Future Land Use Plan

The Future Land Use Plan provides a land use framework for future development in the county through 2020. The plan illustrates the distribution of agricultural, residential, commercial, industrial, mixed-use, and open space uses. It does not depict an “end state” or “full build out” at some future date. The plan is a dynamic tool which is reviewed and updated as provided by county charter at least every five years. It is not intended to change stable neighborhoods—it’s primary focus is on places where new development will occur in the future, including some redevelopment areas.

Key Land Use Concepts

This section describes the key land use concepts utilized in drafting the 2020 Future Land Use Plan (see Future Land Use Map page 9.75). These concepts incorporate elements from the Vision, Goals and Strategy statements that relate to land use planning. These concepts are intended to guide land use decisions and development in the county with the following characteristics:

1. Urban development focused within an Urban Service Area;
2. Balanced mix of housing and jobs;
3. Neighborhoods with housing choices;
4. Variety of vital "Activity Centers;"
5. System of parks and trails throughout our neighborhoods and community;
6. Connected transportation system;
7. Viable agricultural and rural lands;
8. Natural and environmental constraints; and
8 Future Land Use Plan

1—Urban Service Area

The plan illustrates an Urban Service Area (USA), which is the anticipated major growth area for the county. Generally, the USA follows a boundary where water and sewer are provided or planned to be provided within the planning horizon of the plan. It is expected that most urban development should and will occur within this area. New urban residential neighborhoods, with supporting businesses and services, will be directed into this area that is generally contiguous with existing development. Development within the USA that is not connected to urban facilities, especially community sewer systems will exacerbate the economical extension of such systems and contribute to an inefficient use of land.

2—Balanced mix of land use types (Housing and Jobs)

The plan includes lands for future residential neighborhoods and employment and service areas in a balanced manner—to meet the needs for growth through 2020. The county will annually review the plan to determine if the balance of land uses continues to be appropriate.

3—Neighborhoods with Residential Choices

Neighborhoods are the building blocks of the county. The plan encourages future residential development to occur in urban neighborhoods with a variety of housing choices and other amenities. In order to facilitate a greater variety of housing choices and to integrate open space into developments, the county encourages the use of clustering whereby overall densities of a zoning district are maintained within a development but flexibility is provided to allow a variety of lot sizes and residential building types. The plan still provides an option for rural residential development, but this type of development is not preferred because of the costs to serve it and the lack of community sewer and water services. Agriculture may also continue in these areas, although at a lesser scale over time.
4—Variety of Vital "Activity Centers"

One of the concepts of the plan is the notion of mixed-use activity centers. These are places designed to be somewhat pedestrian-oriented, with high quality of design and cohesive site development, and with a mix of complementary uses, such as retail services and higher density housing (even loft style apartments). The plan identifies different kinds of future "activity centers" for services and businesses and employment (see Future Land Use Plan). Activity centers range from small retail services near housing—Neighborhood Business Centers (which are not shown on the plan), to Mixed-Use Commercial Activity Centers, to larger centers for Community and Regional-scale Commercial and Employment.

5—System of Connected Parks throughout our Neighborhoods and County

A parks and open space system is made of numerous types of parks, open space and recreational facilities and amenities, that are important to the county’s identity and livability, which are provided by a number of city, county, district, state and federal agencies. An important but often overlooked component of this system is the various open spaces and walkway systems within individual development areas. This portion of the system is important to provide the connectivity to create a truly integrated system. This plan generally describes the potential location of the Great Rivers Greenway trail system. Individual agency plans for parks and recreation provide more detail.
6—Connected and Coordinated Transportation System with Future Transit Corridors

The plan promotes land use patterns in the Urban Service Area that are conducive to supporting a variety of transportation alternatives and mobility in the county. For example, the mixed-use activity centers should include a mix of compatible land uses and be designed to be safe and comfortable for pedestrians and should be located along corridors that could be future transit routes. Developing land use patterns that are more mixed can allow people to live in neighborhoods where they are able to drive shorter distances to services and jobs, and where they may be more inclined to walk, ride a bike, or use transit.

St. Charles County’s “Proposed Ten Year Transportation Improvement Program” addresses necessary transportation improvements. The Thoroughfare Plan, a part of this plan recommends reserving future rights-of-way for future major streets so streets will be connected, efficient and sufficient to provide for the future roadway needs of the county.

7—Viable Agricultural Lands

The plan illustrates areas of the county that should promote agricultural uses and cropland conservation. These areas are where large parcels are largely held by a few landowners and where farming is currently taking place. Many of these parcels are also in environmentally sensitive areas. These environmentally sensitive areas are generally located within the 100-year flood plains of the Mississippi and Missouri Rivers. Agriculture is an important use in the county and needs to be protected from intrusions that will impact its viability. Minimal residential development not associated with agricultural uses is permitted but not encouraged. This plan strives to maintain and strengthen the viability of these economic activities involved with agriculture. Some lands designated Agriculture in this plan may change to other land uses in the future. This land use plan attempts to depict only the areas needed for non-agriculture uses to meet 2020 projected land use.
8—Natural and Environmental Constraints

The Future Land Use Plan identifies major flood plain areas within the county. Other natural and environmental constraints are depicted in the various maps in the appendix of this plan. The areas shown are generally undeveloped lands rich with natural and/or cultural values, including creeks and riparian areas, steep slopes and wildlife habitat. This plan promotes conserving these areas and designing development in ways that protect the resources and integrates development into the landscape. Much of the future growth areas, in general, are not conducive to the use of septic systems. While site by site analysis may show that soil conditions may support the use of septic systems, this plan does not encourage the use of this wastewater treatment method for urban development and within urban service areas. Floodplains and other hazard areas should be kept free of development to the maximum extent feasible. It is noted however, that our river systems provide a tremendous recreational amenity. Therefore, development associated with recreational uses, consistent with floodplain development regulations, is contemplated by this plan.

9—Flexible Land Use Categories

The Future Land Use Plan does not predetermine specific land uses or densities for given parcels of land. Instead, it illustrates general categories with preferred character types and policies and criteria to describe the interest in creating a mix of uses and compatible densities within new neighborhoods. This allows more creative and efficient use of land according to this plan's goals and strategies.
Future Land Use Plan

There are eight major land use categories provided within this plan.

Future Land Use Categories
The land use categories should allow our future neighborhoods and activity centers to become distinctive, diverse places with a mix of compatible activities. They also provide some flexibility to respond to market conditions.

The Land Use Categories
The land use categories are grouped under eight major types and more detailed descriptions are provided in later pages of this plan. For each category, the plan describes uses (primary and secondary), general characteristics, and location criteria.

1. Agriculture
Includes:

- Agriculture

2. Rural Residential
Includes:

- Rural Residential

3. Urban Residential
Includes:

- Low Density Residential;
- Medium Density Residential; and
- High Density Residential

4. Mixed-Use
Includes:

- Mixed-Use: Employment Campus (research and office parks); and
- Mixed-Use: Commercial Emphasis.

5. Mixed-Use Activity Centers
Includes:

- Neighborhood Business Centers;
- Mixed-Use Commercial Activity Centers; and
- Community/Regional Commercial Activity Centers.
6. Commercial
Includes:

- Community Business and Office.

7. Industrial
Includes:

- Manufacturing, assembly, fabrication, distribution, warehouse and wholesale.

8. Parks and Open Space
Includes:

- Parks, Greenway Trails, and Open Space

Other Specific Areas Depicted on the Future Land Use Plan

Planning Districts

The Future Land Use Plan identifies two areas in need of additional and more detailed planning. These districts are (1) Arena Parkway/Page Planning District and (2) the Highway 79 Planning District.

Arena Parkway/Page Planning District

The Arena Parkway/Page Planning District is one of the key gateways in and out of the county. It is located on Hwy 364 and Upper Bottom/Arena Parkway. The intent for this planning district is to promote cohesive, attractive, economically viable development that will not detrimentally affect traffic and the transportation system. Quality of design and natural area protection and views are important in this area. It will be important to work with property owners to create a positive image for the county at this important gateway into the community.
The Whites Branch Planning District contains approximately 7,600 acres of land. The Future Land Use Plan depicts a general agricultural land use for this area, considering that this area has few roads and no planning for sewage treatment. This area is also shown as being within an urban service area. The intent is that without appropriate urban services this area should only be used for agricultural uses. Residential development not associated with agricultural uses would also be permitted on no less than five acres of land with a septic sewage system.

It is recognized however, that development pressure on this area will occur and therefore opportunities exist to properly plan for transitions that provide for urban services, and are sensitive to environmental issues and neighborhood character concerns. Therefore, residential development within this planning district could be considered provided that such development has appropriate urban services, is designed and arranged in a manner that clusters development providing open space (not including developments consisting of 3-acre parcels), and development densities do not exceed 1 dwelling unit per gross acre.

100-Year Floodplains

The Future Land Use Plan identifies major 100-Year Floodplain areas along the flood plains of the major waterways within the county. The 100-year flood plain areas in St. Charles County are located along the Mississippi and Missouri Rivers. Other major areas having 100-year floodplain designations are along the Cuivre River, Big Creek, Dardenne Creek, Perique Creek, and Femme Osage Creek.

These are generally undeveloped lands containing rich farmland with natural and cultural values. This plan promotes conserving these areas and directs development to other areas that are not so constrained. This land use designation overlays base land use designations and therefore provides additional guidance on the use of land so depicted.
8 Future Land Use Plan

Uses

Primary Uses
In general, uses which have a low flood damage potential are best suited within the 100-year floodplain. Such uses would include general farming, pasture, nurseries, gardens, airport landing strips, golf courses, parks, wildlife and nature preserves. Any structure erected within a 100-year floodplain must have its lowest floor (including basement) elevation one (1) foot above the base flood elevation. The flood plain regulations of the county should be consulted prior to considering development within floodplain areas.

Urban Service Area
The plan illustrates an Urban Service Area (USA), which is the anticipated major growth area for the county. Generally, the USA follows a boundary where water and sewer are provided or planned to be provided within the planning horizon of the plan. It is expected that most urban development should and will occur within this area. While a significant amount of the land within the Urban Service Area is already developed, a considerable amount of undeveloped land exists particularly within the western and northern portions of the USA. These sectors of the USA will provide the area for the majority of the county’s future neighborhoods. New urban residential neighborhoods, with supporting businesses and services, will be directed into this area that is generally contiguous with existing development. Development that is not connected to urban facilities, especially urban sewer systems, will exacerbate the economical extension of such systems and contribute to an inefficient use of land. Such development should be discouraged and prohibited from occurring within the USA.
Land Use Categories and Location Criteria

General Intent

The intent of the Future Land Use plan is not to predetermine specific land uses for individual parcels or specific locations for uses or facilities, but to provide a general framework for neighborhoods and activity centers organized around a roadway network and major parks and open space. Therefore, if a developer proposes a project that is generally consistent with the categories shown and with locations for activity centers identified, or that meet location criteria described in this section, then the proposed project could be considered to be in conformance with this Plan. For example, the plan shows Urban Residential land uses, but does not designate Neighborhood Business Centers. A developer is able to propose a Neighborhood Business Center in a location not shown if it meets location criteria as set forth in this chapter. The proposal for the activity center should also follow design principles in the plan to achieve a long lasting and beneficial community project. It is also anticipated that large tracts of property could develop their own master development plan provided that the master development plan is generally consistent with the land use patterns and principles contained in this Plan. The determination of consistency shall be made by the Planning and Zoning Commission and Governing Body, based on a review and recommendations from planning staff. The master development plan could be processed as an amendment to this plan, in accordance with the process and procedures established by the county.

Agriculture

- Agricultural

The areas illustrated as agricultural in the County contain vast undeveloped areas. It is the intent of this Plan to promote continued farming and agricultural use in these areas, rather than more intense development. The areas shown do not provide community sewer services, are not within the urban service area where such facilities are planned, or are not in an area within the urban services area where sewers are expected to be provided by 2020. Development not associated with an agricultural use are not encouraged.
Agricultural Design Ideals

If non-agriculture development is to occur it should minimize its impacts on natural areas and on nearby farming and agricultural operations. The following design ideals are appropriate for all rural development that occurs outside of the Urban Service Area (that will be primarily residential):

1. **Minimize cut and fill for roads and site grading.**
2. **Steer development away from geologic features, such as rock outcroppings or steep slopes.**
3. **Use appropriate setbacks, and placement of structures that are compatible with adjacent agricultural activities.**
4. **Incorporate wildlife friendly fencing or "rural" open fencing rather than solid fencing.**

Agriculture Category

**Appropriate Uses**

**Primary Uses**
Farming and other agriculturally related uses, including raising farm animals, equestrian activities, breeding and boarding facilities, vet services, kennels, are appropriate.

**Secondary Uses** Agriculture-related businesses and agricultural support services are encouraged (e.g. agricultural tourism activities such as wineries). Residential dwellings are accessory to agricultural and farming activities. Very low density residential (e.g., 5 acre large lots or larger). Wind energy generation and other energy production facilities may be appropriate but should be located away from residential areas.

**Desired Characteristics and Location**
Land designated Agriculture will typically be prime agriculture land, farmlands of statewide importance and land used for agriculture uses that are not within an Urban Service Area. Areas with significant slopes and without urban services may also be included within this land use designation.

In the southwestern and western portions of the planning area outside of the Urban Service Area, the vast majority of land is dedicated to farming and agriculturally related uses. Agricultural operations typically require very large parcels of land. Scattered areas of residences on large lots are also located here. These residences rely on individual wells and septic systems, and open space usually is owned privately. Agriculture depends on soil capabilities and requires some basic utility services. Agricultural operations should have access to minor county roads. Agriculture is permitted in floodplains and geologic hazard areas, subject to state and county regulations. Residential uses not associated with agricultural or farming
operations should have minimum lot sizes of 5 acres, however this
development type is not encouraged.

*Applicable Zoning Districts: A*

### Rural Residential

- **Rural Residential**

  *The areas depicted as rural residential in the County contains significant undeveloped areas. It is the intent of this Plan to promote continued farming and agricultural use in these areas until rural residential development occurs.*

### Rural Residential Design Ideals

If development is to occur in the rural residential areas, it should minimize its impacts on natural areas and on nearby farming and agricultural operations. The following design ideals are appropriate for all rural residential development that occurs outside of the Urban Service Area:

1. Minimize cut and fill for roads and site grading.
2. Steer development away from geologic features, such as rock outcroppings or steep slopes.
3. Use appropriate setbacks, and placement of structures that are compatible with adjacent agricultural activities.
4. Incorporate wildlife friendly fencing or "rural" open fencing rather than solid fencing.

### Rural Residential Category

**Appropriate Uses**

**Primary Uses** The Rural Residential category provides for single family residences on individual large lots (3 acres or larger). The keeping of horses is appropriate in this category.

**Secondary Uses**

Supporting and complementary uses, including open space and recreation, schools, places of worship, and other public uses are appropriate, as well as accessory structures, such as barns and stables.
Desired Characteristics and Location The Future Land Use Plan shows this type of development to the north of Hwy W, adjacent to Highway P, and along Hwy F in the southwestern portion of the county.

Rural Residential will develop at densities lower than typically found in the more urban residential areas (i.e., within the Urban Service Area) with lifestyles oriented to more rural characteristics, such as keeping horses. Open space is on private lands. This type of residential development emphasizes spaciousness over convenience.

Landowners may develop large lot single-family rural residential, or cluster development on smaller lots to conserve open space, views, and other natural features. The cluster development option promotes retention of open space and providing larger connected open space or agricultural lands that are conserved in perpetuity. With this option, a significant percent of the site should be conserved as open space within the clustered development.

Applicable Zoning Districts: RR

Urban Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential

The county’s residential areas have a variety of characteristics and densities. The locations of future residential areas will be designed to protect and strengthen existing and proposed neighborhoods. Cluster development patterns, whereby a variety of residential types and lot sizes are permitted within a zoning district’s density maximum with areas reserved for open space is encouraged. The county will also consider availability of utilities, the development’s impact on the transportation system and roads, accessibility, and proximity to community facilities.

For multiple family residential (e.g., townhomes and apartments), vehicular, bicycle, and transit routes should be accessible, yet residential areas should be protected from heavy traffic. In addition, these types of residential developments should be within convenient proximity to neighborhood retail centers as well as open space and parks.
Urban Neighborhood Design Ideals
Development of new neighborhoods (usually larger areas than an individual development) are designed in ways that follows the ideals below:

1. Contain a mix of lot sizes and housing styles, types, and sizes, and land uses.

2. Include a core, such as neighborhood serving retail, civic services, or a gathering space (e.g., a park, plaza, school, community center, or natural open space). Neighborhood recreation area should occur within distances specified on municipal plans or provided within develops that are operated by the residents.

3. Contain connected streets and sidewalks based on a modified-grid pattern. Pedestrian pass-throughs provided at appropriate locations provide interconnectivity.

4. Be designed for pedestrians, including amenities such as sidewalks, shade trees, and other features.

5. Include open space, parks, and other amenities.

6. Contain a variety of buildings to avoid monotony.

7. Be designed in harmony and to respect the natural landscape and landforms and conserve natural features, such as creeks or geologic features.

8. Include transitions between different residential intensities and bulk configurations.

This Plan encourages new neighborhoods to be developed in traditional development patterns with a mix of densities, lot sizes, housing types, and home sizes that are well integrated with one another. New urban residential developments should have a wide variety of housing types, lot sizes, styles, and patterns. Future neighborhoods should also include well planned amenities such as parks and open space.

The core of an urban residential neighborhood may contain apartments and townhomes and may even include neighborhood retail uses organized around a public space that is inviting for pedestrians. The secondary uses are intended to serve the neighborhood and should be developed and operated in harmony with the residential character.

Within urban residential neighborhoods, streets and sidewalks should provide connections to, from, and within the neighborhoods to make it safe and convenient for people to walk and ride bicycles. Urban Residential areas will be served by central water and sewer, and will contain paved streets with sidewalks.
Neighborhoods should have transitions between different intensities or activities. For example, lower density residential (i.e., with a minimum of two dwelling units per acre and ranging up to four du/acre) is appropriately located away from shopping and other activity centers and should be accessed from local or collector streets. For these areas, some common open space should be provided. Open space should be usable and connected.

Multi-family residential (i.e., townhomes and apartments with densities higher than six dwelling units per acre and up to 15 dwelling units per acre) is appropriate in locations closer to activity centers or supporting business uses. These types of housing are generally served by collector streets or arterial streets and in the future should have access to transit or transit centers. In these multi-family residential areas with density higher than six dwelling units per acre, some common open space or other amenities should be provided. Open space should be usable and/or connected. In addition, for multiple family residential projects, other private recreational amenities should be provided, such as tot lots, playgrounds, or garden/courtyards. Where it is adjacent to lower density development, densities and building heights should step down. The development could also provide transitions by incorporating open space buffers into the development plan.

**Low Density Residential Category**

**Appropriate Uses**

**Primary Uses**

This land use category allows for single-family residences at a density of 1 to 4 dwelling units per acre. The single family residences are normally detached units and have urban services (central water distribution and sanitary sewers). Lot sizes in these areas can vary from approximately 43,000 square feet to 10,000 square feet. Clustering development is encouraged.

**Secondary Uses**

Supporting and complementary uses, including open space and recreation, schools, places of worship, and other public or civic uses are also appropriate in this category. Senior housing is appropriate if compatible with the surrounding area.
Desired Characteristics and Location
Low density residential in St. Charles County is the dominant land use type within the designated Urban Service Area. This land use is suburban in character with detached homes on individual subdivision lots. Housing styles should vary to avoid monotony. Subdivisions should be designed in harmony with the natural landscape and conserve natural features. The category allows for a blend of "urban" neighborhood housing with more "rural" characteristics, such as larger lots.

Developments should be connected to community water and sewer systems. In addition, this type of residential development should be located on paved streets with sidewalks. Developments should provide transitions between less intense uses on neighboring properties (such as single family residences), and proposed higher intensity uses, such as townhomes. Transitions could include transitions in building heights, and landscaped buffers. This Plan encourages the provision of urban improvements in these areas, such as sidewalks, trails, and developed parks. Neighborhood commercial may be appropriate in newly developing areas if it complies with the criteria for Neighborhood Business Centers on page 8.61.

Finally, landowners and developers may develop large lot single-family rural residential provided community water and sewer systems are provided.

Clustering development on smaller lots to conserve open space, views, and other natural features using a cluster development provision would also be encouraged.

*Applicable Zoning Districts: R1A through R1D*

Medium Density Residential Category

Appropriate Uses

**Primary Uses**
The Medium Density Residential category allows for a broader variety of residential types, including single-family residences, duplexes, patio homes, townhomes, and multi-family structures.
Future Land Use Plan

This land use allows for moderate density residential development which permits both detached and attached housing units with urban services (central water distribution and sanitary sewers). Such residential housing units would include single-family residences, duplexes developed under traditional development patterns and can include in addition villas, zero lot line and patio homes under a clustering approach. Density levels are 4.1 to 10 units per acre.

Secondary Uses
Supporting and complementary uses, including open space and recreation, schools, places of worship, and other public or civic uses are encouraged. Senior housing facilities are also appropriate. Neighborhood commercial may be appropriate in newly developing areas if it complies with the criteria for Neighborhood Business Centers on page 8.61.

Desired Characteristics and Location
Medium Density Residential is shown in established neighborhoods and newly developing neighborhoods within the Urban Service Boundary. This density pattern is found in various locations in the Golden Triangle Area, particularly within the cities of St. Charles, St. Peters, O’Fallon, and Wentzville. Such developments are within urban settings with sidewalks, trails, parks, and neighborhood services. Neighborhoods should contain a mix of lot sizes and housing styles, types and sizes. The building styles should vary to avoid monotony. Subdivisions should be designed in harmony with the natural landscape and conserve natural features.

Applicable Zoning Districts: Some R1D – R1E, R2, R3A

High Density Residential Category

Appropriate Uses

Primary Uses
The land use classification allows for high density residential development. Developments would have urban services (central water distribution and sanitary sewers). This classification allows for 10.1 or more dwelling units per acre.
Secondary Uses
Secondary uses for this land use include places of worship, schools, parks, and recreational facilities, public buildings and facilities. Accessory uses would include swimming pools, club houses, and community garages.

Desired Characteristics and Location
The density patterns for this land use classification are generally found in close proximity to arterial streets and major thoroughfares. Housing units within this classification are usually multi-storied multiple-family buildings, (apartments, condominiums, senior housing, etc.), and also possibly townhomes and villas. Such developments are within urban settings with sidewalks, trails, parks and neighborhood services. Buildings should vary in architectural style. Development should be designed for pedestrians with benches, shade trees, and human-scale features. Transitional areas should be maintained between different residential intensities. Development should be designed in harmony with the natural landscape.

Applicable Zoning Districts: R3B

Mixed-Use
- Mixed-Use Commercial Emphasis
- Mixed-Use Employment Campus (research and office parks)

Historically, downtown cores traditionally had mixed-use development—where offices, homes, and shopping coexisted in one discrete area. However, development trends in the county have shifted away from this pattern of mixed-use. The automobile as the dominant mode of transportation has led to a more dispersed pattern of land uses, and consumer demand for larger single family homes on larger lots has dispersed the community more over time.

This Plan promotes mixed-use development patterns in areas designated on the Future Land Use Plan to create livable neighborhoods, safe and inviting pedestrian environments, and to create a variety of housing options. The mixed-use commercial use is located along existing or future thoroughfares, generally between activity centers. These locations recognize the need for commercial and offices to be along major transportation routes. In addition, multi-family development also benefits from being along or in close proximity of these major roadways. This category promotes the mixture of commercial/office and residential either in vertical or horizontal format. This
Future Land Use Plan

The mixed-use employment campus is intended to provide large development sites for research, high tech and low impact industrial parks as well as offices within those developments or separate office campuses. The absence of well planned and designed employment campuses will result in the county missing opportunities to provide for employment within the county for county residents. It is important to provide opportunities for area residents to find work locally and thereby reduce travel times and contribute to less road congestion through shorter trips.

Mixed-Use Design Ideals

Generally, a mixed-use development area should be designed with the following ideals in mind:

1. Develop according to a coherent mixed-use concept plan that physically integrates different uses, including retail space, residential, hotels, offices, or civic and cultural facilities (for projects greater than five acres).

2. Incorporate a mix of land uses that is either "vertical" (where components are mixed within a single building or block such as dwellings on top floors with retail on bottom), or "horizontal" (where different activities on the site are in separate buildings, but linked through a cohesive design).

3. Provide internal connected streets and sidewalks that allow safe and direct access between buildings, and accommodate pedestrians in a safe manner.

4. Provide transitions in building heights from adjacent buildings in a less intensive land use.

5. Connections to the road system are designed to mitigate traffic issues and enhance safety.

Mixed-Use Commercial Emphasis Category

Appropriate Uses

Primary Uses
The Mixed-Use Commercial category is intended to promote a range of land uses, with primarily retail, office, light industrial, and live-work developments. Parks, plazas and/or open space should also be part of the core of Mixed-Use Commercial areas that form activity centers.

Secondary Uses
Apartments and townhomes and other residential uses are also encouraged as part of the mix of uses. Places of worship and other public or civic uses are also appropriate.
Future Land Use Plan

Desired Characteristics and Location
Mixed-Use Commercial areas should be located along principal arterial or minor arterial streets or transit facilities and can become larger activity centers if they meet the Mixed-Use Activity Center criteria. The intent is to create an environment that has employment and shopping opportunities, a range of housing types and civic uses, if appropriate. Uses may be mixed either vertically or horizontally. Mixed-Use areas should be developed in an integrated, pedestrian friendly manner and should not be overly dominated by any one land use or housing type.

Higher intensity employment and residential developments are encouraged in the core of Mixed-Use Commercial areas, or adjacent to principal arterial roadways or at the intersection of a principal arterial or as part of activity centers. Building heights should be evaluated during the development review process. Where appropriate, building height transitions and step-downs should be provided to be compatible with adjacent land use characteristics.

Applicable Zoning Districts: CO, C1, C2, all residential

Mixed-Use Employment Campus Category

Appropriate Uses

Primary Uses
The Mixed-Use Employment Campus category is intended to promote a range of land uses, with primarily office, research, high tech and light industry designed in a business campus setting. The campus should include open space, parks and plazas, and pedestrian walkways. Retail and services can also be an important component to creating a functional business campus.

Secondary Uses
Supporting uses for this land use classification include financial institutions, child care facilities, hotels, motels and extended-stay rental lodging facilities, tennis courts, fitness centers and indoor recreational facilities, restaurants, retail and personal service establishments. Also public buildings and facilities (i.e., fire stations) would be appropriate secondary uses. Places of worship and other public or civic uses are also appropriate.
**Desired Characteristics and Location**

Mixed-Use Employment Campus areas should be located in areas generally depicted on the Future Land Use Plan. The intent is to create an environment that has employment opportunities integrating buildings and outdoor spaces, transportation and parks, open space, civic uses, and other uses as appropriate. Uses may be mixed either vertically or horizontally. Mixed-Use Employment Campus areas should be developed in an integrated, pedestrian friendly manner and should not be overly dominated by any one land use.

Higher intensity employment is encouraged in the core of Mixed-Use Employment Campus areas or adjacent to collector or arterial roadways. Building heights should be evaluated during the development review process. Where appropriate, building height transitions/step-downs and/or landscape buffers should be provided to be compatible with adjacent land use classifications.

*Applicable Zoning Districts:* CO, C1, C2, I1, HTCD

**Mixed-Use Activity Centers**

**Activity Centers and Location Criteria**

A key direction of this Plan is to develop mixed-use activity centers as a focus for economic and social activity in the community. The intent is that a variety of different kinds of centers will serve different needs in the community. Centers will range from small scale neighborhood or community-oriented centers (i.e., a Neighborhood Business Center or a Mixed-Use Commercial Activity Center) to regional centers (i.e., a Community/Regional Activity Center).

These will all be places with high quality site design containing a mix of complementary land uses, such as retail and higher density housing (e.g., loft style apartments). Site design also should include some public or quasi-public spaces such as plazas, natural open space, or outdoor seating associated with restaurants. Site and building design should be cohesive and designed with people in mind, and should include some open space or plaza facility. Finally, the location of activity centers must be coordinated with the street system and transportation as defined in the criteria that follow.
The criteria in the following sections address the location and some size and design ideals for:

- Neighborhood Business Centers (not shown on the Future Land Use Plan);
- Mixed-Use Commercial Activity Centers;
- and Community/Regional Commercial Centers.

Neighborhood Business Centers
Neighborhood Business Centers are NOT specifically designated on the Future Land Use Plan as activity centers. The intent for Neighborhood Business Centers is to locate them to serve the convenience shopping needs of a neighborhood. The county will use the following criteria in determining the location of this type of center and for site plan review and approval. It should:

- Occur in an areas designated for Urban Residential.
- Have frontage on an arterial and a collector or two collector roads.
- Range in size up to five acres.
- Generally will serve a trade area up to 1 mile.
- Be accessible by walking from neighborhoods.
- Contain amenities such as a pedestrian plaza, sidewalks, and landscaping and access control to create a cohesive development.
- Ensure that commercial development is integrated with and enhances the surrounding neighborhoods.
- Connections to the road system are designed to mitigate traffic issues and enhance safety.

1. Neighborhood Business Center focused internally to create a pedestrian-friendly atmosphere allowing easy walking between uses. Commercial buildings are located to be visible from the arterial and/or collector streets.
2. Townhomes...Medium density housing can provide a transition to surrounding neighborhoods.
3. Offices...Provide a transition to surrounding neighborhoods and employment opportunities within close proximity of residential.
4. Single-family Dwellings at various densities to provide transition from higher intensity uses and to create a variety of housing types.
Mixed-Use Commercial Activity Centers
Mixed-Use Commercial Activity Centers are located throughout the community to serve the day-to-day commercial needs of surrounding neighborhoods. Use the following criteria in determining the location and design of Mixed-Use Commercial Activity Centers (as designated on the Future Land Use Plan OR to designate new centers). This type of center will generally:

- Be located on one quadrant of the intersection of two arterials in places designated for “Mixed-Use” on the future land use plan.
- Vary in size depending on the mix of uses.
- Serve a trade area up to approximately 2 miles.
- Have a gross floor area up to 200,000 square feet of non-residential uses.
- Typical format consists of one anchor store, such as a supermarket or drug store, and smaller retail and services. The project should also contain some residential development (either vertically or horizontally mixed). (See Design Principles for Mixed-Use Development.)
- The main part of the development should contain amenities such as a pedestrian plaza and landscaping as well as access control to create a cohesive development.
- Additional Mixed-Use Activity Centers can be located in the community provided that traffic impacts are mitigated and transitions are provided for residential areas.
- Connections to the road system are designed to mitigate traffic issues and enhance safety.

Community/Regional Activity Centers
Community/Regional Activity Centers are located throughout the community to serve the day-to-day commercial needs of the community. Use the following criteria in determining the location and design of Community/Regional Activity Centers (as designated on the Future Land Use Plan OR to designate new centers). This type of center should:

- Be located on one to two quadrants of an Interstate interchange or on one quadrant of the intersection of two arterials.
- Range in size up to approximately 100 acres.
- Serve a trade area up to approximately 5 miles.
Future Land Use Plan

- Have a gross floor area of over 200,000 square feet for non-residential uses.
- Typical format consists of one to two anchor stores, such as a supermarket or drug store, or can consist of regional shopping, "lifestyle" centers, outlet mall, and "big box" configurations.
- Contain amenities such as a pedestrian plaza and landscaping as well as sign and access control to create a cohesive development.
- Connections to the road system are designed to mitigate traffic issues and enhance safety.
- Additional Community/Regional Activity Centers can be located in the community provided that traffic impacts are mitigated and transitions are provided for residential areas.

Commercial and Industrial

- Commercial
- Industrial

The commercial and industry categories on the Future Land Use Plan have a variety of uses, development intensities, and characteristics that generally do not include residential development. These are the areas of the community designed to provide jobs, services, and economic vitality. The industrial and commercial uses are planned to be compatible with existing and proposed development, site constraints, and market demand.

Commercial and Industry Development Ideals

Commercial and Industry development should be designed using the following principles:

1. Provide greater attention to design in high visibility locations, such as along interstates or on arterials.
2. Screen service areas and outdoor storage to the extent possible.
3. Provide pedestrian access from the main street through parking areas to the building.
4. Access to arterials and collectors should be limited and placed at locations which will not compromise the functionality of such thoroughfares as traffic corridors.
Commercial Category

Appropriate Uses

Primary Uses
General retail to serve neighborhoods and the community and region is appropriate in the Commercial category. This category also allows offices. It may also include, but is not limited to, general retail and office, large tenant retail (i.e., "big boxes"), and regional malls. Intensive industrial activities are not appropriate.

Secondary Uses
Supporting uses, open space and recreation, and other public or civic uses are appropriate. Multi-family housing (e.g., apartments) may be appropriate if designed as part of an integrated mixed-use concept plan.

Desired Characteristics and Location
The Commercial category encompasses retail centers that provide shopping services in the community and region. Commercial is generally shown on the Future Land Use Plan at interstate interchanges or at the intersection of an arterial or state highway, or at two arterials.

Community/Regional Activity Centers should meet location criteria for activity centers. Additional locations along major arterials may also be appropriate.

Where possible, internal streets and sidewalks should provide access and connections to nearby neighborhoods. Community business should blend into the neighborhoods, with scale, design, signage, and lighting.

Applicable Zoning Districts: CO, C1 through C2
Industrial Category

Appropriate Uses

Primary Uses
This land use classification includes manufacturing and assembly facilities, fabrication, distribution, warehousing and wholesale operations, contractor’s yards and related facilities. Offices are also appropriate in this land use.

Secondary Uses
Supporting retail uses and services are also appropriate in this category, as are open space and recreation, and other public or civic uses.

Desired Characteristics and Location
This category encompasses the heavier and light industrial areas and generally provides a location where less restrictive regulations are applied. Outdoor storage and heavy industry may be appropriate in certain areas and will be evaluated as part of the development review process. High visibility locations require greater attention to design. Industrial areas should be located with access to major transportation facilities, such as interstates and railroads.

Applicable Zoning Districts: I1, I2

Parks and Open Space

This category includes existing and future parks, conservation areas, trails and other open space. Public or semi-public lands uses and activities for schools, public buildings, fire and police stations, and libraries are not depicted in the future land use plan. Future municipal parks are also not shown. Some of the existing public and quasi public facilities are shown on various background maps or reference should be directed to the individual authority responsible for those facilities. The County does not provide local or neighborhood parks. The County’s role has been to provide regional parks. Parks or open space within unincorporated areas are therefore normally owned and operated by Home Owners Associations.
Parks and Open Spaces Ideals
Parks and public spaces should be designed using the following principles. They should:

1. Be designed and planned as part of neighborhoods—not be merely "left over."
2. Be large enough to provide useable space to meet the intended uses.
3. Incorporate natural features, including ridgelines, habitats, hills, drainage-ways, and historic sites or landmarks.
4. Be visible from at least one local street (two ideally) to invite use, encourage a sense of ownership, and provide a safe area.
5. Include a focal point or amenities for a variety of users.
6. Include appropriate lighting.
7. County Parks should be approximately 100 acres in size or more and serve larger community needs.
8. Parks and Open Spaces areas need to be connected to area walkways and neighborhood sidewalk systems.

Parks and Open Space Category

Uses
Public and private open space, public and private parks, country clubs, trail systems, conservation areas, and golf courses are appropriate uses. Some public utilities or facilities may also be appropriate. This category may also include natural/cultural resource areas.

Characteristics and Location
Existing parks and open space are shown on the Future Land Use Plan and some general locations for future county parks; however, not all future parks are shown. Locations for neighborhood parks will be addressed through the policies of the various entities providing these facilities. The characteristics and location will vary, depending on the type of use.

Open space includes areas for active and passive recreation, conservation and mitigation of environmental hazards. Proposed locations for the Greenway Trail system are also shown.
Future Land Use Plan

The location, access, terrain, size, and design will vary for future open space, depending on the specific use. Open space incorporated into the design of residential neighborhoods can provide active and passive open space for neighborhood residents as well as providing connections to other neighborhoods and parks. The adjacent picture shows a residential development with internal open space and a walkway system connected to a public park.

Applicable Zoning Districts: PR and other Districts

Land Use Plan Summary

This section provides a synopsis of the Future Land Use Plan and what it means for growth in the County for the planning horizon of 2020. The land use categories as displayed on the land use plan should provide the necessary acreage that will exceed the projected land use needs for 2020. The amount of acres in each land use category has deliberately been depicted to exceed the projected land use needs to insure that sufficient lands have been designated to provide the necessary flexibility in obtaining sites for development and to account for other externals, e.g. land not available for sale, that will affect the availability of sites for development. While the land use acreages designated exceed projected needs, the plan still encourages a compact and contiguous growth pattern. Over the next 12 years, the County could grow to a population ranging from 441,000 to 457,000 residents. This growth and where it occurs will have significant implications on county and city services, such as utilities, transportation, and parks. While the County’s planning jurisdiction does not include incorporated areas, planning for growth and development can not be done in a vacuum. The development of this plan has included the consultation of municipal
planners and has incorporated the basic land use arrangements contained within municipal land use plans if they existed.

It is important to consider the Future Land Use Plan’s ability to accommodate potential future growth and to monitor growth rates over time and adjust the plan accordingly. The land use acreages as shown on the plan are shown in Table 8.1 below in comparison to the projected needs.

### TABLE 8.1

<table>
<thead>
<tr>
<th>Year</th>
<th>Undeveloped &amp; Low Density Residential</th>
<th>Residential</th>
<th>Commercial and Office</th>
<th>Industrial</th>
<th>Education</th>
<th>Government</th>
<th>Parks</th>
<th>Misc.</th>
<th>Non-parcel Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>2020</td>
<td>261,500</td>
<td>57,079</td>
<td>6,132</td>
<td>11,845</td>
<td>2,659</td>
<td>7,383</td>
<td>5,294</td>
<td>6,167</td>
<td>n/a</td>
</tr>
<tr>
<td>2020</td>
<td>229,053</td>
<td>79,589</td>
<td>6,024</td>
<td>13,526</td>
<td>2,801</td>
<td>9,348</td>
<td>8,040</td>
<td>7,357</td>
<td>n/a</td>
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</table>

The acreages shown account for lands within incorporated and unincorporated areas.

**New Residential Development Potential**

New residential development could occupy a total of approximately 22,893 acres. This future residential development could amount to approximately 56,531 new housing units, and accommodate approximately 150,372 new people. The land use plan envisions that these new residential units will consist of a mix of housing types ranging from rural to urban residential. Urban residential densities consist of three density ranges as defined in the previous sections. Dwelling Unit and Population calculations are shown in Table 8.2.

<table>
<thead>
<tr>
<th>Land Use Type</th>
<th>Acres Planned</th>
<th>Net Acres Available*</th>
<th>Dwelling Units Per Acre</th>
<th>Total Dwelling Units</th>
<th>People per Dwelling Unit</th>
<th>Total Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Residential</td>
<td>13,372</td>
<td>8,558</td>
<td>0.4</td>
<td>3,423</td>
<td>2.66</td>
<td>9,106</td>
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<tr>
<td>Low Density</td>
<td>17,804</td>
<td>11,395</td>
<td>2.7</td>
<td>30,785</td>
<td>2.66</td>
<td>81,836</td>
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<tr>
<td>Medium Density</td>
<td>2,852</td>
<td>1,825</td>
<td>7.0</td>
<td>12,777</td>
<td>2.66</td>
<td>33,987</td>
</tr>
<tr>
<td>High Density</td>
<td>915</td>
<td>586</td>
<td>10.0</td>
<td>5,856</td>
<td>2.66</td>
<td>15,577</td>
</tr>
<tr>
<td>Mixed Use Comm.</td>
<td>828</td>
<td>530</td>
<td>7.0</td>
<td>3,709</td>
<td>2.66</td>
<td>9,867</td>
</tr>
<tr>
<td>Total</td>
<td>35,771</td>
<td>22,893</td>
<td>55,531</td>
<td>150,372</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Net acres available equals acres planned minus % in Government, parks, misc. minus 20% not available minus 10% in roads, % in government, parks, misc.
New Commercial and Industry Potential

New retail, office, and industrial land uses could occupy a total of approximately 8,640 acres based upon the Future Land Use Plan. These land uses could provide an estimated 90,340 new jobs. This assumes a net of 15 jobs per acre on commercial lands and 3.5 jobs per acre on industrial lands. These estimates assume an 80 per cent land utilization rate and that 15 per cent of the utilized acreage will be devoted to roadways.

The land use plan depicts an area for a major employment center e.g. a new high tech, office and research park. Whether the actual location is near to the designated location on the Land Use Plan or not, the economic development sectors have indicated the importance of establishing a new location in light of the degree of fill within the Missouri Research Park. A concerted effort needs to be initiated to further explore and orchestrate the creation of such a development.

It should be noted the magnitude of the change in 2015 land uses along Highway 40/61. A significant amount of the acreages along Highway 40/61 that had been placed in a High Tech Corridor land use have subsequently been utilized for other residential and commercial uses. In drafting this future land use plan, this corridor now reflects the significant adjustments that have taken place and the re-designation of land uses for this corridor.

Coordinated Planning

Future coordination will need to take place in a variety of areas but of significant importance is the provision of sanitary sewer services within the Urban Service Area. Timely extensions and strategically placed treatment facilities will facilitate growth and development in a sustainable manner.