



Smart Growth Focus Area *Urban Design Element*

Prepared for the Urban Design Policy Work Group Meeting – October 6, 2011, by the Plan Tucson Team, Planning and Community Development Division, City of Tucson Housing and Community Development Department.

Note: This working document may be refined as Plan Tucson proceeds and additional information and input is obtained.

I. Introduction

This working document presents background information on urban design in Tucson with the objective of providing a basic foundation for the discussion of urban design policies for inclusion in Plan Tucson, the City of Tucson’s new General Plan now underway.

“However logical the land-use pattern prescribed by city planners, the beauty and utility of its buildings and the nature of the landscape, it is the overall three-dimensional combination of forms and spaces as seen in time and over time that gives a city its character.” *Urban Design: A Typology of Procedures and Products*, Jon Lang, Elsevier, 2005

II. The Basics

The use of “urban design” as a contemporary term dates back only to the mid-twentieth century. However, long before the formalization of this term there were communities deliberately designed.

For purposes of Plan Tucson, the working definition of *urban design* will be *the arrangement, appearance and functionality of a community*.

Components often considered in urban design include:

- Neighborhoods
- Districts
- Corridors
- Streets pattern
- Civic buildings
- Natural features

An increasingly popular term associated with urban design is “placemaking”. As the word suggests, *placemaking* is the creation of a setting that imparts a sense of place to an area. This process is achieved by establishing identifiable neighborhoods, unique architecture, aesthetically pleasing public places and vistas, identifiable landmarks and focal points, and a human element established by compatible scales of development and ongoing public stewardship.

III. Influences on Tucson Urban Design Over Time

Tucson is not a city that began with a deliberative physical plan, rather it has been shaped to a large degree by the natural environment, economic circumstances, transportation and land use policy and regulations, and development practice.

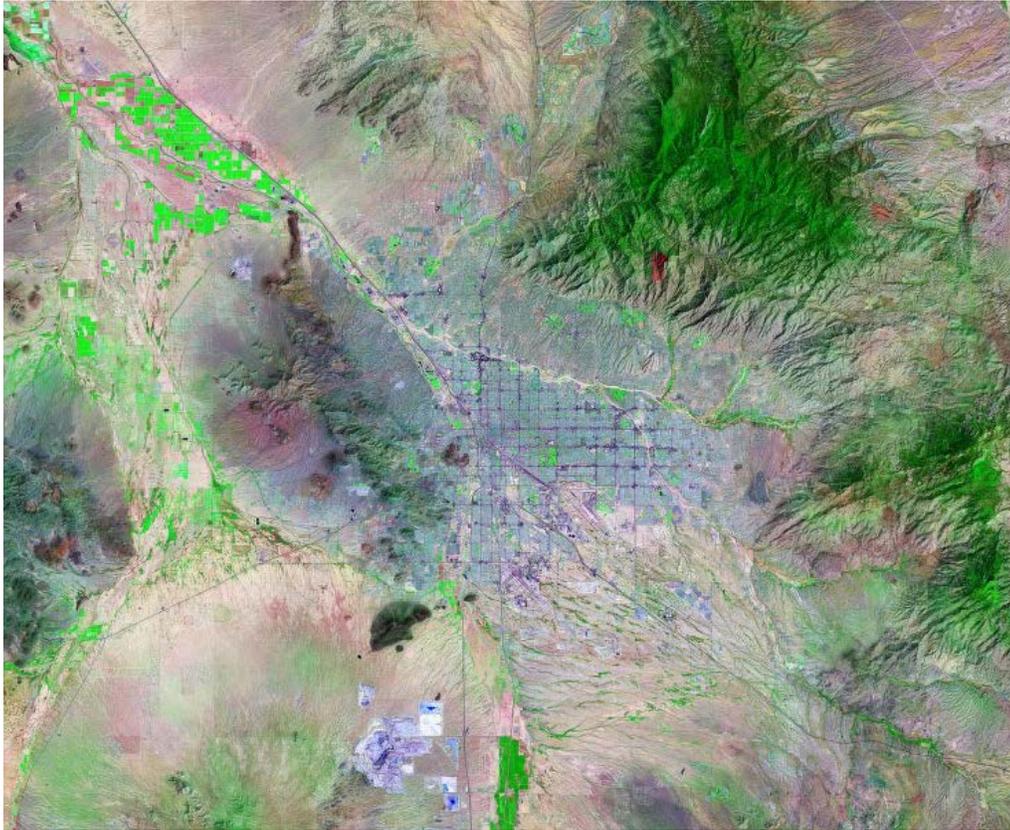
A. Historic Growth Pattern

Exhibits 1a, a satellite photograph of the Tucson metropolitan region, shows an urbanized basin encircled by mountain ranges. This large-scale aerial view encompasses the natural environment of mountains and desert uplands, the Santa Cruz and the Rillito Rivers, the Pantano Wash, a network of tributary washes, and the built environment, which in the photograph is depicted by a grid of roadways. *Exhibit 1b*, a closer view of the city portion of the satellite view, shows Tucson’s built form is basically defined by those roadways (Interstates 10 and 19 and the grid of arterial streets), as well as by major activity centers, including the Downtown, the University of Arizona, Tucson International Airport, Davis Monthan Airforce Base, and regional shopping centers. What doesn’t read well in the satellite views is the generally overall low-profile of Tucson.

Following are “snapshots” of events that contributed to Tucson’s general physical configuration over time:

- **In the early 1920’s, the Tucson Council and businessmen aggressively promoted economic development in Tucson, coinciding with the rise of mass production of automobiles.** The availability of automobiles led to residential dispersion, more roadways, and, in the 1930s, a resulting shift in public transit modes from the electric streetcars to buses.
- **WWII drastically altered the trajectory of economic development in Tucson.** Seeking wide-open spaces for military training and testing and attracted by Tucson’s proximity to the Pacific Ocean, the military developed Davis-Monthan Army Air Base, which was soon followed by defense-related industries. The Marana Basic Flying School and Ryan Field were constructed on the edges of Tucson during WWII. Hughes Aircraft opened an electronics plant in Tucson in 1951. These industries, which required large open areas, were located on the outskirts of Tucson. To accommodate these new industries, the city began implementing a public works projects, including street construction, paving, and the extension of water and sewer lines. Housing followed quickly, resulting in further residential dispersion. By the end of the 1950s, approximately twice as many people lived outside the Tucson city limits as inside.

Exhibit 1a: Tucson Metropolitan Region: Environmental Influences



Source: geology.com

Exhibit 1b: City of Tucson: Roadway & Major Activity Center Influences



Source: Google Earth

- **The 1950s was a period of economic boom for Tucson and the beginning of the decay of the inner city.** Businesses were attracted by the relatively low wage rate in Tucson and the low cost of living. Due to the rapid influx of newcomers during this time, typical urban problems began to develop including traffic congestion, higher pollution levels, insufficient housing, high crime rates, overcrowded schools, and inadequate transportation. All these factors further encouraged people to move to the urban fringes to escape the emerging decay of the inner city, and the pattern of residential development that has persisted until the present day began. The City of Tucson pursued an aggressive annexation campaign, increasing the city’s size from 7.9 square miles in 1940 to 70.8 square miles in 1960. High-rise office development occurred in downtown at the same time that residential development and other businesses and industries were locating primarily on the fringes. City leaders and businessmen implemented public works projects, including roadway construction, paving, and extension of water and sewer lines. Some residents began voicing concern about the effects of growth, focusing on the destruction of the quasi-rural lifestyle. Businessmen and city leaders alike became concerned about retaining the healthy, “outdoorsy” quality of Tucson and attempted to recruit non-polluting light industry to the area.
- **Interstate 10 was constructed through Tucson in the 1960s.** The 1957 Interstate Highway Act provided federal funds for highway construction, stipulating that the federal government would pay 90 percent of highway costs. This massive government financing of road/highway construction, along with a reduction in the cost of cars, accelerated suburban growth.
- **In the 1960s, the Tucson City Council implemented the revised urban renewal plan, demolishing deteriorated housing in Mexican-American neighborhoods.** As residents moved to the urban fringes, the City of Tucson attempted to renew the decaying urban core through projects aimed at economic revitalization. Property values in revitalized areas tended to rise, effectively barring low-income people from the urban housing market. In addition, “federal urban aid favored construction of luxury housing units and cultural centers, such as symphony halls and art museums, over affordable housing for worker”. In combination, these forces tended to push residents to the urban fringes.

B. Zooming In

Looking more closely within the City limits are the neighborhoods, corridors, streets, public facilities, and natural features, i.e., the components of urban design. Below are brief descriptions of some of the components and touches on what the possibilities these components offer in terms of the future design of the City.

- Many of Tucson’s older neighborhoods built prior to World War II capitalized on the City’s natural features, climate, and social life. Examples of these neighborhoods are: Barrios El Hoyo, Anita, El Membrillo, Menlo Park.
- The older commercial corridors in downtown and 4th Avenue are particularly suitable to pedestrians.
- In addition to being the regional administrative, legal, cultural and entertainment center, Downtown also offers convenient and extensive transit connections (rail, regional buses, and soon the Modern Streetcar), supported by high-density housing, compact development, and a pedestrian-

oriented environment. Downtown has been identified as a place that warrants significant public and private investment to sustain and constantly reinvent itself to maintain its competitive advantage.

- The City encompasses a variety of large master-planned educational, institutional, and business facilities, such the University of Arizona, University Medical Center, Tucson Medical Center, and Pima Community College campuses. The areas around the centers generally include a range of single-family and multifamily housing and some services. The future Arizona Bioscience Park of the University of Arizona will represent the largest mixed-use infill project on South Kino Parkway.
- Major employment and/or commercial areas outside of Downtown containing corporate or multiple-use office, industrial, and retail uses with some adjacent low to mid-rise multifamily residential uses are located at major arterials or along highways, and rely heavily on both car and transit access. Streets and parking facilities in these areas emphasize the efficient movement of transit and vehicles. Gateway landscaping and lighting, monuments, and other devices provide visibility from the major roadways to guide visitors to destinations. These areas include Williams Centre, Gateway Centre, and the University of Arizona Science and Technology Park.
- Aging auto-oriented commercial strip development along Grant Road, Oracle Road, Stone Avenue, Broadway Boulevard, Speedway Boulevard, 12th Avenue, 6th Avenue, and St. Mary's Road.
- Central Tucson is bicycle-friendly, by providing significant bicycle connections from the University of Arizona to the east via Third Street, to the west via University Boulevard, to the north through Mountain Avenue connecting to the Rillito River Park bike and walk multi-use path, and to the south with Highland Avenue leading to the Barraza-Aviation Parkway bicycle path.
- Southern Tucson is widely known for its higher concentration of Hispanic population, businesses and public art. This are of town also houses the Tucson International Airport, the Davis Monthan Air Force Base, and Tucson Electric Park.

Ongoing Influences in Urban Design

Key influences on the design of the built environment in Tucson include:

- City of Tucson Land Use Code - addresses use location, setbacks, heights, size, buffers, etc.
- Major Streets and Roadways – addresses future right-of-way needs
- Financial Institutions – make decisions about development loans
- Insurance Institutions – traditionally coverage is related to specific uses, which can be a constraint for mixed use projects

IV. Initiatives and Tools Affecting Tucson Urban Design

The current Tucson General Plan, adopted in 2001, addresses urban design directly and indirectly through policies included in the first six elements of the Plan, and references in particular the:

1999 Tucson Design Guidelines Manual: The Manual was developed as part of the 1998 Tucson Comprehensive Plan. In the 2001 General Plan, this Manual is referenced in the policy direction provided in the Land Use and Community Character elements. It describes a variety of design techniques to improve land use compatibility, street and neighborhood character, and overall community design. (See <http://cms3.tucsonaz.gov/planning/codes/design/index.html>.)

Since the adoption of the 2001 General Plan, a variety of City-initiated guidance documents and ordinances have been developed that touch to a greater or lesser degree on issues related to the physical form of the city as a whole or portions of the City. These follow:

2006 Downtown Infill Incentive District (Resolution # 20487): The Downtown Core Subdistrict is intended to encourage infill development within the Downtown geographic area. There are incentives on flexible land use code as well as other infrastructure and engineering standards. (See cms3.tucsonaz.gov/sites/default/files/imported/maps/city/infillincentivedistmaterial.pdf)

2007 Downtown Infrastructure Study: The City of Tucson, Pima County, utility agencies and private sector representatives have jointly developed recommendations for infrastructure improvements necessary to support downtown development over the next twenty years. (See cms3.tucsonaz.gov/sites/default/files/imported/resources/publications/DTIInfrastructureStudy.)

2008 Downtown Urban Design Reference Manual: The Reference Manual contains adopted design policies currently used in development review of the Downtown and serves as a guide to many of the best practices in urban design. Further, it serves to guide future public and private design decisions related to redevelopment and revitalization in the Downtown area. (See cms3.tucsonaz.gov/sites/default/files/planning/docs/Downtown%20Urban%20Design%20Reference%20Manual%20august%202008.pdf)

2009 Transit-Oriented Development Handbook: Portions of the document will be implemented through zoning associated with the Downtown Links project, which has a coterminous area. For areas in which Transit-Oriented Development zoning has not been implemented, this document will be used by project proponents seeking plan amendments through the Planning Commission or rezonings through the Zoning Examiner.

2009 Feldman’s Neighborhood Design Manual

On November 24, 2009, the Mayor and Council adopted the Feldman’s Neighborhood Preservation Zone (NPZ), including the Feldman’s Neighborhood Design Manual that provides a process to guide architectural and design requirements to assure development is compatible with the neighborhood’s character.

(See cms3.tucsonaz.gov/files/planning/prog_proj/projects/neighborhoodplan/cms1_036442.)

2010 Downtown Links Urban Overlay District: Background Study and District Proposal

The District is a new optional alternate zoning district that is proposed to implement the Downtown Links Land Use and Urban Design Plan, a companion document to the Downtown Links roadway project. (See www.downtownlinks.info/Documents/DL-TaskCandD_001.)

2011 Jefferson Park Neighborhood Design Manual: The Jefferson Park Neighborhood Preservation Zone was adopted by the Mayor and Council on June 21, 2011, and includes a Design Manual that lays architectural and design guidance to assure development is compatible with the neighborhood’s character.

(See cms3.tucsonaz.gov/sites/default/files/dsd/PLANNING/Jefferson%20Park%20Design%20Manual_final.pdf.)

V. Agencies & Organizations Involved in Urban Design

Below are agencies and organizations that address urban design issues that affect or may affect Tucson. These lists are not intended to be exhaustive.

Private & Non-Profit Sectors	Public Sector (Primary Agencies)
<ul style="list-style-type: none"> - American Institute of Architects - American Association of Landscape Architects - Arizona Planning Association, Southern Section - College of Architecture and Landscape Architecture, including the Drachman Institute - Local Architectural and Planning Firms - Living Streets Alliance - Sonoran Institute - Sustainable Tucson - Urban Land Institute 	<ul style="list-style-type: none"> - City of Tucson: Housing & Community Development Department, Planning and Development Services Department, Office of Conservation and Sustainable Development, Planning Commission, Design Review Board - Pima County Development Services – Planning and Zoning - State of Arizona, Department of Commerce (<i>Smart Growth</i>) - U.S. Department of Housing and Urban Development (<i>Sustainability, Community Development</i>) - U.S. Environmental Protection Agency (<i>Smart Growth</i>) - U.S. Department of Transportation (<i>Context Sensitive Design</i>)

VI. Urban Design Trends

Briefly described below are some key concepts/movements related to contemporary urban design. All are generally complementary, and examples of the application of each of them can be found in Tucson.

Sustainability: Sustainability, a term used frequently in both the public and private sectors, has moved beyond its original focus on the natural environment, to be used as the holistic goal for community – that is, to be sustainable. This goal is consistent with much of what urban design aspires to, including human scale urbanism, with a mix of uses and services, a range of housing options, alternative transportation options, and public spaces that foster social interaction. Sustainability is a major theme in the development of Plan Tucson.

New Urbanism: New Urbanism evolved as a direct response to sprawl and the resulting “placelessness” of modern development. This movement, which was formalized in 1996 with the

signing of the Charter of the New Urbanism, builds on lessons learned from traditional urbanism of historic cities and towns. Examples of local development projects in which New Urbanism principles have been used include Civano on the east side of the City and the Mercado located at the terminus of Tucson’s new Modern Streetcar line.

Smart Growth: The Smart Growth movement focuses on public policy, in particular public policy that address locations where government should invest and about how planning should shape communities. The State of Arizona adopted Smart Growth principles in ____, and one of the three focus areas for Plan Tucson policy development is “Smart Growth.”

Context Sensitive Design (CSD): CSD focuses in particular on how transportation facilities can integrate and interact with the dynamics of the existing natural and man-made environment, and what can be done to preserve or even enhance those features. The planning for the Regional Transportation Authority project to widen Grant Road has been undertaken using such an approach.

Transit Oriented Design: Compact, mixed-use development within walking distance of public transportation. This is the design approach being promoted for development in the area of Tucson’s Modern Streetcar now under construction.

VII. Current Urban Design Challenges & Opportunities

Plan Tucson provides a chance to think deliberately about whether and how the City’s current physical form supports goals for the City’s future, and what policies are needed to strengthen that relationship. Below are some preliminary Challenges and Opportunities that Plan Tucson staff identified in thinking about the urban design of Tucson.

Preliminary Challenges and Opportunities for Urban Design in Tucson

Challenges	Opportunities
<ul style="list-style-type: none"> ■ Urban form often not sensitive to human and environmental assets and to efficient and effective public infrastructure and services ■ Lack of public space vitality ■ Zoning regulations do not foster the creation of innovative designs for integrated and visually appealing places ■ Varying levels of investment and design in different areas of city ■ Building practices and increased density is often a contentious issue within neighborhoods 	<ul style="list-style-type: none"> ■ Expand the use of cultural heritage assets in the economic and social fabric of the city, and to progress towards sustainable development ■ Mixed-disciplinary approach – urban design, social service, revitalization, cultural tourism ■ Partnerships to foster new business opportunities and innovation ■ Build on community-based design programs that encourage a broad base of community participation and awareness of urban design, such as Tucson Community Design Academy and Building from the Best of Tucson