







Final Report



HNTB HNTB Corporation

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Date Adopted: 9 March 2005

3. Land Use and Urban Design Throughout the Trinity Corridor

Land Use Principles

A land use plan should describe a community's preferred pattern of future development. It should provide policies, maps and other illustrations that can be used by citizens, property owners and public officials to determine whether a proposal for development on a particular piece of property is consistent with this preferred pattern of development. It does not, however, prescribe specific zoning or development regulation at a parcel-specific level.

Chapter 2 of this "Comprehensive Land Use Plan for the Trinity River Corridor" describes the vision for this area through 2050. It also sets objectives and establishes the framework concepts for public and private investment. In this chapter of the Comprehensive Land Use Plan, the 'building blocks' used to define the preferred development pattern are explained. The land use and urban design policies that apply throughout the corridor are also discussed. The detailed land use plans that apply to each district within the corridor are presented in Chapter 5. These district plans use the 'building blocks' explained in this chapter.

Comprehensive land use plans use many different techniques to convey their policy direction. This plan defines a set of 33 'land use types' that are appropriate in one or more locations throughout the Trinity River Corridor. These land use types are then combined into 15 'land use modules'. Each module includes several land use types; the mix of these types within a module defines the character of an area's development. Finally, the land use modules are applied to the map of the Trinity River Corridor to create a 'preferred land use plan'. This plan covers the entire corridor and illustrates the City's policy direction for future development and redevelopment.

Building Blocks for Planning: Land Use Types

Land use definitions provide a description and basic understanding of how a community values its built environment and surroundings. Land uses help clarify the type of activities the community deems appropriate for a particular area. The 33 land use definitions for the Trinity River Corridor spell out the development types, intensity, function, and characteristics for each area; their application is based on community input. Many of these land use definitions reflect a changing urban community where people live, work, shop, and play within easy walking or commuting distance.

Mixed Use 'A'

- Mix of uses in a vertical arrangement
- 2- to 3-story buildings
- Generally consists of groundfloor retail or office with residential or office above



Mixed Use 'B'

- Mix of uses in a dense vertical arrangement
- 4- to 6-story buildings
- Active, pedestrian-oriented commercial uses located on the ground floor with direct street access



Retail - Neighborhood

- Limited retail uses intended to serve the needs of a small market area
- Customer base would likely come from adjacent residential neighborhoods up to 1 mile away



Retail - Community

- Serves populations within a 2 mile radius
- Comprised of a major anchor tenant and multiple inline lease spaces



Mixed Use - High Rise

- Mix of uses in a dense vertical arrangement
- 7- to 20-story buildings
- Active, pedestrian-oriented commercial uses located on the ground floor with direct street access and one or two uses in floors above



Retail – Neighborhood

Urban

- Retail development, generally 1- to 2-stories in height
- Designed for high volumes of pedestrian activity from adjacent neighborhoods



Trinity River Corridor Comprehensive Land Use Plan

Retail - Regional

- Serves a population radius of approximately 5 miles
- Developments tend to have multiple anchor tenants along with pad sites at the periphery of the center
- Allows for office and medical uses



Office - Neighborhood

- Provides office space for professionals servicing surrounding neighborhoods
- Up to 3-story commercial development



Office - Urban

- Provides office space for professional services
- 10- to 25-story commercial development
- Built adjacent to street and ties into the urban framework of its surroundings



Retail - Parkside

- Serves a larger market area
- Should be focused on the Trinity River park amenities
- Can consist of:
 - Retail tourism centers
 - Themed retail centers
 - Smaller sport-related
 - Retail developments



Office - Regional

- Provides office space for professional services and clients seeking multi-story office spaces
- 4- to 9-story commercial development



Office - CBD

- Provides office space for professional services
- Ties into the surrounding urban framework
- 10 stories and up to 'any legal height' commercial building
- Represents the highest density office category



Retail - Urban

- Designed for high volumes of pedestrian activity
- Acts as a destination for a regional area
- Retail development generally
 3- to 4-stories in height



Office - Parkside

- Provides office space for professional services
- 6- to 12-story commercial development
- Capitalizes on proximity to the Trinity River through views and connectivity



Office - Corporate HQ

- Provides office space for one tenant user desiring a high profile building
- Can be a low slung campus setting or a multi-story office tower
- High profile location or address is desirable



Employment Center

- Large-scale, high density commercial and/or institutional development
- Represents entities with similar interests locate together, providing a significant job base



Industrial – Flex Space

- Mix of office and warehouse distribution functions on one property
- The office function is typically 25% and the distribution area is 75% of the overall building



Single Family Detached

- Represents neighborhoods of single family detached houses
- The average density is 5 dwelling units per acre



Lodging

• Represents developments such as hotels, motels, inns, and bed & breakfast establishments



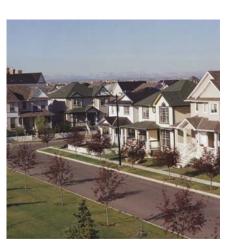
Industrial - Manufacturing

 Commercial development devoted to the processing of raw materials and/or recycled materials for the production of goods and/or wholesale storage of goods



Single Family Urban

- Represented by single family detached houses with narrower street setbacks organized in a denser, more pedestrian-oriented layout
- The average density is 8 dwelling units per acre



Industrial - Distribution

 Commercial development devoted to the wholesale storage and distribution of goods



Single Family Estate

- Characterized by single family houses on large lots
- The lowest density residential use
- The approximate density is one dwelling unit per acre



Single Family Attached

- Comprised of housing structures with the visual character and arrangement of a single family detached house
- Duplex to quadplex



Townhouse

- Single dwelling units sharing their sides with an adjacent unit
- 2- to 3-story vertical housing units
- Averages 12 dwelling units per acre



Residential Urban 5

- Residential development characterized by 6- to 9-story structures having multiple units
- Located adjacent to the street; creates an urban streetscape



Entertainment

 Includes functions such as movie theaters, themed restaurants, outdoor game/recreation venues, and park rental activities



Multi-Family 2

- Residential development characterized by 2- to 3-story structures with multiple units
- Typical developments are loosely organized around landscaped areas and use surface parking



Residential - Parkside

- Residential development characterized by 10- to 25story structures having multiple units
- Capitalizes on proximity to the Trinity River through views and connectivity



Civic

• Represents non-profit, public or semi-public uses such as a church, school, post office, town square, library, fire station, community center, or other government / municipal facility



Multi-Family 3

- Residential development characterized by 4- to 8-story structures with multiple units
- Located adjacent to the street; creates an urban streetscape



Residential Urban 10

- Residential development characterized by 10-to 35-story structures with multiple units
- Located adjacent to the street; creates an urban streetscape



Parks and Open Space

• Includes public and private parks, open space, golf courses, equestrian centers, large gardens, and outdoor structure placements



Building Blocks for Planning: Land Use Modules

The land use types described in the previous section are combined into "land use modules" that illustrate preferred development patterns for each part of the Trinity River Corridor, while providing flexibility in the use of particular parcels within an area. Each of the fifteen (15) land use modules is characterized by a dominant or primary land use type indicated by a particular color and land use code. Within each module a variety of land uses may be mixed to achieve a desired development pattern for a specific parcel or development project. Module boundaries are determined by natural and man-made features. The size of modules was influenced based on the area's features, its infrastructure/service needs and the ability of the surrounding area to absorb the mix of uses.

Module Applications

Each land use module has a core land use type (identified in bold) that serves as the primary focus of the area. Several secondary land uses support the primary use. Recommended land use percentages provide a balanced mix of primary and supporting uses. The land use mix described by these percentages creates an opportunity for fiscal balance and ample land use transitions. Totaled together, the primary and secondary land uses equal 100%. Optional land uses can be substituted for the secondary land uses, but not the primary land use type. Park & Open Space uses can occur as any percentage of a module that is appropriate to meet community needs in the area where the module is applied.

These modules serve as the palette to paint a picture describing desirable future land development in the Trinity River Corridor. The stated percentages of land uses are not intended to be prescribed strictly through zoning; but rather as a general policy guide to achieve a desirable land use mix through development decisions, other city policies, investments and incentives.

Flexibility Factor

A flexibility factor for the primary and secondary land uses allows the mix of land use types in each module to vary as necessary to take advantage of market trends while maintaining community values. A flexibility factor of +5% means the primary or secondary land use can be increased by five percentage points, while a flexibility factor of +/- 5% means the primary or secondary land use can increase or decrease by five percentage points from its recommended percentage.

Regional Corridor Module

%	Flexibility Factor
45%	+/- 10%
20%	+/- 10%
15%	+/- 5%
10%	+/- 5%
5%	+ 5%
5%	+ 5%
5%	
5%	
5%	
	45% 20% 15% 10% 5% 5%

Community Corridor Module

%	Flexibility Factor
25%	+ 10%
25%	+/- 10%
20%	+/- 5%
20%	+/- 5%
5%	+ 5%
5%	+ 5%
5%	
10%	
	25% 25% 20% 20% 5% 5%

Neighborhood Corridor Module

	%	Flexibility Factor
Primary Land Use		
Mixed Use A	25%	+/- 10%
Residential-Multi-Family 3	25%	+/- 10%
Office-Neighborhood	25%	+/- 5%
Secondary Land Uses		
Retail-Neighborhood	20%	+/- 10%
Civic	5%	+ 5%
Optional Land Uses		
Park & Open Space		
Entertainment	15%	

Central Business District Module

	%	Flexibility Factor
Primary Land Use		
Mixed Use B	50%	+/- 10%
Secondary Land Uses		
Office CBD	15%	+ 10%
Retail-Urban	10%	+ 5%
Residential Urban 10	5%	+ 5%
Entertainment	5%	+ 5%
Civic	15%	+ 5%
Optional Land Uses		
Park & Open Space		
Mixed Use-High Rise	10%	
Retail-Parkside	10%	
Residential Townhouse	5%	

	%	Flexibility Factor
Primary Land Use		
Employment Center	30%	+ 20%
Secondary Land Uses		
Mixed Use B	20%	+/- 5%
Residential-Multi-Family 3	20%	+/- 5%
Retail-Regional	10%	+ 5%
Office-Regional	5%	+ 10%
Entertainment	5%	+ 5%
Civic	10%	+ 5%
Optional Land Uses		
Park & Open Space		
Lodging	10%	

	0/0	Flexibility Factor
Primary Land Use		
Office-Regional	60%	Unlimited
Retail-Regional	15%	+ 15%
Lodging	15%	+/- 5%
Residential-Multi-Family 3	5%	+ 5%
Civic	5%	+ 5%
Optional Land Uses		
Park & Open Space		
Office-Corporate HQ	20%	
Retail-Neighborhood	10%	

Mixed Use – High Dens	sity Module	
imary Land Use	%	Flexil

%	Flexibility Factor
25%	+ 10%
25%	+ 10%
15%	+/- 5%
10%	+/- 5%
10%	+/- 5%
5%	+ 5%
10%	+ 10%
5%	
10%	
5%	
	25% 25% 15% 10% 10% 5% 10%

Mixed Use – Adaptive Reuse Module			
	%	Flexibility Factor	
Primary Land Use			
Office-Regional (Adaptive Reuse)	25%	+ 5%	
Mixed Use B (Adaptive Reuse)	25%	+ 5%	
Secondary Land Uses			
Employment Center	20%	+/- 5%	
Residential-Multi-Family 3	20%	+ 5%	
Entertainment (Adaptive Reuse)	5%	+ 10%	
Civic	5%	+ 10%	
Optional Land Uses			
Mixed Use-High Rise	10%		

Transit Center Module

	%	Flexibility Factor
Primary Land Use		
Mixed Use B	40%	+ 10%
Secondary Land Uses		
Residential-Multi-Family 3	20%	+/- 5%
Office-Urban	15%	+/- 5%
Retail-Urban	10%	+/- 5%
Entertainment	5%	+ 5%
Civic	10%	+ 10%
Optional Land Uses		
Park & Open Space		
Mixed Use A	15%	
Mixed Use-High Rise	10%	
Residential-Urban 5	10%	

Community Village Module

	%	Flexibility Factor
Primary Land Use		
Retail-Community	45%	+/- 5%
Secondary Land Uses		
Office-Regional	15%	+/- 5%
Residential-Multi-Family 3	15%	+/- 5%
Residential-Townhouse	5%	+ 10%
Residential-Single Family Urban	5%	+ 10%
Entertainment	5%	+ 5%
Civic	10%	+ 5%
Optional Land Uses		
Mixed Use B	10%	

Residential Riverside Module

	%	Flexibility Factor
Primary Land Use		
Residential-Parkside	55%	+ 10%
Secondary Land Uses		
Mixed Use B	15%	+/- 5%
Office-Parkside	10%	+/- 5%
Entertainment	5%	+ 10%
Retail-Parkside	5%	+ 5%
Lodging	5%	+ 10%
Civic	5%	+ 10%
Optional Land Uses		
Park & Open Space		
Mixed Use-High Rise	10%	
Office-Corporate HQ	10%	
Residential-Townhouse	5%	

Residential Urban Module

	%	Flexibility Factor
Primary Land Use		
Residential-Single Family Urban	55%	+/- 10%
Residential-Single Family Attached	10%	+ 10%
Residential-Multi-Family 3	10%	+ 10%
Retail-Neighborhood Urban	10%	+ 10%
Office-Neighborhood	5%	+ 5%
	%	Flexibility Factor
Primary Land Use		
Industrial-Manufacturing	50%	Unlimited

Civic	10%	+ 5%
Optional Land Uses		
Park & Open Space		
Residential Townhouse	10%	

Residential Traditional Module

	%	Flexibility Factor
Primary Land Use		
Residential-Single Family Detached	65%	+ 5%
Secondary Land Uses		
Residential-Multi-Family 2	10%	+/- 5%
Retail-Neighborhood	10%	+ 5%
Office-Neighborhood	5%	+ 5%
Civic	10%	+ 5%
Optional Land Uses		
Park & Open Space		
Single Family Estate	10%	

Light Industrial Module

%	Flexibility Factor
35%	Unlimited
30%	Unlimited
20%	+/- 5%
10%	+ 5%
5%	+ 5%
10%	
	35% 30% 20% 10% 5%

Heavy Industrial Module

	%	Flexibility Factor
Primary Land Use		
Industrial-Manufacturing	50%	Unlimited
Secondary Land Uses		
Industrial-Flex Office	25%	Unlimited
Industrial-Distribution	20%	Unlimited
Civic	5%	5%
Optional Land Uses		
Park & Open Space		
Retail-Neighborhood	15%	

Preferred Land Use Plan

The Preferred Land Use Plan serves as the long-range land use and development plan for the Corridor. In this capacity, the comprehensive land use plan will be the policy reference for City staff, the City Plan Commission, and the Dallas City Council when they consider decisions affecting land use in the corridor. In addition to the land use plan's importance for the public sector, the plan directs the private sector regarding the community's preferences for how development should take place. This plan is shown on the following page.

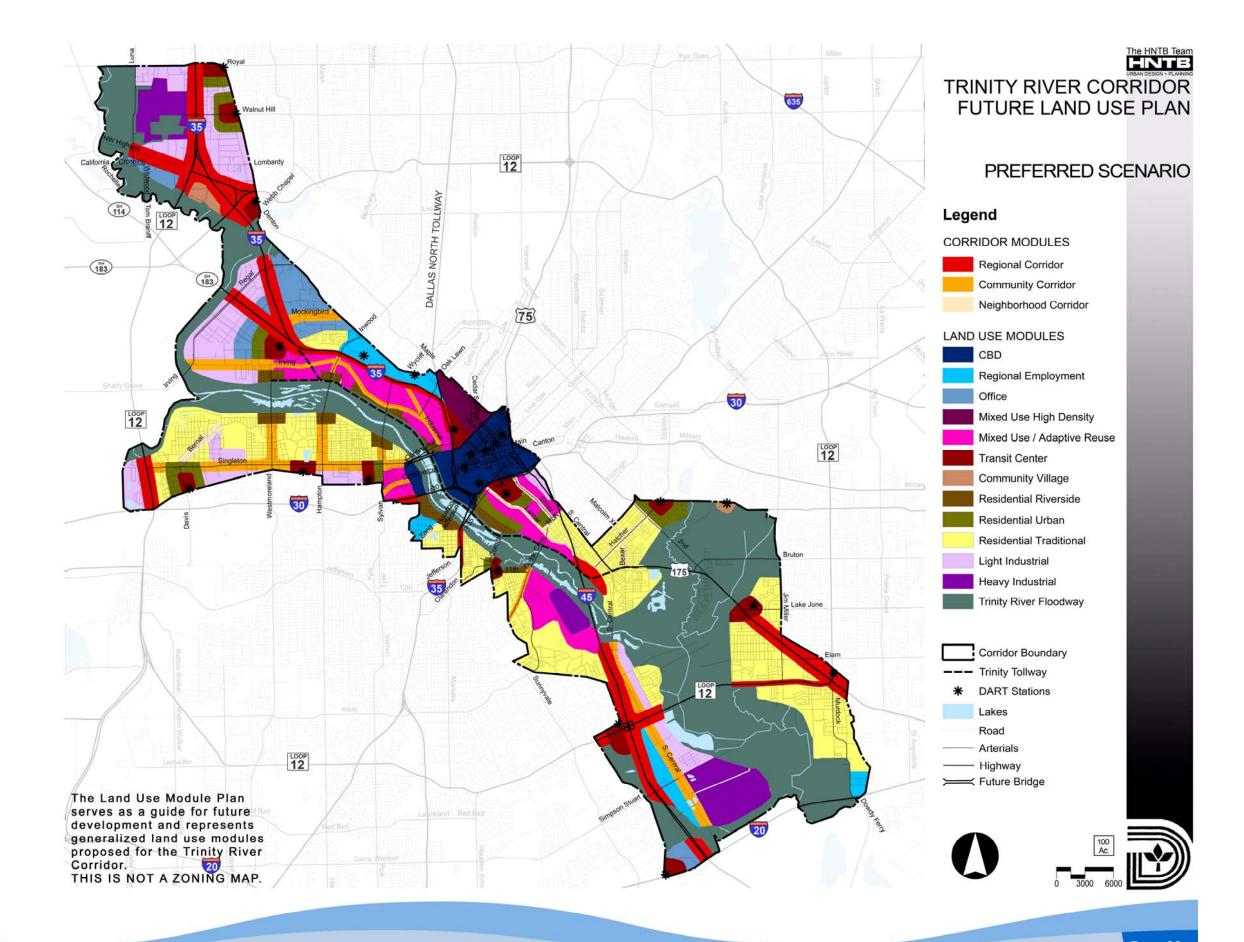
The Preferred Land Use Plan shown here is the result of detailed analysis by professional staff and consultants, as well as extensive input from citizens and stakeholders at each stage in the development of this plan. Chapter 6 explains this planning process and describes the many levels of involvement by the community that resulted in this land use plan for the Trinity River Corridor. Major stakeholder recommendations that are reflected in the Preferred Land Use Plan include:

 Within a three- to four-mile radius of downtown Dallas, development in the corridor should emphasize higher density, mixed use development and economic activity along the river's edge.

- Outside that radius, the corridor's development pattern should reflect dispersed centers of density or activity at locations such as major intersections and DART stations.
- In West Dallas, economic activity is planned at dispersed locations throughout the community, while traditional residential without a mix of non-residential uses is maintained at most places along the riverside.
- Heavy Industrial uses are expanded at each end of the corridor (Elm Fork and I-45 Gateway near McCommas Bluff), while the areas in between cater to existing Residential Traditional uses (West Dallas, Tenth Street Bottoms, Joppa, Rochester Park, and Pleasant Grove); Mixed Use / Adaptive Reuse and Residential Riverside uses (Trinity Industrial District, Oak Cliff Gateway, Cedars West, Lamar Street, and small portions of West Dallas); Light Industrial uses (Brookhollow); and expand Central Business District uses (both sides of river at Commerce Street).
- Land use patterns that emphasize transit and pedestrian-oriented activities are actively promoted throughout the corridor.

- The expansion of rail transit is supported throughout the corridor and specifically in West Dallas and along IH-45. Transit-oriented development should occur around potential transit stations.
- A trail system should be implemented throughout the Trinity River Corridor, serving as a catalyst for new development, adaptive reuse of existing structures, and an important tool for connecting neighborhoods.
- Mixed use development should form a buffer between residential and industrial uses.
- Development patterns should provide as much development south of the river as north of the river.
- Higher density uses should be located close to downtown on both sides of the river.

The Trinity River Corridor Comprehensive Land Use Plan is a central component of the *Forward Dallas! Plan* for the entire City of Dallas. Its objectives, preferred land use plan and other policies establish the development direction for this part of Dallas within the context of the overall *Forward Dallas! Plan*.



3. Land Use and Urban Design Throughout the Trinity Corridor

Urban Design Principles

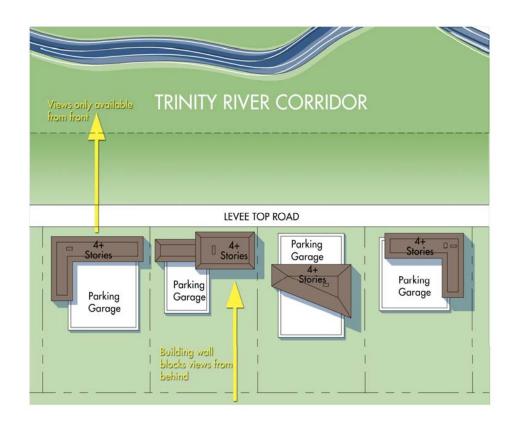
Identifying the land uses that will occur in the Trinity River Corridor is an important step in creating the communities envisioned for the future. But the land uses alone do not determine the character of an area or the image of a community. Guidance about appropriate urban design – the location, mass and form of buildings, paved surfaces, landscaping and other urban features – is the essential next step for an area that is as important to a community as the Trinity River Corridor is to Dallas.

Urban Design Concerns

- Protecting key view corridors so new development does not block important vistas of the Dallas skyline, the Trinity River and landmarks such as the signature bridges.
- Avoiding a 'wall of buildings' that limits views along the river greenbelt edge.
- Establishing riverfront development patterns that encourage new investment and redevelopment while protecting views from properties located further from the river's edge.
- Establishing riverfront development patterns that enhance the view looking back at the city from the trails, lakes, and wetlands inside the river greenbelt and from the bridges crossing the river.

General Design Concepts

- A maximum of 20% of the building's main vertical facade can front the river greenbelt's edge (for buildings that are four stories or higher).
- Lengthwise, no more than 50% of the main vertical structure of the building can be parallel to the river greenbelt's edge (for buildings that are four stories or higher).
- Parking garages must be placed to the rear or interior of the property or, if fronting onto the river greenbelt's edge, must be below the elevation of the top of the levee.
- Each module's land use mix will encourage a variety of development patterns along the river greenbelt's edge.
- Buildings fronting directly adjacent and parallel to the river greenbelt's edge can be only three stories of habitable structure maximum at the top of levee (as illustrated in the graphic below).





Discourage this pattern of development along the river greenbelt's edge

Encourage this pattern of development with building orientation

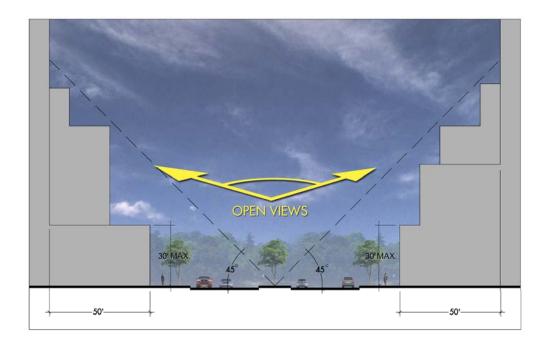
Trinity River Corridor Comprehensive Land Use Plan

3. Land Use and Urban Design Throughout the Trinity Corridor

Urban Design Recommendations

Development in the Trinity River Corridor must conform to the land use modules illustrated in the Preferred Land Use Plan. In addition, urban design guidelines must be established to address the urban design concerns. Three key sets of design guidelines are needed.

- Architectural guidelines for development immediately adjacent to the river greenbelt's edge. These guidelines would protect view corridors and enhance the community form by fostering a sense of place. These guidelines could be established through a zoning overlay district. This technique has been used in similar riverside locations in Vancouver, Seattle, San Francisco, and Washington, D.C.
- Locational criteria for the distribution of land uses at key locations within defined land use modules. For example, these criteria would provide direction for the land uses next to major roadways or key public buildings.
- Streetscape design guidelines. These urban design guidelines would define the widths and locations of vehicular travel lanes, paths or sidewalks, signage, landscaping, street furniture and other aspects of the travel routes through the Trinity River Corridor. Streetscape guidelines would be different for major roadways (such as the Trinity Parkway), arterial and collector streets, levee top roads and other local streets. They should protect view corridors and enhance the experience of travelers using all modes of transportation.



Recommended building envelopes along public streets pointing toward river

Development Areas within the Trinity River Corridor

Planning Districts

The Preferred Land Use Plan for the entire Trinity River Corridor is shown on page 32 of this document. The corridor is divided into seven Planning Districts in order to communicate the appropriate land use plan and design policies for each part of the corridor. Chapter 5 discusses each of the Planning Districts and presents the Preferred Land Use Plan for each one.

Planning Districts

- ✓ South Trinity Forest
- ✓ I-45 Gateway
- ✓ North Trinity Forest
- ✓ Downtown Lakes
- ✓ West Dallas
- ✓ Stemmons
- ✓ Elm Fork

Study Areas

Within the 44,000 acre Trinity River Corridor, study areas were identified for more detailed evaluation and policy recommendation. These 23 areas were selected because they include important existing neighborhood and business assets, are adjacent to key Trinity River Corridor project improvements, or are near other major public facilities or investments (such as major interchanges on IH-20). Chapter 5 provides detailed development direction for each of these study areas. It includes:

- Text describing the study area and its assets.
- A "Land Use Opportunity Plan" showing specific development opportunities in the study area, based on expected market response to the Trinity Project's major public improvements. These maps also capture the land use desires for the corridor expressed by the stakeholders through a series of stakeholder meetings and reflect the professional evaluation of staff and consultants.
- An "Urban Design Framework Plan" illustrating the development framework created by major public projects and additional design features that should be created during future development. Transportation systems are identified on the plans and additional enhancement treatment such as streetscape, entry portals, edges, are noted. These plans also include physical recommendations for such items as significant intersections, pedestrian access alignments, Trinity River project access, special elements/uses for preservation, NTTA tollway alignments, streetscape treatment, and significant civic elements.

Prototype Sites

A final component of this land use planning and urban design study was the creation of example site development plans for ten (10) prototype sites within the corridor. These sites were selected because they are representative of development conditions at many locations within the corridor. The case studies prepared for these prototype sites include land use mix and intensity and a site plan showing an illustrative layout of buildings, roadways, landscaping and other features. Each prototype size was analyzed to determine its economic feasibility. Lastly, specific implementation tools needed to achieve such development are described. Plans for these prototype sites are found in Chapter 5 of this document.

The prototype site plans are not intended to show actual projects that are currently being pursued by private property owners. Rather, they are site-specific examples of the types of development this plan supports and assessments of the public and private actions needed to complete them.