Land Use and Development Strategies





LAND USE & DEVELOPMENT STRATEGIES



Essential Land Use and Development Strategies

Land is a limited resource. It is imperative to ensure that a variety of housing, employment, shopping, recreation, entertainment, open space, and other amenities are provided for the benefit of those who live, work, and play in Maryland Heights. It is essential to establish policies to guide future land use, development, and redevelopment to ensure that this aspiration is effectively achieved.

With regard to the land use policies contained in this document, it should be noted that the Comprehensive Plan is not a regulatory document. The goals, objectives, actions, and other discussion provide guidance to land use decisions. The Plan is then implemented through the regulations and standards of the Municipal Code, including the Zoning and Subdivision Codes which control the use and development of land. The City is also able to encourage desirable uses and developments on challenged properties through the use of economic development incentives.

Ideally, future development in Maryland Heights will be evaluated based on the concepts of sustainability and resilience. Sustainability is the belief that every decision should be made considering the full long-term implications of the choice. It further means that development choices will be required to consider the social, environmental and economic needs of today without reducing the ability of future generations to have their needs met. This requires acting in a way that simultaneously benefits the social, environmental, and economic well-being of city residents, property owners, and that of the development community. Thinking in terms of sustainability is an integrated process; many strategies that improve the City's sustainability are interwoven throughout this plan.

Resilience is generally viewed as a community's ability to bounce back after an economic downturn or a sudden natural disaster, and absorb the change. For communities and regions resilience measures the ability to return to normal performance levels following a high-impact but low probability disruption, and the speed at which they can do it. Similarly, community resilience can be described as "The capability to anticipate risk, limit impact, and bounce back rapidly through survival, adaptability, evolution, and growth in the face of turbulent change."¹



GOAL: ENCOURAGE PROJECTS AND FEATURES THAT ENHANCE THE IDENTITY AND IMAGE OF THE CITY.

OBJECTIVES:

- Ensure the character and image of the City of Maryland Heights is perpetuated in new development and redevelopment proposals.
- Encourage the expansion and strengthening of existing commercial areas.
- Encourage a better/improved range of retail and services, including hospitality and entertainment.
- Support the development of neighborhood retail and service opportunities.
- Encourage mixed-use developments that enhance the quality of life and community character by building efficient, compact, connected development.

ACTIONS

The following actions may be undertaken to implement the objectives of this goal:

- \Rightarrow Streamline review and approval processes for entertainment and hospitality uses.
- ⇒ Prepare corridor design guidelines for right-of-way improvements that may occur during any redevelopment or repair of the city rights-of-way.
- \Rightarrow Integrate the architecture and landscape along major streets and highway frontages to achieve a strong, unified appearance.
- \Rightarrow Ensure that new development along Dorsett Road is consistent with the Great Streets Plan.



GOAL: ENCOURAGE PROJECTS AND FEATURES THAT ENHANCE THE IDENTITY AND IMAGE OF THE CITY.



Development throughout the City of Maryland Heights should occur in a manner that creates character and adds value. This can be achieved through applying good design principles to site layout, access, landscaping, architecture, on-site stormwater management, connection to the regional stormwater management system, building scale, massing and orientation and the design and layout of parking. To implement the City's Strategic Plan, as well as the vision of the Comprehensive Plan, regardless of the specific land use, projects should have architectural quality, be integral with both infrastructure and open space, and relate to adjoining land uses.

Objective: Ensure the character and image of the City of Maryland Heights is perpetuated in new development and redevelopment proposals.

While ensuring both an economically productive pattern of development for the City and providing increased value to land owners is important, it is also critical that land be developed in such a way that enhances both the regional image of the City and provides for the needs of the overall community. Development proposals in the form of rezoning applications will be expected to address the following general questions regarding their impacts:

- Does the development improve Maryland Heights' image?
- DOES THE DEVELOPMENT PROVIDE A NEEDED AMENITY TO THE COMMUNITY?
- DOES THE DEVELOPMENT ADHERE TO THE GOALS AND STRATEGIES ESTABLISHED IN THE PLAN?
- Does the development's design add character to the City?



Objective: Ensure the character and image of the City of Maryland Heights is perpetuated in new development and redevelopment proposals.

What is the character and image of Maryland Heights? The City lacks the traditional character of some inner ring St. Louis suburbs or the historic downtown of places like the City of St. Charles. The emerging and future character of Maryland Heights, due to substantial public and private investment, is an image of quality. Quality public infrastructure like the Dorsett Road/Interstate 270 interchange, quality places to play like Creve Coeur Lake Memorial Park, quality places to work like the office campuses of the Westport area, quality places to stay like the modern hotels that now provide approximately 4,000 rooms, and quality places to live throughout the City whether multi-family or single-family homes. This image should be preserved, emphasized, and capitalized upon even as a variety of development and redevelopment is encouraged.



The first component that furthers development quality is quality begets quality; high quality development sets a tone that attracts additional high quality development that embodies sustainability and resiliency. It is envisioned that improved standards, planning of infrastructure improvements, and inclusion of amenities will attract even higher quality development, in which architecture, landscape, and urban design are fully integrated across new development and redevelopment throughout the City.

World Wide Technology Global Headquarters (Source: St. Louis Post Dispatch, 2017)



Objective: Ensure the character and image of the City of Maryland Heights is perpetuated in new development and redevelopment proposals.

Quality is a difficult concept to define, especially when it relates to real estate development. Quality and character are often thought of as subjective ideas that on the surface appear difficult to quantify and seem intangible. However, the fact that subjective concepts cannot always be quantified does not mean that fair, reasonable, effective standards cannot be established. It is well demonstrated that design standards related to land use, public facilities, site planning, building configuration, materials and orientation, landscaping, pedestrian facilities, signage, lighting, and other aspects of public and private development can be established and development character can achieve a certain level of "quality." At the same time, these standards must be administered efficiently and consistently without creating uncertainty and undue delay in the development review process.

"Public realm" is any publicly owned streets, sidewalks, right of ways, parks, and open spaces, as well as public and civic building and facilities.



However, the responsibility for quality does not solely rest within the private sector. It is equally important that the City apply the same high standards for the public realm as those to which private development is held. The manner in which streets are designed, development is integrated with public pedestrian facilities, and open spaces and public properties are maintained and operated are critical to community character.

"Streetscape" standards are particularly important: street landscaping, lighting, traffic control devices, signage, the location of utility lines, and other public infrastructure can be designed to achieve an overall aesthetic image, in addition to serving functional purposes.



Objective: Encourage the expansion and strengthening of existing commercial areas.

Objective: Encourage a better/improved range of retail and services, including hospitality and entertainment.

Objective: Support the development of neighborhood retail and service opportunities.

Within the City, commercial development (including potential for future commercial development) generally falls into four areas:

DORSETT ROAD COMMERCIAL CORRIDOR. Long considered the City's "Main Street," Dorsett Road offers an extremely wide variety of commercial uses. These include fast food and sit down restaurants, gas stations, automotive uses, and a number of other retail and service uses. As development is proposed along Dorsett Road, the City expects that it will comport with the principles set forth in Dorsett Road Great Streets Plan (June, 2013) and should provide both a local and regional appeal.

COMMERCIAL NODES. There are a number of smaller commercial nodes throughout Maryland Heights. These nodes primarily serve the local neighborhood and generally consist of small, locally owned businesses. Commercial development in these neighborhood nodes should offer a variety of goods and services to support nearby neighborhoods, but remain lower in intensity so as not to disrupt neighborhood character.

WESTPORT COMMERCIAL AREA. Serving as the City's key economic engine, this area includes Westport Plaza and the office and hospitality uses surrounding it. In recent years, obsolete industrial and distribution buildings have transitioned to, or been redeveloped in favor of, offices and restaurants. This pattern of adaptive reuse and reinvestment should continue to be encouraged.

MARYLAND PARK LAKE DISTRICT. The Comprehensive Plan advocates commercial development within much of the district in the form of mixeduse developments, regional retail, and service retail depending on the location.









Commercial developments should be appropriate in their given contexts with an overall emphasis on creating a draw to both local residents and regional visitors by creating a place of destination. Residents of Maryland Heights have also indicated a desire for a greater variety of retail options within the City. Yet changes in economic conditions and retail trends have shifted the retail and services market. The following is a brief explanation of various retail types, based on an analysis by *Who's Who Legal*:

THE ENCLOSED REGIONAL MALL



Source: SLBJ, 2020

The pace of regional mall development across the US has slowed to a virtual halt. This trend illustrates that, for the present, this formerly typical retail style of development has ceased to be built. The consolidation of the traditional department store industry has played an extremely important role in the shrinking construction of the traditional mall. Since the mid-1990s, the major department store chains have either disintegrated or merged. The traditional anchor tenant of the enclosed mall has diminished in number and impact. Given market conditions and consumer preferences, it is unlikely than an enclosed mall would be constructed in Maryland Heights.

POWER CENTERS



The decline of the regional mall was hastened by the popularity of the power center. The power center started as a collection of value retailers in major categories such as apparel, books, bed and bath, sporting goods, electronics, movie theatres and home improvement coupled with a section of small conventional retailers occupying smaller or less significant spaces. Soon the needs of the major power center retailers to fuel their growth by expanding the number of stores led to the power center becoming a collection of the "category killers" - retailers with large square footage and inventory that use buying power to sell at prices not usually achievable by the small tenant in the same category. As a result, small tenant space was typically not developed.

As adjuncts to the large free-standing retailers grouped together or near one another, power center developers reserved pad sites for smaller users such as restaurants, banks and small-space users that were no less dominant in their retailing category. Power centers are usually located near major highway transportation access, which is deemed necessary by the dominant retailers. While it is possible to walk from one store to another, typical site designs often make this impractical and dangerous. Future developments of this type within Maryland Heights, however, should include provisions for internal walkability such as incorporating safe and effective pedestrian connections throughout.





Colonial Marketplace, Rendering (<u>Source</u>: SLBJ, 2012)

THE LIFESTYLE CENTER

A lifestyle center, while similar to a power center, typically attracts higherend fashion-apparel mall tenants, restaurants, and high end homefurnishing stores. These centers are not typically enclosed and often try to emulate a traditional Main Street, placing a great emphasis on walkability. Successful lifestyle centers also include quality public spaces and landscaping.

BIG BOX RETAIL

A big-box store (also supercenter, superstore, or megastore) is a physically large retail establishment, usually part of a chain. Typical characteristics include the following:

- Retail stores selling a variety of goods and services, usually including clothing, consumer goods, and groceries
- Corporate ownership and nationwide chain presence
- Buildings of at least 50,000 square feet, ranging up to more than 200,000 square feet
- Mostly windowless, roughly rectangular, usually single-story buildings
- Standardized formats used by most or all stores in the chain
- Large, free, usually parking lots

To achieve the appropriate quality, any future development of this type must be consistent with the Building Design Standards of the Zoning Code which seek to minimize corporate architecture and create visual interest in building form. Also, and perhaps more importantly, the impact of large parking fields must be minimized through creative design approaches, proper building orientation, and landscaping.



A strip mall (also a shopping plaza, shopping center, or mini-mall) is an open-air shopping mall where the stores are arranged in a row, typically with a sidewalk in front of the building. Strip malls are often developed as a unit and have large parking lots in front. They generally face major arterials and tend to be self-contained with few pedestrian connections to surrounding neighborhoods. Walkability to and within strip malls should be a priority, retrofitting existing centers and properly designing new ones, particularly those located within neighborhood commercial districts or along Dorsett Road.



City of Maryland Heights Comprehensive Plan



SUPERMARKETS AND SUPERMARKET ANCHORED CENTERS

The supermarket-anchored neighborhood or community center (such as Dorsett Village) continues to be an important retail type. Supermarket types, however, have changed over the years from simple food sales to multi-department retail stores that contain pharmacies, florists, housewares, banks, and restaurants. In its own way, the supermarket has become an entertainment venue. Like big box retail, this development form often produces large visually obtrusive parking fields that should be improved by creative approaches to site design.

SUBURBAN IN-FILL RETAIL DEVELOPMENT

Opportunities exist throughout the City for infill retail within existing shopping venues. Market conditions, including changing preferences, mean that continued redevelopment and intensification of suburban infill sites are likely. This may include the adaptive reuse of some existing buildings and properties. This infill redevelopment should be encouraged by the City as a means of strengthening existing commercial areas.

Objective: Encourage mixed-use developments that enhance the quality of life and community character by building efficient, compact, connected development.

Suburban mixed-use projects are on the rise across the United States. The term "mixed-use development" holds a variety of meanings and can be applied to a wide range of community development projects. Development projects may be classified as "mixed-use" if they provide more than one use or purpose within a shared building or development area. Mixed-use projects may include any combination of housing, office, retail, medical, recreational, commercial, light industrial, or other components.

A single owner and business operator might occupy a mixed-use building, or multiple housing and commercial tenants could lease space within a mixed-use development project. Mixed-use projects often involve the redevelopment of buildings and blocks located in aging inner-city commercial districts. However, new construction of mixed-use development is occurring in urban and suburban communities as well.



Objective: Encourage mixed-use developments that enhance the quality of life and community character by building efficient, compact, connected development.

While mixed-use can take on many forms, it is typically categorized as vertical mixed-use buildings, horizontal mixed-use blocks, or mixed-use walkable neighborhoods:

VERTICAL MIXED-USE BUILDING

Combines different uses in the same building. Lower floors should have more public uses with more private uses on the upper floors. For example, the ground floor could have retail, second floor and up having professional offices, and uppermost floors being some form of residential, such as flats or a hotel. In more urban areas, an entire block or neighborhood may be composed of vertical mixed-use buildings.

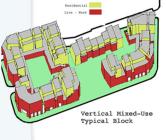
HORIZONTAL MIXED-USE BLOCKS

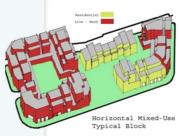
Combines single-use buildings on distinct parcels in a range of land uses within one block. In more urban areas, this approach avoids the financing and coding complexities of vertical layered uses while achieving the goal of placemaking that is made possible by bringing together complementary uses in one place. In less urban areas, horizontal mixed-use offers the advantage of sharing utilities and amenities while using conventional construction to create a mixture of uses within walkable blocks surrounded by an integrated street system.

MIXED-USE WALKABLE NEIGHBORHOODS

With the infinite number of various possibilities, these places combine vertical and horizontal use mixing in an area ideally within a five to ten minute walking distance (known as a pedestrian shed) or quarter mile radius of a neighborhood center.

Regardless of the form it takes, mixed-use development should be an integral part of most communities, creating unique places where people can live, work, play, and meet daily shopping and lifestyle needs within a single neighborhood. Mixed-use development is the preferred land use through the City and should be encouraged through the use of creative zoning procedures and economic development incentives.





<u>Source:</u> Urban Development Institute, 2013



GOAL: ENCOURAGE A SUSTAINABLE DEVELOPMENT PATTERN THAT ACCOMMODATES AND BALANCES BOTH ECONOMIC GROWTH AND COMMUNITY CHARACTER.

OBJECTIVES:

- Reduce energy consumption through the application of energy efficient design techniques and technologies.
- Encourage environmentally friendly building practices such as green roofs and permeable pavers in new development and redevelopment.
- Encourage redevelopment of buildings and properties that are experiencing functional or economic obsolescence.
- Create development patterns that result in efficient connection to the regional stormwater and transportation system.
- Encourage public infrastructure and facilities including roads, pedestrian connections, and streetscapes that are designed to promote both aesthetic and functional quality.
- Encourage green infrastructure in all redevelopment and new development.
- Establish and strengthen focal points, such as schools, parks, commercial districts, and other community gathering spaces.

ACTIONS

The following actions may be undertaken to implement the objectives of this goal:

- ⇒ Modify the Zoning Code to encourage alternative energy efficient technologies, green infrastructure, and other sustainable measures.
- ⇒ Modify the Subdivision Code to encourage alternative energy efficient technologies, green infrastructure, and other sustainable measures
- \Rightarrow Modify the Zoning Code to facilitate redevelopment of obsolete properties and buildings.
- \Rightarrow Inventory existing vacant commercial space, including zoning, transportation, and available utilities.
- ⇒ Evaluate impacts of current and proposed development on existing community character and infrastructure.
- \Rightarrow Encourage applications for green building/site certifications such as LEED, Green Globes, and PHIUS.

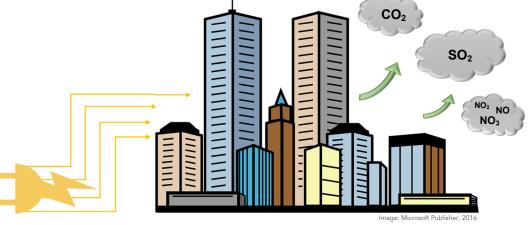


GOAL: Encourage a sustainable development pattern that accommodates and balances both economic growth and community character.

There are many ways to improve the sustainability and performance of new development, as well as redevelopment. Building energy efficient buildings, creating walkable communities, protecting natural resources, and encouraging healthy lifestyles are all ways in which the sustainability of our lifestyles is extended. It is the responsibility of development to adhere to these ideals and it is the role of the city government to take the long-view of these issues and encourage development that furthers it.

Objective: Reduce energy consumption through the application of energy efficient design techniques and technologies.

(<u>Source</u>: US Environmental Protection Agency, 2018) On an annual basis, buildings in the United States consume 36% of America's energy and 65% of its electricity. Likewise, buildings emit 30% of the carbon dioxide (the primary greenhouse gas associated with climate change), 49% of the sulfur dioxide, and 25% of the nitrogen oxides found in the air. Currently, the vast majority of this energy is produced from non-renewable, fossil fuel resources.



With the world's supply of fossil fuel dwindling, demand for fossil fuel rising, concerns for energy supply security increasing (both for general supply and specific needs of facilities), and the impact of greenhouse gases on the world's climate rising, it is essential to find ways to reduce load, increase efficiency, and utilize renewable fuel resources in facilities of all types.



Objective: Reduce energy consumption through the application of energy efficient design techniques and technologies.

According to the National Institute of Building Sciences, during the facility design and development process, building projects should have a comprehensive, integrated approach that seeks to:

- Reduce heating, cooling, and lighting loads through climateresponsive design and conservation practices;
- Employ renewable energy sources such as daylighting, passive solar heating, photovoltaics, geothermal, and groundwater cooling;
- Specify efficient HVAC and lighting systems that consider part-load conditions and utility interface requirements;
- Optimize building performance by employing energy modeling programs and optimize system control strategies by using occupancy sensors, CO² sensors, and other air quality alarms;
- Monitor project performance through a policy of commissioning, metering, annual reporting, and periodic re-commissioning; and
- Integrate water saving technologies to reduce the energy burden of providing potable water.

This process should be applied to the reuse or renovation of existing buildings as well. In early 2015, the City adopted the 2015 International Code Council model codes. At the time of this Plan's adoption, the City was in the process of adopting the 2021 codes. This body of codes covers all aspects of existing and new residential and commercial construction. Remaining current with these documents reinforces our ongoing effort to address many important concerns, including public health and safety, and environmental protection. The International Code Council publishes an updated code every three years. In order to maintain a favorable ISO rating which results in lower property insurance rates for the entire community, the City typically adopts the newest code on a six-year cycle. This affords staff the opportunity to monitor the needs of the community and amend the adopting ordinance if necessary.



Courtesy of the National Institute of Building Sciences



Objective: Encourage environmentally friendly building practices such as green roofs and permeable pavers in new development and redevelopment.

Low Impact Development (LID) is an approach to land development that works with nature to manage stormwater as close to its source as possible. LID helps improve area water quality by preventing harmful pollutants from being carried by stormwater runoff into local waterways. It attempts to preserve and recreate natural landscape features and minimize impervious surfaces to create functional and appealing site drainage that treats stormwater as a resource rather than a waste product.

LID uses site planning and engineering to reduce or prevent the adverse impacts of stormwater runoff from both residential and commercial developments. LID relies on both structural and nonstructural practices to conserve the site's natural or predeveloped hydrologic response to rainfall – the way rainfall is distributed among runoff, infiltration, and evapotranspiration.

"Green" roofs or vegetated rooftops consist of waterproofing and drainage mats, a special growing media, and plants able to withstand extreme climates. They have been shown to reduce runoff, increase evapotranspiration, prolong roof life, reduce building temperature, decrease energy costs, and help reduce the overall heat island effect.

Permeable pavements are an alternative to asphalt and concrete and allow water to infiltrate or pass through them, reducing stormwater runoff.

These features should be encouraged in new developments or retrofits to existing developments by incentives like extra credit toward landscaping requirements and/or density bonuses.



<u>Source:</u> Smart Cities World, 2021.



Objective: Encourage redevelopment of buildings and properties that are experiencing functional or economic obsolescence.

Functional obsolescence is the reduction in value due to the inability of the property to perform the function (or yield the periodic utility) for which it was originally designed. This also could be considered by a loss of building utility. If a building has reduced usefulness due to poor design or the presence of features that are no longer useful, the value of that building is reduced.



Examples might include buildings that are too small, lack sufficient parking, or have low ceiling heights. If a building is thought to be out-ofplace or poorly designed for its location, it could be considered functionally obsolete. Further if a house lacks a feature such as a side yard, or only contains one bathroom despite having five bedrooms, or lacks a garage, functional obsolescence occurs. Some instances of functional obsolesce can be fixed with building renovations or site improvements.

Photo Left: Before Photo Right: After



Objective: Encourage redevelopment of buildings and properties that are experiencing functional or economic obsolescence.

Economic obsolescence relates to the inability of property operations to generate a market-based rate of return on investment (ROI). This is also referred to as environmental, external, or locational obsolescence. Typically, this form of obsolescence occurs sometime after the property is built, as the environment around the property changes.





Photo Top: Before Photo Bottom: After Examples include increased airport noise, toxic waste, power plants, freeway noise, dust and air pollens, or changes in zoning. Therefore properties located next to the freeway or under a flight path will experience reductions in value. Economic obsolescence also can occur when market demand changes. An example might be a home with only one bathroom or small bedrooms. If newer properties in the area are being built with two or more bathrooms or large bedrooms, obsolescence can occur. Economic obsolescence is generally considered incurable, because it is out of the control of the owner of the property, and any effort to cure such a problem would be very costly and value depleting. However, it could also be the fault of the property owner by failing to maintain or update the property in a manner in keeping with the current market or neighborhood.

"Redevelopment" in this context typically means demolition followed by new construction. In situations where buildings are adaptable and worth saving, it could be achieved through adaptive re-use. The Westport area has seen a number of obsolete buildings originally intended for manufacturing or distribution transition to office or hospitality uses. This pattern should continue to be encouraged by creative zoning procedures that ensure sufficient parking while not being overly burdensome and economic development incentives where necessary and appropriate.



Objective: Create development patterns that result in efficient connection to the regional stormwater and transportation system.

Within a multi-level/multi-jurisdictional environment, the City will participate in regional planning efforts. To that end, the design and construction of a regional stormwater conveyance system to manage internal flooding is a major element of regional infrastructure being planned for the Maryland Park Lake District. Without this regional approach to stormwater management, a substantial amount of property will continue to be constrained for development by an internal flood event. Additional transportation system improvements are planned as well, and are in response to future land development throughout the City.

The conceptual approach to stormwater management was developed and submitted to the City by the Howard Bend Levee District. This plan employs a regional approach and utilizes Best Management Practices (BMP's) to develop a multi-functional system of stormwater management. Developers will be responsible for on-site drainage and conveyance to the regional stormwater system.

Quality development in the Maryland Park Lake District will require both an efficient and effective transportation system. The City will continue to plan for the regional transportation system of which the District is a part, particularly as development pressure in the area grows. For the district to develop in a coordinated and integrated manner, the transportation system must function holistically. That is, all components of the system should be evaluated on their effect on the system as a whole; certain types of land uses have a greater impact upon the system and consequently, will require varying levels of improvements to the system as a requirement of the regulatory process. The transportation system however, should not only be oriented solely to the automobile, but should accommodate and integrate pedestrians, bikeways, and transit (bus and light rail) in both development and design.

The Howard Bend Levee District has financed, constructed, and will maintain the Missouri River Levee protecting the Maryland Park Lake District from Missouri River 500-year flood events.



City of

Objective: Encourage public infrastructure and facilities including roads, pedestrian connections, and streetscapes that are designed to promote both aesthetic and functional quality.

Good design and advanced materials can improve transportation, energy, water, and waste systems, and also create more sustainable suburban environments. Further, the general public is increasingly demanding aesthetic enhancements to existing and proposed public infrastructure facilities. Streetscape standards are particularly important: street landscaping, lighting, traffic control devices, signage, the location of utility lines, and other public infrastructure can be designed to achieve an overall aesthetic image, in addition to serving functional purposes - and without compromising safety.

However, the aesthetic properties of infrastructure have purpose beyond simply creating a pleasant view. Aesthetics is intertwined with the function of the facility. An aesthetically pleasing highway or other transport mode is one that provides its users with a clear picture of what is going on around them and what is expected of them. This is accomplished by using techniques and materials to provide better definition of the elements of the facility, to visually highlight important information, and to reduce the stress on users that results from operating a vehicle in a complex environment. An example of this concept is provided by the City's investment in the Dorsett Road/Interstate 270 interchange which provides both form and function.



Objective: Encourage green infrastructure in all redevelopment and new development.

Green infrastructure uses natural hydrologic features to manage water and provide environmental and community benefits, and mimics natural water cycles. Green infrastructure incorporates both the natural environment and engineered systems to provide clean water, conserve ecosystem functions, and provide other benefits to people and wildlife.

Green infrastructure solutions can be applied on different scales, from the house or building level, to the broader regional level. At the local level, green infrastructure practices include rain gardens, permeable pavements, green roofs, infiltration planters, trees and tree boxes, and rainwater harvesting systems. At the scale of a neighborhood or development site, green infrastructure refers to stormwater management systems that mimic nature by absorbing and storing water. At the largest scale, the preservation and restoration of natural landscapes (such as forests, floodplains, and wetlands) are also critical components.

Green infrastructure can often provide more benefits at lesser cost than singlepurpose "gray" infrastructure. A growing body of research and experience demonstrates the potential for green infrastructure to improve the water management at multiple scales, while also providing natural resources preservation and pleasant regional outdoor spaces. Green infrastructure could be encouraged by offering incentives like extra credit toward landscaping requirements and/or density bonuses.

Objective: Encourage green infrastructure in all redevelopment and new development.

A **focal point** has a variety of definitions, but for the purposes of this comprehensive plan, it refers to **a place where people are drawn as a community.** These public spaces can be a gathering spot or part of a neighborhood, park, special district, or other area within the public realm that helps promote social interaction and helps create a sense of community. These places capitalize on building design, scale, architecture, and proportionality to create interesting visual experiences, vistas, or other qualities. They accommodate multiple uses and multiple users, and often take advantage of the environment and natural features.



The following land use definitions are included to establish a common vocabulary and set of expectations for the consideration of future land uses in the City:

















SINGLE-FAMILY RESIDENTIAL

<u>CHARACTERISTICS</u>: Includes detached dwellings, attached dwellings (villas), row houses and supporting features including, but not limited to, parks, playgrounds, walkways/bikeways, and other functional open space areas.

CRITERIA FOR DESIGNATION:

- Residentially zoned;
- Shown on future land use map; or
- Located within a mixed-use development under the following criteria:
 - Single-family dwellings are functionally and aesthetically integrated with compatible buildings and uses within the development;
 - Single-family dwellings are buffered from incompatible uses within or adjacent to the development;
 - Single-family dwellings will not adversely affect or conflict with adjacent uses or impede the development of surrounding property;

 Adequate and integrated public and private facilities, such as roads, sidewalks, walkways, utilities, stormwater management, open space, landscaping, parking, and circulation, are provided or will be provided;

- Open space areas are accessible to and integrated with adjacent commercial or business uses rather than freestanding.
- There is safe and efficient access for the anticipated traffic levels.

PURPOSE: To create high quality neighborhoods that include a range of housing options for people in all stages of life with integrated public and open space.





DENSITY: 4 to 8 dwelling units per acre.



SINGLE-FAMILY RESIDENTIAL

DEVELOPMENT GUIDELINES:

Encourage a range of unit types within each project that results in a diversity of housing opportunities not only in form, but in price range.

Discourage housing types to be clustered in such a manner that creates the perception of income differences.

Encourage architectural details that establish and enhance the neighborhood's character.

Encourage building materials that provide visual interest and texture to a building.

Encourage front yard features to be designed as part of the public realm, enhancing both the visual quality of the road system and walkability.

Encourage pedestrian connectivity within the project and to adjoining properties through sidewalks and walkways.

Encourage functional common ground areas that provide places to residents to gather, play, exercise, and/or relax.

Encourage the use of "green" infrastructure and energy efficient building materials and design.









MULTI-FAMILY RESIDENTIAL, COMMUNITY

CHARACTERISTICS: Structures designed to accommodate several unrelated households. Multi-family communities include garden apartments, townhouses, row-houses, mid-rise and high-rise apartment buildings, second-story (or higher) residential units over commercial space, and residential condominiums as well as the necessary development components to support the development as a community.

CRITERIA FOR DESIGNATION:

- Zoned for multi-family residential; shown on future land use map; or
- Located within a mixed-use development under the following criteria:
 - The proposed use will not be detrimental to the public health, safety, or general welfare;
 - The proposed use can be constructed in a manner that addresses the potential flood hazards on or adjacent to the site;
 - The proposed use will not adversely affect or conflict with adjacent uses or impede the development of surrounding property;
 - Adequate public and private facilities, such as infrastructure (roads, stormwater management, open space), landscaping, parking, and circulation, are provided or will be provided for the proposed use;
 - Availability or future availability of transit connections and the design of transit-oriented development;
 - There is safe and efficient access for the anticipated traffic levels.

PURPOSE: To provide for a residential community that creates a mix of unit types in appropriate locations by supporting variety and options in living environments while protecting and improving the community's property values.





DENSITY: 8 to 20 dwelling units per acre.



MULTI-FAMILY RESIDENTIAL, COMMUNITY

DEVELOPMENT GUIDELINES:

Architectural elements, such as colonnades, canopies, walkways, lighting standards, street furniture and variety in building materials, together with building massing and form, should create human scale.

Buildings are expected to include porches, varied rooflines and varied façade depths to create variety and individuality of dwelling units within the complex.

Freestanding garages and/or carports shall be designed to be integral with the building design or sited so as to avoid long monotonous rows of garage doors and building walls.







OFFICE FLEX

CHARACTERISTICS: Office space in combination with technology, research and development, retail, and/or clean, indoor fabrication/ assembly uses; all uses contained within structure; limited number of employees. Office flex generally does not involve the primary storage or distribution of materials, which may be included as an accessory use that includes appropriate screening and mitigation of loading docks and other related site elements.

CRITERIA FOR DESIGNATION:

- Identify as buffer use between higher/more intensive uses (i.e., office campus) and office distribution/industrial uses.
- Must have, or be able to provide sufficient infrastructure (road, water, sewer, stormwater) capacity.
- Office uses should be located along the "public" face of the structure facing public ROW or the publicly oriented portion of the development.
- Should be in proximity to service retail.
- Architectural design and associated characteristics should primarily be reflective of office development types (i.e. variety of architectural materials, etc.).



PURPOSE: To provide locations for office flex buildings that allow opportunities for multiple business uses in conjunction with similar surrounding office flex uses.

BUILDING SIZE:

Building sizes typically range from 10,000 to 50,000 square feet.

ROW: Right Of Way



OFFICE FLEX

DEVELOPMENT GUIDELINES:

Promote building designs, systems, and practices that are sustainable and adoptable to multiple uses in the interest of extending the building life cycle.

Architectural elements, such as colonnades, canopies, walkways, lighting standards, street furniture and variety in building materials, together with building massing and form, should create human scale.

Provide gateway features and design elements along public ROW.

Integrated open space in coordination with stormwater management system designed as a site amenity.





OFFICE CAMPUS

CHARACTERISTICS:

Large-scale employment centers and a mix of single/multiple tenant office buildings; may include some institutional and public/quasi-public uses such as hospital/medical or government offices; personal service and accessory uses including restaurants, local retail, hotel/motel; multi-story buildings; integrated site design to encourage walkability, connections to parks and trails system and including public open spaces.

CRITERIA FOR DESIGNATION:

- Access to existing or proposed public facilities and infrastructure such as roads, stormwater, and sewer to serve buildings and occupants.
- Location at gateways, along major corridors, and at highway interchanges
- Incorporation of building and site design to minimize environmental impacts.
- Adjacent to employment-supportive land uses, including mixed-use, entertainment, and retail.



PURPOSE: To provide opportunities for corporate and regional offices and accessory uses in a well-designed and integrated campus setting.



Edward Jones, North Campus.

BUILDING SIZE:

Overall building sizes typically range from 100,000 to 250,000 square feet; typical building footprints range from 30,000 square feet to 50,000 square feet for multiple story buildings



OFFICE CAMPUS

DEVELOPMENT GUIDELINES:

Promote building designs, systems, and practices that are sustainable and adoptable to multiple uses in the interest of extending the building life cycle.

Architectural elements, such as colonnades, canopies, walkways, lighting standards, street furniture and variety in building materials, together with building massing and form, should create human scale.

Provide gateway features and design elements along public ROW.

Integrated open space in coordination with stormwater management system designed as a site amenity.

Provide the usability and connectivity of the pedestrian environment by enhancing internal access within the campus, providing access to the public realm of the street and/or open space features.



OFFICE DISTRIBUTION

CHARACTERISTICS:

Business services, warehousing, distribution center; typically a planned park or campus development; limited number of employees; may include wholesale uses with distribution but without a local retail outlet; all uses contained within structure; loading docks screened from public view.

CRITERIA FOR DESIGNATION:

- Must have or provide sufficient infrastructure (road, water, sewer, stormwater) capacity.
- Sufficient land area for internal roadway network that can accommodate large over the road trucks.
- Access to a major roadway through a connector street.



PURPOSE: To provide for locations for combined office and distribution facilities.

SITE SIZE:

Minimum site size is typically 5 to 10 acres.



OFFICE DISTRIBUTION

DEVELOPMENT GUIDELINES:

Architectural design to incorporate design features that create visual relief and shadow into the façade, articulation of building entrances as visual features and focal points, and allows for variety in building surface materials.

Gateway features utilized along public right-of-way.

Integrated open space in coordination with stormwater management system designed as a site amenity.

Provide connections to the open space system.

Adequate screening of loading docks from the public ROW.



LIGHT INDUSTRIAL

CHARACTERISTICS:

Large-scale employment centers and a mix of single/multiple tenant office buildings; may include some institutional and public/quasi-public uses such as hospital/medical or government offices; personal service and accessory uses including restaurants, local retail, hotel/motel; multi-story buildings; integrated site design to encourage walkability, connections to parks and trails system and including public open spaces.

CRITERIA FOR DESIGNATION:

- Access to existing or proposed public facilities and infrastructure such as roads, stormwater, and sewer to serve buildings and occupants.
- Location at gateways, along major corridors, and at highway interchanges
- Capable of building and site design to minimize environmental impacts, including low impact developments or Leadership in Energy and Environmental Design (LEED) standards.
- Adjacent to employment-supportive land uses, including mixed-use, entertainment, and retail.



PURPOSE: To provide opportunities for clean, indoor research, development, assembly, manufacturing, warehousing, and distribution, along with supportive goods and services at locations that allow for moderate transportation impacts.

BUILDING SIZE:

Typical gross floor area of 50,000 to 250,000 square feet.



LIGHT INDUSTRIAL

DEVELOPMENT GUIDELINES:

Architectural design to incorporate design features that create visual relief and shadow into the façade, articulation of building entrances as visual features and focal points, and allows for variety in building surface materials.

Integrated open space in coordination with stormwater management system designed as a site amenity.

Provide connections to the open space system.

Adequate screening of loading docks from the public right-of-way.



SERVICE RETAIL

<u>CHARACTERISTICS</u>: Retail, restaurant and personal service businesses that offer convenient access for employees and visitors of nearby development; primary trade area for service retail is three to six miles.

CRITERIA FOR DESIGNATION:

- Located along collector street or higher.
- May be located within office or industrial district as part of a larger development.
- Contains a variety of businesses and services at various scales, does not include large scale retail ("big-box") uses.
- Ability to provide vehicle and pedestrian connections to surrounding uses.
- Compatible with surrounding neighborhood.
- Integrated into adjacent uses.

PURPOSE: To provide for local and community retail demand generated by surrounding land uses.





BUILDING SIZE: 10,000 to 50,000 square feet, individual building footprints tend not



SERVICE RETAIL

DEVELOPMENT GUIDELINES:

Architectural elements, such as colonnades, canopies, walkways, lighting standards, street furniture and variety in building materials, together with building massing and form, should create human scale.

Gateway features utilized along public right-of-way.

Integrated open spaces and public spaces, such as outdoor patios with restaurant seating.

Stormwater management designed as a site amenity and integrated into the open space system.

Buildings that derive their image solely from applied treatments that express corporate identity are discouraged.



REGIONAL RETAIL

CHARACTERISTICS: Intensity may range from smaller scale to large-scale retail and may include a combination of use sizes; no residential uses; mix of auto-oriented and pedestrian oriented uses; often includes pad sites along major roadways for convenience goods, restaurants and services. The primary trade area for regional retail is five to fifteen miles.

CRITERIA FOR DESIGNATION:

- Interchange or intersection of arterial streets or higher.
- High visibility location.
- May include ancillary office uses but no residential uses.
- Must have or provide for sufficient infrastructure (road, water, sewer, stormwater) capacity.
- Sufficient land area for internal roadway network.



PURPOSE: To provide opportunities for regional as well as local retail and service demand at a destination site with proximity to many users and accessibility locally and regionally.

BUILDING SIZE:

10,000 to 50,000 square feet, individual building footprints tend not to exceed 50,000 square feet.



REGIONAL RETAIL

DEVELOPMENT GUIDELINES:

Present an integrated connected appearance.

Designed to front on access roads with parking primarily located behind the buildings.

Facades should be articulated to reduce the massive scale and the uniform appearance of large retail buildings, provide visual interest, and introduce human scale elements along the walkways fronting the building.

Building design and entrances should be designed to reduce walking distances from parking lots and facilitate pedestrian access.

Signage consolidated and integrated into the architecture.

Stormwater management and open space will be integrated into the development and utilized as a multi-functional site amenity.

Parking areas should promote safe, convenient, and efficient access for vehicles and pedestrians.



ENTERTAINMENT

CHARACTERISTICS: State-licensed gaming facilities; hotels/motels; restaurants; specialty retail; entertainment and hospitality uses; recreation-oriented uses; administrative services; convention and exhibition spaces.

CRITERIA FOR DESIGNATION:

- Adjacent to existing entertainment uses.
- Must have or provide sufficient infrastructure (road, water, sewer, stormwater) capacity.
- Sufficient land area for internal roadway network.
- Connections to and integration with adjacent uses.



PURPOSE: To provide opportunities for entertainment and hospitality uses in prominent accessible locations that complements and enhances existing entertainment uses.

BUILDING SIZE:

10,000 to 100,000 square feet, individual building footprints tend not to exceed 100,000 square feet (buildings may be larger when integrating multiple tenants into a single structure).



ENTERTAINMENT

DEVELOPMENT GUIDELINES:

Present an integrated connected appearance.

Facades should be articulated to provide human scale and reduce the uniform appearance of large scale buildings and provide visual interest.

Building design and entrances should be designed to reduce walking distances from parking lots and facilitate pedestrian access.

Signage consolidated and integrated into the architecture.

Stormwater management and open space will be integrated into the development and utilized as a multi-functional site amenity.

Parking areas should promote safe, convenient, and efficient access for vehicles and pedestrians.



Centene Community Ice Center)



MIXED-USE

CHARACTERISTICS: Broad mix of uses with compatibility ensured through site design; integrated pedestrian circulation throughout site and to surrounding uses; building size and use intensity can vary across development; can be tourist and/or recreation oriented; general and specialty retail; mix of multifamily housing types; open spaces and public spaces; seen as a catalyst for high quality development; useful in creating compact development nodes centered on plaza's and other public spaces.

CRITERIA FOR DESIGNATION:

- Sufficient access to support higher density of development.
- Connection between open space active recreation and other uses.
- Must have or provide sufficient infrastructure (road, water, sewer, stormwater) capacity.
- Sufficient land area for internal roadway network.
- Increased access to the transportation network.
- Access to alternative modes of transportation.
- Promotes a sense of community and place.
- Provide increased access and connection to public places and open space.







PURPOSE: To provide for a dense, compatible mix of retail, residential, commercial business and hospitality land uses.



MIXED-USE

DEVELOPMENT GUIDELINES:

Mixed-use developments should create an inviting and attractive destination for local residents and region wide users. Buildings, and spaces between buildings, should be designed and oriented to create safe, pleasant, and active environments.

The development's circulation system should promote efficient movement of vehicles in a clear and well-defined manner that minimizes conflicts with pedestrians and bicycles. Pedestrian users should find that public spaces and gathering places are clearly identified and easy to access and locate.

Landscaped areas should be used to frame and soften structures, to define site functions, to enhance the quality of the environment, and to screen undesirable views. Landscaping should work with buildings and surroundings to make a positive contribution to the aesthetics and function of both the specific site and the area.

Visitors and residents should be able to locate and identify major attributes of the development through a unified signage concept.

Visitors and residents should find that the development provides the best possible design to protect their personal safety and safety of their property.



INSTITUTIONAL

CHARACTERISTICS: Multi-functional uses that serve the immediate neighborhood or greater community. May include housing facilities that are accessory to a civic use, such as student dormitories.

CRITERIA FOR DESIGNATION:

- Accessible and useable for neighborhood residents.
- Civic uses that are permitted throughout the city, such as day care centers and religious assembly, should not be limited to only the civic land use designation.
- Must have or provide for sufficient infrastructure (road, water, sewer, stormwater) capacity.



Maryland Heights Community Center

PURPOSE: Provide necessary civic activity to a community, these uses typically include governmental, educational, and cultural activities. Located throughout the community, institutional land uses take a variety of forms from single buildings to campuses.



BUILDING SIZE: 25,000 to 75,000 square feet.



INSTITUTIONAL

DEVELOPMENT GUIDELINES:

Manage the expansion of major institutional uses to prevent unnecessary impacts on established neighborhood areas.

Preserve the availability of sites for civic facilities to ensure that facilities are adequate for population growth.

Promote building designs, systems, and practices that are sustainable and adoptable to multiple uses in the interest of extending the building life cycle.

Architectural elements, such as colonnades, canopies, walkways, lighting standards, street furniture and variety in building materials, together with building massing and form, should create human scale.

Provide gateway features and design elements along public right-of-way.

Integrated open space in coordination with stormwater management system designed as a site amenity.

Provide the usability and connectivity of the pedestrian environment by enhancing internal access within the campus, providing access to the public realm of the street and/or open space features.



ADDITIONAL RESOURCES

DORSETT ROAD GREAT STREETS PLAN (2019)

Download the plan at: https:// www.marylandheights.com/departments/ community_development/planning_and_zoning.php

