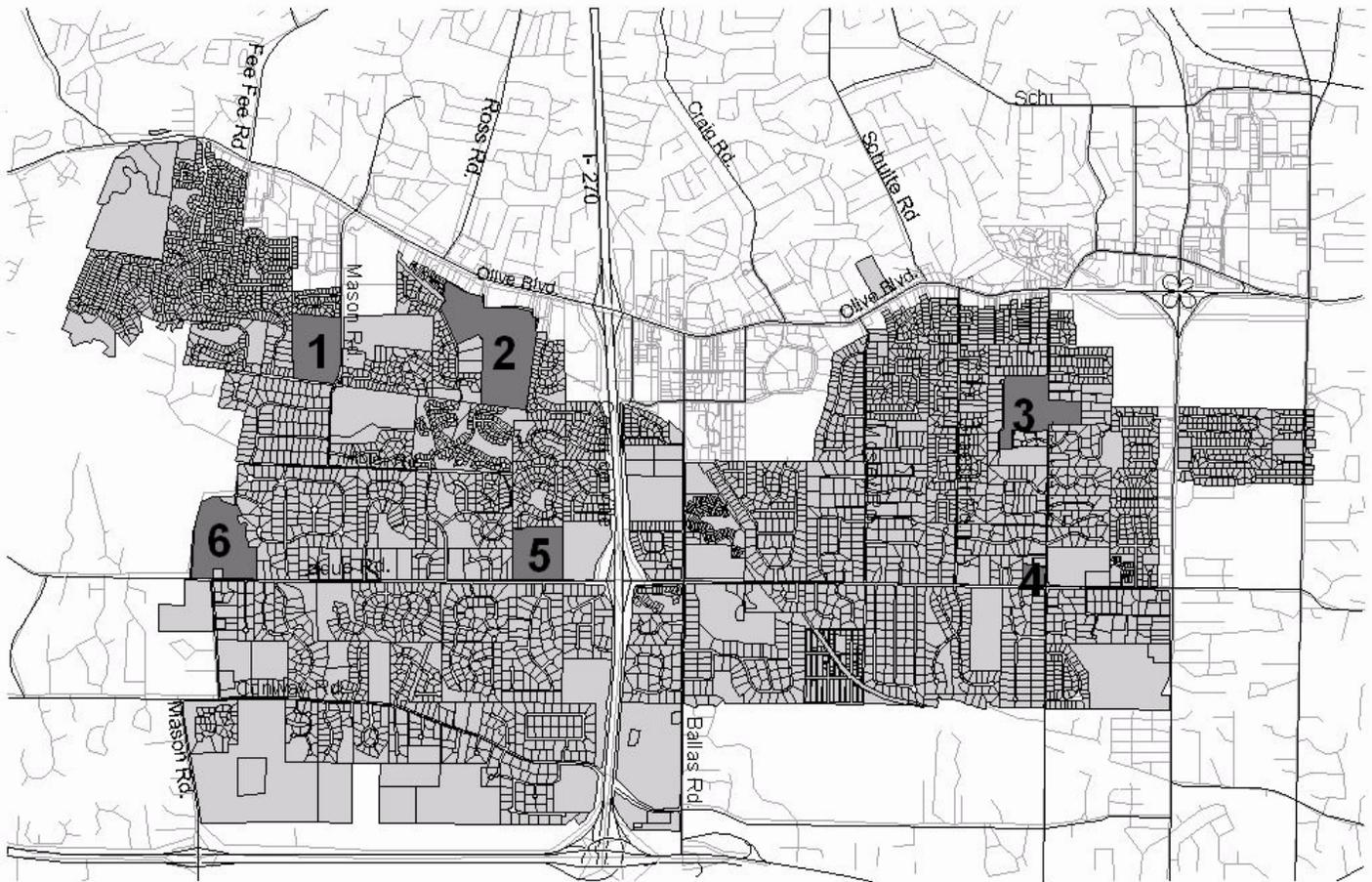
1. Develop projects that address the two high-priority problems identified in this area by Metropolitan St. Louis Sewer District in the Creve Coeur Watershed report; establish a storm water level-of-service and prioritize the problems identified in the City's storm water study based on those criteria; implement a storm water capital improvement plan to deal with the prioritized storm water problems identified in the 1999 Stormwater Evaluation Final Report.
2. Explore the protection and enhancement of stream channels to accomplish the dual purpose of providing natural pedestrian connections and managing storm water runoff.
3. Focus efforts on resolving storm water problems in the areas experiencing the worst problems.
4. Preserve the existing greenscape and semi-rural character of this area to sustain its safe, quiet, residential neighborhood atmosphere.



A sound wall, like the one pictured above on Lindbergh Boulevard, is one way to mitigate the noise impacts caused by traffic on nearby development.

### Key Properties Map

Several properties are of particular interest and concern with regard to potential development or redevelopment in the Residential Neighborhoods Area.



## Key Property Recommendations

**Neighborhoods 1** - This area consists of approximately thirty-two (32) acres currently zoned and used as single-family residential. The southern portion of this area is currently zoned single-family residential “A”, and consists primarily of five (5) acre parcels. It is recommended that the northern part be developed under its current “D” classification. With respect to the remaining portion currently zoned “A”, it is recommended that the southern parcels be developed, together or in a coordinated manner, as single-family residential detached. Development should be planned with an emphasis on preserving forty percent (40%) open space without changing overall density. Open space should be used to preserve natural site features as much as possible, such as streams, trees, and topography, and should incorporate trails where feasible.

Individual lot sizes should be one-half (1/2) of an acre or greater, and the orientation of homes should be toward the street. Commercial uses are not recommended and would not be appropriate for this area since it is surrounded by single-family residential uses. Consideration should be given to access issues and entryways to properties on the east side of Mason Road and with respect to Mason Manor Drive. Only one access to Mason Road and one access to Mason Manor Drive should be permitted. Of particular concern should be the fact that Mason Manor Drive is heavily traveled and is only one of three existing access points into the Bellerive Estates, Fernwood Estates, Somerton and adjoining subdivisions containing over one thousand (1,000) homes. Substantial stormwater improvements will be necessary in conjunction with development of this area due to severe problems.

**Neighborhoods 2** - This area consists of approximately sixty-seven (67) acres and is used as two (2) separate apartment complexes, the Cove and Westgate Apartments. The Cove is zoned “AR” and the Westgate Apartments are zoned “PC”. The Cove is a newer, upscale apartment complex and is envisioned to remain a viable use for many years to come. There is an undeveloped portion of the Cove development that borders and buffers the Questover Place Subdivision. This tract is subject to a recorded greenbelt agreement, which restricts development of the tract. This greenbelt agreement was a condition of the approval of the Cove development and should continue in effect. The Westgate Apartment complex is an older development, but is still a viable use. However, the possibility exists for redevelopment. As the Westgate Apartment property is bordered to the east, west, and south by single-family detached residential, special care should be taken regarding any redevelopment. No commercial uses should be allowed for this property. A blend of single-family residential detached consistent with the surrounding residential areas and upscale attached single-family housing is proposed for any redevelopment of this site.

**Neighborhoods 3** - This 42-acre assemblage of parcels is developed for single-family homes on large lots. It is included as a key area only because it has potential for consolidation and re-subdivision. The City encourages this area to remain as is; however, if it is consolidated and re-subdivided, it should be used for single-family detached residential at a gross density of no more than one dwelling unit per acre. It too may be developed using lot-clustering techniques with individual lots not smaller than 32,000 square feet, with at least 25% of the property set aside as open space.

**Neighborhoods 4** - The 5-acre assemblage of parcels on the northwest corner of Ladue Road and Spoede Road offers a unique challenge for the City. These parcels are zoned “A” single-family residential. Historically, this property has been dedicated to residential use, with the exception of 1.7 acres, currently vacant, which was used at one time by a non-conforming gasoline service station. This property could be developed as single-family residential under the current “A” zoning designation. Sufficient landscaping to serve as a buffer should be incorporated into any residential development proposal. In addition, this property could be acquired as a City park.

**Neighborhoods 5** - The 30-acre property on the north side of Ladue Road that is currently used as a church retreat center may also be subject to pressure of development or redevelopment in the future. This property should also be used for single-family detached residential with the lot clustering discussed above.

**Neighborhoods 6** - The 46-acre property on the north side of Ladue Road at the far western end of the City (known as the Baer property) has potential for development. This property should be developed for single-family detached residential use while encouraging lot clustering so land is preserved as public open space. Further, at the time of development or redevelopment, provision should be made for the reservation of right-of-way for the re-alignment of Mason Road.

The City should also strongly consider offering additional single family density, as an incentive in order to achieve the following desired outcomes:

- The proposed development occurs under defined design guidelines and development standards. Reduced lot sizes, emphasis on architecture, rear entry garages, centralized common areas are just some of the elements to be incorporated. Such standards should raise the awareness of architecture, provide detail and features typically omitted in contemporary residential developments, and provide alternative single family development opportunities in the community.
- The proposed development reserves land as public open space, with lot clustering.
- Land is set aside to accommodate right-of-way for the re-alignment of Mason Road.



## Residential Preservation and Economic Development

The land uses envisioned for this corridor include small-scale retail, office, single-family, multi-family, and parks and recreation uses. Policies that guide these land uses include the following:

Established neighborhoods are experiencing a pattern of teardowns, where existing homes are replaced with larger homes that are often out of scale with the neighborhood.



1. Preserve and protect single-family residential areas from intrusions of non-residential uses. Limit commercial and non-single family uses to Olive Boulevard. Limit retail uses to a size and scale designed to provide goods and services to the Creve Coeur market rather than to a regional market.
2. Evaluate and enhance Special Use Permit standards and regulations to ensure the procedures offer realistic, limited usage of Olive fronting properties while protecting surrounding residential character and maintaining the “green” along the corridor.
3. Maintain this area with a residential character, even when homes are converted or replaced by business uses. New development or redevelopment should be compatible with the low-density residential character of the corridor, as discussed below.
4. Protect existing healthy, larger trees during the development or redevelopment process.
5. All elevations of new construction or redevelopment should maintain the overall character of the existing residential structure or area. Emphasis should be given to compatible door, window and other opening location, size and scale.
6. New development or redevelopment should emphasize an activity level visible from the street. A front entrance for pedestrian access should be required for any new project and should be maintained on any reuse project from the building to the sidewalk.
7. All new development or redevelopment of non-residential uses should comply with the Creve Coeur Design Guidelines. The City’s Design Guidelines should be strengthened for this area to ensure that building scale, height, shape, and volume will be compatible with residential structures. Illustrations should be added to depict acceptable building design features.
8. Mechanical equipment should be located so as not to be visible from any public ways or adjacent residential areas. Where such limitation is not possible, the facilities should be screened from public view with materials compatible with the building. The backs or sides of buildings adjacent to residential areas should be designed so as to cover utility boxes and meters, have architectural treatment of facades

similar to the front facade, incorporate landscaping strips or other buffers (low walls, ornamental fencing) and incorporate opaque screening of dumpsters and mechanical equipment.

9. Mitigate the impact of non-residential uses on residential areas through heavy landscaping and other buffers.
10. New buildings should have setbacks consistent with surrounding established residential patterns and provide a sidewalk and landscape treatment in the front of buildings. New development should be designed to provide connections to the “green line” park linear greenway described below.
11. Parking areas should be treated to minimize the visual impact of parked vehicles as viewed from sidewalks and adjacent properties through the use of plantings and landscaping. Parking is encouraged to be located to the rear of buildings, with sharing of parking areas encouraged through the use of cross access easements.
12. Outdoor storage should not be allowed in the district.
13. Overhead utilities should be consolidated on newer existing poles to minimize the number of utility poles in the streetscape. Utility services should be placed underground for all new development projects, whenever possible.
14. All exterior lighting should be an integral part of the architectural and landscape design.
15. Operational compatibility standards should be adopted and enforced to control noise, lighting, the placement of outdoor vending machines, and hours of operation, particularly for commercial uses near residential areas.
16. Tighten sign controls to reduce size of allowable signs along Olive Boulevard and limit types of materials and colors to ensure more muted signage that projects a better quality image for the corridor. Improve the City’s existing sign regulations to increase the consistency and compatibility of signage.

## Community Health and Connectivity

The City will explore the creation of a “green line” park along Olive Boulevard, connecting the Commerce Center on the east to the Central Business District on the west. This linear park should be incorporated into future development plans and may include purchase of some parcels as they become available to make the park continuous

### Lighting Standards

One of the City’s goals is to develop lighting standards so developments are consistently well-designed to enhance site and building architecture, while providing reasonable lighting levels and reducing safety concerns. Lighting impacts on surrounding properties can be minimized by controlling and regulating lighting throughout the community or region.

Elements Creve Coeur should consider when developing lighting standards include:

- Light levels;
- Glare;
- Color (type of lighting);
- Energy use and cost issues;
- Skyglow, and;
- Security and crime prevention.

and to provide buffers between existing residential and commercial where appropriate. The park may run adjacent to Olive Boulevard in some places, and behind existing businesses and residences in other places depending upon the constraints of particular properties. The City will prepare a plan for the gradual development of this linear park.

## **Transportation and Movement**

1. New development or redevelopment should minimize the conflict between pedestrian and vehicular traffic through the use of a coordinated pedestrian circulation system, compatible with a “green line” open space network, as described above.
2. Minimize the impact of vehicular traffic on adjacent residential areas through managed access.
3. Eliminate the off set intersections along Olive Boulevard at Spoede Road and at Graeser Road.
4. An east-west bicycle path should be developed along Olive Boulevard to connect the Commerce Center Area and the Central Business District Area. This bicycle path should connect with a network of other such facilities in the City.
5. Provide shuttle service between the East Olive Boulevard area and activity centers in the adjacent areas of Central Business District and Commerce Center.
6. Improve pedestrian movement across Olive Boulevard, including crosswalks, refuge islands, and pedestrian walk indicators.
7. Whenever possible, eliminate left turn movements on and off Olive. The City should explore and pursue opportunities to direct existing and future vehicular movements to north/south collector streets.
8. Future access to Olive Boulevard should be discouraged and existing curbcuts and public access be reduced or coordinated, by sharing access.

## **Public Facilities**

1. Continue public investment in Olive Boulevard streetscape improvements, including landscaped islands, landscaping, street lighting, sidewalks, bicycle accommodations, and landscaped medians. Manage privately developed interior pedestrian improvements by developers so that they interconnect and coordinate with improvements along the public right-of-way.
2. Explore the elimination of above ground utility lines or the consolidation of overhead utility lines where feasible.

## Key Properties Map



## Key Property Recommendations

**East Olive Corridor 1** – The commercial area along Olive Boulevard on the west side of the East Olive Corridor is expected to experience some development pressures. It serves as a transitional area from the Central Business District and consists of office, retail, and single-family homes converted to business use. Several commercial uses in single-family homes are located along both sides of Olive Boulevard and are a predominant feature of the corridor. Several subdivisions that abut this area are expected to draw pressure from a growing trend of demolishing existing homes in order to build new, larger homes. The Plan recommends the following for this area:

- The redevelopment of larger commercial uses should include a coordinated effort to implement access management strategies, including curb cut reduction and cross-access.
- The redevelopment of larger commercial uses should follow Design Guidelines enacted by the City.

The zoning designation of some of the subdivisions that abut this area is not compatible with the actual lot sizes. Currently several subdivisions are zoned “A” with a 1-acre minimum lot size, and consist almost entirely of lots that were originally platted as one-third to one-half acre. The City should consider rezoning these subdivisions to a classification that better suits existing parcel sizes. The City has established a policy that allows infill residential development on these lots without a variance. Rezoning so existing conditions are consistent with the zoning ordinance is a preferred course of action. Rezoning would diminish the potential for zoning conflicts as these parcels continue to experience infill residential development.

Businesses that occupy residential structures fronting on Olive should maintain residential character and act as a buffer between Olive Boulevard and single-family residential developments. They should be small in scale, and limited to neighborhood-oriented businesses.

**East Olive Corridor 2** – The commercial area along Olive Boulevard in the middle of the East Olive Corridor is an area of concern. The uses in EO-2 include 1950’s era commercial uses that lack identity and focus. In addition, the stretch of Olive between Schulte (north of Olive) and Mary Meadows (south of Olive) to the west, and Graeser and Dautel to the east, creates potential traffic conflicts because the streets do not align. The Plan recommends the following policies for this area:

- As redevelopment and new investment occurs, the area will be encouraged to remain commercial, with uses limited to neighborhood-oriented commercial. Redevelopment should be designed to protect and be compatible with adjacent residential areas, as provided for in the *Residential Preservation and Economic Development* recommendations for the East Olive Corridor. The freestanding structure located here is a positive example of the type of development desired for this area as it relates to site design, parking lot design, and landscaping.
- The area should be encouraged to develop as a commercial node, meaning that it should develop within well-defined boundaries and limits, not as an expanding commercial strip.
- The City should explore long-term opportunities to enhance vehicular movement and safety by evaluating improvements to Schulte, Mary Meadows, Graeser, and Dautel. Improvements should include alignment of some of the streets.

**East Olive Corridor 3** – This entire corridor is expected to be under pressure for change and should be carefully managed pursuant to this Plan. Preservation of the residential areas south of Olive, between Graeser and Spoede (directly south of East Olive-3) is a particular concern. The Special Use Permit regulation should be continued and enhanced for properties fronting Olive in order to preserve the residential character. Buffering should be required between the East Olive-3 area and the residential neighborhoods to the south to prevent conflict between commercial and residential uses.



Special Use business along Olive Boulevard

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