Section 11: Urban Design

The Urban Design Element is based on the values and goals expressed by McKinney residents and businesses throughout the comprehensive plan process. Key to these values and goals is a strong desire to maintain a unique "McKinney Character" that citizens and visitors have come to appreciate and associate with McKinney. This desire to maintain and, with regard to new development, establish a distinctive community character includes such things as the proper utilization of our existing rolling terrain and wooded stream corridors, the preservation of historic downtown McKinney and the surrounding historic residential neighborhoods, and the distinct and readily identifiable districts, including Eldorado, Stonebridge Ranch, and Craig Ranch. The Urban Design Element is intended to help guide physical land use decisions in order to realize our community's values and goals.

To a great degree, this element establishes the physical land use vision as expressed by the community. This vision is expressed through the urban design elements and the module design treatments. The expression of this vision includes the basic urban form of new development, the treatment of gateways and portals; the look and feel of major transportation corridors; the utilization of creeks, lakes, floodplains, and open space; and land use transitions and buffers.

Urban design can best be described as the physical structures and artifacts that comprise a city.

11.1 Role of Urban Design

Urban design plays an important part in how people perceive a community and associate with it. Urban design can best be described as the physical structures and artifacts that comprise a city. These creations include buildings, roads, signs, street trees, sidewalks and much more. In McKinney the role of urban design is quite important. McKinney's neighborhoods east of US 75, near the downtown, have an urban design pattern that was built primarily between the 1930's and 1950's. This pattern of streets and homes establishes a pedestrian friendly environment. The suburban neighborhoods to the west of US 75 have an urban design pattern that creates efficient vehicular circulation.

The physical character, placement, juxtaposition, and choice of construction materials of physical elements within McKinney give citizens and visitors an understanding as to the values they hold dear. The urban design character of a place helps to define the values of the community. An additional aspect of urban design is the use of public, quasi-public and civic space. Public space includes places such as the sidewalks along the downtown square, city parks, plazas and church courtyards. McKinney's urban design character is one of a culturally rich community with historic roots, high-quality new and contemporary development, with quality public spaces.

11.2 Urban Design Plan

This Urban Design Plan identifies the framework of spaces and linkages that McKinney can achieve with the associated Future Land Use Plan. The plan (Figure 11.2) is a diagram defining future opportunities for "place making". The most important places and spaces are pedestrian environments that provide the setting for people to socialize and enjoy the character that is McKinney.

McKinney can achieve this vision for urban design. To achieve this vision, the community will need to begin by following the Future Land Use Plan in this Comprehensive Plan which includes these proposals for urban design spaces which build on

the quality and character that McKinney exhibits today. McKinney understands that future residents and employers will require that the community continues to increase its "quality of life" features through planning and design.

A. Urban Design Elements

The following urban design elements should be treated on a broad basis, working with the land use modules serving a citywide purpose for placemaking and wayfinding. These urban design concepts are proposed to enhance value and identity in McKinney. The urban design concepts are just concepts; further detailed planning and design must be completed for all items as McKinney defines their priority to move forward on implementation. These proposed urban design concepts work together with the Future Land Plan and other comprehensive plan elements to create a physical environment unique to McKinney. These elements, if implemented properly over time, can add to the economic development potential for the city.

1. City Gateways / Portals

City entrance gateways should be placed where natural waterways cross major highway corridors (see Figure 11.1). These entryways should express the natural beauty that is found in McKinney's wooded streams and rivers while creating a sense of arrival. They should help delineate one community from another as the traveler passes from a neighboring city into McKinney.

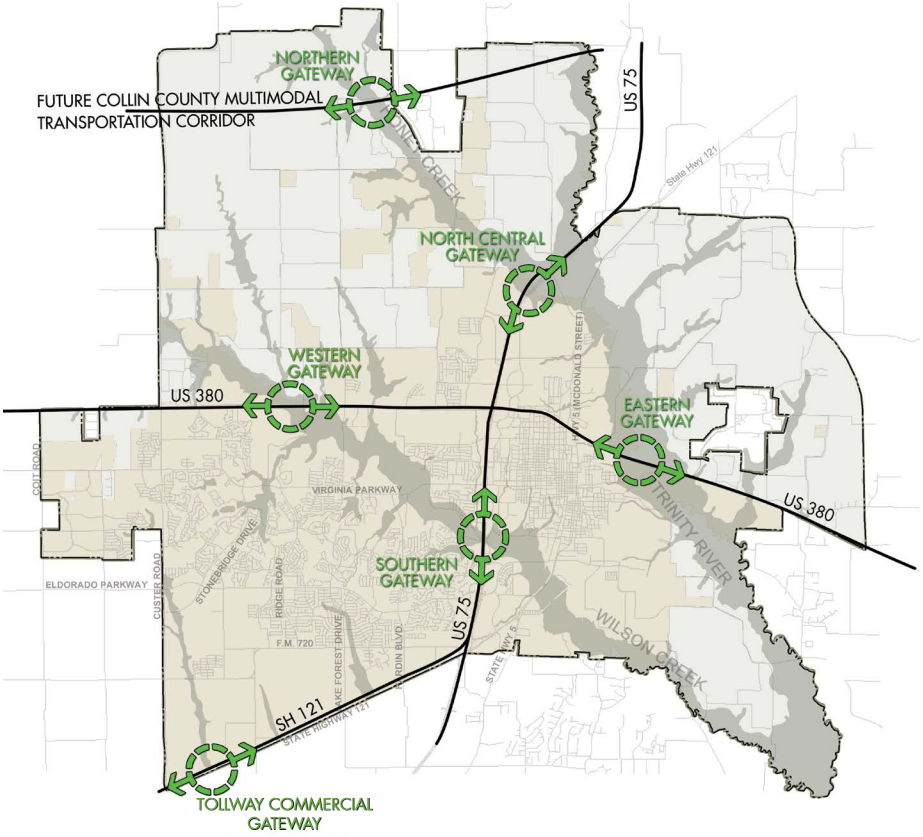
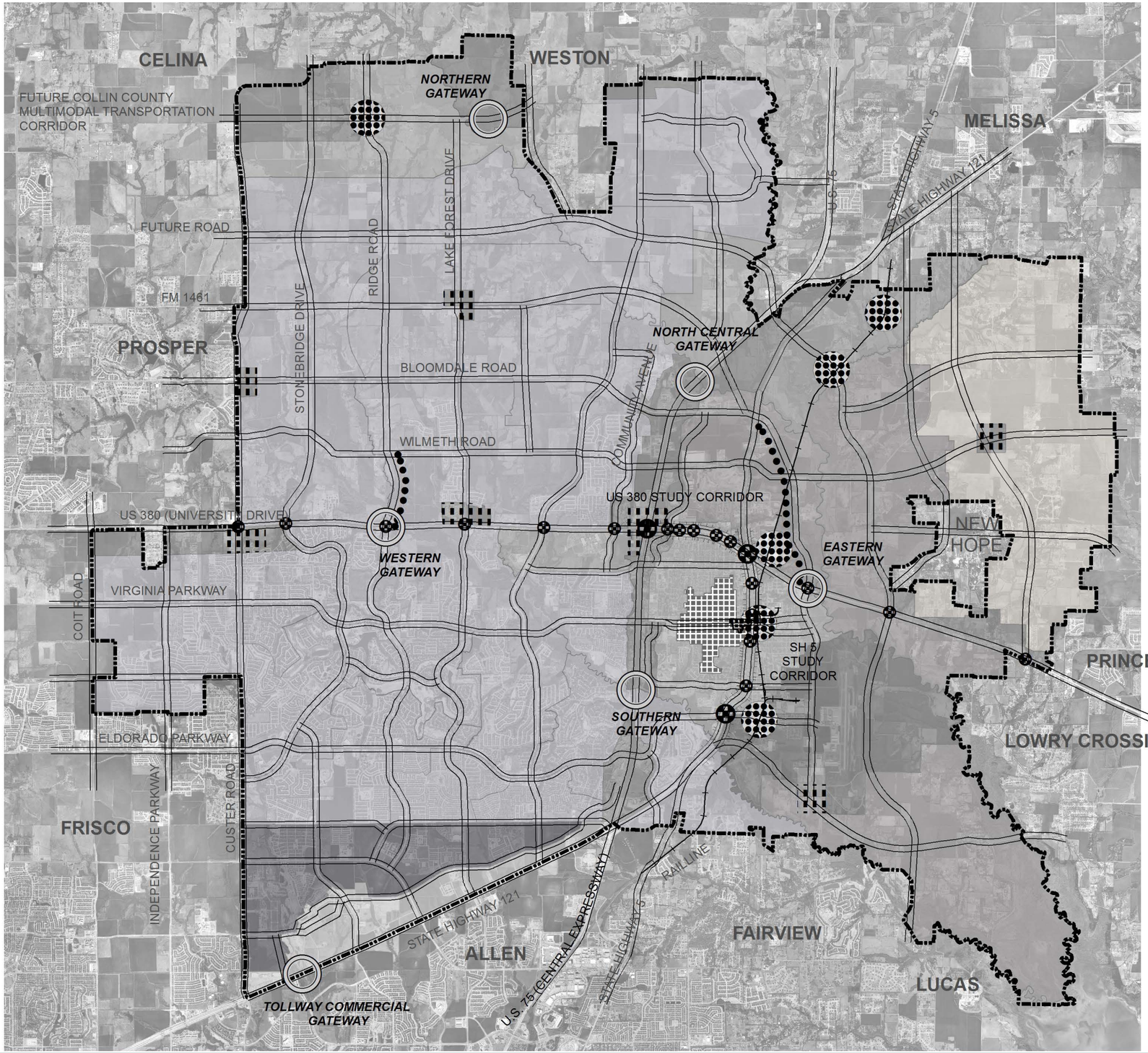


Figure 11.1: City Gateway/Portal Locations



CITY OF MCKINNEY

COMPREHENSIVE PLAN

URBAN DESIGN PLAN

Legend

- Extraterritorial Jurisdiction
- Rail
- Major Roads
- Intersection Study
- District Gateways
- Greenbelt Thoroughfare
- Historic Downtown
- Historic Residential
- Corridor Study
- Transit Village
- Community Village

* Original Adoption 03-22-2004 (Ordinance No. 2004-03-035)

* Amendment #1 01-05-2010 (Ordinance No. 2010-01-001) Revised to reflect boundary changes between McKinney, Fairview and Princeton as well as changes to the Master Thoroughfare Plan.

* Amendment #2 05-XX-2015 (Ordinance No. 2015-05-XXX) Revised to reflect changes to some District Gateway names and the removal of the Transit Village located at Collin McKinney Parkway and Alma Road.

Source: City of McKinney GIS Department Data

XX May 2015

FIGURE 11.2

Feet

0 5,500 11,000

1 Square Mile

100 Acres

THIS PAGE INTENTIONALLY LEFT BLANK

Urban design aspects to be addressed include:

- Location

  As previously mentioned, city gateways should be located at the confluence of natural streams and rivers with major highways. These crossings provide several natural amenities which signify the quality of life in McKinney, while serving as functional elements of the open space and trails systems. Already distinguishable by prevalent mature tree cover, these entry portals have an inherent natural beauty which can be highlighted with strategically placed manmade focal points.

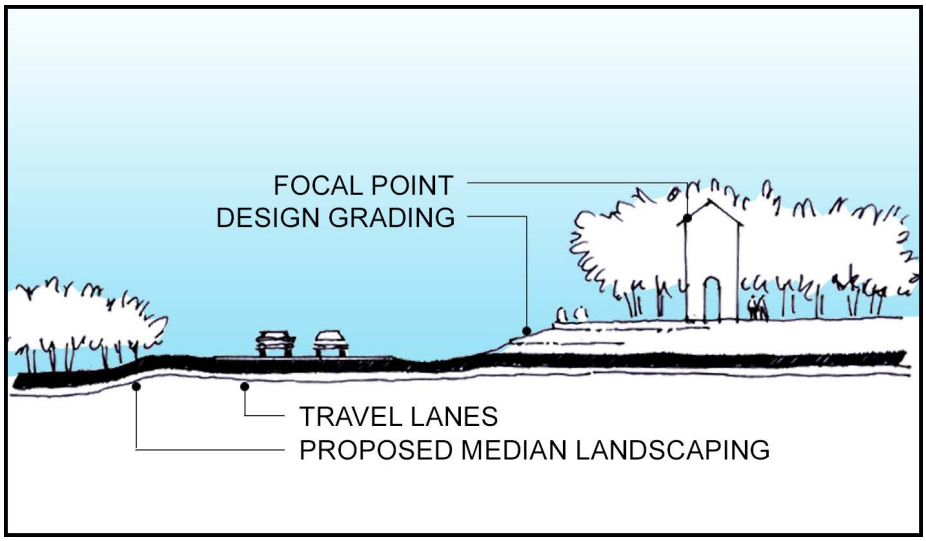


Figure 11.3: McKinney Gateway Concept

- Description / Character

  A single focal point placed within city gateways can be aesthetically pleasing as well as functional. The functional aspect includes features such as: pedestrian overlooks, trail place or event markers, or even a signature art piece. Design grading may be used to enhance the feel of the landscape, especially near the entry portal's focal point. This focal point should be constructed of brick or native stone and should reflect it's purpose and be carefully integrated into its surroundings. Vernacular or regional architecture should inform the focal point's design character, which should result in an architectural element which is sensitive to its context, rather than overpowering.

  City gateways offer natural opportunities for trails and other recreational opportunities. The inclusion of the human element to activate these spaces (an example is the Towne Lake and Wilson Creek corridor) brings another dimension to the gateways, further reflecting McKinney's quality of life attributes. Programming the space for meaningful human use is an integral part of establishing a desirable character.

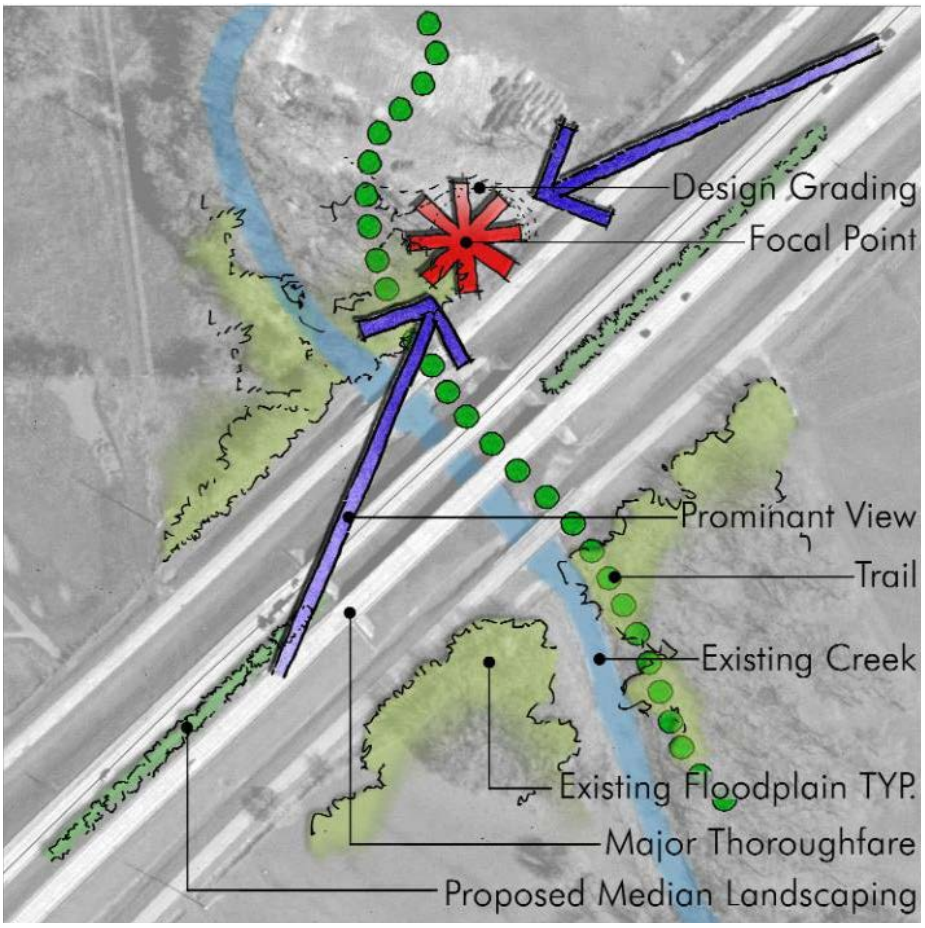


Figure 11.4: Prototypical McKinney Gateway Concept Plan

2. Corridors

State Highway 5 Corridor

One of the primary focuses of the Town Center Study was the State Highway 5 (McDonald Street) Corridor. The Town Center Study Phase 1 Report (2008) serves as a policy guide for city officials, staff, property owners, and private developers when considering decisions affecting the State Highway 5 Corridor.

State Highway 5 (McDonald Street) is a north/south corridor in McKinney. The study area along SH 5 between US 380 and Industrial Boulevard crosses the eastern edge of Downtown McKinney. Prior to the construction of the existing US 75 freeway, SH 5 was the main north/south highway through McKinney. The development along this corridor typically predated McKinney's first zoning ordinance (1969), so many of the landscaping, parking, and building set back standards typical of contemporary development were not provided. Some of the lots fronting onto State Highway 5 are shallow by current standards, further challenging the redevelopment opportunities along the corridor.

Existing land uses along the corridor include residential, commercial, and light industrial. There are several sites available for infill development along the corridor. To a certain degree, some of the unique character from the area results from these pre-zoning standards, and it may be to the City's advantage to play off this unique development pattern and preserve a snapshot of McKinney's history.

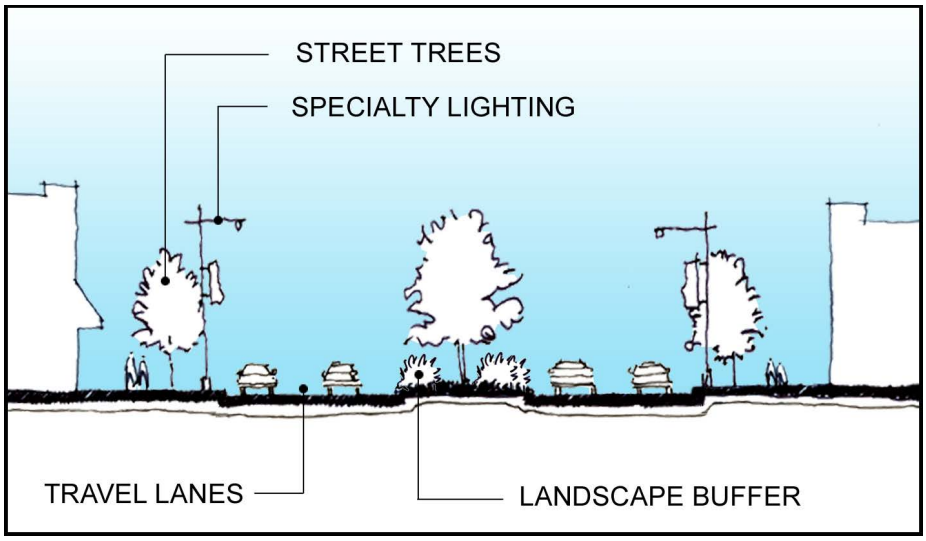


Figure 11.5: SH 5 Corridor Section (Conceptual)

Intersections

The intersection of State Highway 5 and Virginia and Louisiana Streets connects Historic Downtown McKinney with one of McKinney's oldest warehouse districts. Design treatments should complement the existing architectural style of downtown.

Streetscape

Pedestrian-scale street environment is encouraged along the corridor. Due to the unique constraints of the corridor, traditional methods of creating pedestrian-scale street environment may have limited applicability. However, in some areas it may be possible to provide landscape plantings to create pockets of separation from motor vehicles for pedestrians.

Building Relationships

Special consideration of urban form along State Highway 5 is appropriate. A detailed study is currently being made to identify those unique elements that may add value to the corridor that are not currently provided for within McKinney's development standards. By enhancing the unique nature of this pre-zoning commercial corridor, it may be possible to continue the revitalization that has been occurring along the corridor in a more strategic manner.

Just as the physical relationship of the buildings to the street create the quality of environment in Downtown McKinney, the physical relationship of the State Highway 5 corridor should be utilized as an asset, not a liability.

Reference the Town Center Study Phase 1 Report (2008) for more detailed urban design concepts related to intersections, streetscape and building relationships along the State Highway 5 corridor.

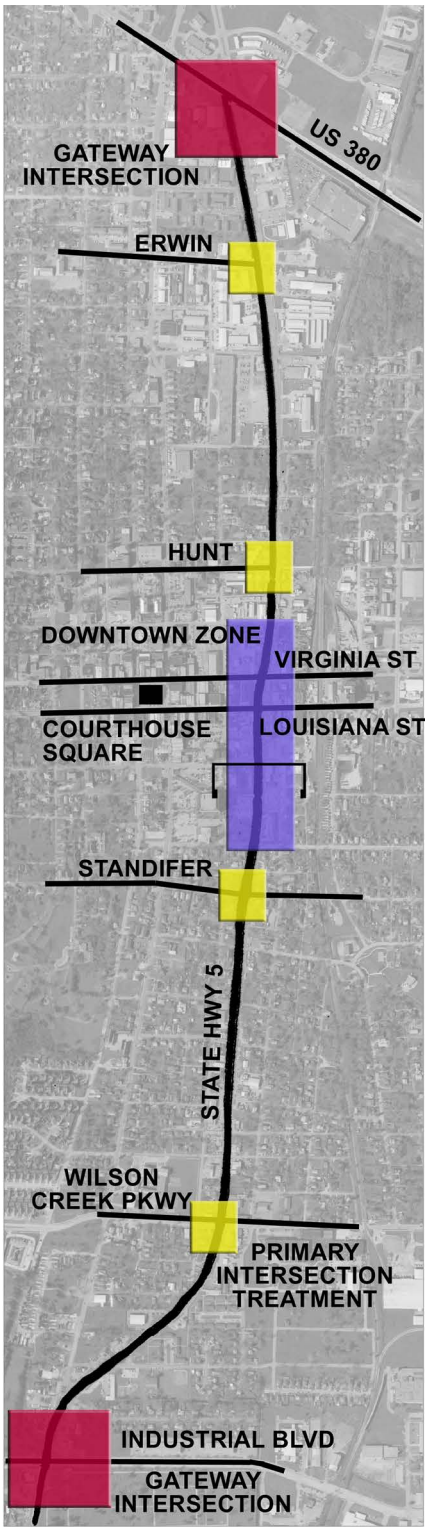


Figure 11.6: SH 5 Corridor Concept

US 380 Corridor

One of the primary focuses of the Town Center Study was the U.S. Highway 380 corridor (generally between Graves Street and State Highway 5). The Town Center Study Phase 1 Report (2008) serves as a policy guide for city officials, staff, proper-

ty owners, and private developers when considering decisions involving issues (such as land use, circulation, and aesthetic improvements) affecting the U.S. Highway 380 corridor.

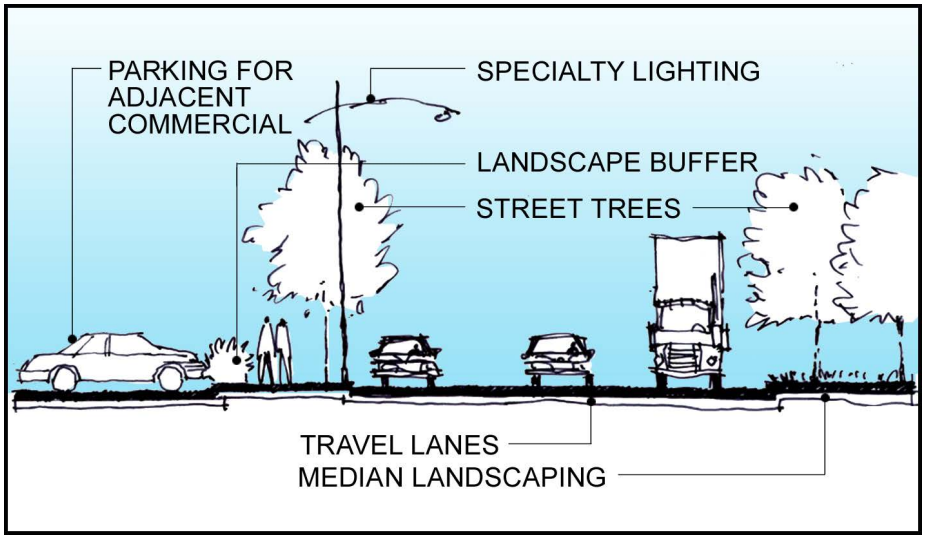


Figure 11.7: US 380 Corridor Section (Conceptual)

US 380 is a major east/west highway through McKinney that provides a connection to the western and eastern sections of the City of McKinney. It is a six-lane divided highway with land uses that include residential, office and regional commercial uses along the edges.

Corridor Sections

Five distinct sections of the US 380 Corridor exist. Each section should be reviewed for its unique strengths, while keeping an overall corridor theme and context in place.

- Trinity River Portal Section
- Town Center Section
- US 75 Commercial Core Section
- Wilson Creek Portal Section
- Western Section

Figure 11.8: US 380 Corridor Concept

Intersections

Two key intersections have been identified for Community Village designation. Those intersections are at Custer Road and Lake Forest Drive. Community Villages are discussed in detail in the Land Use section of the Comprehensive Plan.

Streetscape

Landscaped medians should be created along the US 380 corridor (Figure 11.7). Concentrations of streetscape planting are recommended in the Town Center Module. Landscape street trees soften the highway aesthetically, while enhancing pedestrian safety.

Building Relationships

Future land uses along the corridor should allow a full range of commercial uses, while limiting residential uses. Special concern should be given to providing an appropriate transition between uses fronting the corridor and their adjacent uses. This is necessary to avoid those adjacent uses from being negatively impacted by the uses directly along the corridor which may be significantly more intensive. Height and massing controls should provide a compatible relationship to the adjacent residential neighborhoods.

Reference the Town Center Study Phase 1 Report (2008) for more detailed urban design concepts related to intersections, streetscape and building relationships along the section of the U.S. Highway 380 corridor within the Town Center Module.

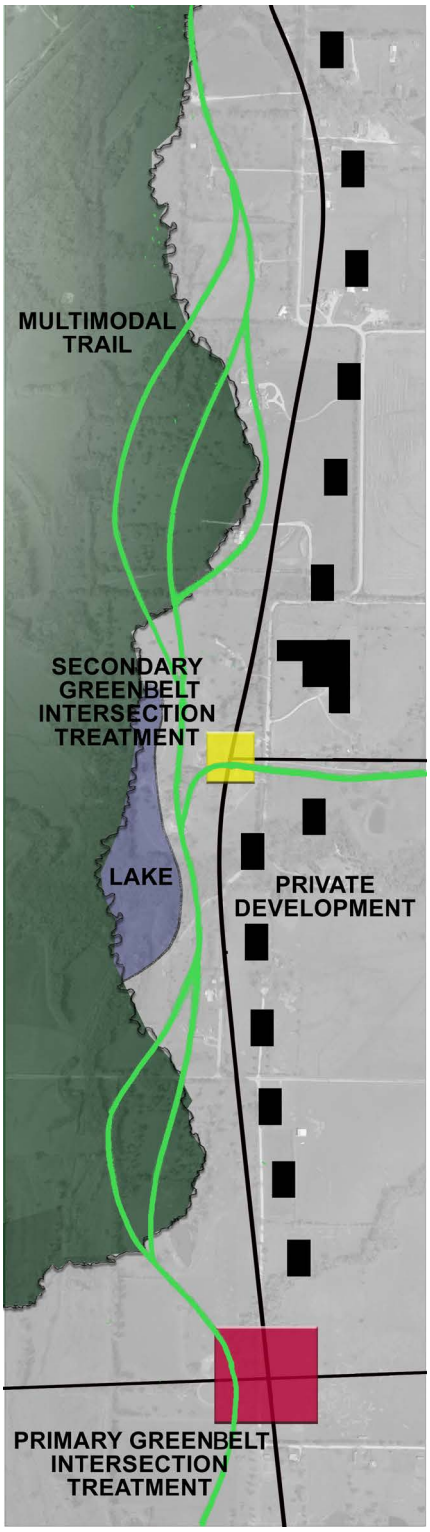


Figure 11.10: Greenbelt Thoroughfare Corridor Concept

Greenbelt Thoroughfares

The Greenbelt Thoroughfares are organized to take advantage of the creeks, floodplains, lakes, and open spaces that occur throughout the City of McKinney. Two Greenbelt Thoroughfares have been designated to occur north of US 380 along Ridge Road and Airport Drive.

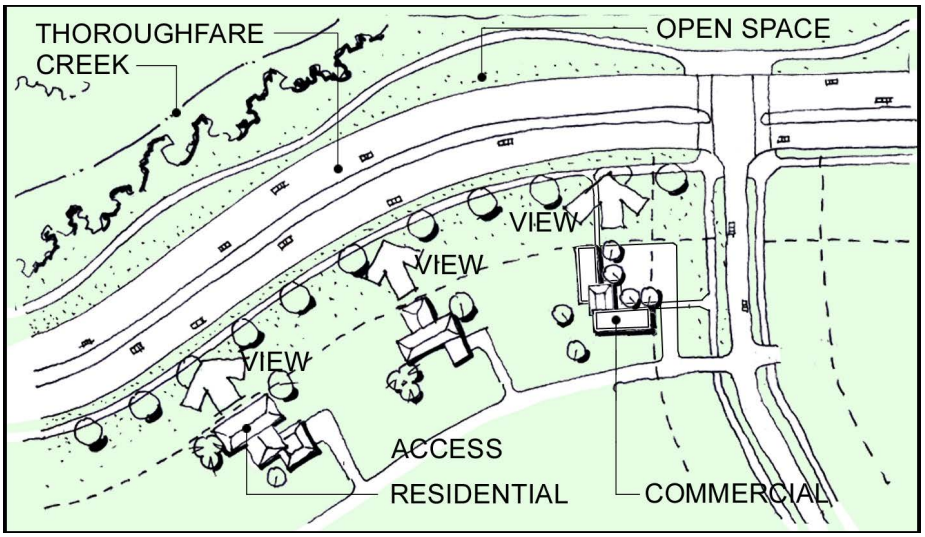


Figure 11.9: Prototypical Greenbelt Thoroughfare

Intersections

Greenbelt Thoroughfares are encouraged to utilize "T" intersections whereby views and access to the natural amenities can be heightened. Pedestrian trail access at grade should be provided at logical locations along Greenbelt Thoroughfares.

Streetscape

The streets designated as Greenbelt Thoroughfares are designed to include significant single-loaded roadway segments having development only along one side. Streetscape elements should differ between the developed side and greenbelt side. Enhanced pedestrian and bicycling facilities should be provided on the greenbelt side. Special consideration of hiking and biking activities, connections to existing trail networks, pedestrian furniture, trash receptacles, and lighting, as well as informal tree plantings should be made.

Building Relationships

Building orientation to take advantage of the natural open space is encouraged. Inward facing developments should be used if no practicable means of taking advantage of the open views is possible; in such cases, special/enhanced treatment of the rear and sides of the development should be provided to maintain an appropriate view from the public trails and the street.

3. Creeks, Lakes, Floodplains, and Open Space

McKinney's natural elements, including creeks, lakes, floodplains, and open space, should be considered in the context of urban design. These elements influence the physical form of the developed environment and can enhance its value, if utilized in a thoughtful manner. McKinney currently requires buffers/screens as a part of their various development codes. The following buffers are recommended along with current requirements.

Figure 11.11: Prototypical Open Space Concept

Urban design elements to be addressed include:

- Development Frontage

  Developments adjacent to a creek, lake, floodplain, or open space should take advantage of the view of these areas and incorporate them into the design of the new development. In particular, when located along a road which separates the natural feature from the developed area (see also Greenbelt Thoroughfares), the development should look out across the road to the natural area. In doing so, the built environment can connect people with these natural areas rather than serving to further limit contact. Development, particularly residential, should not be oriented away from the road and natural element, leaving rear fences, alleys, or neighborhood walls adjacent to the road in this condition. Views from development should take advantage of the adjacent natural amenity.

  Setbacks, parking requirements (including parking location in relationship to structures), and landscape improvements for development along creeks, lakes, floodplains, and open space are governed by existing zoning regulations, but amendments should be considered to provide for site design which is sensitive to these natural amenities. Sidewalks should be present along developments with this frontage to accommodate pedestrian activity and connect to trail networks.

- Open Space Relationship

  Where possible, open spaces (creeks, lakes, floodplains, parks, or private open spaces) should be connected to form a network which allows for habitat protection and wildlife migration. Existing segmented open

spaces should be targeted for connection where possible. Open spaces may be connected through public lands, or through linear opportunities such as utility and rail easements or street right-of-way.

The resulting open space system sets the framework for alternative transportation options, such as trails. In addition, it can add to the value of individual properties, developments, and the community as a whole. By developing residential areas adjacent to open space, property values increase, and demands for these lots increase.

4. Buffers

Buffers serve an important purpose in urban design as they relate to the separation of inappropriate land uses. Buffers can take many forms: architectural buffers include walls, buildings, or other structural elements that form a visual barrier. Landscape buffers utilize trees, berms, shrubs, or grasses to form the barrier. Both architectural and landscape buffers are appropriate if conflicting land uses are in close proximity to one another. Open space buffers, on the other hand, are less visually dominating and are appropriate in circumstances where conflicting land uses are not in close proximity, (in other words, where the open space to separate the two uses is present and unaccounted for). Natural open space buffers can be subtle buffers which promote a more natural, less intense separation.

Urban design elements to be addressed include:

- Architectural buffers

  Architectural buffers are most appropriate when placed between buildings of conflicting land uses. Buffers such as walls, for example, can be used to effectively separate such uses in areas of low visibility. Such uses may also include screening waste or mechanical structures near buildings. However, architectural barriers should be avoided for use along a street without a high level of design consideration and accompanying landscape treatments to soften its appearance. Visible walls should be constructed of brick or stone. Wood fences should be avoided due to their limited life span.

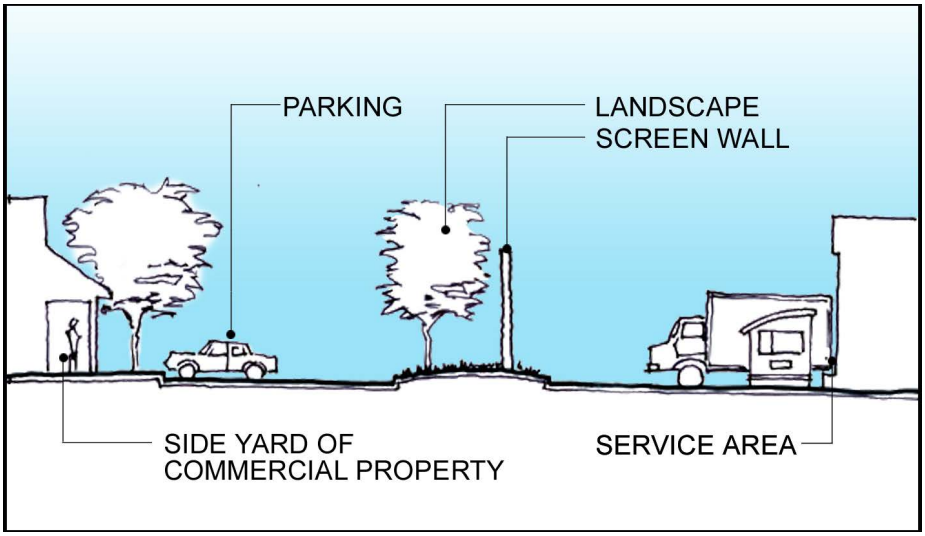


Figure 11.12: Prototypical Architectural Buffer

- Landscape buffers

  Landscape buffers, including trees, shrubs, and grasses, are appropriate when placed in areas of higher visibility. Landscape buffers should be used along long stretches of streets, given the softer appearance. Additionally, such uses may include screening parking areas from thoroughfares or screening smaller mechanical or utility boxes. They may also be used in conjunction with architectural buffers to soften their appearance.

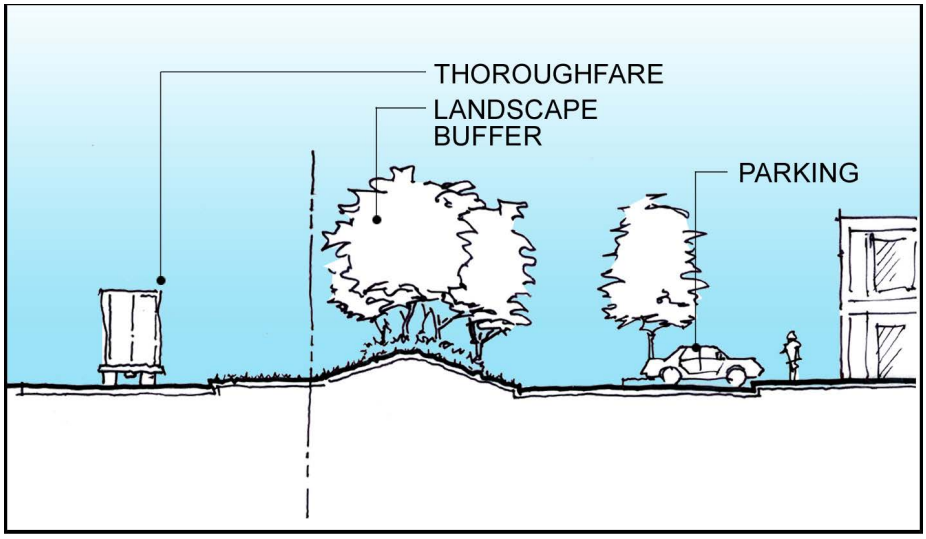


Figure 11.13: Prototypical Landscape Buffer

- Open space buffers

  Open space buffers are most appropriate to separate conflicting land uses which have a minimum of 30 feet between them. Such buffers may include vegetation, landscape, and/or trails or other pedestrian amenities.

  Buffers should be used to supplement sensitive site design to mitigate potential negative impacts rather serve as a substitute for sensitive site design. No buffer or screening device can ever entirely mitigate the negative impacts associated with uses of varying intensities. By considering these factors when beginning to lay out the site, rather than as an afterthought, uses can be made more compatible.

B. Module Design Treatments

The following urban design treatments are specific to particular land use modules, based on a range of desired characteristics for each module.

1. Town Center Module

The Town Center Study Phase 1 Report (2008) serves as a policy guide for city officials, staff, property owners, and private developers when considering decisions regarding urban design treatments within the Town Center Module.

The Town Center Module is a mix of traditional residential housing types with neighborhood and regional office, retail, and commercial uses. This Module contains a significant amount of community facilities such as government offices, churches, schools and parks. The core of the Town Center Module is the Downtown Commercial District, consisting of the historic town square surrounded by blocks of commercial structures and the City of McKinney's main municipal campus.

Ringing the core is the Historic Residential District, a mix of pre-World War II housing in a pre-automobile, traditional neighborhood pattern to form a strong sense of place. Surrounding this core are other neighborhoods and commercial districts. This outer zone is made up of residential units and commercial developments that catered to surrounding residential neighborhoods from the 1880's through today. This module, with its unique blend of land uses, relationships, and age of development, requires a planning document specific to itself. This area contains much of the physical fabric that people reference as "McKinney Character". The plan for the Town Center includes a much greater detail of analysis and recommendations.

Reference the Town Center Study Phase 1 Report (2008) for more detailed module design treatments related to building orientation, pedestrian environment, parking, and vehicular access in the Town Center Module.

A - Downtown Commercial District

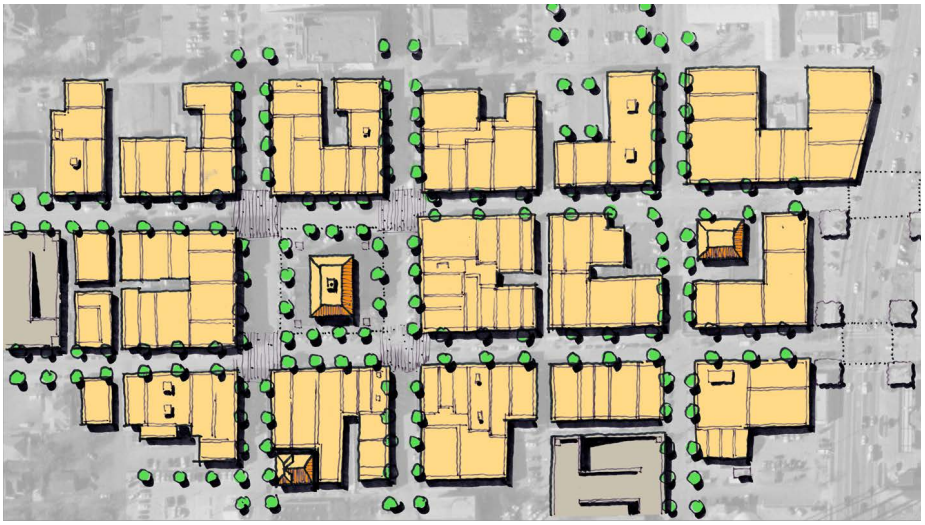


Figure 11.14: McKinney Downtown Commercial District

Building Orientation

The Downtown Commercial District was developed before the automobile and reflects a pedestrian-oriented development pattern. The downtown served as

the Collin County seat, a center of agricultural trade and the area's retail hub. These primary land uses are still reflected today in the historic courthouse and the retail storefronts on and around the square. The multi-story grain mills by the railroad tracks still remain today and represent a significant redevelopment opportunity for the community.

While the businesses and wares have changed, this pedestrian-friendly commercial environment continues to draw customers to McKinney's downtown. Any redevelopment in the area should be sensitive to the historic land uses and building patterns, including following the Historic Design Guidelines if the property is zoned "historic." The dominate downtown building patterns and uses include:

- Retail, office, and mixed use buildings set closer to the street curb with little or no setbacks from the property line.
- Retail urban and office urban structures ranging between single-story and three stories in height.
- The retail, office, and mixed-use product support a street-level pedestrian-oriented environment.

Pedestrian Environment

The traditional building orientation and architectural detail were designed at the human scale, as opposed to the contemporary automobile-oriented development pattern that is typically found in retail developments along and west of US 75. Maintaining the prominence of the pedestrian-friendly environment, as well as the historically sensitive architectural treatment of new development, is critical in the downtown area. To help facilitate such development patterns, the following design treatments should be considered:

- Traditional window displays, entryways, and architectural decorative treatments around window displays and entryways.
- Wide sidewalks, building set-to lines, and careful attention to access location and design.

Parking

The Downtown Commercial District attracts shoppers from a wide region, in addition to surrounding neighborhoods. Both customer and employee parking is an important factor in the development of this module. In general, off street parking should not dominate the downtown area while maintaining convenient, efficient, and, to some degree, intuitive access. To achieve this, it is critical that the following design elements be considered:

- Surface parking lots should be located behind buildings or one to two blocks off the main square where possible.
- Parking structures require appropriate placement, scale, and design if utilized downtown. Parking structures should not dominate gateways into downtown but should be conveniently located one to two blocks off the square.
- A parking study of downtown is being conducted in order to determine the type, location, and timing of parking improvements.

Vehicular Access

The street patterns within the Downtown Commercial District are a traditional

grid pattern typical of early community development. The grid pattern within the module features narrow streets and on-street parking.

- To maintain the pedestrian-oriented environment while still providing efficient vehicular access into and around the downtown area, special emphasis on minimizing pedestrian-vehicular conflicts is required.

B - Residential Historic District

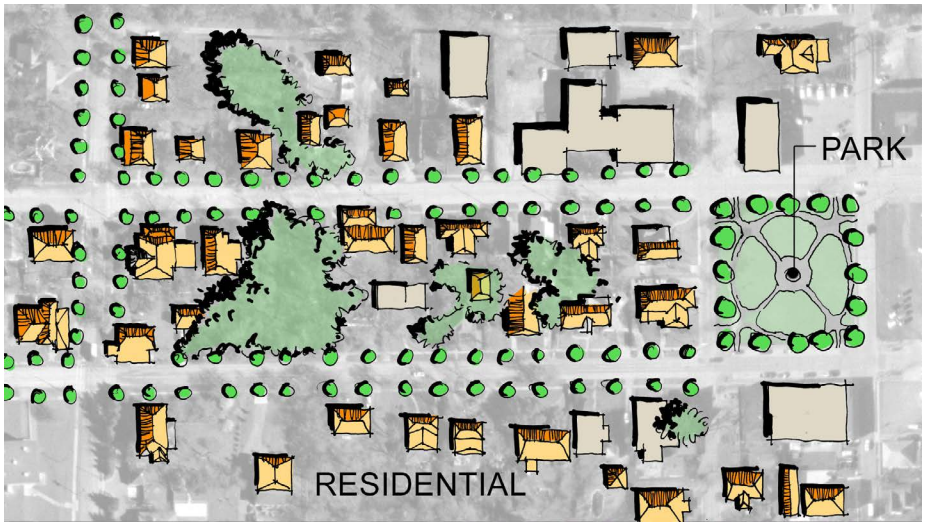


Figure 11.15: Residential Historic Prototype

Building Orientation

The historic residential areas are made up of a mix of housing types, of varying styles and sizes, along with a smaller amount of medium density dwelling units. The building pattern is traditional, and many of the streets were laid out in the pre-automobile era prior to World War II. Maintaining this unique mix and relationship between residential dwelling units, street activity, and neighborhood cohesiveness is important in the historic residential area.

- The Historic Design Guidelines should be utilized for areas with a "historic" zoning designation.
- Lots sizes vary from block to block. As redevelopment occurs building massing should be consistent within each block (facades fronting each other).

Pedestrian Environment

The Residential Historic District should continue to emphasize its human scale design that creates a pedestrian-friendly environment. This treatment should be present in redevelopment projects when appropriate.

- Residential streets should incorporate sidewalks on both sides of street.
- The street grid network should be preserved in order to provide expanded choices in movement for both pedestrian and vehicular access.

Vehicular Access

The street patterns within the Residential Historic District are similar to the Down-

town Commercial District - a standard grid pattern typical of pre-automobile community development. This pattern should be continued with new and redevelopment projects within this area.

2. Transit Village Module

The Town Center Study Phase 1 Report serves as a policy guide for city officials, staff, property owners, and private developers when considering decisions regarding urban design treatments within the Transit Village Module generally located on the east side of McDonald Street (S.H. 5) near Louisiana Street, Virginia Street, and the DART rail right-of-way.

The Transit Village Module describes development based around a transit center and includes medium to high density residential, office, retail, and mixed-use projects. Each transit village is anticipated to have a different mix of uses with some composed of regional office and commercial uses and others with greater amounts of entertainment and commercial uses with varying degrees of residential uses. Each transit village can take on a character and style of its own, creating unique opportunities to address a variety of development patterns. These patterns may include interim park & ride facilities, mixed use facilities, employment centers, and traditional downtown-scale centers. True transit villages require the use of public transit, including light rail and bus, in addition to automobile, bicycle, and pedestrian access.

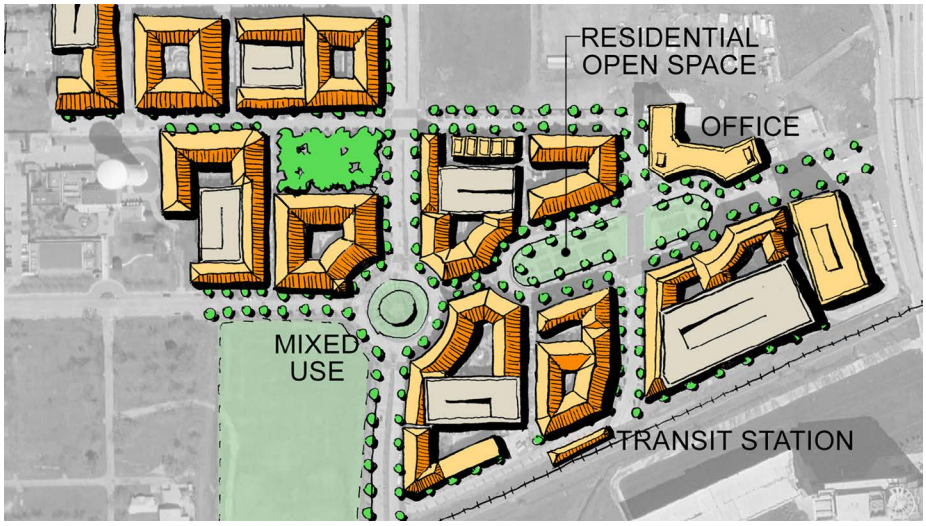


Figure 11.16: Transit Village Prototype

Transit Relationship

The Transit Village Module is geared toward the existence of a transit station serving local and regional commuters. To efficiently serve the transit station, the built environment of streets, sidewalks, buildings, and public spaces must be tailored to provide safe active surroundings and foster a pedestrian-friendly setting where walking and transit are a preferred means of mobility.

- The highest level of density within the Transit Village should be focused within a quarter-mile radius, or ten minute walk, from the transit station.
- To address the higher densities of the Transit Village, public plazas or parks should be interspersed within a quarter-mile radius of the transit station so that no building is more than 300 feet

from such public plazas or parks. At least one significant and meaningful public space should be provided. Size, function, and prominence define the concept of significant and meaningful.
- Transit stations should be located with ample access to at least two major roadways serving the Transit Village.

Building Orientation

Within the Transit Village, buildings are developed primarily to serve the pedestrian needs of neighborhood residents, village employees, and visitors. Because of this pedestrian focus, building facades should properly address wide sidewalks and street-related activities. **Reference the Town Center Study Phase 1 Report for more detailed module design treatments related to building orientation, pedestrian environment, parking, and vehicular access in the Transit Village module generally located on the east side of McDonald Street near Louisiana Street, Virginia Street and the DART rail right-of-way.** Generally, the following treatments should be considered:

- Buildings with the greatest density need to be adjacent to the transit facility.
- A density cone sits over the transit village with buildings at the center having greatest density and lessening as you move to the perimeter developments.
- Buildings should utilize build-to lines, not contemporary setback lines.
- Buildings can be arranged to create a court or village pattern. These patterns provide a pedestrian scaled environment. This can be reinforced with landscape and lighting for identification.
- Exterior environments for dining and relaxing are vital for some land uses. These "outdoor rooms" can be designed with landscape or plaza hardscape materials.
- Service areas need to be located away from adjacent front door access points. Service courts can be defined on u-shaped buildings to contain trash and delivery products.

Pedestrian Environment

The core of the Transit Village is the transit station; this hub is surrounded by a dense concentration of land uses which can include a combination of retail, office, entertainment, and residential developments. Key to making these various parts work together as an integrated whole is the design, including scale and functionality, of the Transit Village. Mixed uses, pedestrian access, activity nodes, and attention to architectural design differentiate a Transit Village from a simple commuter-oriented "park and ride" facility.

- Wide sidewalks, front entries, and street oriented commercial establishments should be emphasized.
- Walkways linking adjacent neighborhoods with this module need to be provided.
- Walkways must be provided on both sides of all streets.

Parking

While automobile movement should be secondary in design and importance to pedestrian movement, auto-oriented travel will still need to be properly accom-

modated. The following parking considerations should be utilized within Transit Village developments:

- Multi-level parking garages and surface parking lots should not front directly onto streets but should instead be located in the interior courtyard settings of building(s) when possible.
- On-street parallel parking should be considered for all local streets.
- On-street head-in parking should be considered only in limited circumstances.

Vehicular Access

Within the Transit Village Module, automobile movement should be secondary in design and importance to pedestrian movement.

3. Community Village Module

Community Villages are areas of concentrated development. Generally, a community village is a grouping of commercial uses serving a larger region. It includes a higher concentration of retail and lesser concentration of office, entertainment and community facilities. Some residential uses may be allowed when designed to minimize impacts from and to the primary commercial uses. But these will generally fill in around, rather than develop prior to, the commercial uses.

Figure 11.17: Community Village Corner Prototype

Building Orientation

Within the Community Village, buildings are developed primarily to serve the needs of shoppers and workers by providing a concentrated commercial environment.

- Unified architectural standards should be developed for each or all community villages. The standards should use high-quality building materials, provide architectural variety, while establishing a family of compatible standards.
- The uniform alignment of facades should be used to provide for a more planned appearance and character. In contrast, overly long building facades should incorporate offsets to prevent

monotony.
- Buildings can be arranged to create a court or village pattern. These patterns provide a pedestrian scaled environment. This can be reinforced with landscape and lighting for identification.
- Exterior environments for dining and relaxing are vital for some land uses. These "outdoor rooms" can be designed with landscape or plaza hardscape materials.
- Service areas need to be located away from adjacent front door access points. Service courts can be defined on u-shaped buildings to contain trash and delivery products.

Parking

Because of its broad market appeal, Community Village Modules will attract shoppers traveling from a wide area. Both customer and employee parking will be an important factor in the development of this module. Ample, convenient parking should be provided.

- Parking lots should be divided into smaller parking "gardens" separated by meaningful green landscaped corridors. The corridors can include pedestrian walkways leading to building entries.
- Parking and pedestrian walkways should be designed to serve as "visual compasses" directing pedestrians toward the primary entry of buildings.
- Parking lots should utilize landscaped walkways to provide safe pathways for those going from their cars to the buildings; and to allow pedestrians to go from building to building safely.

Pedestrian Environment

These concentrated commercial modules require a network of walkways for pedestrians, bicycles, and other modes to move between buildings.

- Walkways linking adjacent neighborhoods with this module needs to be provided.
- Walkways connecting adjacent buildings need to be provided.
- The network of walkways can be enhanced with landscaping and lighting to support safe and pleasant movement.

Vehicular Access

Convenient access should be provided. Fire lanes and cross access drives should be included to the front and rear of buildings.

- Heavily used access drives should be designed to reduce conflicts with vehicles backing out of parking spaces.
- Primary access drives can take the look and feel of a local street. These streets allow the user to circulate the village with a logical pattern allowing easy and safe access.
- Unified signage standards should be developed to define the comprehensive package of high-quality development standards for this module.

4. Suburban Mix Module

The Suburban Mix Module is generally used for single-family residential development typically at a density of 3.0 to 3.4 dwelling units per acre, with supporting office and retail uses rounding out the typical module area. Medium density residential along with community facilities such as schools, parks and religious institutions are also included in the Suburban Mix Module. Opportunities to connect with the City of McKinney's trail network should be utilized if the module is located adjacent to the trail system.

Figure 11.18: Suburban Mix Prototype

A - Residential Single-Family

Building Orientation

The single-family residential housing units that dominate the Suburban Mix Module have a typical residential building pattern that is characterized by average front- and rear-yard setbacks, as well as minimum side-yard setbacks. Design of subdivisions should work with the natural features of the land such as topography, creeks, and scenic view. Engineering efficiency along with maximizing lot count should not be the primary consideration of subdivision design.

Another critical element in building orientation is the traffic patterns and levels within the module. Fronting homes on higher traffic roads can have an undesirable impact, whether real or perceived, on the quality of life of the residents. Poorly designed subdivisions that don't account for adequate use of collector streets, appropriate stacking at major roadways, and limiting cut-through traffic patterns often result in requests to the City for traffic calming measures. Subdivisions should be planned in a holistic manner that accounts for the overall area traffic patterns, neighborhood levels, and the like.

- Single-family housing units should side on residential collector streets and to back single family on major collector streets.
- Single loaded streets in residential subdivisions are desirable when adjacent to a park, floodplain, or greenbelt.

Design for Density

In order to achieve the density bonus for preferred design, the following features should be incorporated into the design of residential developments. To achieve

the increase to 3.4 dwelling units/acre available for single-family residential, the items below should be used:

- Extremely large tracts should be broken down into smaller separate distinct neighborhoods or villages generally no larger than 50 acres or +/-175 lots.
- Curvilinear streets should be used rather than a modified grid pattern.
- Natural areas such as creeks and lakes should have single loaded streets adjacent to them.
- Usable open space should be centrally located throughout the neighborhood to serve as an amenity for all residents. These open areas should not serve as detention ponds.
- Culs-de-sac should not be perfectly round, rather they should be more elliptical (tear drop) and off center. A landscaped island is also desirable.
- Median features should be incorporated into street design, particularly at the entrance to neighborhoods.
- A mix of lot sizes and shapes should be included along a street frontage rather than a uniform lot size.
- Penetrating screen walls and allowing view corridors into neighborhoods from arterial streets via the use of landscape or metal fencing at the terminus of neighborhood culs-de-sac is desirable.

B - Commercial & Multi-Family

Building Orientation

Multi-family and commercial land uses should be oriented toward arterial roadways with secondary access on major collector roadways, not residential streets. The land use transition, including building height, architecture, landscaping, and site plan elements, is a significant element that can define the appropriateness of the site planning on the more intensive land uses when adjacent to single-family uses.

- Transitions are a design feature that includes: stepping building height away from residential, window orientation limits for second floor buildings, landscape buffers, living screens, and others.
- Exterior environments for dining and relaxing are vital for some land uses. These "outdoor rooms" can be designed with landscape or plaza hardscape materials.
- Service areas need to be located away from adjacent front door access points. Service courts can be defined on u-shaped buildings to contain trash and delivery products.

Parking

Because of its market appeal, commercial development will attract shoppers traveling from adjacent neighborhoods. Both customer and employee parking will be an important factor in the development of this module.

- Parking lots should be divided into smaller parking "gardens" separated by meaningful green landscaped corridors. The corridors can include pedestrian walkways leading to building entries.

- Parking and pedestrian walkways should be designed to serve as "visual compasses" directing pedestrians toward the primary entry of buildings.
- Parking lots should utilize landscaped walkways to provide safe pathways for those going from their cars to the buildings; and to allow pedestrians to go from building to building safely.

C - Residential and Commercial

Pedestrian Environment

The Suburban Mix Module is dominated by residential uses with a secondary mix of neighborhood supported commercial uses. To foster greater neighborhood organization and to develop stronger bonds to local amenities and commercial centers, pedestrian linkages must be put in place. The following design treatments should be considered in strengthening these connections.

- Suburban Mix Module residential streets should incorporate sidewalks on both sides of street where necessary to provide for increased pedestrian access.
- Sidewalks from residential streets should connect with sidewalks running alongside community collector roads and thoroughfares.
- For residential streets terminating at parks or greenbelts, pedestrian access to hike and bike trail systems should be provided where appropriate.
- To help facilitate other modes of travel and to connect with community amenities, interior sidewalks and crosswalks within commercial centers should link with adjacent thoroughfare sidewalks, residential street sidewalks, and trails within adjoining greenbelts and parks.
- Community facilities, such as schools, libraries, religious facilities, and fire stations, should link into adjoining greenbelt and park trails when possible.

5. Estate Mix Module

The Estate Mix Module is generally used for low density single-family residential on large lots, with a limited amount of other single-family residential and support office and retail uses. Community facilities such as schools, parks and religious institutions are also included in the Estate Mix Module. Medium densities and higher concentrations of residential or commercial land uses are generally incompatible with this module unless additional infrastructure capacity for thoroughfares, water/wastewater facilities, schools, parks, and the like are provided. Opportunities to connect with the City of McKinney's trail network should be utilized if the module is located adjacent to the trail system.

Building Orientation

Low density larger lot single-family residential housing is found in the Estate Mix Module. This type of residential building pattern is characterized by broad front and back-yard setbacks as well as sufficient side-yard setbacks.

- The limited commercial building patterns in this module should be sensitive to the rural atmosphere that the estate residential

neighborhoods enjoy.

- Additional landscaping buffers, deeper setbacks, residential-scale architectural design, reduced signing levels, and lower lighting levels would be appropriate.

Pedestrian Environment

The Estate Mix Module is dominated by large lot residential uses with a limited mix of neighborhood supported commercial uses. The large size of residential lots, rural street character and infrequent commercial developments make pedestrian linkages less necessary. Even so, design should not ignore this feature.

6. Regional Commercial, Tollway Commercial, Regional Employment, Office Park, and Industrial Modules

The Regional Commercial Module is an area of large scale commercial development providing for retail and service uses on a regional level. Tollway Commercial includes a mix of commercial, office, and entertainment uses that have a strong regional draw. Residential uses within the Tollway Commercial Module are limited and shall generally be located no closer than 1,000 feet from State Highway 121 (Sam Rayburn Tollway). Regional employment is a large scale office and potentially light industrial / research development providing employment at a regional level. Office parks are characterized by the primary use, which are office parks. It also includes supporting retail and service uses. Industrial is development that includes manufacturing, office, distribution, warehouse, flex-warehouse as well as industrial uses with supporting retail and office uses.

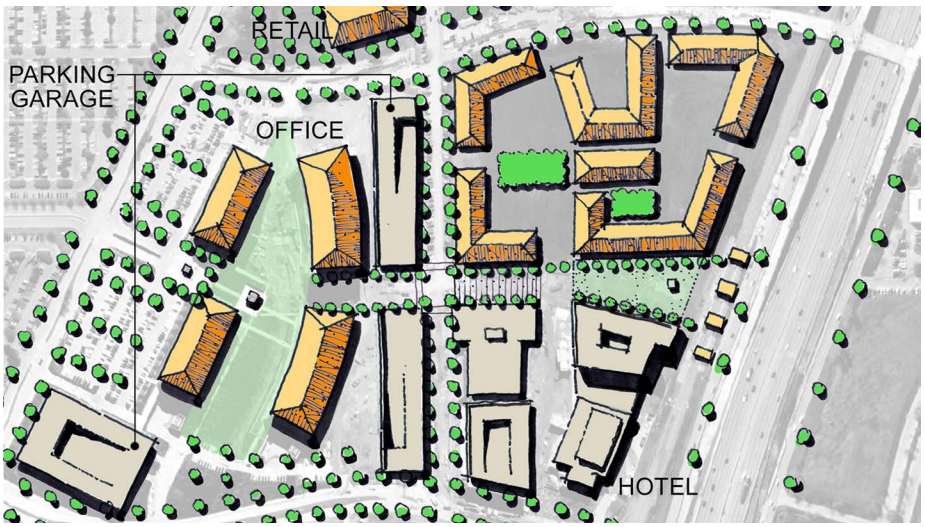


Figure 11.19: Regional Commercial, Tollway Commercial, Regional Employment, Office Park, and Industrial Modules Prototype

Building Orientation

Within these modules, buildings should be oriented to be both accessible and identifiable from the streets.

- The "back" of buildings which generally include service areas, dumpsters, loading docks etc. should be the least visible side of the building and not diminish the view from natural areas.
- Where this is not possible, appropriate screening should be used to soften the view.

- When residential adjacency exists, appropriate transitions, buffers, and other design elements should be utilized by the more intensive use to minimize any negative impacts on the residential neighborhood.
- Parking garages need to be near the building they serve and not be adjacent to neighboring residential.
- Parking garages must have façades that do not show ramping in the façade design.

Parking

These modules anticipate large numbers of people traveling to these centers for working and shopping, with most arriving by car or truck.

- Parking lots should be divided into smaller parking "gardens" separated by meaningful green landscaped corridors. The corridors can include pedestrian walkways leading to building entries.
- Parking and pedestrian walkways should be designed to serve as "visual compasses" directing pedestrians toward the primary entry of buildings.
- Parking lots should utilize landscaped walkways to provide safe pathways for those going from their cars to the buildings; and to allow pedestrians to go from building to building safely.

Vehicular Access

Ample, convenient access should be provided within these modules. Where possible, direct and convenient access would be desirable from regional highways and major thoroughfares into the core of these modules.

- Internal drives should be designed to direct traffic to the destination by the use of landscaping along drives, eliminating parking backing into primary drives and textured paving.

7. Airport Industrial Module

The Airport Industrial Module is development focused around its proximity to the Collin County Regional Airport. It includes a range of industrial, office and support uses. Of note: all landscaping within this module needs to follow the Bird Mitigation Program for the airport. This program calls for specific plant species that do not attract birds to the area to reduce the potential for bird strike events near the airport.

Building Orientation

Within the module, buildings should be oriented to be both accessible and identifiable from the streets.

- The "back" of buildings which generally include service areas, dumpsters, loading docks etc. should be the least visible side of the building and not diminish the view from natural areas.
- When residential adjacency exists, appropriate transitions, buffers, and other design elements should be utilized by the more intensive use to minimize any negative impacts on the residential neighborhood.

- Parking garages need to be near the building they serve and not be adjacent to neighboring residential.
- Parking garages must have façades that do not show ramping in the façade design.

Parking

These modules anticipate large numbers of people traveling to these centers for work, with most arriving by car or truck.

- Parking lots should be divided into smaller parking lots separated by meaningful green landscaped corridors. The corridors can include pedestrian walkways leading to building entries.
- Parking and pedestrian walkways should be designed to serve as "visual compasses" directing pedestrian toward the primary entry to buildings.
- Parking lots should utilize landscaped walkways to provide safe pathways for those going from their cars to the buildings; and to allow pedestrians to go from building to building safely.

Vehicular Access

This module requires special access for emergency vehicles to Collin County Regional Airport. This access will be supported with access to and through the module. Where possible, direct and convenient access would be desirable from regional highways and major thoroughfares into the core of the module.

- Special access must be provided for security access to and from air-side developments on the airport.
- Land-side access for development such as hotels, car rental, support commercial, light industrial, etc will be provided in an efficient and safe manner.

8. Urban Mix Module

The Urban Mix Module is characterized by a primary mix of urban and traditional single-family detached residential housing types. Some medium and high density residential may be allowed in order to support nodes of urban residential/commercial development patterns. The Urban Mix Module also includes neighborhood office, retail and commercial uses, as well as some community facilities. Opportunities to connect with the City of McKinney's trail network should be utilized in locations adjacent to the trail system.

Building Orientation

A - Single Family Residential

Single-Family detached and single-family attached residential housing units should have a typical residential building pattern that is characterized by average front and rear-year setbacks, as well as minimum side-yard and/or end of row setbacks. Single-Family Urban Residential should utilize build-to lines with structures located in close proximity to the street offering opportunities for pedestrian interaction and a street pattern based on a modified grid pattern. Design of subdivisions should work with the natural features of the land such as topography, creeks, and scenic views. Engineering efficiency along with maximizing lot counts should not be the primary consideration of subdivision design.

Another critical element in building orientation is the traffic patterns and levels of service within the module. Fronting homes on higher traffic roads can have an undesirable impact, whether real or perceived, on the quality of life of the residents. Poorly designed subdivisions that don't account for adequate use of collector streets, appropriate stacking at intersections of major roadways, and limiting cut-through traffic patterns often result in requests to the City for traffic calming measures. Subdivisions should be planned in a holistic manner that accounts for the overall traffic patterns of the area, neighborhood traffic levels, and the like.

- Single-family housing units should be located on residential collector streets and should back or side on local collector streets.
- Single loaded streets in residential subdivisions are desirable when adjacent to a park, floodplain, greenbelt, or other natural features.

Design for Density

In order to achieve the density bonus for preferred design, the following features should be incorporated into the design of residential developments. To achieve the increase to 3.4 dwelling units/acre available for single-family residential, the items below should be used:

- Extremely large tracts should be broken down into smaller separate distinct neighborhoods or villages generally no larger than 50 acres or +/- 175 lots.
- Curvilinear streets should be used rather than a modified grid pattern.
- Natural areas such as creeks and lakes should have single loaded streets adjacent to them.
- Usable open space should be centrally located throughout the neighborhood to serve as an amenity for all residents. These open areas should not serve as detention ponds.
- Culs-de-sac should not be perfectly round, rather they should be more elliptical (tear drop) and off center. A landscaped island is also desirable.
- Median features should be incorporated into street design, particularly at the entrance to neighborhoods.
- A mix of lot sizes and shapes should be included along a street frontage rather than a uniform lot size.
- Penetrating screen walls and allowing view corridors into neighborhoods from arterial streets via the use of landscape or metal fencing that the terminus of neighborhood cul-de-sac is desirable.

B - Multi-Family Residential & Commercial

Multi-family and commercial land uses should be oriented toward arterial roadways with secondary access on local collector roadways, not residential streets. The land use transition, including building height, architecture, landscaping, and site plan elements, is a significant element that can define the appropriateness of the site planning on the more intensive land uses when adjacent to single-family uses.

High Density Urban Residential should be constructed in an urban and pedestrian-oriented manner (structures in close proximity to the street with on-street parking or parking internal to the site with limited visibility from adjacent streets).

- Transitions are a design feature that includes, but is not limited to: stepping building heights away from residential, window orientation limits for second floor buildings, landscape buffers, living screens, and others.
- Exterior environments for dining and relaxing are vital for some land uses. These "outdoor rooms" can be designed with landscape or plaza hardscape materials.
- Service areas need to be located away from adjacent front door access points. Service courts can be defined on u-shaped buildings to contain trash and delivery products.

Parking

Because of market appeal commercial development will attract shoppers traveling from adjacent neighborhoods as well as those that migrate from the more regionally-scaled commercial uses along SH 121. Both customer and employee parking will be an important factor in the development of this module.

- Parking lots should be divided into smaller parking "gardens" separated by meaningful green landscaped corridors. The corridors can include pedestrian walkways leading to building entries.
- Parking and pedestrian walkways should be designed to serve as "visual compasses" directing pedestrians toward the primary entry of buildings.
- Parking lots should utilize landscaped walkways to provide safe pathways for those going from their cars to the buildings; and to allow pedestrians to go from building to building safely.
- Structured parking is encouraged for multi-family residential and vertical mixed use developments.

Pedestrian Environment

The Urban Mix Module is dominated by residential uses with a secondary mix of neighborhood supported commercial uses and community facilities. To foster greater neighborhood organization and to develop stronger bonds to local amenities and commercial centers, pedestrian linkages must be incorporated. The following design treatments should be considered in strengthening these connections.

- Urban Mix Module residential streets should incorporate sidewalks on both sides of the street. Additionally, Single-Family Urban Residential streets should provide pedestrian-oriented streetscapes characterized by street trees, pedestrian scaled lighting, and pedestrian seating defining and protecting the pedestrian realm between streets and building facades.
- Sidewalks from residential streets should connect with sidewalks running alongside community collector roads and thoroughfares providing access to neighborhood scaled commercial sites serving the immediate area.

- For residential streets terminating at parks or greenbelts, pedestrian access to hike and bike trail systems should be provided where appropriate.
- To help facilitate other modes of travel and to connect with community amenities, interior sidewalks and crosswalks within commercial centers should link with adjacent thoroughfare sidewalks, residential street sidewalks, and trails within adjoining greenbelts and parks.
- Community facilities, such as schools, libraries, religious facilities, and fire stations, should link into adjoining greenbelt and park trails when possible.

THIS PAGE INTENTIONALLY LEFT BLANK