Urban Design Element

Data, Inventory & Analysis

Approved August 12, 1991 • Amended June 8, 2009

SUPPORT DOCUMENT

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1. BACKGROUND

Orlando, “The City Beautiful,” is one of the nation's most attractive tourist destinations, and an important magnet for corporate relocations. The City's growth and prosperity is due, in no small part, to its quality of life and its Southern charm. The Urban Design Element is intended to place into clear focus those goals, objectives and policies that, if effectively pursued, will allow Orlando to retain its unique image and maintain its quality of life, yet ensure that new growth will blend well with this established identity.

Under a grant from the Florida Department of Community Affairs, the Growth Management Division embarked upon a study of urban design opportunities and constraints throughout the City of Orlando. The research for the study completed in November 1987, provided a significant portion of the background data and analysis for the 1991 Growth Management Plan Urban Design Element. The 1987 urban design study was prepared by consultants Wallace, Roberts and Todd, local Landscape Architect Herbert Halback, and Architect Leslie Divoll.

From this study and based on continuing research and analysis, three development patterns have been identified: Traditional City, Post World War II Developments, and New Urbanist Development Opportunities. These development patterns are included in the Community Design section of the Support Document.

The Support Document provides an overview of the present urban design framework of the City as a whole. To properly understand the complex structure of existing conditions, each of the following components has been separately mapped and evaluated.

- Existing Conditions: an overview of the existing development patterns and patterns of change within the City.

- Community Design: Detailed analysis of Orlando's three development patterns: Traditional City, Post World War II Developments and New-Urbanist Development Opportunities.

- Urban Design Challenges: Analysis of some of the urban design challenges associated with development and redevelopment proposals.

- Urban Design Tools: Programs and standards that will impact and assist the City's development character.

- Aspects of Urban Design: patterns of tree cover densities, lakes, scenic features and civic architecture.

Once these separate components are understood individually, they can be reassembled and depicted as the urban design framework. However, this overview only provides a conceptual "planner's view" of how the city is perceived. To be effective, urban design analysis must define "how the City looks" to residents and visitors, not just how it may be mapped or structured in theory. Many of the factors that contribute to the aesthetics of the City, including architectural styles of buildings, ages of neighborhoods, development patterns and landscape qualities are not subject to City-wide mapping and evaluation. These factors must be examined in context of the factors that define the uniqueness of Orlando.

The City of Orlando's Growth Management Plan, Land Development Code, and neighborhood and special plans describe the preferred land patterns for the City and for specific neighborhoods. Collectively, these documents help create the physical character and visual image of Orlando as a whole. The following observations, analysis and conclusions provide a common framework for understanding the urban forms that these documents seek to enhance.

2. EXISTING CONDITIONS

Overview

The City of Orlando is comprised of three types of development patterns: the Traditional City, Post-World War II development and New Urbanist neighborhoods.

Most long time residents consider the Traditional City to be the true "Orlando". The Traditional City has diverse neighborhoods of mixed architectural style and size, numerous civic activities, recognized historic districts, a gridded street pattern with numerous through streets and neighborhood connections, a high degree of pedestrian activity, an abundant landscape with large street trees, and lakes accessible to the public. In the Traditional City, residents can work, shop and play in close proximity to their homes, taking advantage of the many recreational opportunities, cultural amenities and accessible open space. This sense of community and feeling of accessibility inherent to the Traditional City is vital and must be preserved and enhanced.

Post-World War II communities differ from the Traditional City, offering an alternative lifestyle. Residential and commercial areas are more dispersed and inwardly oriented, often facing away from access streets. Architectural styles and land uses tend to be more homogeneous than those found in the Traditional City. Pedestrian access is fragmented and the automobile often dominates the design. Incorporation of positive Traditional City elements into Post-World War II communities would improve their form and livability. Increasing densities in these locations is challenging, but represents one of the City's best tools for fighting sprawl.

A large percentage of Orlando's land area is devoted to single family and mixed density residential uses that extend from the peripheral suburban fringe directly to and surrounding the Downtown core. Orlando has historically developed as a city of low-density, traditional, grid street residential neighborhoods in its center, with suburban, curvilinear street

development around the perimeter. Multifamily residential development is largely clustered along the suburban periphery, particularly in the newer southeast and southwest quadrants of the City.

Many older commercial strips criss-cross the City through large, low-density residential areas. Principal among these are Orange Blossom Trail (SR 441), Semoran Boulevard (SR 436), Colonial Drive (SR 50) and Edgewater Drive (SR 424). The commercial strips close to the Downtown areas have a multi-use, compact, pedestrian oriented development pattern, while Post-World War II commercial strips are single use and vehicle-oriented.

Major neighborhood and community shopping centers are located along most arterial roads. However, regional shopping is concentrated at Fashion Square Mall and Colonial Town Center on Colonial Drive, near Orlando Executive Airport; the Mall at Millenia located east of I-4; and the Florida Mall south of Downtown, along Sand Lake Road.

Industrial uses were originally concentrated in the northwest quadrant of the City, in a wedge defined generally by Orange Blossom Trail and the East-West Expressway. Areas now identified for future, concentrated industrial growth are located in the southwest quadrant and on lands to the west of Orlando International Airport.

Significant land area in Orlando is designated for activity center uses. The largest single activity Center is the Orlando International Airport. Other activity centers include a more typical mix of commercial, office and residential uses. They include Verandah Park (Metrowest), International Drive, Millenia, Downtown, Fashion Square/Colonial Town Center and smaller areas along major corridors such as Semoran Boulevard, Orange Avenue, Colonial Drive and Orange Blossom Trail. These areas promote an intensive mixture of employment, goods, services and residential uses to achieve the highest standards of quality in the urban environment.

The tourist district is an important and unique component of Orlando's development pattern. This district, the International Drive area, encompasses some of the area's major theme parks and tourist attractions. Universal Studios is located to the north.

New Urbanist development techniques (Traditional Neighborhood Design) represent an opportunity for the City to capture the best characteristics of both the Traditional City and Post-World War II development in order to create a new urban form for Central Florida. New Urbanist communities are newly constructed areas, but include mixed uses and other positive design elements of the Traditional City. Successful new urban communities include Baldwin Park and Northlake Park at Lake Nona.

Key urban design issues in the new growth areas focus on the implications of present code regulations for the development of large scale residential and retail development. The issue is whether the City's present development standards concerning landscaping, densities, setbacks, parking, building scale, signs, etc., will produce desirable urban design characteristics. The option and incentives for Traditional Neighborhood Design principles will however allow

compact, pedestrian and transit-oriented villages in newly developing areas and will be promoted by the City.

Patterns of Change

Since 1980, the City has experienced considerable growth in its land area, as a result of numerous annexations. According to the City of Orlando 2006-2030 Growth Projections Report, Orlando's land area increased by 42,904 acres (67 square miles) from 1980 to 2006, or 155%. Much of this acreage can be found on the Orlando International Airport property and within the Southeast Orlando Sector Plan and Vista East annexation areas in southeast Orlando. Much of this land was vacant when annexed, however it is anticipated that the resident population per square mile will increase as development in the annexed areas proceeds into the future.

Figure UD-A shows the resident population growth forecast for the City between 2006 and 2030. Greatest population growth is expected in the Southeast area and Downtown, within the Traditional City area.

The southeast area contains both well established business areas along South Orange Avenue, Michigan Street, Curry Ford Road and Semoran Boulevard, as well as large greenfield areas where significant residential and non-residential development is anticipated in the next 22 years. The southeast includes the Orlando International Airport (OIA), which is projected to expand by millions of square feet, with the addition of a new southern terminal and support aviation facilities. The OIA acts as a magnet for numerous industrial, warehouse/distribution and office uses. There are nearly a dozen DRI's centered around the OIA, including LeeVista, Airport Lakes, Semoran CommerceCenter, Lake Nona, Vista Park, Airport Industrial Park Orlando, along with several sub-DRI level projects. A new medical services cluster is underway within Lake Nona, which is the home of the new UCF Medical School, Burnham Institute for Biomedical Research, and proposed VA hospital and proposed Nemours Children's Hospital.

The Traditional City experienced a tremendous amount of infill development and redevelopment between 2000 and 2009. Orlando's Traditional City is located wholly within the City's adopted Transportation Concurrency Exception Area (TCEA) and is therefore considered part of an infill and redevelopment area under Florida Statutes. The Downtown area has undergone a tremendous resurgence in recent years and is characterized by the highest intensities of development found anywhere in the Central Florida region, with the potential to accommodate a significant amount of vertical development. It is projected that Downtown Orlando will experience growth totaling 317 single-family units, 9,631 multifamily units, 5.38 million office square feet, 826,000 retail square feet, 1,375 hotel rooms, 60,000 hospital square feet and 1.44 million square feet of civic/government space by 2030.

It is forecast that the City of Orlando will grow at a relatively steady rate in terms of population and employment between 2009 and 2030. Intensification of the Downtown, continued development of the tourist/attractions area in the southwest and new development in large

greenfield areas such as Vista East and the Southeast Orlando Sector Plan area is expected during this timeframe.

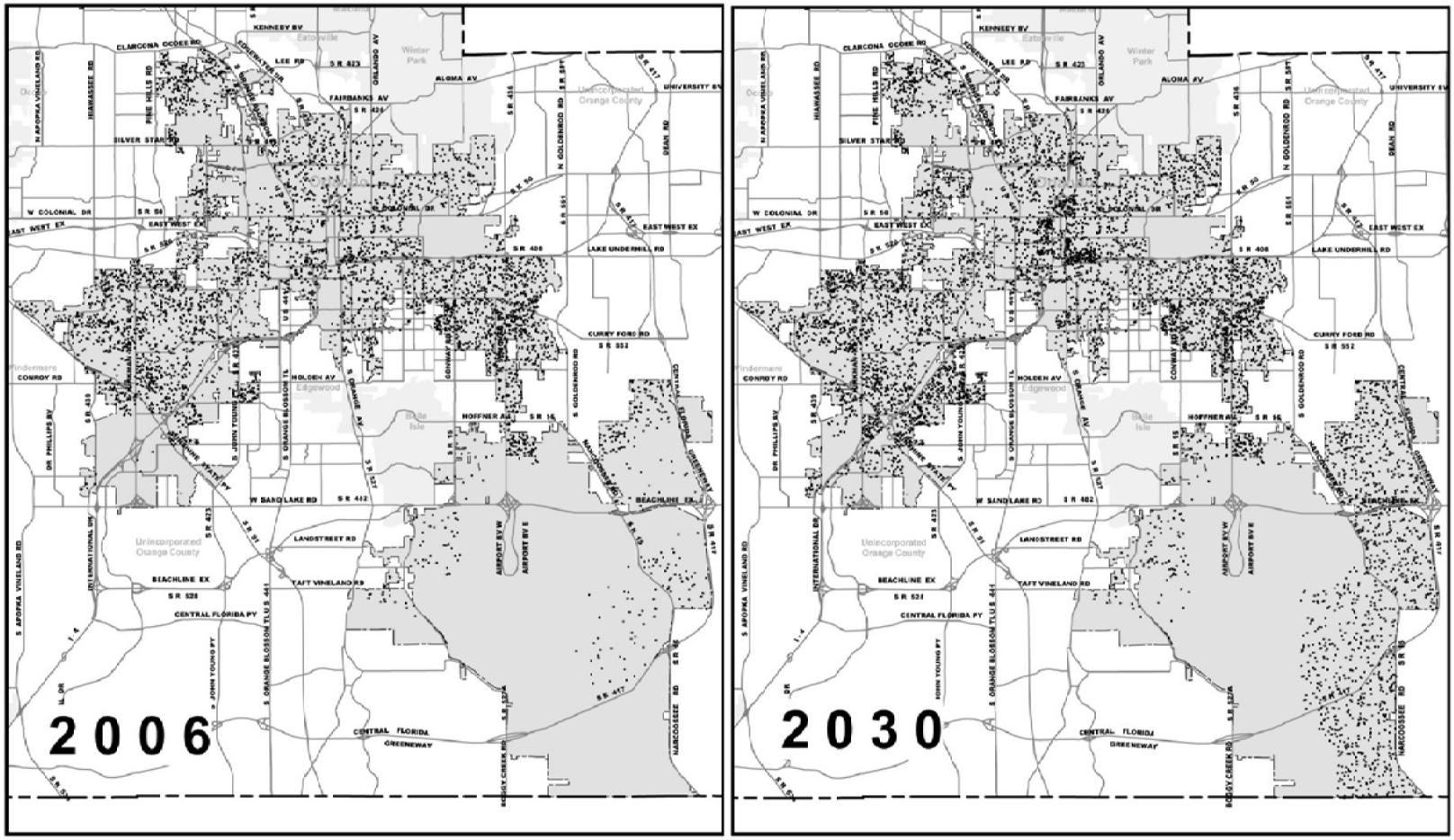
The City's primary future land use goal is to promote quality mixed use development and accommodate growth while enhancing and protecting neighborhoods, the building blocks of the community. To achieve this goal, the City will focus on promoting quality infill development and redevelopment to strengthen the character of the Traditional City, while creating new opportunities to introduce the positive features of the Traditional City in suburban and newly developing areas.

The majority of future growth within the City should be accommodated using Traditional City infill standards, or New Urbanism standards for newly developing greenfield areas. The City has plans and standards in place to ensure high quality design for future development and redevelopment and must continue to focus attention on areas experiencing less growth and/or in need of revitalization.

The following section entitled "Community Design" explains in further detail the urban design concepts associated with the City's three development patterns.

Figure UD-A

Population 2006 & 2030



LEGEND

City of Jurisdiction

Each Dot Represents 50 People

NORTH

City of Orlando Economic Development Department:
City Planning Division May, 2008

3. COMMUNITY DESIGN

The City of Orlando is comprised of three types of existing development patterns: the Traditional City, Post-World War II development and New Urbanism development opportunities. The Traditional City and Post World War II developments are both characterized by the presence or absence of specific urban design elements and defined by recognizable geographic boundaries (Figure UD-1). Each development pattern contains residential and commercial components. New Urbanist development is based on Traditional Neighborhood Design (TND) and is intended to promote connection and diversity.

Traditional City Development

Orlando's Traditional City neighborhoods have an urban form that is coherent and concentrated, accessible, diverse and possess strong neighborhood identities. Coherence can be established by a regular and predictable pattern of elements. A concentrated urban form results from the relationship between buildings and open space. Design elements create the coherent and concentrated form of Orlando's Traditional City neighborhood residential areas. These positive design elements include: similarly sized lots, the gridded street pattern; narrow brick roads with on-street parking; a well established shade tree canopy; generous parkways; mature landscaping; varied but relatively limited building setbacks; compact buildings of similar mass and scale that are typically no more than two to three stories high, oriented to the street and constructed in a variety of architectural styles. Figures UD-B, C and E illustrate some of these positive design elements. Figure UD-D illustrates residential infill which does not incorporate positive Traditional City design elements. Such infill ignores the mass and scale of existing residential patterns, and includes architectural styles that are incompatible with surrounding structures, buildings that are oriented away from the street, and landscape plantings that are virtually nonexistent.

Orlando's Traditional City neighborhoods are walkable. Parks, schools and neighborhood recreation centers are close to most homes. The diversity of architectural styles is engaging. Lakes are publicly accessible, often forming a focal point for a neighborhood, and the mature tree canopy and abundance of green open space heighten the pleasant pedestrian experience. The urban form established by the gridded street pattern and the presence of sidewalks further facilitates pedestrian traffic, as well as other forms of transportation.

The land use pattern of the Traditional City is that of economically mixed neighborhoods with desirable features such as "mom and pop" neighborhood convenience stores, elementary schools located within walking distance of homes, garage apartments, community centers, day care centers, churches and home occupations on the same block. This diversity contributes to the sense of community and to neighborhood identity and should be permitted to continue.

Positive Traditional City Design Elements

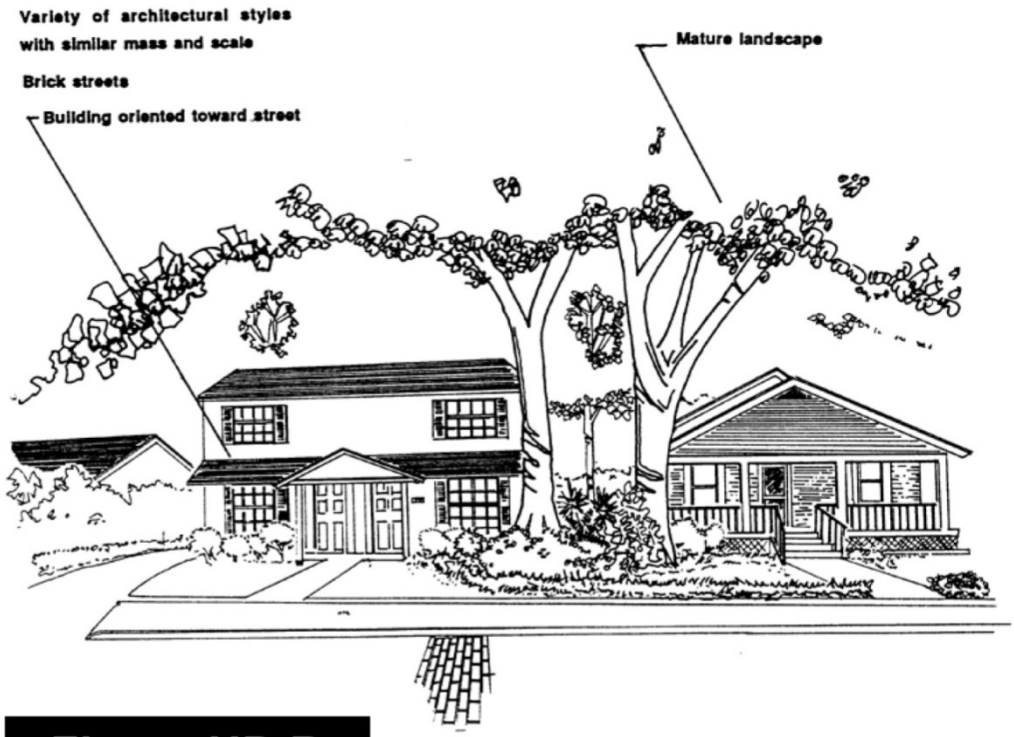


Figure UD B

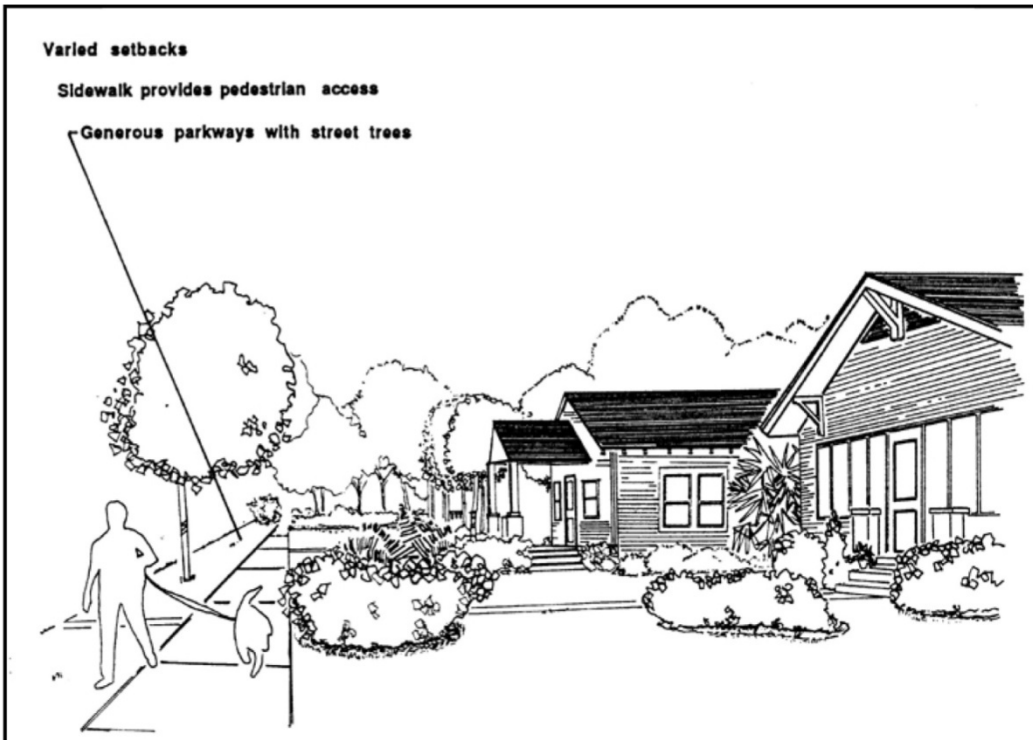


Figure UD C

Inappropriate Residential Infill

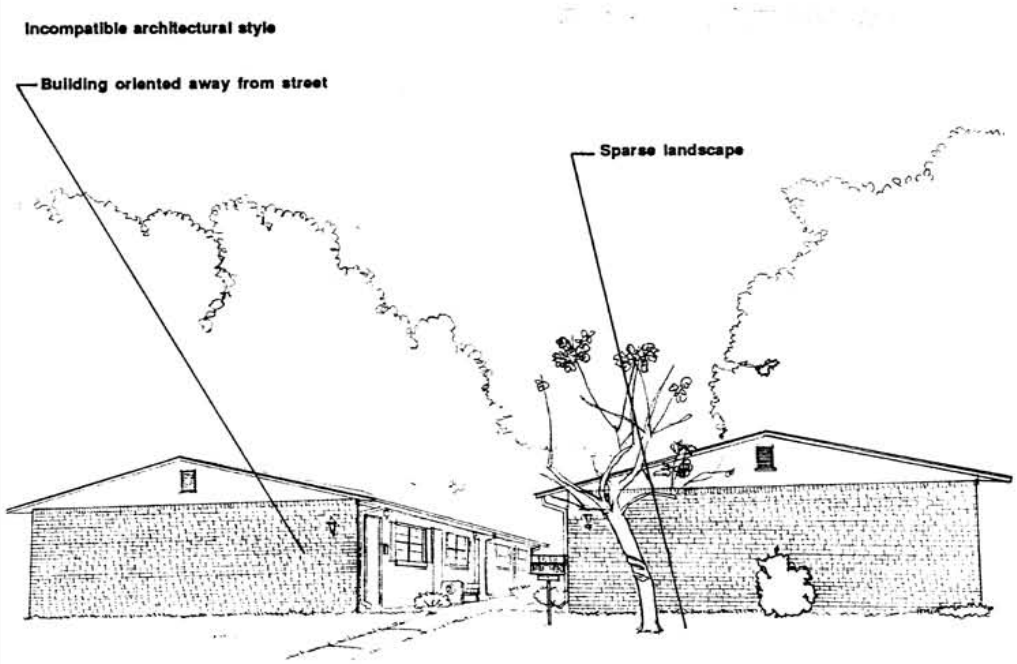


Figure UD D

Positive Traditional City Design Elements

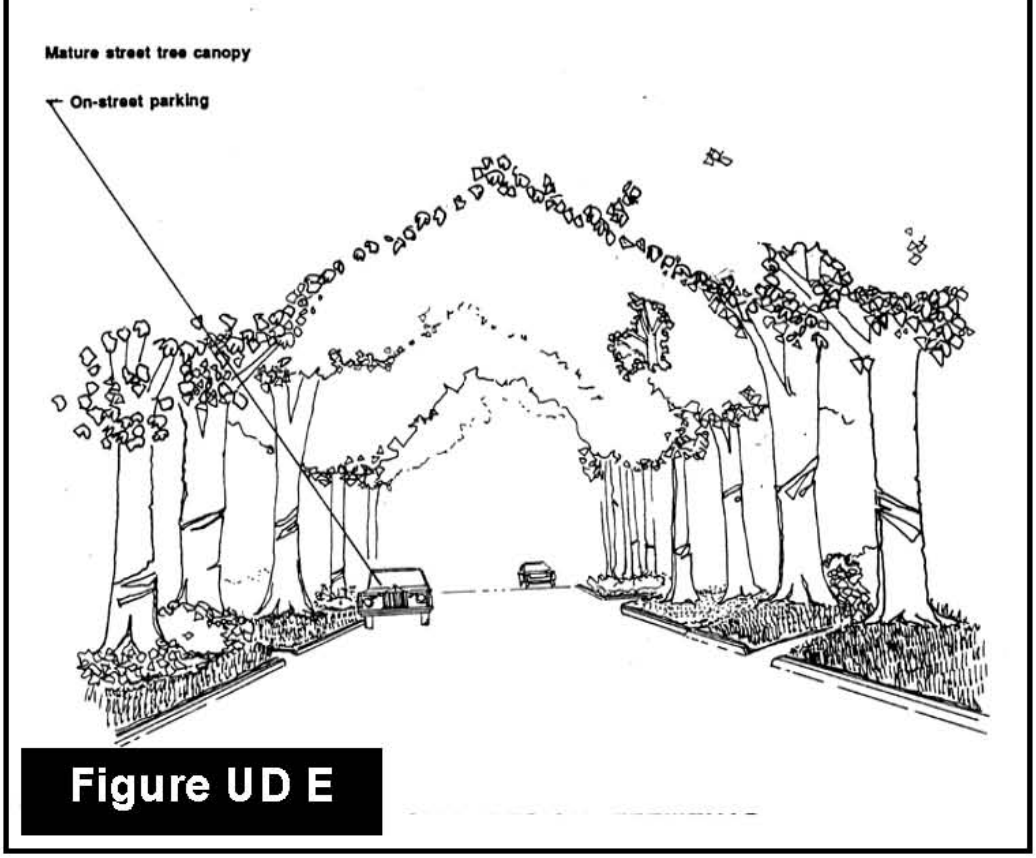


Figure UD E

Disruption to a residential neighborhood can be caused by incompatible land uses or incompatible design of new development. Low intensity office uses are generally considered acceptable as a transitional land use if the character of the surrounding residential area is respected. Converted single family homes or new office buildings should exhibit a massing comparable to adjacent residential structures. The solid-to-void relationship, or the regular placement of buildings and open space along the roadway, represents the rhythm of the neighborhood and should also be maintained. Existing building scale, diversity of architectural style, setbacks and orientation to the street must also remain consistent.

Figure UD-F depicts an example of appropriate infill development. The structure in the background is a typical older two story wood frame hip-roofed home. The structure in the foreground is a recent infill office structure. Note that the design is not an artificial duplication of nearby buildings. Rather, it is a contemporary adaptation which reflects the scale, massing, directional expression and texture of surrounding buildings. Also note that landscaping has been introduced which, when mature, will contribute to the tree canopy. Figure UD-G illustrates inappropriate office infill. The structure in the foreground does not reflect the form and proportion of surrounding structures, nor the established street pattern.

Traditional City activity centers and mixed use corridors provide an opportunity for shopping and employment close to residential neighborhoods. Activity centers, characterized by a diversity of uses, are located at the intersections of two thoroughfares. These centers are occupied by a concentration of intense activities including employment, high density residential, commercial and cultural facilities. Examples of Orlando's pedestrian-oriented activity centers are identified in Figures UD-2 through UD-6. Through establishing urban design standards, positive design characteristics can be reinforced to intensify the concentrated urban form of activity centers.

Mixed use corridors are transportation corridors that interconnect or extend from activity centers and offer opportunities to reinforce a concentrated and efficient future development pattern. Mixed use corridors possess a mixture of land uses including commercial, office, services, institutional and residential development. These corridors are intended to provide for and encourage concentrated areas of mixed use development along these major transportation corridors.

Traditional City commercial areas frequently exhibit a compact form, provide an environment that meets the diverse needs of the community and project a sense of identity. They are pedestrian-oriented to varying degrees, depending upon infill development and roadway treatment. Their compact urban form is affected by a street wall in which buildings between side streets appear to be continuous and have similar setbacks, generally between zero and five feet. In essence the buildings form the wall of a room in which the street is the floor. Also contributing to the compact urban form are buildings of similar mass and scale: buildings relate to one another in form and proportion. Legibility of the areas is enhanced by the rhythm of the street grid. On-street parking and the location of parking lots behind buildings encourage pedestrian activity. A strong relationship to human scale is established by the consistent

orientation of buildings to the street, the variety of architectural styles, and active ground floor uses which cater to the pedestrian. Traditional City commercial areas commonly possess a sense of arrival and departure: upon entering the area one is aware of the more concentrated mass and scale of the built environment, and structures are close to the street. Traditional City commercial areas are recognized as a destination and focal point for the community and project a sense of identity. Figure UD-H illustrates many of the positive design elements of Traditional City commercial areas.

Appropriate Office Infill

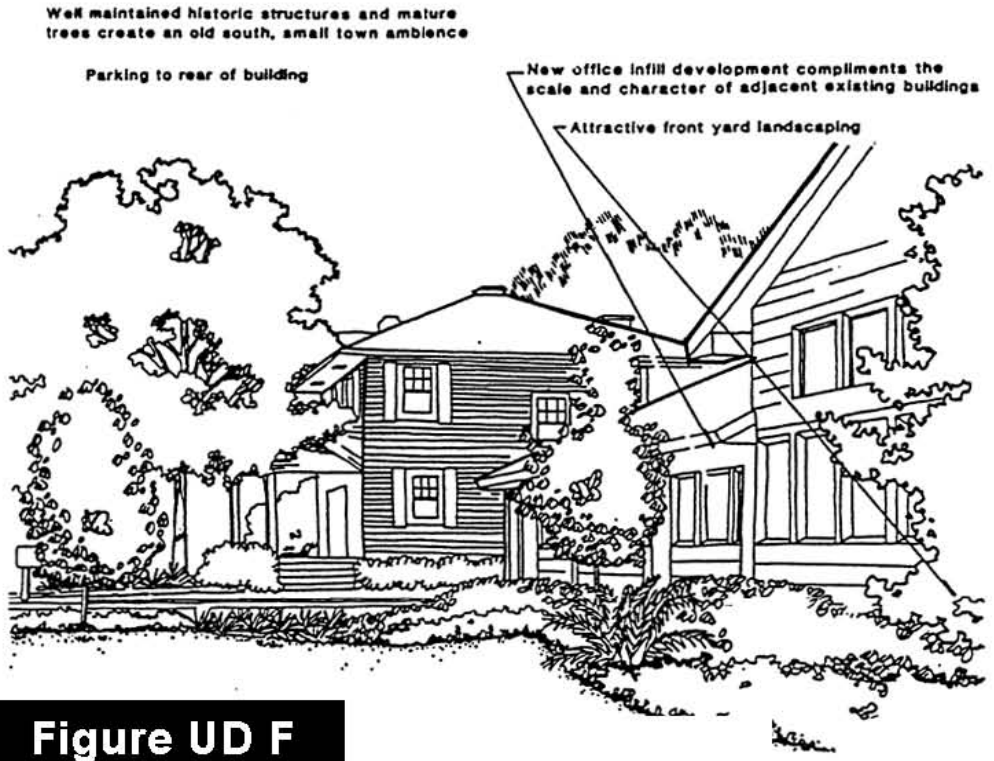


Figure UD F

Inappropriate Office Infill

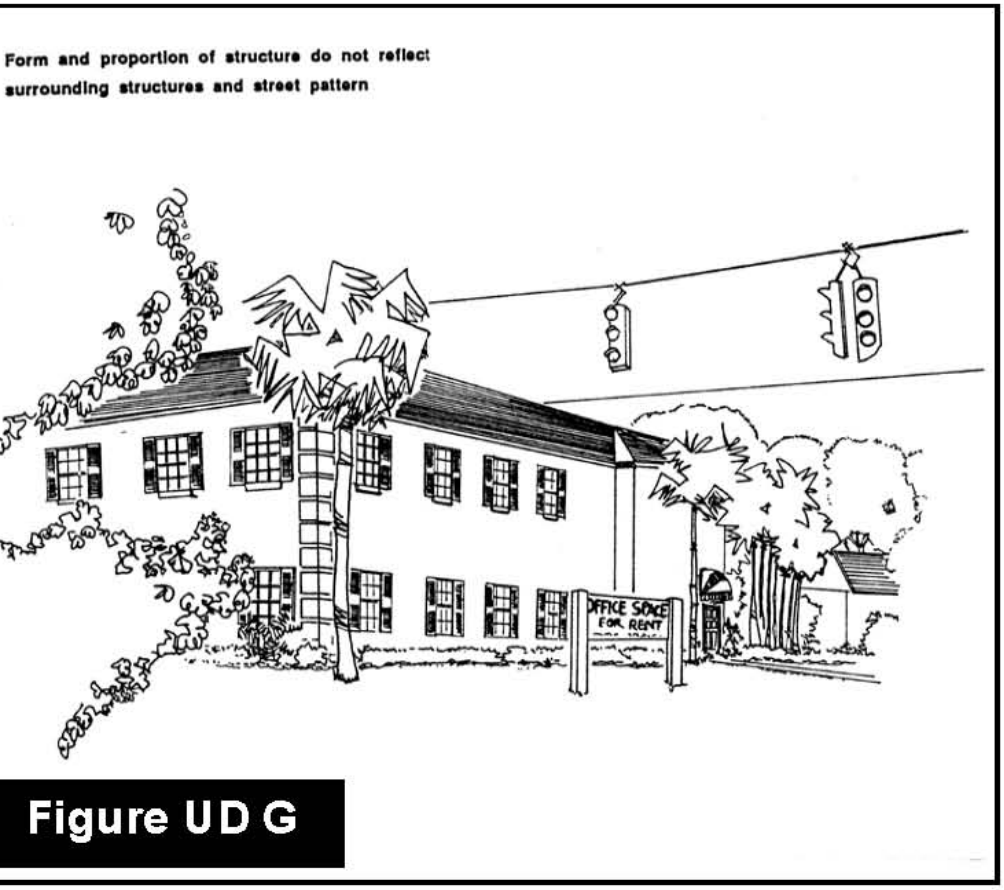


Figure UD G

Positive Traditional City Design Elements

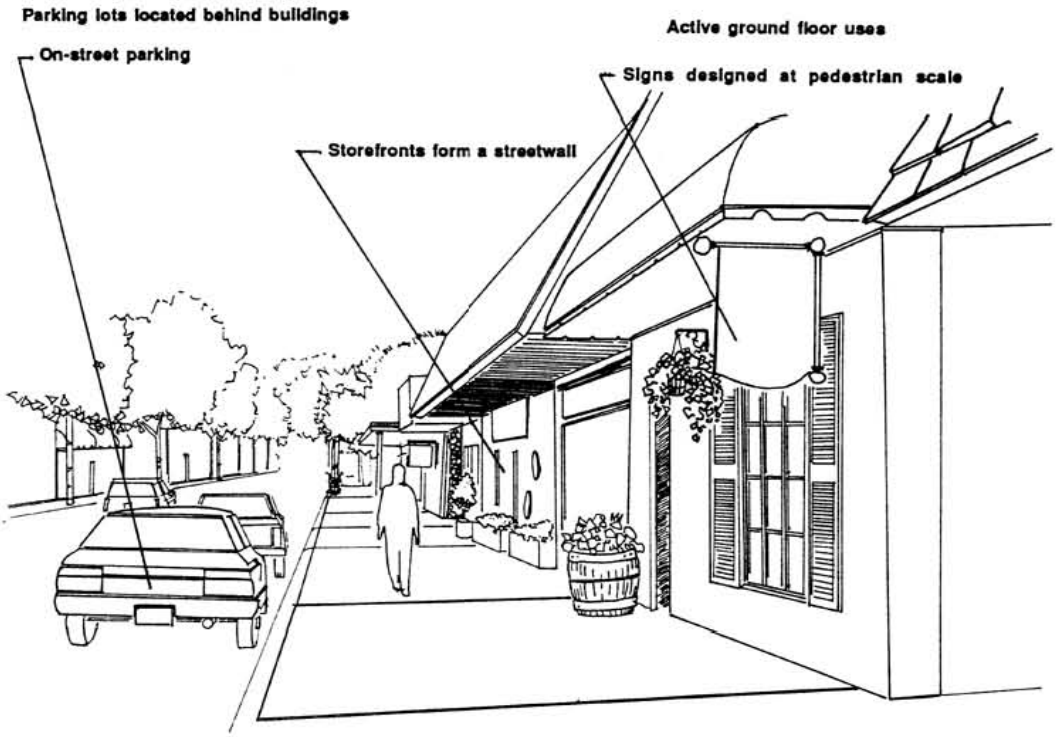


Figure UD H

Certain commercial areas that exhibit positive Traditional City design elements are undergoing transitions that risk losing those elements through redevelopment. Urban design plans for these transitional commercial areas could facilitate redevelopment while enhancing the positive design characteristics.

Some areas within the Traditional City had been subject of decline, in particular the Parramore area concentrated just west of I-4, generally south of Colonial Drive and north of McLeod Road. Declining conditions are often associated with absentee landlords and a lower percentage of owner-occupied housing units.

Urban design characteristics in declining areas are those normally associated with the process of economic disinvestment, e.g. inadequate maintenance of buildings and sites, dilapidation, building vacancies, empty lots, incompatible infill development, and demolitions. Decline may also be associated with land speculation. Particularly objectionable in declining areas is the pattern of conflict among residential and commercial uses.

Key urban design issues concern actions to promote neighborhood stability and prevent further decline. These actions may include retention of the existing building stock through appropriate renovation standards, guidelines for appropriate infill development, increased code

enforcement, and the incorporation of amenities including street tree plantings and the provision of open space to improve the neighborhood quality of life.

In 2005, the City launched an initiative to revitalize the area west of I-4, known as "Pathways to Parramore". This initiative was established to increase affordable housing in this neighborhood through new construction, substantial rehabilitation and homeownership assistance. Approximately 1,000 mixed-income residential units are planned or under construction in this neighborhood. The area will also be transformed by the Community Venues project, with the new Events Center to be located west of the I-4; renovations planned to the Citrus Bowl, together with planned streetscape and transit improvements along West Church Street. A new Parramore Heritage Park was opened in 2007. The City's intent is to transform the Parramore Heritage Neighborhood to bring vitality to this previously stressed area.

Post-World War II Development

The Post-World War II suburban-style development communities outside the Traditional City are a noticeable contrast to older neighborhood development patterns. They are single-use with curvilinear street patterns and cul-de-sacs, off-street parking, wide roadways with wide turning radii and incomplete pedestrian connections (Figures UD-I and J). Often these neighborhoods are surrounded by security fences or walls with buildings oriented toward or clustered around the interior of the development. The residential areas are generally homogeneous and isolated and result in overdependence upon the automobile. However, as these Post-World War II neighborhoods mature, they are developing some of the positive elements of the Traditional City neighborhoods such as maturing street trees and increased individuality of homes. While these areas will never have the urban form of Traditional City neighborhoods, they are the neighborhood of choice for many. When possible, positive design characteristics such as street trees, pedestrian connections and public art should be incorporated into the neighborhoods and views and lakes should be enhanced.

Vehicular-oriented activity centers and mixed use corridors are typically inwardly oriented shopping areas whose landscapes are predominantly asphalt parking lots. Examples of Orlando's vehicular-oriented activity centers are Fashion Square Mall, Colonial Plaza, the Curry Ford Road/Crystal Lake activity center and the Holden Road/Orange Blossom Trail Activity Center. Because of their inward focus, these activity centers do not contribute to a coherent urban form or sense of community identity.

Although the interiors of these activity centers are pedestrian-oriented, pedestrian connections to surrounding development are usually lacking. Also, landscaping is minimal, building setbacks are generally quite large and sign groupings are cluttered. Incorporation of positive Traditional City design characteristics into redevelopment that is planned for Post-World War II activity centers and mixed use corridors (see the Future Land Use Map Series) will further reinforce the urban form and community identity.

Post World War II Design Characteristics

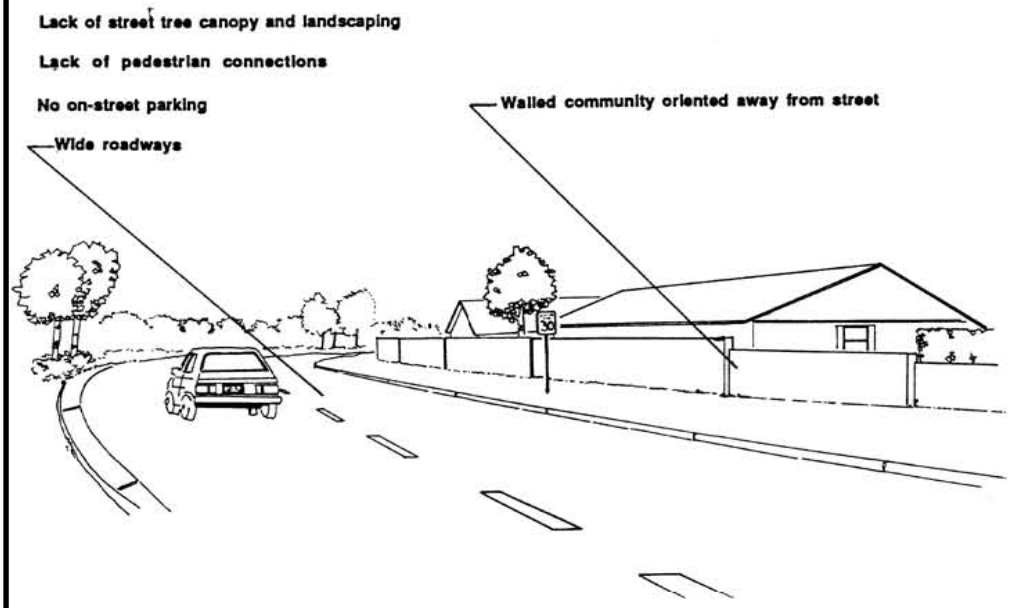


Figure UD I

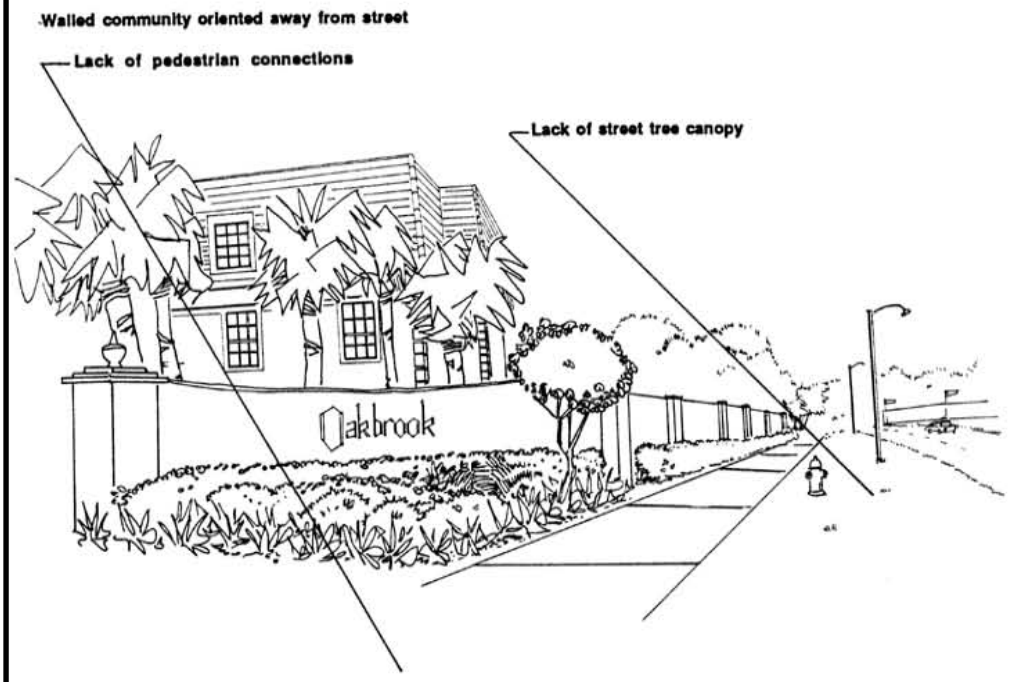


Figure UD J

New Urbanist Development Opportunities

The third development pattern is Traditional Neighborhood Design (TND). The fundamental idea of TND's is connection and diversity. This includes connecting all of the basic daily needs such as living, shopping, learning and recreation; connecting housing types to allow for varied housing choices within neighborhoods; connecting roads to disperse neighborhood traffic calmly, rather than collect it; and connecting people to civic ideas by placing public buildings, parks and other important amenities in prominent locations.

The City has adopted in its Land Development Code optional land use and urban design guidelines and standards based on Traditional Design principles. The guidelines and standards apply to Southeast Orlando and incorporate the principles of Traditional Neighborhood Development, promote accessibility, decrease sprawl, reduce energy costs, foster the creation of a built environment on a human scale, and allow for a richer and more varied public domain. This optional TND code is not intended to eliminate suburban practices, rather it allows a range of development techniques extending from the truly urban, to suburban, to rural.

The area historically known as the Orlando Naval Training Center has been redeveloped as an urban, mixed use pedestrian and transit accommodating in-town community that embraces the principles of Traditional Neighborhood Design. This area, located east of Downtown and now known as Baldwin Park, has been redeveloped to include a mixed-use village center, surrounded by supporting residential neighborhoods, a park system and an elementary school. Priority has been given to enhancing the pedestrian experience. Specific urban design standards and land use relationships have been adopted as part of a Planned Development (PD) zoning designation, to guide the redevelopment of the area.

The City has also created the Southeast Orlando Sector Plan which is one of the largest urban planning and development projects undertaken by the City of Orlando. The Plan area, measuring in excess of 19,300 acres, is located directly adjacent to Orlando International Airport (OIA). The City has identified the Southeast Sector Plan area as a Future Growth Center with OIA as the primary economic and employment generator. The City's projections indicate a growth potential in the general southeast subarea for over 22,000 residential units, 9.4 million square feet of retail space, 8 million square feet of office space, 3,900 hotel rooms, 14.2 million square feet of industrial space and 2.1 million square feet of civic/government space between 2006 and 2030.

The Southeast Sector Plan allows the use of Conventional Land Development Code standards under certain conditions. As an alternative, property anywhere within the Southeast Sector Plan area may be developed in accordance with Traditional Neighborhood Design principles and certain incentives that are associated with such planning principles as a matter of right.

In order to build and sustain a viable community, development in the Southeast Sector Plan area will feature a mixture of land uses which allows for increased accessibility, diversity and opportunities for social interaction within the context of an integrated amenity framework. The

City has developed a community framework based on Traditional Design principles. A hierarchy of places has been proposed, ranging from a Town Center that will serve as the primary destination and job center within the community, to village and neighborhood centers that provide local shopping and civic areas for residential areas, to airport-related employment districts that include a variety of industrial and office uses. In the Southeast Plan area, the vision is for centers to be compact and walkable, with residential neighborhoods defined by public space and activated by locally-oriented civic and commercial facilities.

4. URBAN DESIGN CHALLENGES

Some examples of the urban design challenges facing the City include accommodating the vehicle, establishing an appropriate building scale for big box retail development, both outside and potentially within the Traditional City, and design issues associated with the retention/detention of stormwater.

Accommodating the Vehicle

Drive Through Facilities

Drive-through facilities have proven to be very successful as they target the mobile and car-oriented market. They often operate 24 hours a day and provide convenience for the traveling public and offer a sense of security for users at night. Drive-through service has been widely adopted by fast food businesses, and more recent types of drive-through facilities include banks and pharmacies.

While successful and popular, drive-through facilities present many urban design challenges, including respecting the character of the neighborhood; lack of design flexibility due to business's need to use a prototype drive-through facility; supporting a pedestrian friendly environment along public streets; using landscape areas effectively to improve the overall environmental and visual quality of the area; and designing efficient stacking movements on site. Issues that can generate concern associated with drive-through facilities include traffic; noise and light pollution; reduction of air quality; environmental degradation; odor; conflicts between pedestrian and automobile circulation; visual impact; littering and waste; site servicing; and hours of operation.

The challenges to address these concerns include the need to promote compatible development that fits well with its surroundings and improves the property upon which it is to be located; to enhance public streets and contribute to a high quality public space; to create efficient stacking movements on site; to create a safe and comfortable pedestrian environment on site; and to minimize impacts on adjacent land uses that could be caused by on-site activities.

Design considerations to address these challenges and public concerns include:

- Locating stacking lanes away from adjacent sensitive uses, such as residential and outdoor amenity areas, in order to reduce the impacts of noise and pollution that could be caused by stacking cars near such uses. The use of landscaping and fencing can help buffer potential impacts;
- Locating surface parking areas and stacking lanes at the side or rear of buildings;
- Separating vehicular and pedestrian traffic;
- Minimizing the number and width of driveways from the public street;
- Locating vehicular site access points as far away as possible from street intersections.
- Minimizing paved areas and maximizing water permeable surfaces and soft landscaped areas to contribute to the appearance and environmental sustainability of the site and its larger context by increasing water penetration into the water table, reducing pollution of local water features and runoff demand on local infrastructure.

Gas Stations/Car Wash

Numerous trends in the industry are affecting the design of gas station sites. Gas stations often operate 24 hours per day, tend to locate on larger sites, and contain an increased number of gas pumps. Auto services associated with gas stations are declining, while other services such as convenience stores, car washes, banking machines, retail units and drive-through services are increasing, which results in consumers leaving their vehicles and circulating around the site on foot. Additionally, major petroleum companies have adopted a set of standard building and canopy types to assert a cohesive image and presence in the marketplace.

As a result of these trends, the design of gas station sites presents several challenges, many of the issues similar to drive through facilities, including incorporating prototype building designs and a corporate image into the neighborhood; addressing the complexity of large sites and the requirements of the many different uses; designing a circulation pattern to meet the needs of both vehicles and pedestrians; supporting a pedestrian-friendly environment along public streets; and using landscape areas effectively to improve the overall environmental and visual quality of the area. In the Traditional City, meeting minimum Floor Area Ratio (FAR) requirements can also be a challenge.

Vehicle Parking

Another urban design challenge in accommodating the vehicle is addressing parking requirements, including the design and location within the site of surface parking lots or garage structures.

Surface Parking Lot Design and Location

Traditionally, surface parking lot design has focused on accommodating vehicle movements, in order to maximize the number of parking spaces and providing for ease of maintenance and servicing. While these aspects are important for functionality, this can result in poor urban design standards. The result can be poor quality landscaping, unattractive streetscapes, minimum regard for pedestrian circulation throughout the parking lot, excessive stormwater

run-off from large expanses of paved areas that may have absorbed oils and fuels, and an increase in the urban heat island effect.

The urban design challenge includes the need to improve the quality of landscaping, encourage best practices for on-site stormwater management, define pedestrian connections to improve pedestrian safety and promote the use of sustainable materials.

Another issue associated with surface parking lots is the location of the lot in relation to the principal building on the property. While businesses may often want parking to be as readily visible and easily accessible as possible for customers, locating the on-site parking in front of the building can adversely impact the pedestrian environment and visually detract from the streetscape. Parking lots have a major impact on urban design and can conflict with efforts to create high quality pedestrian environments along public streets.

Parking lots should be located in areas that are visually unobtrusive and wherever possible, new development and redevelopment designs should locate parking lots behind the principal building, with adequate signage to direct drivers to the available parking.

Parking Garage Design

The City's Growth Management Plan and Land Development Code allow for concentrated residential, commercial, office, recreational and cultural facilities in the Downtown area, at a scale which serves the entire metropolitan area and at the highest intensities to be found anywhere in the region. Given the existing intensity of development found within the Downtown and sparse land area available, a common feature for new development and redevelopment projects is to incorporate the parking garage into the design of the principal structure. Given the limitations and costs associated with constructing underground parking facilities, common design practice in the Downtown area is to locate the parking structure above-ground, situated below the principal building use(s).

Urban design challenges associated with above-ground parking garages include the need for a structure that is aesthetically pleasing, can achieve an architectural unity with the principal structure it is intended to serve and will blend with and complement the surrounding area. Architecturally breaking down the scale of the large structure along its façade helps integrate the parking structure into the environment. Where fire separation issues prohibit fenestration within a parking structure, provision should be made for public art such as a mural. The incorporation of an urban street front by having the sidewalk edge of the garage contain light retailing, offices, personal services or entertainment uses is important to maximize architectural interest and human activity.

The incorporation of Crime Prevention Through Environmental Design (CPTED) principles is integral to parking garage design to ensure appropriate safety and security features.

These requirements for parking garage design are addressed within the City's Land Development Code.

Building Scale

The prototype model for big box stores is characterized by large windowless structures with featureless designs, located around a site perimeter, with the openings facing into an interior expansive surface parking lot that establishes little or no relationship with nearby development patterns.

The urban design challenge is to create human scaling for big box store developments, which should include reducing the massing, adding ample window space and creating a height that is compatible with neighboring buildings, in order to reduce the impact of these structures on nearby development. Ideally such projects should contain mixed uses to include residential, commercial and office uses in order to reduce the need to travel to destinations, help create a built-in local market and promote a continuous "eyes on the street" situation to help crime prevention. Other considerations are to build storefronts to the sidewalk, create continuous streetwalls wherever possible and incorporate wide sidewalks and streetscaping.

A more recent design issue associated with box stores is that big-box retailers, facing saturation in rural and suburban markets, are now focusing on urban centers. However, this is accompanied by challenges including density, mixed-uses, walkability and sense of place, being integral to revitalization techniques within urban centers. Parking for box-stores in urban centers where land is scarce is also challenging, since suburban stores typically have parking lots between the street and the building, whereas within an urban center such as Downtown Orlando, buildings are required to be located closer to the streets, in order to create an environment that is more conscious to the pedestrian and public transit. A strong public transit system is important to help counter the need for dedicated parking spaces. Where transit is available, shared parking between businesses with peak parking demand at different times of the day or week on the same property, or in the immediate neighborhood can be explored.

One approach for urban centers is for vertically oriented box stores, which can allow for an opportunity for mixed-use development on the property, and may include residential development. Such designs need to address the competing demands between the retail store and residential units located above it. If well planned, vertical box stores can complement and integrate with neighboring residential development. The Paramount, a 16 story condominium building that includes a ground-floor Publix supermarket, is one of Downtown's most successful recent examples of this aproach.

Vertical box stores in urban areas such as Downtown will also have the future potential to convert to another use should the retail activity fail. This option is less likely to succeed for the traditional suburban style box store/warehouse design because retailers move onto new locations if there are no adjacent uses to create centers of activity.

Stormwater

Stormwater retention/detention areas offer an opportunity for using water as a visual amenity. Too often these facilities are not integrated into the design of a development, and appear as afterthoughts or merely functional areas. Figure UD-K shows a typical stormwater retention/detention area. The banks are void of aquatic vegetation. The lack of maintenance, the eroding edges, and separation from the houses portrays the stormwater facility as a messy and an unwanted design element. Integrating a stormwater facility into the design of a development, as illustrated in Figure UD-L, can transform this facility into a visual amenity as well as enhance the environment. The City will consider innovative site planning practices to help developers create stormwater management systems that fit into the landscape and do not create eyesores or future maintenance problems. The City will plan to update design criteria to allow the multiple use of stormwater management facilities for recreation, conservation, irrigation, and open space.

Low Impact Development (LID) is another option to be considered to manage stormwater runoff. LID emphasizes conservation and use of on-site natural features to protect water quality. The approach implements engineered small-scale hydrologic controls to replicate the pre-development hydrologic regime of watersheds through infiltrating, filtering, storing, evaporating and detaining runoff close to its source. LID began as an alternative to stormwater best management practices (BMPs) installed at construction projects. The LID design approach has received support from the U.S. Environmental Protection Agency (EPA) and is being promoted as a method to help meet goals of the Clean Water Act. LID techniques can also play an important role in Smart Growth and Green Infrastructure land use planning.

Typical, Poorly Designed Stormwater Facility

Figure UD K

Positive Stormwater Facility

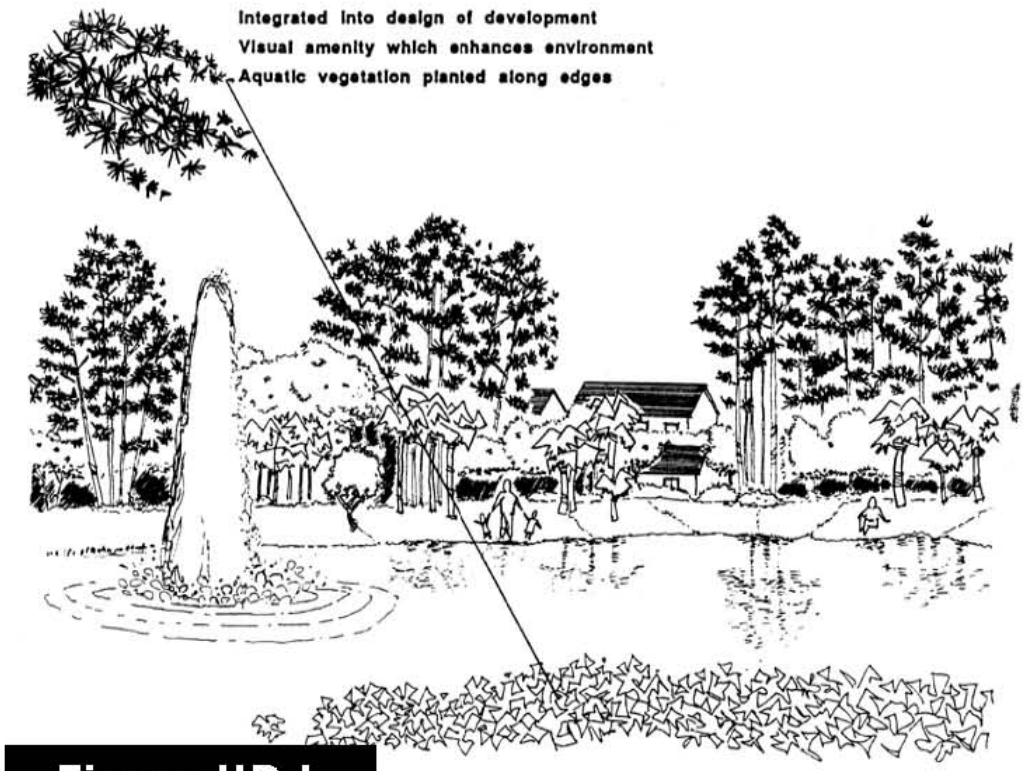


Figure UD L

5. URBAN DESIGN TOOLS

Green Building Standards

Green Building can be referred to as the practice of increasing the efficiency with which buildings use resources, including energy, water and materials, while reducing building impacts on human health and the environment. This may be achieved through better siting, design, construction, operation, maintenance and removal of those resources. Green buildings use fewer resources, are healthier places to occupy and are more economically efficient.

In 2007, the City established an internal "Green Team", tasked with incorporating the City's existing green programs into a larger and more comprehensive plan, in order to transform Orlando into a more environmentally friendly city.

The result of this effort is "Green Works Orlando", an environmental action agenda that charts an ambitious course for the City of Orlando and reaffirms its commitment to sustainability. The City has established five "pillars" that will serve as the operational foundation of the plan:

- Energy Efficiencies and Green Buildings
- Transportation
- Sustainable Infrastructure and Conservation
- Green Spaces
- Advocacy and Education

Some of the actions identified within these "pillars" include:

- Design all new City buildings to comply with Leadership in Energy and Environmental Design (LEED) standards, with a goal of achieving LEED certification or appropriate green building standards for all municipal buildings.
- Develop a comprehensive Green Building Program that will encourage and create standards for environmentally friendly buildings.
- Amend the Growth Management Plan and Land Development Code to include options for natural and water conserving landscaping, green roofs and other residential and commercial development elements that encourage conservation (power, water and natural resources).
- Create standards for green homes.
- Create healthy, livable urban centers that promote walkable neighborhoods, affordable housing, mixed-use transit-oriented development, open space and job creation.

By 2010, the City will consider adopting a policy requiring environmental certification for all new buildings owned by the City and for renovations to existing buildings owned by the City.

Downtown Outlook

In 2000, the City adopted the Downtown Outlook Plan, which applies to the Downtown Community Redevelopment Area. The Plan creates a set of recommendations for growth and development to create the Downtown Orlando 2020 vision. The Plan subdivides the study area into four smaller planning areas (Uptown, Parramore Heritage, the Central Business District and Eola) and as part of its vision emphasizes the need to use urban design as a tool to ensure that new development fits into the existing community.

The Downtown Orlando vision incorporates the principles of sustainability and livability as essential building blocks. The Plan establishes the following strategic principles:

- Sense of place;
- Integrated land uses;
- Transportation connectivity;
- Human scale of development; and
- Pedestrian orientation.

The vision for Downtown Orlando is to be the symbolic and actual heart of the City for all Orlando residents and visitors. As a 24 hour hub of activity, Downtown will feature vibrant neighborhoods, attractive streets and sidewalks, easily navigated roads, accessible transit and pathways and a diversity of economic opportunity.

Main Street Program

The City of Orlando recognizes the important role neighborhood commercial districts play in the overall health of the City's neighborhoods. Sound neighborhood commercial areas contribute to a good quality of life. It can be a positive attraction and a competitive advantage in retaining existing neighborhood residents and attracting new ones. To meet this need, the City of Orlando is offering business district revitalization support to Orlando neighborhood commercial districts.

In 2007, the City agreed to participate in the Main Street Program. The Program will build upon the existing business development program available through the City and will establish up to six districts in the first two years. Each district will receive financial and technical assistance and intensive training in the Main Street approach from Orlando Main Street and the National Trust Main Street Center.

The National Trust Main Street Center is a program of the National Trust for Historic Preservation. In the 1970s, the National Trust developed its pioneering Main Street approach to commercial district revitalization, an innovative methodology that combined historic preservation with economic development to restore prosperity and vitality to downtowns and neighborhood business districts. It has created a network of more than 40 statewide, citywide,

and countywide Main Street programs with more than 1,200 active Main Street programs nationally.

The Center has led the preservation-based revitalization movement by serving as the nation's clearinghouse for information, technical assistance, research, and advocacy. Through consulting services, conferences, publications, membership, newsletter, and trainings, it has educated and empowered thousands of individuals and local organizations to lead the revitalization of their downtowns and neighborhood commercial districts.

The approach promoted through the Main Street Program includes improving the project area's image by improving its physical appearance - not just the appearance of buildings, but also of street lights, window displays, parking areas, signs, sidewalks, streetscapes, landscaping, promotional materials and all other elements that convey a visual message about what the area is and what it has to offer.

The Main Street Program is available for historic districts and the Market Street Program is available for non-historic areas. As of 2008, the City has established three Main Street neighborhoods: Downtown College Park, Ivanhoe Village Main Street and Parramore Heritage Main Street.

CPTED

Research has shown a relationship between environmental and behavioral factors and the opportunity for crime. A rise of the crime rate in a neighborhood contributes to economic and social degeneration through fear of crime. The fear and crime increase results in reduced maintenance of existing properties, loss of new investment and new development, and a loss of neighborhood services and availability of goods. In turn, economic loss and fear escalate the opportunities for crime.

One technique to help deter the opportunity for and fear of crime is through the proper design and use of the environment. This concept is known as Crime Prevention Through Environmental Design (CPTED). The major premise of CPTED is that our environments can be designed to reduce the opportunities for crime and the fear of crime, without resorting to building of fortresses. The primary principles of CPTED include the proper design and effective use of buildings and sites, reinforcement of territoriality and responsibility by the residents, access control, and natural surveillance.

The study of this relationship between the arrangement and use of the environment and the opportunity for crime has caused a shift from dependence on reactionary crime deterrence to proactive and preventive approaches. Faced with the multiple problems of the crime/decline cycle, it may not be reasonable to stabilize or reverse decline by redevelopment only. The problems of fear and lack of neighborhood identity must also be dealt with.

The City of Orlando utilizes CPTED principles to emphasize the proper design and effective use of a created environment in order to reduce crime and enhance quality of life. The City offers a CPTED brochure which includes crime prevention techniques for various land uses. The City's Police Department has a staff planner who reviews land use proposals and recommends changes to incorporate CPTED principles.

The City has also instituted a Citizen Neighborhood Watch Program, a Citizen Observer Program and embraces the philosophy of Community Oriented Policing (COP), which strives to develop partnerships between the police and the community.

Virtual Orlando

Virtual Orlando is intended to provide the citizens of Orlando a comprehensive visualization, communication and collaboration tool that will bring a superior understanding of every aspect of the City's built environment through information sharing, public participation, community building and ultimately supporting the City's goal to truly be "The City Beautiful". Virtual Orlando will provide a visual database comprised of three-dimensional models that are Building Information Modeling (BIM) compliant and integrate Geographic Information System (GIS) data. The project will provide online interactive and real-time traffic simulations and situational animations, while incorporating the GIS and survey data that the City already utilizes, as well as 3-D models and data of new projects in the City of Orlando. The City has the opportunity to exploit all of these technologies within one cohesive, synthesized program- Virtual Orlando.

The project will allow users to view and navigate around new and planned development projects in Orlando. The software will allow for 3-D models of the new Performing Arts Center, Events Center and remodeled Citrus Bowl to be inserted into a real-time 3-D model of Orlando that will also include the surrounding existing development and infrastructure.

Building a database and model of infrastructure and utilities, streetscape and buildings will be a useful tool not only for planning purposes, but also for the City's Public Works Department, Police Department, the local building industry, fiber optics and other governmental entities to use during planning and construction.

Virtual Orlando will further assist in developing Orlando into a high-tech media industry leader. The Downtown Orlando Creative Village Report stated that Orlando is one of the top 12 digital media clusters in the country. This project will make the City of Orlando the first U.S. city to provide a fully interactive real-time simulation model for planning, growth management and public safety purposes.

The City is in the initial stages of developing Virtual Orlando and expects to develop a strategic plan by 2010, with a 3-D model of the Downtown Community Redevelopment Area to be created by 2012.

6. ASPECTS OF URBAN DESIGN

Nature in the City

Orlando's image as "The City Beautiful" is due to its lush landscape conditions and the presence of about 120 lakes scattered throughout the City. However, landscape and scenic features are extremely diverse, ranging from older neighborhoods shaded by dense canopies of ancient oaks to commercial strips and industrial areas where virtually one hundred percent of the ground plane is paved.

Lakes

Passive parks and decorative green spaces represent a relatively small but exceedingly important category of landscape cover. The landscaped areas that surround Lakes Eola, Cherokee, Davis, Ivanhoe, Adair, Fairview, Rowena, Underhill and others make up Orlando's most unique scenic resources and visual amenities. In addition, the lake system provides a strong sense of identity and orientation. Because of Orlando's flat topography and built-up development pattern, lakes represent one of the few opportunities for long distance views and vistas. As a consequence, the lake system bestows a perception of spaciousness throughout the City.

The value of these resources is often diminished however by poor landscape edge conditions which limit pedestrian and visual access, as depicted in Figure UD-M. In contrast, Figure UD-N illustrates the enhanced scenic values that can result from greater attention to design, the use of appropriate aquatic species, and the proper maintenance of the lake edge. City resources should be directed to identify and correct lake edges that are planted with vegetation other than aquatic and wetland vegetation.

A positive design element of the Traditional City development pattern is the siting of housing so that it faces lakes. Public access is provided so that everyone can enjoy and benefit from this amenity. Areas of the City developed Post World War II make this public amenity a private asset by backing the houses up to the lake. Because lakes are an integral part of Orlando's image, more recent development patterns, including new urbanist communities, treat lakes as a public amenity, not a private asset.

View From The Road

Views to lake obscured from road by weeds and untrimmed vegetation

Figure UD M

Open views; appropriate vegetation and maintenance increases the value of the lake as a public amenity

Figure UD N

Trees

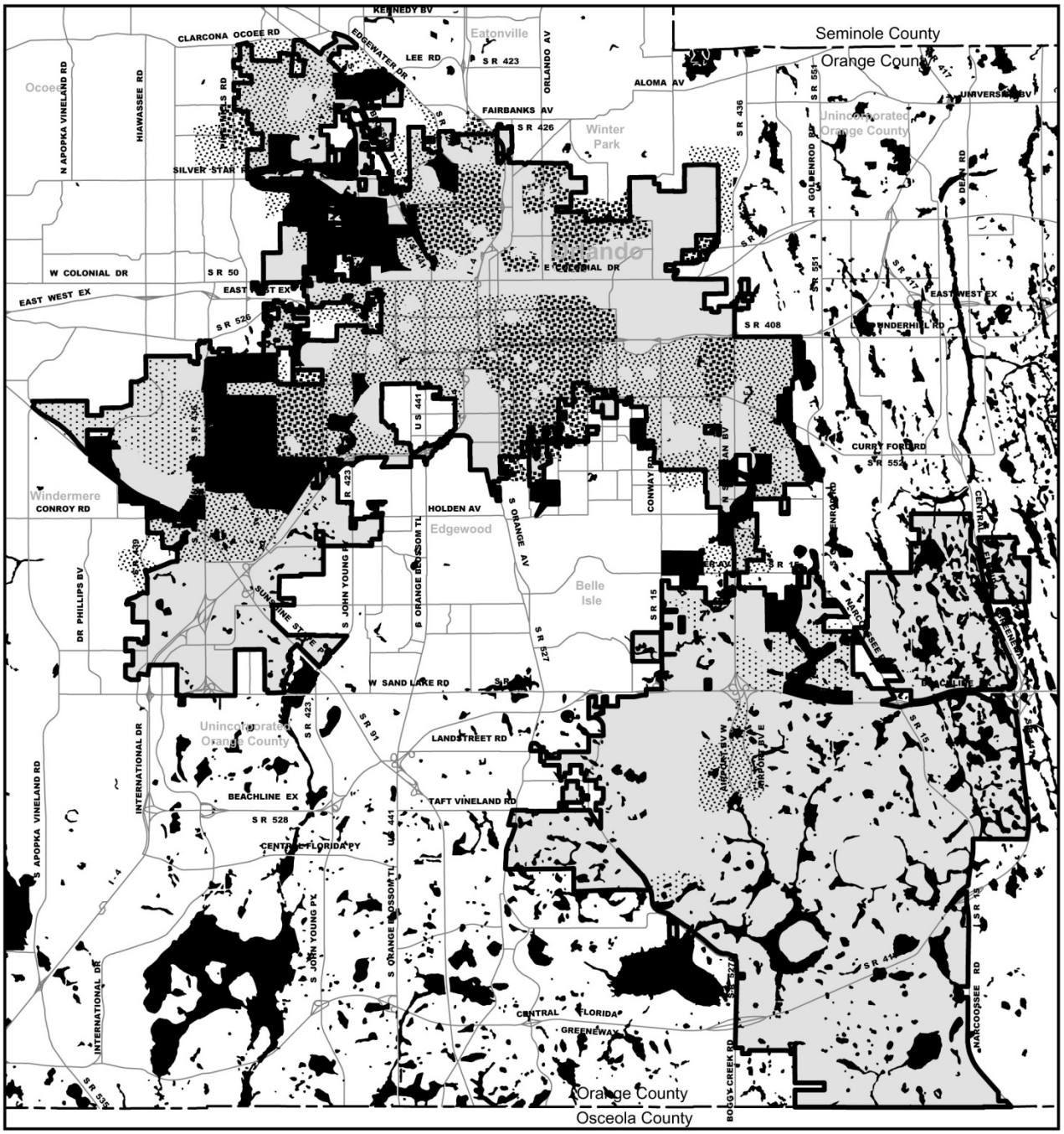
Landscape cover classifications as shown on the Urban Landscape Map, Figure UD-O are "non-existent" (where all trees have been removed), "light canopy" (less than 25% tree covered), "medium canopy" (25% - 75% tree cover) and "dense canopy" (greater than 75% tree cover). The latter category is predominant in Orlando's older in-town neighborhoods, generally between Magnolia Avenue and Orlando Executive Airport as well as in the College Park area west of I-4 and north of Colonial Drive. In such areas the denser canopy is due to more closely spaced trees as well as to their greater age. In many of these neighborhoods oaks planted fifty or sixty years ago at spacings of up to seventy feet apart have now reached a spread dimension such that their canopies merge. Many other neighborhoods, however, have very light canopies, particularly those areas south of Lake Underhill and directly west of I-4 and south of Colonial Drive. Not only do these neighborhoods have fewer trees but average tree size is smaller.

A particularly active hurricane season in 2004 damaged a significant portion of Orlando's tree cover. While many replacement trees have been planted since 2004, they will take a number of years to fully restore the tree canopy.

The various canopy densities are related to several key variables, namely; neighborhood age, density (lot size), in-town location, and property values. Neighborhoods that exhibit the most dense and most desirable tree canopy are older (60 years or more), have fairly low density and have a high percentage of unpaved surfaces. In addition they tend to be within a three-mile radius of Downtown.

This City-wide overview of street tree canopies provides an aerial view of the location and density of the street trees. The documentation has, however fallen drastically short of providing an accurate inventory detailing the location, species, health and maintenance requirements for each tree. This information is vital if the City is to maintain and improve its current street tree density. The inventory would also be a guide to determine where to plant new street trees, and where to replace existing trees that must be removed due to damage and disease. Throughout the planning period, the City will undertake an ongoing street inventory program to identify and record the location, species, health and maintenance requirements of all street trees and identify areas of the City which lack street tree canopy. Furthermore, the City will maintain standards to protect existing canopy trees during construction.

Figure UD-O Urban Landscape



Generally there are four distinct circumstances associated with areas where landscape cover is non-existent:

1. Areas where the existence of trees is incompatible with functional requirements, e.g. airport runways, highway interchanges, etc.
2. Industrial and commercial areas developed prior to present code requirements for landscaping.
3. Land areas cleared in preparation for development activity.
4. Thoroughfares where successive roadway widenings have eliminated or severely reduced landscaped setback areas.

This latter category is perhaps the most significant due to the fact that many residents live adjacent to a thoroughfare. The impacts associated with widening a road adjacent to a residential area are more than visual; there is also noise and air pollution. Large volumes of traffic, especially truck traffic, can affect the livability of a neighborhood and often influence the quality of the housing stock. Although street trees are not the panacea for living adjacent to heavy traffic, they do provide a visual buffer, diffuse noise and improve air quality.

Xeriscaping

Commercial and residential landscaped areas are the major component of the urban landscape. Irrigating this land can account for 50% or more of the use of potable water supply. During the seasonal dry periods when water demands are at their highest, irrigating the landscaped areas burdens the water supply. Water shortages and water rationing have become a common occurrence throughout the State.

In response to this water crisis, governments throughout the State have adopted water conservation requirements. An increasingly popular water conserving concept is Xeriscape[*]. The term is derived from the Greek word Xeros, meaning dry. Xeriscape is the use of native and drought tolerant plants which are grouped by their water requirements. The City has adopted Xeriscape landscape standards which have been incorporated into the Land Development Code. The City will continue to maintain and encourage Xeriscape principles. In Florida, xeriscaped land does not resemble a desert. Use of drought tolerant native species can create a lush and colorful landscape.

Orlando's landscape ordinance places an emphasis on improving the aesthetics of the city by establishing minimum standards for the quantities of plant materials and the percentage of a site that should be landscaped. While aesthetics should continue to play a role, water conservation must also come to the forefront in new landscape development. Improved design, environmental quality, preservation of existing vegetation, and the removal of nuisance species are also important. Other communities are considering banning species of grass that

[*] Xeriscape is a registered trademark

require intense irrigation and Orlando may need to follow suit if water shortages become more intense.

Civic Architecture

The link between quality living and economic vitality is influenced by a city's amenities. Amenities are the assets, uniqueness, personality, character, and distinct features of a city: the qualities that make city life lively and interesting. A vital element of a city's amenities is quality of design and architecture. The appearance, durability, and function of buildings, open spaces, and public facilities increase the city's desirability as a place to live, work, and visit. Excellence in architectural design pays off, as public investment in amenities results in steady economic returns in the future.

Quality architectural design can be translated into excellence in form, shape, and style; attention to detail and functional relationships; and workmanship and materials that will stand the test of time. Quality design captures the context of the surrounding area and provides comfortable, convenient places for people. Excellence goes beyond the purely functional and strives for expression of the spirit and recognition of beauty.

By setting a precedent of design excellence, a city government can encourage quality design in the private sector. Civic architecture includes all publicly financed construction projects. It provides a focal point, a visual landmark or a frame of reference, represents the community spirit or expresses the power of government. Types of public works and civic architecture that can express quality design include public administration buildings, courthouses, performing art centers, airports, sports arenas and stadiums, public utilities, parks, arboretums, plazas, pedestrian linkages, and public art.

The City of Orlando has some excellent examples of civic architecture. Loch Haven Park, where the Edith Bush Theater, the Orlando Museum of Art, the Science Center, and the Planetarium are located, has a well-integrated campus of buildings in a sensitively designed park setting. Another award winning example of civic architecture is downtown's showpiece, Lake Eola Park. The next addition to this impressive list of civic architectural achievements will be the new Community Venues project. This will be the largest public building project in Central Florida history. The project will develop three state-of-the-art community venues to deliver enhanced entertainment, sports and cultural opportunities for residents and visitors alike. The Community Venues project consists of a new Downtown Events Center, Performing Arts Center and renovation of the Florida Citrus Bowl Stadium. The Events Center will be constructed in accordance with and achieve the Leadership in Energy and Environmental Design certification (LEED) and similar initiatives will be pursued in the design, construction and operation of both the performing arts center and renovation of the Citrus Bowl.

City government can influence design quality through the inclusion of urban design standards in the Land Development Code and Engineering Standards Manual, and by staff appearance review of new public projects. The City has room for improvement in the visual image of public

utilities and above ground infrastructure. Public utilities have, in the past, been treated in a purely functional manner with no attention given to appearance. Vegetative screening of lift stations, power transformers, and other mechanical apparatus can enhance the adjacent scenery and improve the image of the community (Figures UD-P and UD-Q).

Other opportunities for the improvement of civic architecture include the appearance of roads, bridges, power transformers, and sewer lift stations. These are equally important to the overall image of the City. Additionally, undergrounding overhead utilities should become a priority to improve the visual quality of our roads. A key urban design constraint is the visual chaos along roadways caused by the number of utility poles and overhead wires. Undergrounding or relocating the utilities out of sight enhances the views of adjacent landscape and buildings (Figures UD-R and UD-S).

When public utilities are being constructed or repaired near a tree, frequently the tree is unwittingly damaged or destroyed because of inadequate construction techniques. The importance of preserving and protecting the tree canopy must come into consideration when construction or repair work is being performed on public lands or right of way. New public structures and utilities should be designed and built so that, wherever possible they do not interfere with existing mature trees.

A commitment to the achievement of quality civic architecture will leave a legacy of enduring beauty and add to the unique character, economic value, and image of Orlando. The visual quality of development influences the impressions of visitors and affects people's decisions on where to live and do business, affecting economic investment and the economic health of a city. Quality architectural design inspires civic pride, sparks vitality and excitement in people who live and work in the community, and establishes a positive visual image of the City.

Unscreened Utility Buildings

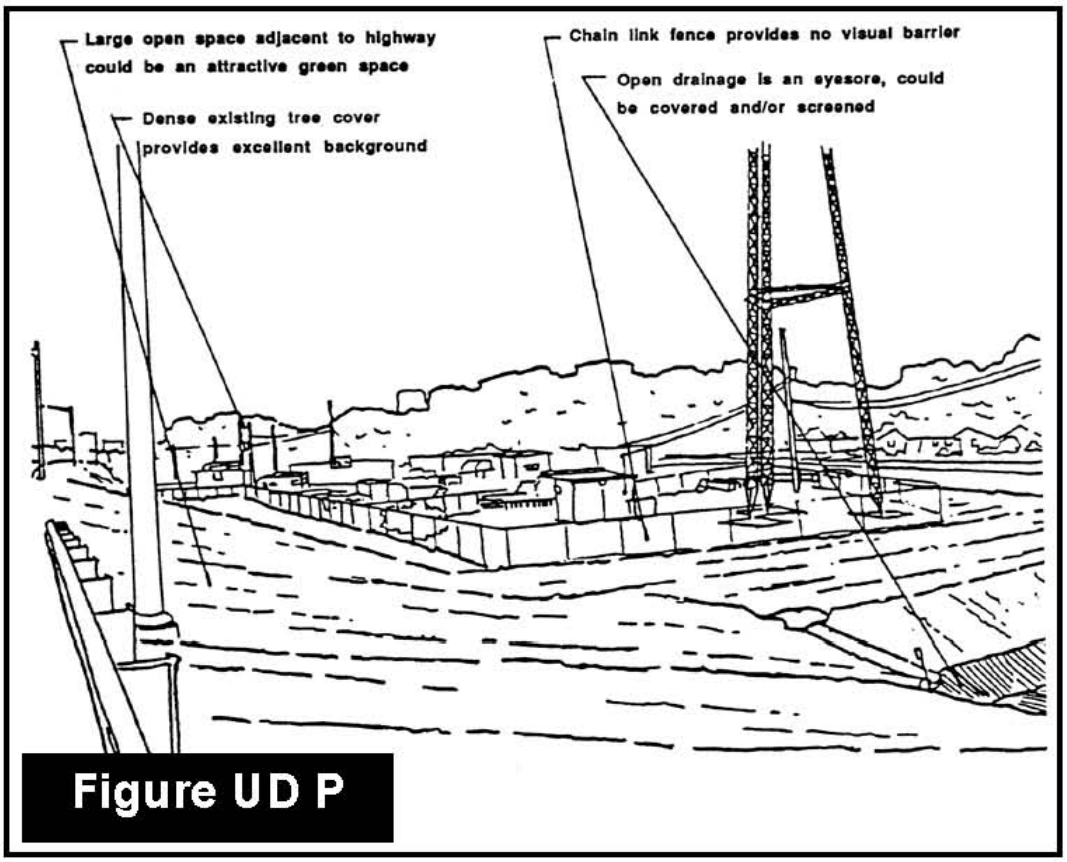


Figure UD P

Landscaped Utility Buildings

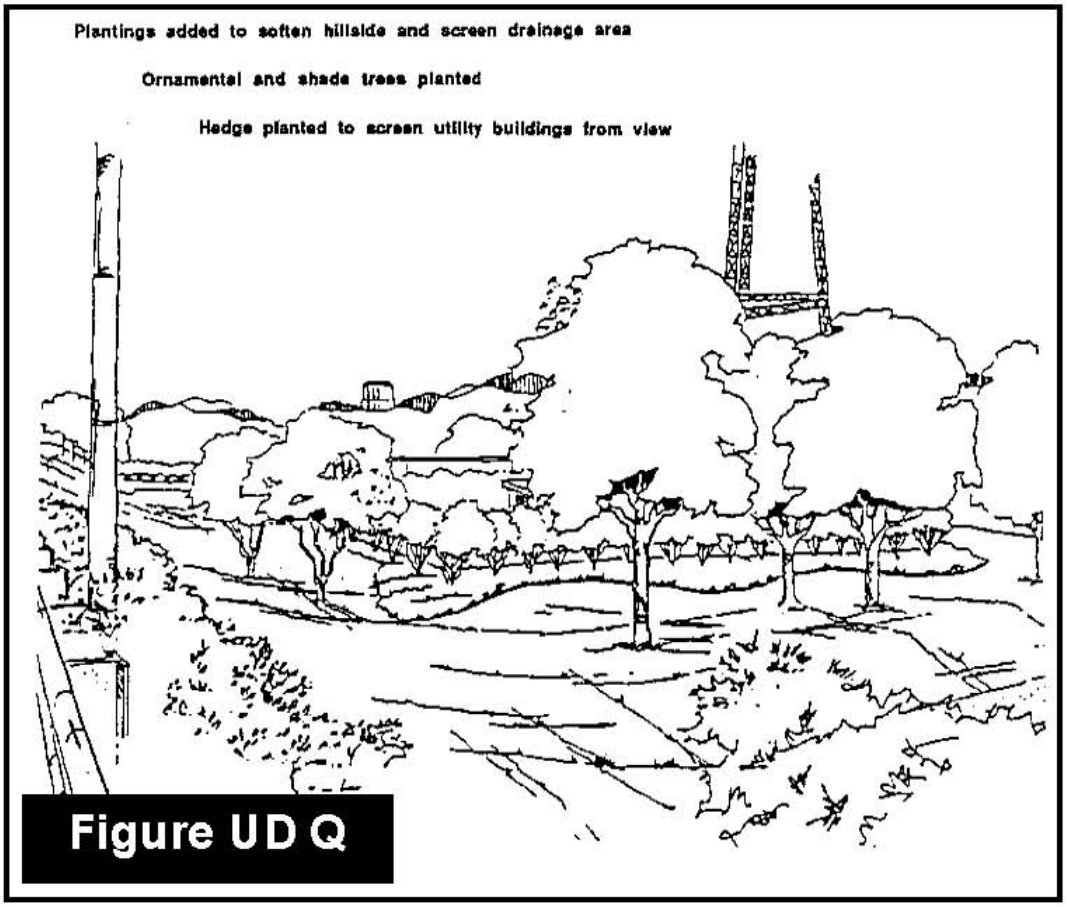


Figure UD Q

View Corridor with Overhead Utility Lines

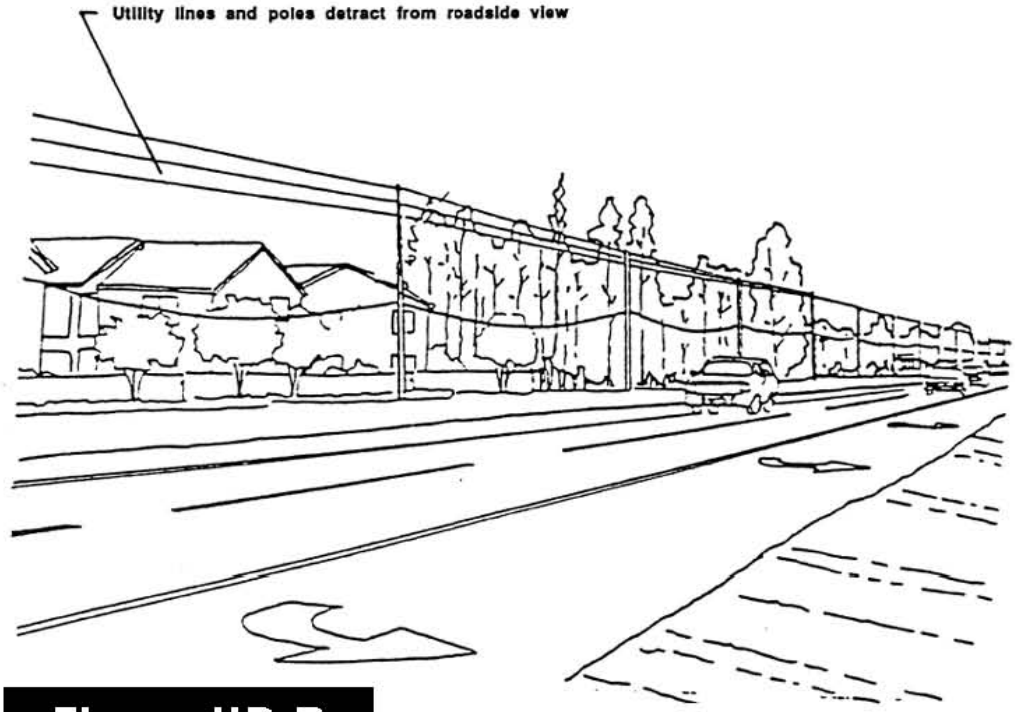


Figure UD R

View Corridor with Underground Utilities

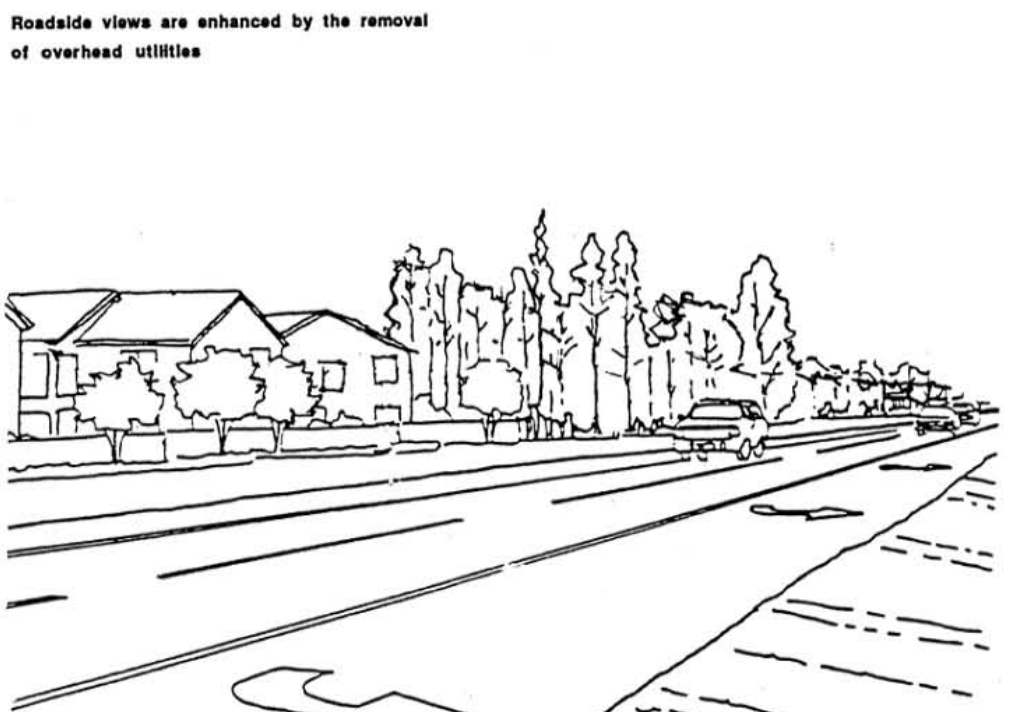


Figure UD S

Scenic Identity

Scenic features in Orlando are experienced most often from roadways; it is a significant fact that virtually all residents and visitors must travel highway corridors on a daily basis. Examples of scenic features include natural characteristics such as lakes and lush vegetation, man-made features such as a striking downtown skyline, or urban scenery experienced while travelling on an elevated expressway. The attractiveness of our roadways can become a valuable asset and an integral part of what makes Orlando an exceptional City.

As described in the Transportation Element Support Document, arterial streets are spaced approximately every 1 - 1 1/2 miles apart creating a "checkerboard" pattern throughout the City. Many of these high traffic arterials began as two lane roads with frequent curb cuts and driveways spaced to serve early single family and retail development patterns. Overtime, many of these roads have been widened to four or six lanes and their present urban design character bears little resemblance to their original small town scenic qualities.

The urban design consequences of this evolution of the arterial street system have been severe. No unified city-wide consideration was given to the visual impacts of these new and expanded roadways at the time they were designed and constructed. Furthermore, many of these arterials are owned and maintained by FDOT, meaning that design standards conform to statewide plans, rather than local conditions. In the years to come, Orlando has the opportunity to retrofit roads by creating “complete streets” that accommodate many types of users, including pedestrians, bicyclists, transit riders and drivers. This effort will help create a comprehensive visual identity and image facelift for our major roadways.

Older arterials often have poor visual qualities, due to the lack of vegetation, limited pedestrian facilities and the proliferation of billboards and large signs. The lack of positive visual image along major roadways translates into a negative impression of Orlando by visitors and residents. High visibility streets and thoroughfares have been designated as View Corridors, with landscaping theme requirements. Figure UD-32 shows the locations of the view corridors.

A view corridor designation should prohibit off-site advertising along local and arterial roads. Billboards are more appropriate when located along an interstate highway. When placed in a commercial strip situation where there is already a proliferation of signs, a driver is often overloaded with information, making driving difficult and unsafe. These visually dominating signs also lend an unpleasant commercialized effect when viewed from a neighborhood. The City of Orlando has prohibited any new, or replacement billboard advertising signs, not only for view corridors, but throughout the City as a whole.

In addition to the arterial street system, several elevated expressways lie within the City limits. Interstate 4 connects Orlando with Daytona to the northeast and Tampa to the southwest, bisecting the City at its midpoint. The East-West Expressway also bisects the City at its midpoint. The Greeneway, Beachline and Turnpike also cross through portions of the City.

There are two key urban design issues associated with the expressway system. One issue is how elevated expressways are viewed from the ground, or how they visually impact the neighborhoods that they bisect. Neighborhoods that abut the elevated expressways bear the brunt of the harshness imposed on the quality of life by the impacts of traffic. Roadway designers face the challenge of how to make the urban design character and traffic impacts of elevated expressways more sympathetic to the adjacent neighborhoods and more pleasant for motorists.

Since 2003, the Expressway Authority, in conjunction with the East-West Expressway (SR 408) widening project has introduced aesthetically pleasing sound walls, decorative bridge columns and pylons, planter walls and landscaping.

Over the next few decades, Florida Department of Transportation will reconstruct 73 miles of I-4 from the Central Florida attractions area (Osceola/Polk County line) to Daytona (I-95). Included in this project are aesthetic improvements, including landscaping, architectural detailing and decorative piers with upward lighting on underpasses to enhance the visual appeal, together with noise walls to reduce traffic impacts. These initiatives will enhance the urban design character, while reducing traffic impacts of the expressways on adjacent neighborhoods.

The second key issue relates to the visual perspective of the motorist traveling at speed on the elevated expressway, experiencing long distance views of the City's major landmarks and downtown skyline. These elevated views provide a panorama otherwise unavailable in cities lacking in topographic variation. As the motorist draws closer, the skyline fills the view and creates a very strong impression of a dynamic, vital city.

Four vistas have been identified and the locations of these vistas are depicted on Figure UD-30. The City has designated these vistas and shall protect them from visual obstruction. Other vistas of the downtown skyline include looking northeast from the eastbound East-West Expressway near the Citrus Bowl, as well as on eastbound I-4 crossing over the Gore Street overpass. These important vistas of the downtown skyline from the elevated expressways impart a positive image of Orlando.

A city's identity is partially formed by distinct geographic boundaries. Boundaries can be highlighted through the development of gateways. The most successful gateways are emphasized by a physical design feature such as Orwin Manor Gates or the landscape treatments found along Mills Avenue at Lake Rowena.

Potential gateways into the City are identified in Figure UD-31 and throughout the planning period the City will maintain and implement a design theme based upon water features for intersections that function as gateways to the City of Orlando.