

CITY OF EL PASO, TEXAS COMPREHENSIVE PLAN

YSLETA EASTON **NORTHEAST** MISSION VALLEY PLACE SAN JACINTO PLAZA AUSTIN HIGH SCHOOL NORTHGATE
PIEDRAS DRIVE RIM ROAD NEIGHBORHOOD MADELINE DRIVE MUNDY PARK
BURGESS HIGH SCHOOL SUNSET HEIGHTS **WESTSIDE** JACKSON
ARROYO PARK HUECO TANKS STATE PARK CORK
FRANKLIN MOUNTAINS **PLAN EL PASO** PARK TOM LEA PARK
CATHEDRAL HIGH LORETTO ACADEMY
GRAND VIEW OREGON CORRIDOR SNOW HEIGHTS PARK KIDD FIELD
FORT BLISS AMERICAS HIGH SCHOOL ALTHEA PARK KERN PLACE
HOUSTON PARK MISSION HILLS SOUTH RIDGECREST
BANDOLERO TARASCAS LOMAS DEL REY LAKEHURST FESTIVAL HILLS
LAMBKA PARK FALCON HILLS ROSEDALE **MISSION VALLEY** FARMS
HIGHRIDGE CRESTMONT PARK MESA HILLS
BELVIDERE BEAR **CENTRAL** RIDGE REMCON MONTOYA HEIGHTS
THREE HILLS SUNSET VIEW WEST GREEN BORDERLAND
MARWOOD PARK RIVERBEND EASTWOOD MEMORIAL PARK ARMSTRONG FIELD
HIGHLAND PARK MILITARY HEIGHTS AUSTIN TERRACE **EASTSIDE**
FIVE POINTS LOGAN HEIGHTS SUNRISE
ASARCO NATIONS TOBIN PARK TERRACE HILLS MINER VILLAGE SAMBRANO
DOLPHIN PARK APOLLO HEIGHTS PLEASANT HILLS TIMBERWOLF
WASHINGTON PARK STILES GARDEN LAFAYETTE PLACE
SEGUNDO BARRIO BUENA VISTA COLLINGSWORTH GARDENS
SUN VALLEY RIVERSIDE PARK
PARKLAND CLARDY FOX
MEDINA DELTA PARK



VOLUME I: CITY PATTERNS



PLAN EL PASO:

A Policy Guide for El Paso for the next 25 years and beyond

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...and thousands of El Paso residents

Adopted March 6, 2012

Cover Buildings: O.T. Bassett Tower, *Henry C. Trost*; Overland Street Rooming House, *Architect Unknown*; Roberts-Banner Building, *Henry C. Trost*; Hotel Paso del Norte (Camino Real), *Henry C. Trost*; San Elizaro Mission, *Architect Unknown*

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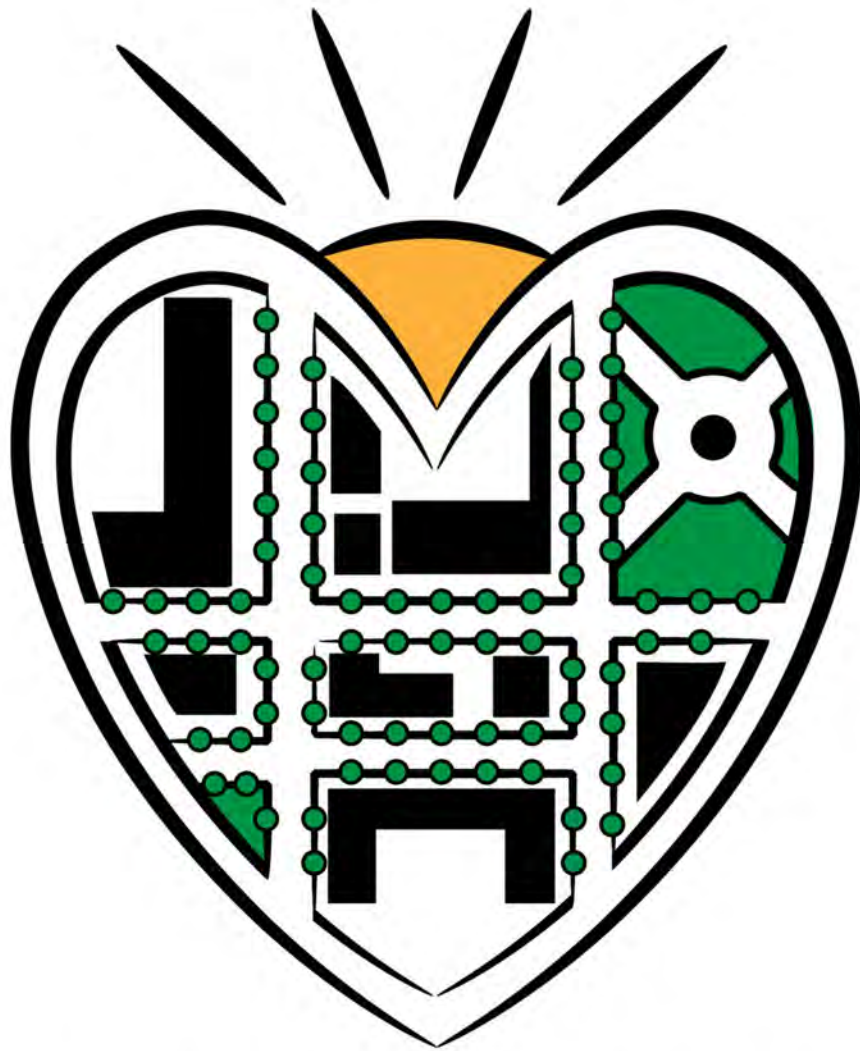
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PREFACE

A BETTER LIFE, EVERY GENERATION

In 1925 the City Plan of El Paso was adopted, the City's first plan of comprehensive scope. Between the City's founding in 1873 and the adoption of the 1925 plan, El Paso had progressed from a frontier village to become one of the most prominent cities in the Southwest. El Paso was a convergence point for five major railroads with connections to all major cities in the US and Mexico, a center of industrial and manufacturing production, and a headquarters for international banking and business. El Paso's Downtown exemplified the ideals of the City Beautiful movement with wonderful public places and proud architecture connected to streetcar suburbs with ample public parks and tree-lined streets. El Paso was also the busiest port of entry on the southern US border as Mexican laborers joined the ranks of a workforce that would help build the nation. With the 1925 plan as a cornerstone document, El Paso would in time have the highest per capita income in the region, the tallest concrete buildings, showpiece public parks, and one of the nation's best mass transit systems.

El Paso's assets in 1925 remain vital components of the City's present economy. The purposes of the plan written over eighty-five years ago remain relevant today: "to promote the convenience of the population; to improve health conditions; to provide more liberally for public recreation; to add to the comforts of urban life; to beautify the City and its surroundings; to develop earnestly all cultural elements in community life; and to give the City of El Paso such distinction among cities that it will acquire new and wider fame."

Today, El Paso is part of the largest international metroplex in the world and a center for cross-border manufacturing and distribution. Some credit for this achievement is due to the 1925 plan which had the foresight to foster the "sister city" relationship with Ciudad Juárez. The Paso del Norte region includes 2.2 million residents, a region comparable in size to San Antonio, Sacramento, Pittsburgh, or Cincinnati. Over 60 Fortune 500 companies have offices in El Paso. Despite a world-wide economic slowdown, El Paso's economy has continued to outperform other US metropolitan regions. Fort Bliss, the outpost base that only began to grow after Pancho Villa's New Mexico raid in 1916, has become one of the county's chief military installations. In addition to the economic engines of industry and defense, new industries have arisen. The Medical Center of the Americas promises to be a national hub of medical technology.

At the same time, a city is more than its commercial and economic activities. El Paso thrives in the modern era while still preserving its social and cultural foundations. Families are still the basis of the community, churches are well attended, holidays both Mexican and American are celebrated with fresh tamales, and children grow up with piñatas and papel picado. Residents who have migrated from Mexico, especially, recognize that economic advancement is achieved only through successive genera-



tions. Though the 19th largest city in the United States, El Paso consistently ranks as one of the safest cities in the United States by virtue of these familial ties. Residents expressed a desire for generations of families to continue living and advancing economically in the same place. This kind of economic diversification is a major goal of the plan.

Troops once stationed at Fort Bliss increasingly choose Northeast El Paso to retire, executives from international companies overseeing maquila operations live in the foothills of the Franklin Mountains, the Tigua Indians preserve their culture as an urban tribe in Ysleta, and students travel from throughout the region to attend the University of Texas at El Paso and the Texas Tech University Health Sciences Center. Many people have come through El Paso; "El Paso" means "the pass," a place to go through. Yet people from a diversity of backgrounds and places of origin continue to choose to make El Paso their permanent home.

Increasingly, El Paso's historic competitive advantages – comparatively low labor, land, and energy costs – are less an asset as industry continues to relocate outside of the United States. Companies today compete for quality human capital and the new race among cities is to provide the high quality of life which attracts and retains skilled labor. In contrast to periods of its history when some defined El Paso as a singularly low-wage city, the 1925 plan envisioned a global city, and prioritized goals necessary to compete on an international level: *convenience, health, recreation, comfort, beauty, culture, and community* – in a phrase, *quality of life*.

Plan El Paso recognizes quality of life, in addition to transportation and education, as foundational goals which will help the City to compete in every sphere. These foundational goals require a sustained commitment. *Plan El Paso* coordinates policies at all scales using the same overall principles so that the plan can operate cohesively and guide the efforts of the City's many stakeholders and decision makers at every level.

The Scale of the Region

The plan recognizes that El Paso is part of a larger region and that the fates of both El Paso and Juárez are inextricably linked. El Paso is also a major US metropolis whose operations affect air quality, water quality, and global climate change. The City's economic strategies, governmental cooperation, housing policy, and physical planning must reflect regional thinking. In terms of energy policy El Paso must think globally.

El Paso is a metropolis made up of many centers and neighborhoods which should be the focus for new infill development to spur economic reinvestment, repair urban fabric, capitalize on existing infrastructure and service investments, and reclaim abandoned areas. By focusing energies within the City's existing boundaries over peripheral expansion, the City can conserve environmental resources like water and energy, and promote preservation of critical arroyos and farmland. Where expansion is necessary, new development should be organized as coherent places with an integrated mix of jobs and housing.

The Scale of the Neighborhood, District, and Corridor

In recent years health problems such as obesity, heart disease, high blood pressure, and the maladies associated with social alienation have become a normal response to a built-environment that does not allow walking or facilitate human interaction. The young and the elderly of El Paso, especially, have been left behind by an urban forms that necessitate driving long distances. The plan proposes strategies to bring more of the activities of daily living within walking distance and a framework of transportation alternatives including transit and bicycle systems. Encouraging walkability helps create healthy life styles. Building complete places that enable neighbors to know each other will help create and retain close-knit communities.

The Scale of the Block, Street, and Building

The plan describes changes in the way streets have been planned and designed throughout the City's history. Streets that were the true public realms of El Paso in 1925 became barriers to community life when the singular function of moving traffic triumphed over all other purposes. Streets are now considered merely segments between two points rather than important places in their own right. What the 1925 plan did for the design, functionality and inclusiveness of the City's parks, *Plan El Paso* seeks to achieve for streets, those other great shared spaces of city life. Interconnected networks of streets that are safe, comfortable, and interesting will encourage walking, reduce reliance on the automobile, and reduce climate-changing pollutants.

The plan recognizes the indispensability of beauty, not as something separate and apart from life like pictures in a gallery, but beauty in homes, neighborhoods, civic buildings, streets, and public spaces. In this way *Plan El Paso* aims not to return to a



vanished time, but rather to grow a choiceworthy contemporary City based on cherished and enduring values. The plan revives the idea that additions to the built-environment must be functional and long-lasting but also delightful and attractive. *Plan El Paso* recognizes that design matters.

Planning in Public

The 1925 City Plan of El Paso is often referred to as the Kessler Plan because the project was headed by George E. Kessler, a renowned city planner and landscape architect. While Kessler lent his wisdom, foresight, and prestige to the plan, a more lasting effect on the City may have been made by Walter Stockwell, who assisted Kessler in creating the plan, and stayed in El Paso to serve 25 years with the City as Plan Engineer and Secretary of the Plan Commission. The 1962 Plan for the City credits Stockwell with keeping the “plan alive and making the plan work.”

Toward a similar end, *Plan El Paso* deputized the entire City as citizen planners through a series of hands-on public design charrettes which included over eight weeks of intense community exercises and policy discussions to generate the plan vision. This process was followed by over a year of regular meetings with a citizen City Plan Advisory Committee (CPAC) to refine the draft plan. A project website received over 40,000 visitors and provided an online forum for plan discussions. The plan process received bilingual coverage in local and national media. Plan drafts were made available to the public and special presentations and meetings were held to discuss the plan before the formal process for adoption was initiated.

Plan El Paso was created in El Paso and the best ideas came from El Pasoans. As a reward for undertaking this effort and persevering in its implementation, El Pasoans will one day remember themselves as the authors of the plan as well as the beneficiaries of the plan's accomplishments.

INTRODUCTION

HOW TO USE THE PLAN

Plan El Paso, the City of El Paso's Comprehensive Plan, provides the basis for El Paso's regulations and policies that guide its physical and economic development. *Plan El Paso* establishes priorities for public action and direction for complementary private decisions. *Plan El Paso* contains illustrative plans, diagrams, maps, and pictures to make its concepts clear and accessible to City officials, residents, developers, community groups, and other stakeholders.

This Comprehensive Plan provides a flexible framework that can be updated, revised, and improved upon over time to stay relevant to the issues the City must confront as well as the ambitions the City chooses to pursue. This plan can serve as a tool to evaluate new development proposals and direct capital improvements and to guide public policy in a manner that ensures that El Paso continues to be the community that its citizens desire it to be.

The plan is divided into elements. Each element concludes with goals and policies that set broad policy directions and identify specific actions that will enhance the City's quality of life, respect its natural environs, and support complementary economic growth and development.

Each element of the plan contains four sections:

1. **Current Conditions:** A discussion of existing circumstances about both the physical City and current City policy;
2. **Community Concerns:** Consensus concerns expressed by community members as part of the public involvement process of meetings, charrettes, and interviews that were conducted early in the planning process.
3. **Strategies for Addressing Community Concerns:** Policy discussions and recommendations with illustrative plans and renderings that articulate strategies to be accomplished through City actions and partnerships among local governmental agencies, private sector businesses, community organizations, and neighborhood residents.
4. **Goals and Policies:** Each goal summarizes the desired end-state for a particular subject based on the community's vision. Policies identify implementation actions and the principles that form the basis for City regulations and procedures and for desired actions by the greater community.

Relationship to Study Area Plans

Over the past decade, the City of El Paso has developed special study area plans that deal with unique community and neighborhood issues. The creation of these study area plans was called for by the City's 1999 Plan for El Paso and they have been developed in close coordination with local residents.



This new Comprehensive Plan does not supersede these plans. They will remain in effect except for any provisions that may conflict with this new plan, until such times as the plans are amended or repealed by the City Council. This Comprehensive Plan attempts to integrate social, economic, aesthetic, and environmental issues described within the study area plans into physical manifestations, demonstrated in illustrative plans, that will result in increasingly livable communities. Additional special area plans may also be created and adopted as amendments to this Comprehensive Plan.

Plan Implementation

This Comprehensive Plan is intended to play a pivotal role in shaping the future of the City. Here are some practical ways to ensure that future activities are consistent with the Comprehensive Plan:

- **Annual Work Programs and Budgets:** The City Council and individual City departments should be cognizant of the recommendations of the Comprehensive Plan when preparing annual work programs and budgets.
- **Development Approvals:** The approvals process for development proposals, including rezoning and subdivision plats, should be a central means of implementing the Comprehensive Plan. The zoning regulations (Title 20) and the subdivision regulations (Title 19) should be updated in response to regulatory strategies presented in the Comprehensive Plan.
- **Capital Improvement Plans:** The City's capital improvement plans (CIP) and long-range utility, and transportation plans should be prepared consistent with the Comprehensive Plan's land use policies and infrastructure recommendations (water, sewer, stormwater, transportation, and parks/recreation). Major new improvements that are not

reflected in the Comprehensive Plan, and which could dramatically affect the Comprehensive Plan’s recommendations, should be preceded by a Comprehensive Plan update.

- **Economic Incentives:** Economic incentives should carry out Comprehensive Plan goals and policies. Geographic areas identified by the illustrative plans should have high priorities for incentives and public/private partnerships.
- **Private Development Decisions:** Property owners and developers should consider the strategies and recommendations of the Comprehensive Plan in their own land planning and investment decisions. Public decision-makers will be using the Comprehensive Plan as a guide in their development-related deliberations.
- **Future Interpretations:** The City Council should call upon the City Plan Commission to provide interpretation of major items that are unclear or are not fully addressed in the Plan. In formulating an interpretation, the Commission may call upon outside experts and other groups for advice. Minor items that require interpretation should be handled by the appropriate agency as it follows the Plan.

Overall Goals of the Plan

Through the charrette process and meetings with public officials, the following general goals have been formulated for the City of El Paso:

- **Regional Land Use Patterns:** Encourage infill development within the existing City over peripheral expansion to conserve environmental resources, spur economic investment, repair social fabric, reduce the cost of providing infrastructure and services, and reclaim abandoned areas.
- **Urban Design:** Incentivize development projects of exemplary location and design throughout the City.
- **Downtown:** Direct public funding and private development of exemplary design to the Downtown where it will have economic and social benefits shared by the entire City.
- **Transportation:** The City of El Paso wishes to become the least car-dependent city in the Southwest through meaningful travel options and land-use patterns that support walkability, livability, and sustainability. Over time, El Paso will join the ranks of the most walkable and transit-rich metropolitan areas in the country.
- **Public Facilities:** Provide community services and facilities that meet the physical, educational, and recreational needs of all segments of the City’s community.



- **Housing:** To provide housing in El Paso through complete, connected neighborhoods containing quality, affordable, and accessible choices to serve all income levels and age groups.
- **Economic Development:** Build a foundation for economic prosperity that nurtures an atmosphere of innovation, increases quality of life to attract national and international talent, offers high-quality infrastructure, improves education and workforce development, and increases tourism.
- **Historic Preservation:** Preserve, renew, and evolve historic buildings, districts, and landscapes for the use and enjoyment of future generations.
- **Health:** Improve the overall physical and mental health of El Paso citizens by increasing the quality of life in the region.
- **Sustainability:** Secure the viability of environmental resources for El Paso’s people, flora, and fauna so that future generations may experience a constantly improving environment that is always more resilient than that of the previous generation.
- **Border Relations:** El Paso will be a world class, highly competitive international border community that draws trade, technology, and tourism to its cultural, geographic, and environmental attractions through unparalleled inter-regional and binational cooperation.
- **Fort Bliss:** The City and Fort Bliss shall continue to grow together in a way that is mutually beneficial.

FACTS ABOUT EL PASO

PHYSICAL CHARACTERISTICS

Total Land Area	255.24 square miles (City of El Paso) 1,012.69 square miles (County of El Paso)
Elevation	3,800 feet above sea level; The highest peak of the Franklin Mountains is 7,192 feet above sea level

Source: US Census Bureau

POPULATION TRENDS

	City of El Paso	El Paso County	Ciudad Juárez
2010	649,121	800,647	1,313,338
2000	563,662	679,622	1,218,817
1990	515,342	591,610	798,499
1980	425,259	479,899	649,275
1970	322,261	359,291	407,370
1960	276,687	314,070	262,119
1950	130,485	194,968	122,566

Sources: US Census Bureau, City of El Paso Planning Division, Ciudad Juárez municipal website

POPULATION OF MUNICIPALITIES

City of El Paso	649,121
Socorro	32,013
Horizon City	16,735
Anthony (Texas)	5,011
Vinton	1,971
Clint	926
El Paso County (unincorporated area)	94,870

Sources: US Census Bureau, Texas Almanac

ETHNICITY IN CITY OF EL PASO

Total 2010 Population	649,121	100.0%
All Hispanic or Latino	523,721	80.7%
Mexican	486,186	74.9%
Puerto Rican	5,793	0.9%
Cuban	737	0.1%
Other Hispanic or Latino	31,005	4.8%
Not Hispanic or Latino	125,400	19.3%

Source: US Census Bureau



PUBLIC EDUCATION

University of Texas at El Paso (UTEP)	22,640 students
El Paso Community College (EPCC)	21,010 students
Socorro Independent School District	42,287 students
El Paso Independent School District	64,023 students
Canutillo Independent School District	5,938 students
Ysleta Independent School District	44,468 students

HOUSEHOLD INCOME IN CITY OF EL PASO

Mean Household Income	\$50,203
Median Household Income	\$36,147

Source: American Community Survey, 2005-2009

HOUSEHOLD SIZE IN CITY OF EL PASO

Number of Households	216,894
Average Household Size	2.95

Source: US Census Bureau

OCCUPIED HOUSING UNITS IN 2010

Occupied Housing Units in City of El Paso	216,894	100.0%
Owner-Occupied	131,104	60.4%
Renter-Occupied	85,790	39.6%

Source: US Census Bureau

MANUFACTURING

Where: 95% of manufacturing employment in the region takes place in Ciudad Juárez, which has 40 industrial parks.

Unique Factors: El Paso and Ciudad Juárez pioneered the twin-plant maquila industry, allowing international manufacturing facilities in Mexico.

Source: El Paso REDCo

RAIL FREIGHT

- El Paso is served by the Union Pacific, Ferromex, and Burlington Northern Santa Fe railroad companies.
- 15-20% of imports/exports to Mexico pass through El Paso.
- 13% of US goods transported by rail pass through El Paso.

FORT BLISS PERSONNEL

Personnel	30,800 active-duty soldiers, 2,100 reservists, 7,950 civilians, and 38,150 family members.
Size	The main post of Fort Bliss is in El Paso; training areas extend across 1,120,000 acres far into New Mexico.
Expansion	\$5 billion has been spent to expand Fort Bliss to accommodate new brigade combat teams.

Source: Fort Bliss

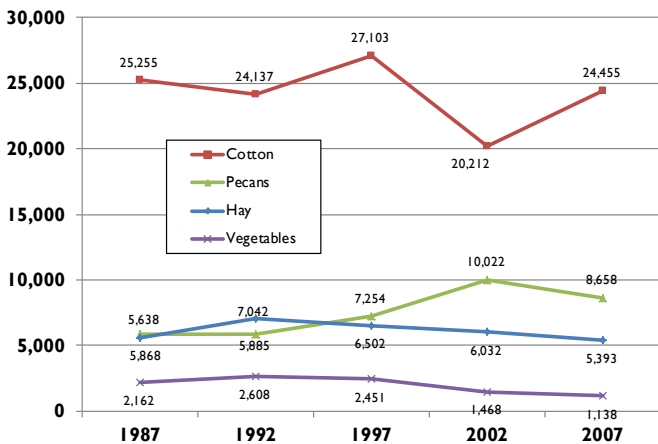
FRANKLIN MOUNTAINS STATE PARK

Size	37 square miles within El Paso's City limits
Created	1979 Act of the Texas Legislature
Acquisition	Began in 1981
Opened to Public	1987
Recent Expansion	1,650 acres from City of El Paso in 2009
Potential Expansion	7,081 acres in Castner Range

AGRICULTURE IN EL PASO COUNTY

	1987	1992	1997	2002	2007
Number of Farms	422	438	415	600	590
Irrigated Land	40,662	41,983	41,447	37,197	37,788
Value of Products Sold	\$66,065,000	\$88,060,000	\$76,673,000	\$67,884,000	\$47,464,000
Major Crops Harvested:					
Cotton	25,255	24,137	27,103	20,212	24,455
Pecans	5,868	5,885	7,254	10,022	8,658
Hay	5,638	7,042	6,502	6,032	5,393
Vegetables	2,162	2,608	2,451	1,468	1,138
Land in Farms	236,667	(D)	243,684	113,948	168,556

Source: USDA's Census of Agriculture for 1987, 1992, 1997, 2002 and 2007



Major Crops Harvested in El Paso County between 1987 to 2007

REGIONAL LAND USE PATTERNS

1

Overall Goal: Encourage infill development within the existing City over peripheral expansion to conserve environmental resources, spur economic investment, repair social fabric, reduce the cost of providing infrastructure and services, and reclaim abandoned areas.

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"THE INTRICATE ORDER OF CITIES -
MANIFESTATION OF THE FREEDOM OF
COUNTLESS NUMBERS OF PEOPLE TO MAKE
AND CARRY OUT COUNTLESS PLANS - IS IN
MANY WAYS A GREAT WONDER."

- JANE JACOBS

CURRENT CONDITIONS

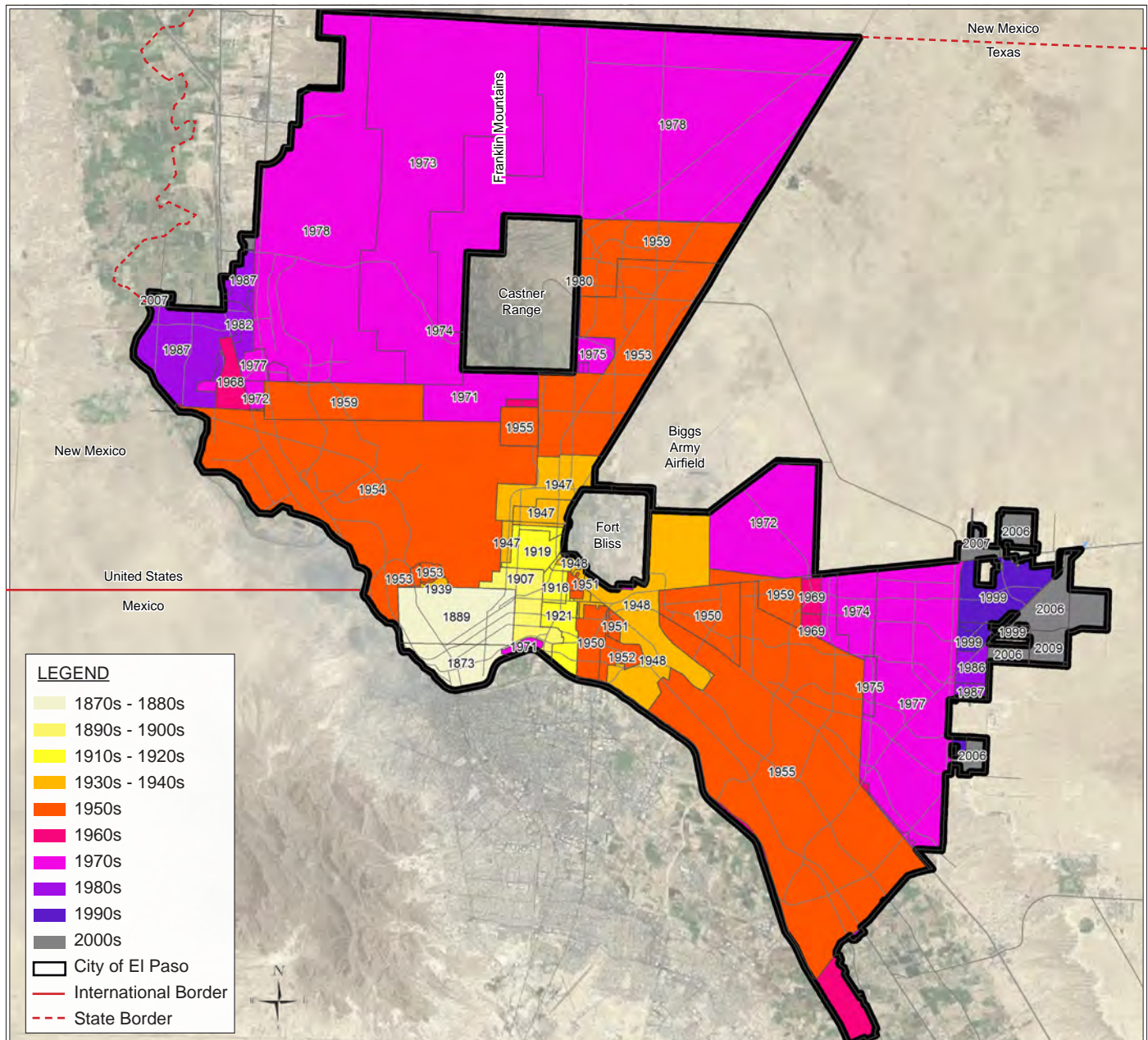
EL PASO'S OUTWARD EXPANSION

When first incorporated in 1873, El Paso consisted of only 2.2 square miles from the Rio Grande north to Downtown. A railroad from Albuquerque arrived soon after in 1881 on its way to San Antonio, followed by a railroad to Mexico City which opened in 1884. These railroads began their long contribution to the region's prosperity.

El Paso expanded in small steps until the 1950s when 19 separate annexations added 90 square miles of developable land. El Paso's northeast portion was added in 1953, the Westside was added in 1954, and much of the Westside was added in 1955.

The 1970s saw another growth spurt when 24 more annexations added an additional 120 square miles. This expansion included most of the land between George Dieter Drive and today's Loop 375, plus the Franklin Mountains and most other vacant land north to the New Mexico state line. The Castner Range, a former military training and weapons firing area on the Eastside of the mountain, is an exception to this expansion.

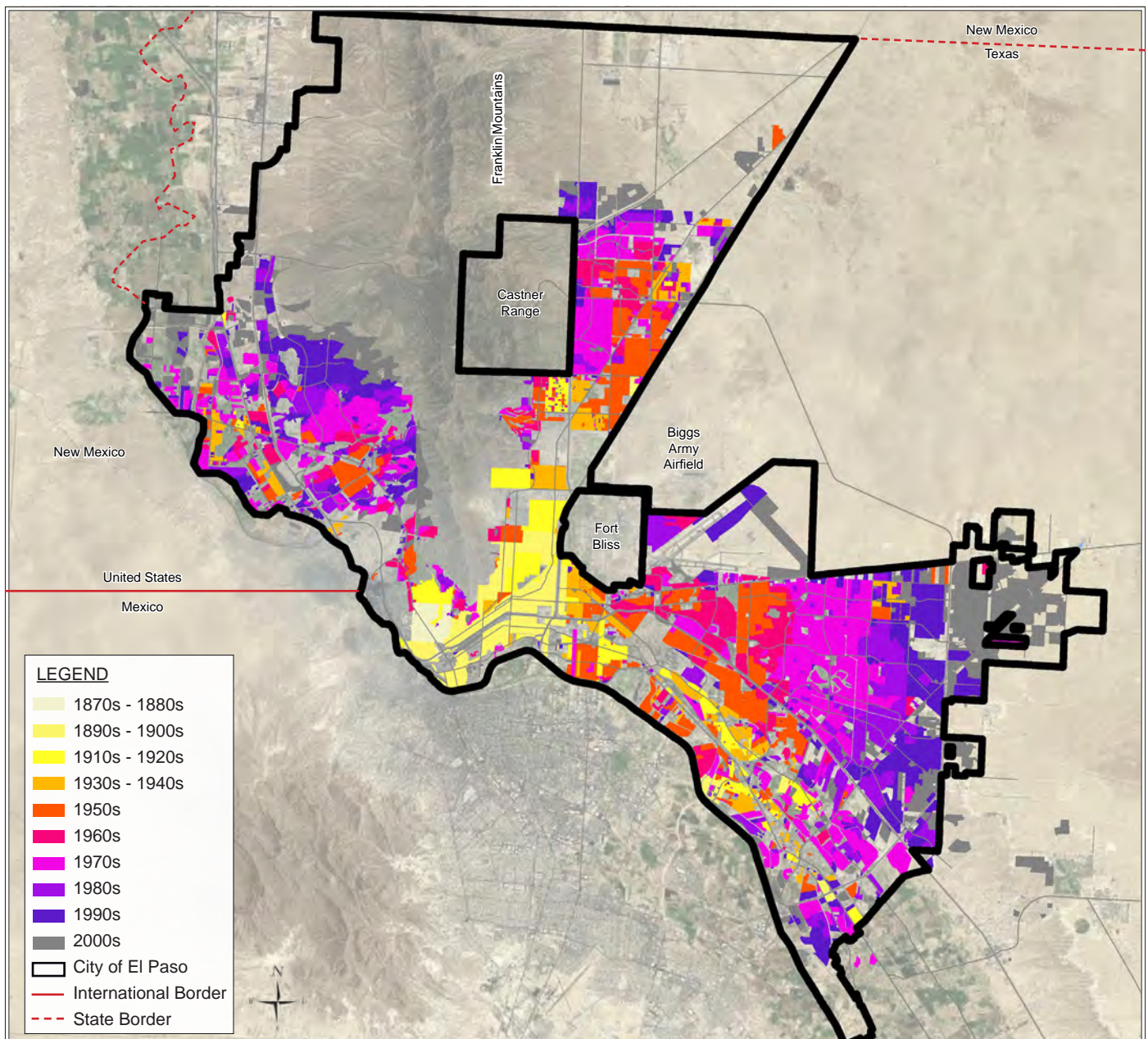
Annexations slowed beginning in the 1980s, however expansion filled out the current City boundaries east of Loop 375 with the exception of several skipped-over tracts. Land was also annexed in the Upper Valley north of Country Club Road.



Decade in which land was annexed into the City of El Paso.

Despite the rapid outward expansion of El Paso's municipal boundary, actual development of land proceeded deliberately. Wildly speculative land sales were rampant in eastern El Paso County from the 1960s until 1981 when the Federal Trade Commission ordered a halt to high-pressure sales tactics. During that same period, development within the City took place in small increments immediately northeast and east of established neighborhoods. In the 1970s new development began on the Westside as well.

The map below indicates the decade when tracts within the City limits were subdivided. Comparing this map to the previous page, it is clear that annexation of land can pre-date actual development by decades or longer. Annexation is usually the first step toward obtaining water and sewer service from El Paso, a critical precondition to development of land. In recent years El Paso has occasionally agreed to provide water and sewer service to new subdivisions without annexation, a trend that threatens the City's historic orderly pattern of expansion.



Decade in which land in El Paso was subdivided for urban development.

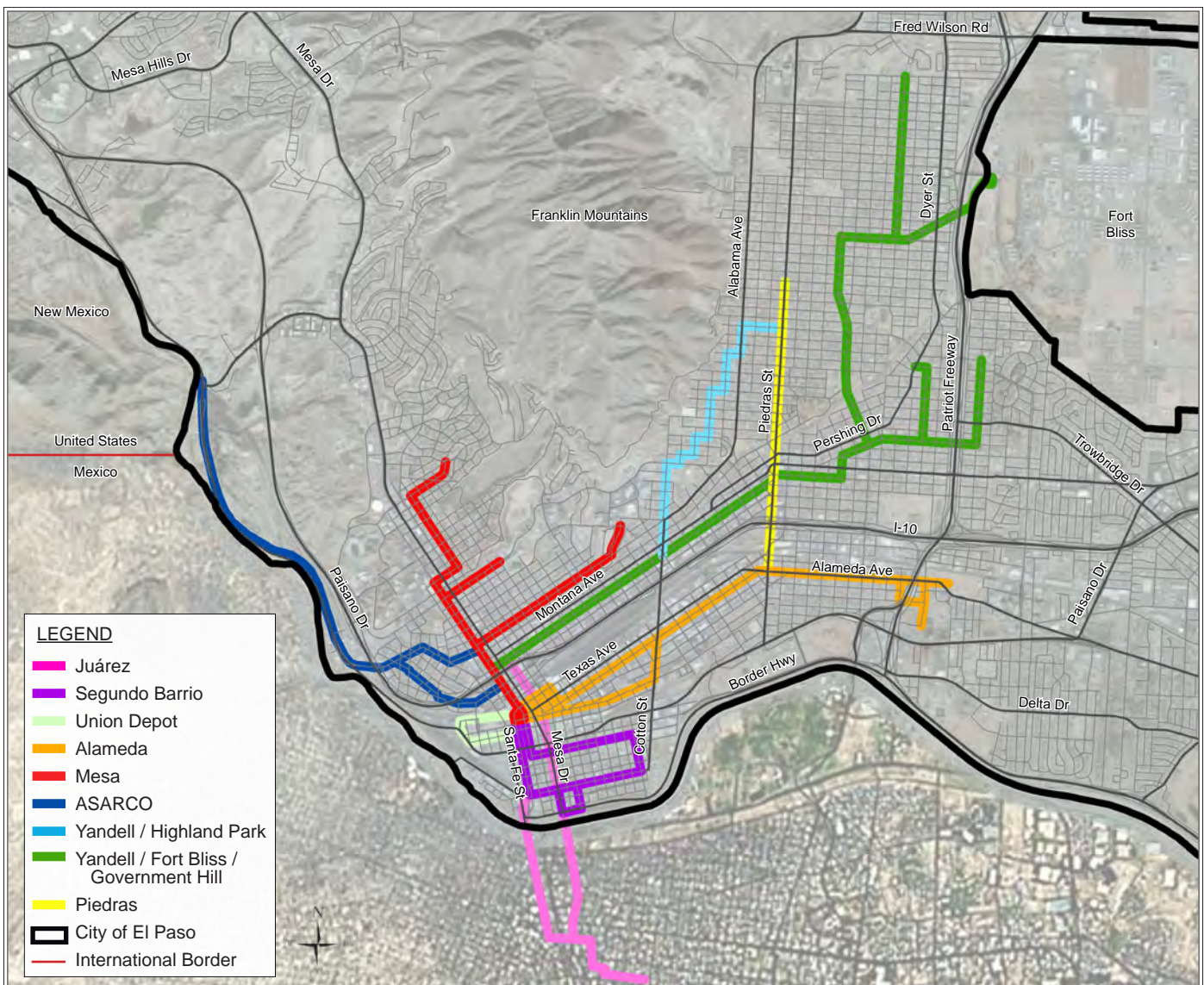
EL PASO'S HISTORIC STREETCAR SYSTEM

A lasting imprint on El Paso was created by an extensive system of streetcars. The earliest streetcars, beginning in 1882, were mule-drawn. Electric streetcars began running in 1902, and the first rubber-tired bus appeared in 1925. The last streetcar, an international line that ran a circular loop that crossed over into Ciudad Juárez on Stanton Street and back north on El Paso Street, ended service in 1974.

In 1973 the Juárez Line carried over 10,000 passengers a day. The length of the three mile route to Mexico was equally divided in the two cities. El Paso was one of only six cities in the world that provided international service. The streetcars were

reportedly well preferred to the buses which slowly began to replace them. Hundreds of participants in the public meetings recommended the reestablishment of streetcars in El Paso and, in time, the relinking of the two countries via the Juárez Line.

Like the freeways that came later, the streetcar network provided easy access to land in neighborhoods outside the Downtown. Businesses and workplaces often located along streetcar lines which promised permanent convenience for employees and customers. Today's bus routes often follow the major streetcar routes.



Furthest extent of El Paso streetcar network

PRE-WORLD WAR II NEIGHBORHOOD PATTERNS

El Paso's neighborhoods were laid out in a similar pattern from the City's founding until the Great Depression. Automobiles had begun to appear in the 1920s but they had only minor influences on development patterns. All of El Paso's historic neighborhoods were created during this time period.

The photographs and descriptions below explain the pattern of development during this time period, which was oriented to people moving about on foot and, later, using streetcars. A typical lot during this time was 50 feet wide and 120 feet deep. Today these neighborhoods average about 4.3 dwelling units per acre.

Neighborhood Structure

Blocks in pre-World War II neighborhoods were small and generally rectangular (with exceptions such as the hillsides in Sunset Heights and Kern Place). Alleys provided access to garages and an out-of-sight path for utility lines. Streets were highly interconnected and there was rarely a clear pattern as to which streets would become through-routes over time. This type of street network provided multiple routes for walking and tended to disperse traffic instead of concentrating it on occasional major streets.



Manhattan Heights and Pershing/Government Hill neighborhoods

Housing

Houses in pre-World War II neighborhoods faced streets of every type. Because the rectangular street network dispersed traffic, streets were never too busy for private homes. Schools were relatively small in size, were integrated within neighborhoods, and were accessible on foot and bicycle. Parks were usually scaled to the neighborhood and often were centerpieces; the most prestigious homes frequently faced these parks.



Mundy Park, a centerpiece of Sunset Heights

Shops and Workplaces

In pre-World War II neighborhoods, shops and workplaces were relatively small and were either scattered between or integrated within residential neighborhoods. This pattern was widespread before private vehicles were common because destinations needed to be reached on foot or by streetcar. Large parking lots were unnecessary, allowing closer integration with neighborhoods. Streetcar routes were the preferred location for stores and offices because of their high visibility and accessibility to people from other neighborhoods.



Montana Avenue at Maple Street

POST-WORLD WAR II NEIGHBORHOOD PATTERNS

During the Great Depression, development stalled in El Paso as well as around the County. During World War II, Fort Bliss became an active training center and the old airfield was modernized as Biggs Air Force Base.

This momentum continued after the war as private development resumed. The streetcar network had declined and private automobiles were becoming common. Many changes occurred

in the patterns of new neighborhoods, including the limitation of multi-family housing to isolated pods.

The photographs and descriptions below explain the pattern of development from the Post-World War II era to the 1980s, and describes the changes from pre-World War II neighborhoods. Lots during this period were wider than previously, often 80 feet wide and 120 feet deep. Today these neighborhoods average about 2.9 dwelling units per acre.

Neighborhood Structure

Blocks in post-war neighborhoods continued to be small, but irregularly shaped blocks became common even on flat land. Alleys were rarely provided; streets had to provide vehicular access to garages and to accommodate utility lines. Streets remained highly interconnected, but many were laid out in curvilinear patterns which made it difficult for unfamiliar drivers to find their way through neighborhoods. A clear pattern of major streets was provided to handle most through traffic.



Neighborhoods around Montwood Drive at Yarbrough Drive

Housing

Houses in post-war neighborhoods usually faced local streets. Where the short edges of blocks faced a major street, homes on corner lots were separated by rock walls, affording some separation from the high levels of traffic that was forced there by the curvilinear street pattern. Schools and parks became larger and were spaced further apart, requiring parking lots because they were less accessible by foot and bicycle.



Sides of homes and their rear yards face major roads.

Shops and Workplaces

The streetcar era had ended when post-war neighborhoods were created. Instead of being placed in a linear pattern, shops and offices began to be concentrated at larger intersections that were accessible from traffic on perpendicular streets. Grocery-anchored shopping plazas became common. Larger shopping centers including regional malls began to appear where they would be accessible by cars driven from longer distances.



Montwood Shopping Center at Yarbrough Drive

SUBURBAN NEIGHBORHOOD PATTERNS

During the 1980s another shift began to occur in the design of El Paso's neighborhoods. A more suburban development pattern began to emerge; however, the changes were less dramatic than in many Texas cities. As new development moved further from the center of town, driving distances increased, causing a change in the thoroughfare pattern as well.

The photographs and descriptions below explain this pattern and describes the changes from post-World War II neighborhoods. Lots sizes declined from the previous pattern, with lots often measuring 50 or 60 feet wide and 100 to 110 feet deep, similar to the original lot sizes in El Paso's historic neighborhoods despite many differences in character. These neighborhoods, however, average only about 2.6 dwelling units per acre because large tracts of land were set aside for future commercial development.

Neighborhood Structure

Blocks in newer suburban neighborhoods continued to be small, but cul-de-sacs became prominent features in El Paso neighborhoods. Alleys were never provided, requiring streets to provide vehicular access to garages and to accommodate utility lines. Except for the cul-de-sacs, local streets remained fairly interconnected. A clear pattern of major streets extended the post-war arterial grid; however, a new freeway network was needed to accommodate long trips between housing and services required by distant neighborhoods.



Neighborhoods around Saul Kleinfeld Drive at Bob Mitchell Drive

Housing

Houses in El Paso's suburban neighborhoods face neighborhood streets; their backs face arterial roads isolating them from development beyond. Residential blocks were separated by other land uses, typically shopping strips. Schools and parks were large and spaced far apart, essentially becoming drive-to facilities with large parking lots that were intended to accommodate people from numerous neighborhoods.



North Zaragoza Road between Pellicano Drive and Vista del Sol Drive

Shops and Workplaces

In the suburban era, longer drives to work and shopping became common. New stores became much larger and required easy vehicular access to a correspondingly large base of potential customers. Stores and offices were now concentrated along arterial roads and highways, not just at intersections. The dominant retail form had become the "power center" of very large stores that shared parking lots but were so spread out that customers often drove from one store to the next.



Las Palmas Marketplace, George Dieter Drive at Zaragoza Road

PRIOR PLANS FOR EL PASO

1999 Plan for El Paso

This document is a major update to the previous Plan for El Paso, which was adopted by the City Council in April 1999 as an official policy statement and general guide to ensure quality growth in El Paso for the next 25 years.

The 1999 plan contained three land-use elements: Land Use & City Form; Land Use Concepts; and Urban Design.

As described in the City Form element, the 1999 plan included a “Year 2025 General Land Use Map” for each of the City’s five major planning areas (central, northwest, northeast, east, and lower valley). These maps did not change any zoning districts, but they assigned general land use designations that are organized primarily by the type of land use, then sub-categorized by intensity:

- Residential (low, medium, high density)
- Commercial (neighborhood, community, regional)
- Industrial (light, heavy)
- Mixed Use

These maps are used as a guide when the City evaluates requests for changing the official zoning classification of property. The zoning map itself is adopted as part of El Paso’s zoning ordinance (Title 20 of the El Paso City Code). Title 20 determines which zoning regulations apply to all land in the City. The General Land Use Map focuses almost solely on the general type of land use (for instance, residential vs. commercial) and it has not been able to provide useful guidance on other critical subjects, such as helping City officials decide how and where to grow outward and how to focus redevelopment efforts in suitable locations.

The Land Use Concepts element of the 1999 plan examined each of the five major planning areas and designated activity centers, activity corridors, and policy statements for each. That element also analyzed potential growth in certain Westside and Eastside areas that were subject to El Paso’s extraterritorial jurisdiction.

The Urban Design Element focused on Downtown redevelopment, infill redevelopment, and design guidelines. Those issues are addressed in the Urban Design Element of this new plan.

The general land use designations in the 1999 plan were explicitly subject to change as a result of special study area plans that would later be carried out and incorporated into the Citywide plan. Eight study area plans have since been prepared and adopted:

- Rim/University (2001)
- Northwest Upper Valley (2004)
- Chihuahueta (2004)
- PSB Westside Master Plan (2005)
- PSB Northeast Master Plan (2005; amended 2007 & 2008)
- Downtown 2015 (2006)
- Medical Center of the Americas (2008, amended 2011)
- Connecting El Paso (2011)

Unless these study area plans are amended by the City Council, their recommendations remain in effect after adoption of this new comprehensive plan.

In addition to the study area plans listed above, the Major Thoroughfare Plan in the *Plan for El Paso* has been amended frequently since 1999:

- 2001: Ordinances 14791 & 14933
- 2002: Ordinance 15068
- 2003: Ordinance 15358
- 2004: Ordinances 15807, 15813, 15824 & 15827
- 2005: Ordinances 16027, 16099, 16115, 16236 & 16237
- 2007: Ordinances 16549, 16642, 16651, 16698 & 16738
- 2008: Ordinances 16910, 16961 & 17025
- 2009: Ordinances 17211
- 2010: Ordinances 17329, 17368 & 17401
- 2011: Ordinances 17499, 17538, 17591 & 17599

1988 Plan for El Paso

In 1988, City officials adopted *The Plan for El Paso: Guide to the Year 2010*. The 1988 plan foreshadowed various themes of this new plan, most notably the designation of activity centers along major corridors where mixed-use development would be encouraged.

1962 El Paso City Plan

In 1962, City officials adopted the *El Paso City Plan*. This plan documented progress on many aspects of El Paso’s landmark *1925 City Plan*, including the adoption of a comprehensive zoning ordinance in 1930, a building code in 1936, completion of Washington and Memorial Parks, and construction of the Bata-an Trainway to submerge railroad tracks near Downtown.

1925 City Plan

The City of El Paso hired renowned planner George Kessler to document and illustrate the City’s most important planning issues. The resulting *1925 City Plan* was highly celebrated at the time, and 90 years later, it continues to be held up as an example of excellent planning.

In addition to larger concerns such as access to water, the *1925 City Plan* focused on urban design and aesthetic concerns. It stressed the importance of the character and quality of the public realm, including El Paso’s streets. The plan said that streets should not be too wide so as to require an unnecessary amount of pavement, which is hot and expensive; and planted parkways should line public sidewalks.

The *1925 City Plan* left a legacy of great planning. One can see many of the recommendations materialized and successfully in place today. In particular, many of the City’s civic spaces and parks, such as Memorial, Caruso, and Washington Parks, were created according to that plan.

EXISTING LAND USES

While taking note of the differing neighborhood patterns it is often useful to identify the existing use of individual parcels of land throughout the City. Maps showing existing land uses for most parcels are found on the next three pages. Where occupied land within the City is not colored on these maps, accurate classifications are not yet available.

The data used to create these maps has been compiled by the City's planning department over the past seven years. Sources for this data include central appraisal district records, building permits, field verification, and professional knowledge of staff planners. This data has been simplified for these maps so that Citywide land use patterns can be discerned at this scale. The table below explains the classification system.

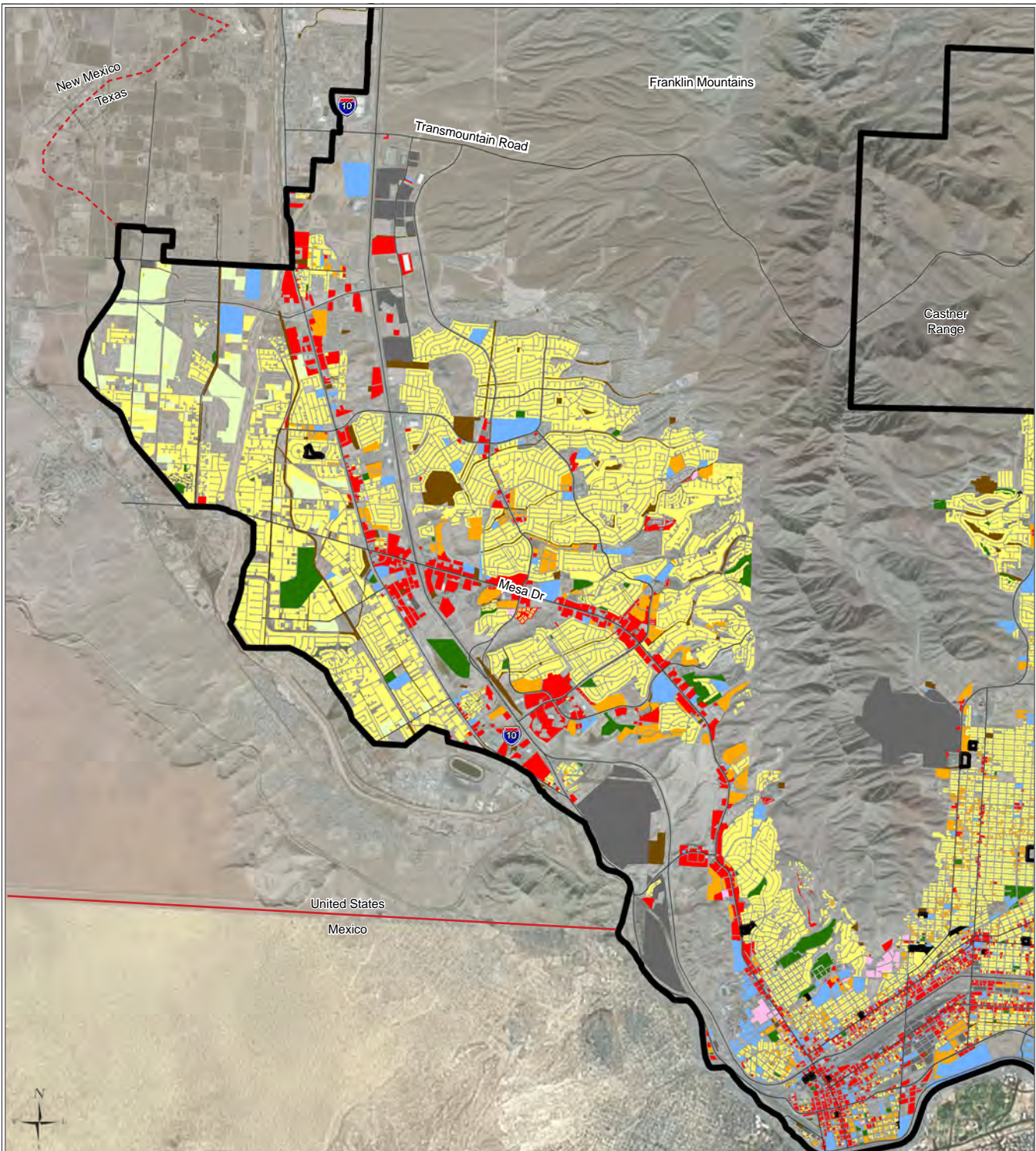
General Observations:

- For a city its size and age, El Paso has relatively little multi-family housing. The detached home on a moderately sized lot has been the predominant pattern since early in El Paso's history, accounting for two-thirds of the City's current housing units.
- Early industrial development had been concentrated on the Westside at the ASARCO smelter and on the Eastside around Western Refining, but it occurred at many other locations around El Paso. Newer industrial development is almost entirely warehousing and distribution serving the maquiladoras in Juárez, and thus is usually located in large industrial parks with good access to Zaragoza Road or Loop 375.
- Newer commercial development occurs on large parcels with access to Interstate 10 or major arterial roads.
- Urban development has nearly eliminated farmland within the City limits and threatens what remains.

LEGEND FOR MAP OF EXISTING LAND USES IN EL PASO

	Residential / detached	Single-family homes on their own lots (including vacant)
	Residential / multi-family	Apartments, condominiums, townhouses (including vacant)
	Commercial	Stores, business offices, motels, theaters (excluding vacant)
	Medical	Hospitals, clinics
	Industrial	Warehouses, quarries, light and heavy industry (excluding vacant)
	Civic uses	Schools, churches, non-profits organizations, government facilities
	Parks / Cemeteries	City and County parks, recreation fields, nature preserves, cemeteries
	Drainage / Utilities	Drainage channels, stormwater detention basins, utility corridors
	Farmland	Cultivated farmland

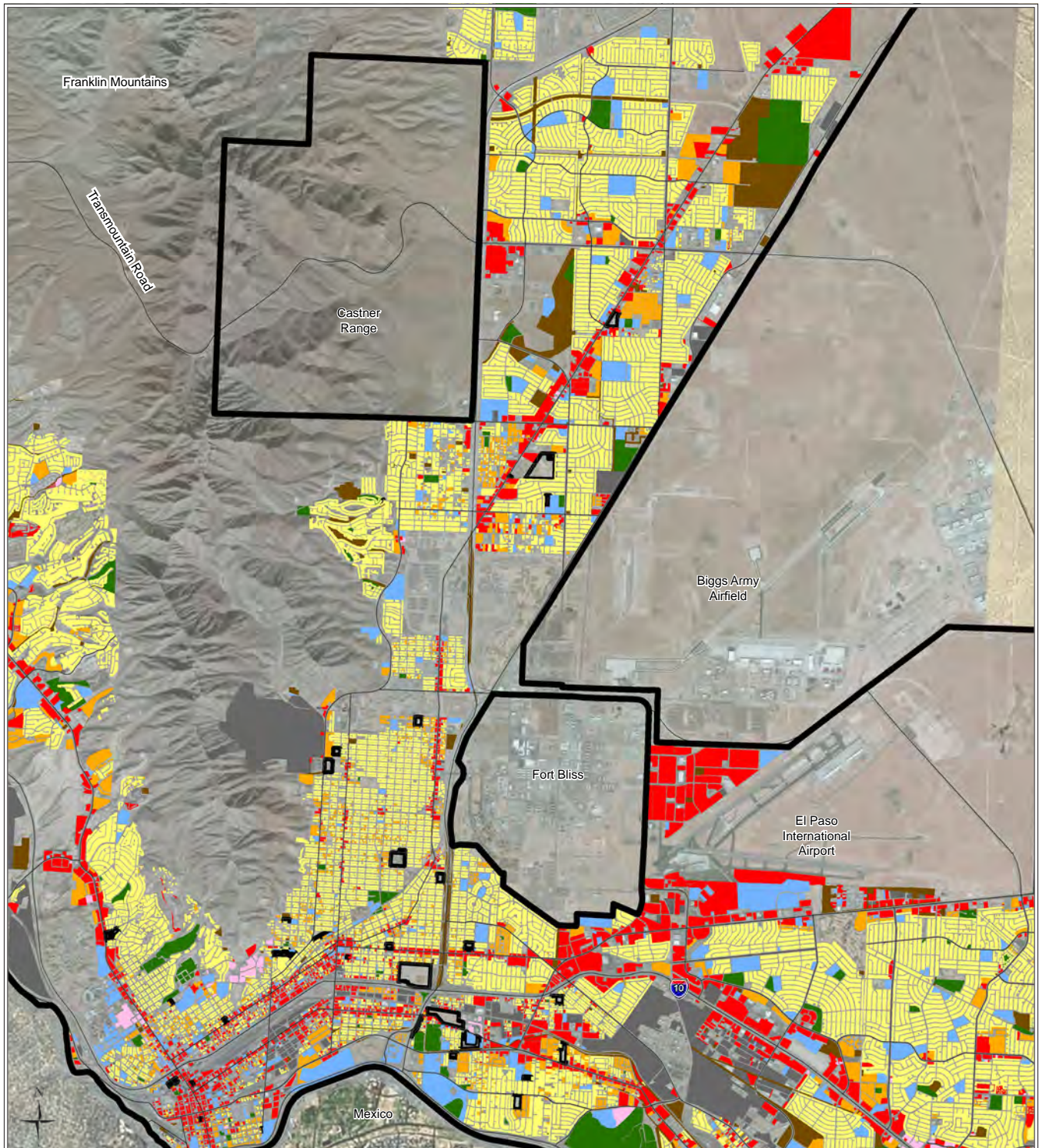
EXISTING LAND USES - WESTSIDE / CENTRAL



LEGEND

Residential / detached	Medical	Parks / Cemeteries	City of El Paso
Residential / multi-family	Industrial	Drainage / Utilities	International Border
Commercial	Civic uses	Farmland	State Border

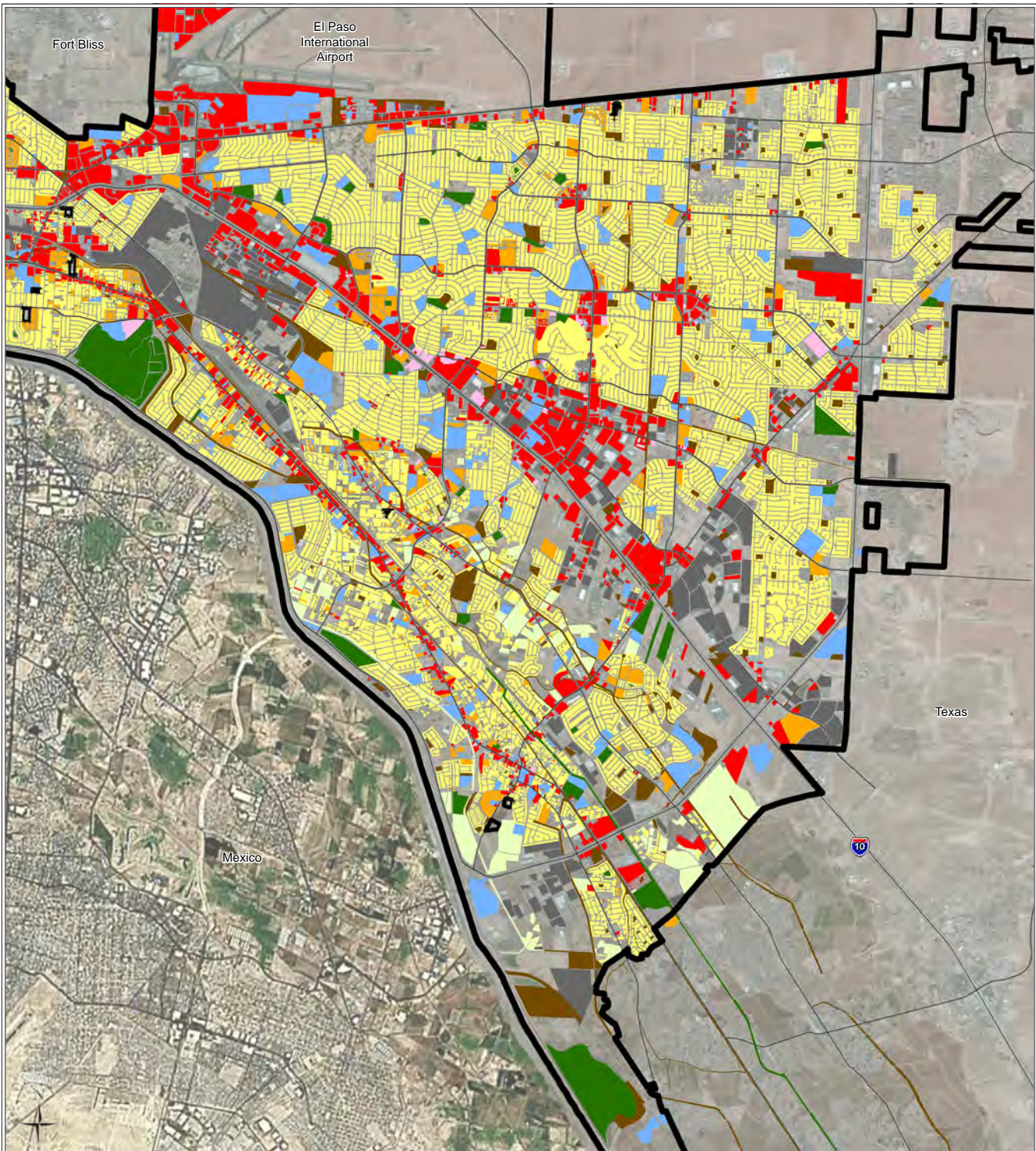
EXISTING LAND USES - NORTHEAST



LEGEND

Residential / detached	Medical	Parks / Cemeteries	City of El Paso
Residential / multi-family	Industrial	Drainage / Utilities	International Border
Commercial	Civic uses	Farmland	State Border

EXISTING LAND USES - EASTSIDE / LOWER VALLEY



LEGEND

- | | | | |
|----------------------------|------------|----------------------|----------------------|
| Residential / detached | Medical | Parks / Cemeteries | City of El Paso |
| Residential / multi-family | Industrial | Drainage / Utilities | International Border |
| Commercial | Civic uses | Farmland | State Border |

COMMUNITY CONCERNS

Revitalize Downtown

Downtown El Paso's rich architectural and cultural heritage is easily apparent, as is the extensive disinvestment in recent decades.

At its prime, Downtown El Paso was a distinctive cultural scene – the place to work, live, and meet. Department stores, theaters, festivals, family celebrations, and visitors from across the U.S. and Mexico all brought life to Downtown. Today, much of that life remains only in memories and stories.

Redevelopment is important throughout El Paso but nowhere more than Downtown. Downtown still provides a treasure of civic amenities. Its streets are the highest-quality pedestrian environment in the City; well-built and beautifully crafted buildings face tree-lined streets.

Fort Bliss and the Franklin Mountains divide El Paso into three wedges. This accident of geography and history ensures that Downtown will always be the “center of town” and the hub of government and transportation. Downtown should also, once again, become El Paso's vibrant heart—a place of common ground, constant reinvention, living, commerce, and entertainment.

Live and Work Closer Together

El Paso's major roads must accommodate long automobile trips for traveling between home, to work, and to shopping. Despite concerted efforts by public officials to widen key roads like Mesa Street and Montana Avenue and to add enough freeway lanes to accommodate this travel pattern, most improvements are simply overcome by additional traffic.

The most practical relief for congestion will come from motorists not needing to drive as far to meet daily needs. As long as residents believe that congestion will be solved by the next road improvement, they will continue to buy homes far from their jobs or accept jobs far from their homes, worsening the very cycle that causes the congestion.

Some long-distance travel is unavoidable, such as intercity travel and the movement of goods by trucks to and from maquiladoras in Juárez. However, excessive travel is often the result of careless development patterns. For instance, the expansion of Fort Bliss will generate a great deal of new traffic. By designing communities to reduce unnecessary travel, the road and transit networks will be better able to handle future growth.

Protect Historic Neighborhoods

El Paso's older neighborhoods are a source of great pride. Nine neighborhoods have been formally designated as historic landmarks: Austin Terrace, Chihuahuita, Downtown, Magoffin, Manhattan Heights, Old San Francisco, Sunset Heights, Ysleta, and the Mission Trail Historic Corridor and District.

These nine neighborhoods are a small fraction of the valued older neighborhoods throughout El Paso County. Many of these older neighborhoods have suffered from disinvestment. However, if protected, these neighborhoods are poised to serve generations of new residents due to their central locations, excellent neighborhood designs, and a housing stock of distinctive yet affordable buildings.

These older neighborhoods are also valuable models for what El Paso residents would like to see in new neighborhoods: interconnected streets; access to neighborhood schools and parks; a wide variety of housing; and easy accessibility to shopping and jobs.



1938 street map of El Paso's historic neighborhoods

Add New Land Uses Into Our Communities

With so few vacant lots in El Paso's older neighborhoods, those wishing to buy a new home usually must move to a new subdivision on the outskirts of town.

Distant subdivisions usually require longer travel to employment. Even daily needs cannot be met without extensive driving. Parks and schools were once the centerpiece of neighborhoods, but now they are so large that they can be unpleasant neighbors. In older areas of the City, small schools are often abandoned and children are bused or driven to larger schools in other parts of town.

Newer subdivisions are often monocultures of a single type and size of home. Families can rarely stay within the same subdivision when they wish to live in different kind of housing or would prefer to move to a larger or smaller house in the same area.

In older neighborhoods, small shops that would be valuable to residents aren't permitted because the same zoning that would permit them would also permit much larger stores that would be perceived as disruptive to nearby housing. Better zoning districts are needed to resolve this problem.

Most neighborhoods, old or new, could benefit from a greater variety of activities within walking and bicycling distance.

Restore Close Connections with Juárez

The recent violence that has overcome Juárez and the northern states of Mexico has badly damaged the historic connectedness between El Paso and Juárez. The maquiladora economy has been minimally affected but most other ties are severely diminished.

Tourism in Juárez has come to a near standstill. Medical facilities in Juárez have historically been used by El Pasoans, but the violence has badly damaged that sector of the Juárez economy and nearly eliminated patients from El Paso. Numerous shopping, dining, and entertainment opportunities have moved to El Paso, further weakening the economy in Juárez. Even routine social visits among family members are perceived to be risky endeavors.

Juárez and El Paso have grown together nearly as a single city, even though divided by the unfortunate 19th century selection of the Rio Grande / Rio Bravo as the national border. The restoration of that closeness is a fervent dream of citizens on both sides of the border.

Grow Up, Not Out

Most new housing in El Paso is built on the outskirts of the City. To some degree this is difficult to avoid because the City has grown continually outward without skipping over many large tracts of land. Yet there are overlooked opportunities to develop without moving further outward.

As El Paso's transit network is expanded, each transfer center provides an opportunity for redevelopment of surrounding land. Some vacant tracts do still exist, which also should be developed at higher intensities than El Paso's historic patterns. In addition, intense land uses such as hospitals and universities offer excellent potential for nearby redevelopment.

Even unexpected sites such as the ASARCO smelter have more redevelopment potential than is commonly expected. If the existing rail yards along I-10 and near the border are relocated outside of the City, those sites would also offer tremendous potential for development that may even make further outward expansion unnecessary.

El Paso residents have shown little interest in skyscrapers but seem to support strategically located two- to four-story buildings that make excellent use of well-located urban land. The compact "footprint" of multi-story buildings is completely compatible with walkable neighborhoods.

Stop Sprawling

Healthy cities tend to grow. However, continual outward expansion is not the only option to accommodate growth.

El Paso is in a very unusual position in that most undeveloped land to the northwest and northeast of the City is owned by the City itself and managed by El Paso Water Utilities and the Public Service Board (EPWU-PSB). The choice of whether the City should expand in these directions, and if so how, is within the discretion of City and EPWU-PSB officials.

To the east, very little land is owned by the City. The past decade has seen continuous debates over when to extend water and sewer lines, how much land to annex for urban expansion, and whether or not it is critical to limit utility extensions to annexed land. Texas law allows El Paso only very limited authority over land that isn't annexed into the City; however, through the use of development agreements and subdivision regulations, compact neighborhoods may be able to be created at the same or greater level of quality found in El Paso's historic neighborhoods. If this cannot be accomplished, annexation may be necessary if the City is to control suburban sprawl along its periphery.

STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS

CONCEPTUAL REGIONAL GROWTH STRATEGIES

Invest First in Downtown

When considering regional growth strategies, the first priority for El Paso should be reinvestment in its historic Downtown. In the past, City priorities and subsidies have often focused on growth and expansion at the edges, which can work against infill and redevelopment in the City's historic core. Shifts in policy could increase livability Downtown and create a strong base for transit expansion throughout the region.

In recent decades Downtown has suffered from disinvestment as auto-oriented development on the edges of town became the preferred location to live and work. Fortunately Downtown El Paso has long been a popular shopping destination for Juárez residents; Downtown businesses now depend on stable and convenient trade with Mexico.

Downtown El Paso is an overlooked urban design treasure. Previous investment in the early 20th century created a vibrant urban fabric with a wide mix of uses, street-oriented buildings, proud architecture of distinctive character, and numerous public and civic gathering spaces.

Downtown El Paso is remarkably intact, with most of the historic buildings standing and the traditional street grid largely in place. These buildings, however, are underutilized, often with discount stores or wholesale outlets filling the ground floors and the upper floors left vacant. With so little housing Downtown, stores and restaurants close at night and on weekends, resulting in vacant streets and a sense of desolation on most blocks.

El Paso needs to reclaim this valuable asset as a vibrant 21st century destination. Revitalization of this historic center will anchor and enhance the overall character of the City and contribute toward El Paso's long-term sustainability.

Infill with Transit-Supportive Mixed Uses

An equally important priority should be encouraging mixed-use development and redevelopment on vacant or underutilized sites throughout El Paso, especially near transit centers and along existing and planned transit routes.

Those seeking variety and choice have discovered that traditional neighborhoods offer a popular and time-tested formula for mixed-uses and mixed-income communities. Neighborhood centers provide a range of goods and services, amenities, and housing in close proximity, reducing the need to drive within that area. An urban pattern of interconnected streets and small blocks allows for greater population density within a compact area, creating a market for a wider variety of goods and services. Accessibility to transit provides the opportunity for more pedestrian activity and reduced demand for parking spaces.

For instance, Northgate Mall can become a dynamic, diverse center that will complement the City's transit investments. Single-use buildings and surface parking lots would be replaced with multi-story mixed-use buildings that could become the Main Street for northeast El Paso.

The construction of transit-supportive multi-family housing and the adaptive reuse and rehabilitation of existing buildings should be encouraged throughout El Paso. Alternative development standards are warranted because mixed-use areas function differently than auto-oriented properties. Financial incentives can be offered for using existing infrastructure and not requiring the construction and future maintenance of new infrastructure.



San Jacinto Plaza

Revitalize El Paso's Older Neighborhoods

A third priority is revitalizing El Paso's great older neighborhoods, which feature walkable streets, parks, a mix of uses and housing types, and historic buildings. These features all contribute to a strong sense of character. Revitalization includes improving public infrastructure in these areas, infilling empty lots and parking lots, and restoring valuable older buildings. El Paso's new infill development program provides financial incentives for private revitalization efforts, a promising start in this direction.

Some of these neighborhoods have been harmed by recent trends. Buildings are sometimes abandoned or demolished, creating a break in the urban fabric. In other cases, front yards are converted into parking lots. New auto-oriented development often faces the street with blank front walls or places parking lots along the sidewalk. A better trend is where historic homes along busy streets have been transformed into offices, providing a mix of uses within neighborhoods while retaining the historic buildings. On-street parking, small public or shared parking lots can be added to such blocks where there is a shortage of parking spaces.

The abundant historic and architectural resources of El Paso are important to its unique character. Historic buildings, particularly when concentrated, are attractions for tourists and residents. Additional neighborhoods and districts should be considered for designation as historic districts. Reusing existing buildings, even where they are not historic, is one of the most basic ways to foster a sustainable city.

Plan El Paso, especially the Urban Design and Downtown Elements, presents overall strategies for physical development, but it is not a substitute for smaller, neighborhood redevelopment plans. This Plan is a starting point for more detailed neighborhood plans such as the recent plans for the Rim University neighborhood and Medical Center of the Americas.

Retrofit Suburban Neighborhoods at Strategic Locations

A fourth priority is to strategically retrofit newer suburban and commercial areas. Suburban areas divide housing, shopping, and offices into separate districts that can only be reached by private car. This modern ideal of single-use districts is no longer attractive to many Americans who are tired of long commutes and a lack of unique character in their neighborhoods.

The Urban Design Element of this plan describes a wide variety of techniques for retrofitting suburban areas to increase the variety of buildings and provide opportunities for people of all ages, backgrounds, and cultures to live and work. Single-family detached homes can be carefully supplemented by a wider range of housing options, including rowhouses, condominiums, and even lofts that can be built above stores and offices.

For instance, Bassett Center Mall and the former Farah factory offer redevelopment opportunities with high visibility along I-10. Because these sites are almost completely impervious to water, additional infiltration areas and green spaces would improve environmental performance while rebuilding these sites in a dense, mixed-use format.

Alameda Avenue has become an auto-oriented street lined with used car lots and junkyards, but it could become more pedestrian-friendly through changes in its physical design. Development along the Zaragoza corridor is also following the auto-dependent model; large parts of the corridor, however, are still undeveloped, creating the opportunity to guide development in a coordinated form that builds toward a walkable environment with a diversity of mobility options, as illustrated in the Transportation Element.



An alternative vision for redevelopment along I-10.

Ensure that New Subdivisions Complete Our Community

A fifth priority is to ensure that new development matches the quality of El Paso's best older neighborhoods. Since the adoption of the SmartCode in 2008, El Paso has had optional regulations that deter urban sprawl by allowing denser development and creating neighborhoods with the design elements of the City's most revered historic neighborhoods. However, hundreds of development proposals have been permitted in El Paso since that time and few have used the SmartCode.

In response, the City has initiated a program to streamline permitting with the creation of City-commissioned SmartCode plans and City-sponsored rezonings to the SmartCode. The City has also explored how some fees can be waived for the creation of walkable and transit-supportive neighborhoods. The Urban Design Element describes the type of development that could qualify for these incentives.

These same design features could be required for development on large tracts of land owned by the City northwest and northeast of central El Paso. The EPWU-PSB is currently updating master plans to ensure that developer expectations are aligned with City goals early in the land sales process. The SmartCode lays the framework for development dense enough to support public transit and reduce future traffic congestion. This type of development also reduces infrastructure costs, preserves environmentally sensitive lands, provides a mix of activities to reduce unnecessary car trips, and has a character that defines El Paso as a choiceworthy place to live and invest.

The large vacant tracts just east of the City limits are a valuable resource for the future of El Paso. Most tracts further to the east and all the way to the County line will never be available for urban growth because in the 1960s and 1970s they were subdivided into a monoculture of unusable "homesites" and then sold off to buyers around the world. Those sales were heavily restricted by the Federal Trade Commission in a 1981 enforcement action against the Horizon Corporation. Decades later, without the prospect of even the most minimal services and amenities, most of these lots outside the City limits are still unusable and virtually unsalable. In the absence of massive lot reassembly, there is nearly no ability to recover this land for urban expansion.

Respect and Protect the Environment

It is both practical and highly desirable to preserve critical arroyos, avoid floodplains, and integrate preserved open spaces into new neighborhoods. This is another important priority of this plan.

Official El Paso plans and regulations call for protecting critical arroyos, yet current regulations and practices have fallen short. Although public and private funds have been used to save some arroyos, improved City regulations could help preclude unnecessary destruction of critical portions of these important scenic and natural drainage features. Currently, each acre of arroyo that is protected during the development process eliminates one-half acre of required parkland.

City regulations should encourage new development to use arroyos as focal points and usable open space, providing an incentive for developers to preserve them. The Urban Design Element of this plan illustrates how neighborhoods can be designed to be protect arroyos while also taking maximum advantage of arroyos for scenic views, recreation, and drainage. These concepts should be encouraged as standard practices in El Paso.

There are other sensitive lands in and around El Paso that are equally worth of protection. Most farmland in the Rio Grande valley that has been annexed into El Paso has been lost. This increasingly scarce natural resource deserves better protection. Also, there are many mountainous tracts around the Franklin Mountains State Park that are still in private ownership; intense development should not be permitted on these valuable tracts of land.



Preserved arroyos provide valuable linear parks.

Manage El Paso's Outward Expansion

Managing El Paso's outward expansion is perhaps the most complex and difficult strategy; it will be discussed at length in the following pages and in the goals and policies of this Element.

The City of El Paso has grown continually outward since its founding in 1873. To its enduring credit, El Paso has always expanded with contiguous new subdivisions that were immediately provided with full urban services. This is in sharp contrast to the scattered or "leapfrog" growth pattern so frequently found in other American cities.

However, even this contiguous growth pattern is now causing serious problems. With the City's expansion forced into three wedges by the Rio Grande, the Franklin Mountains, and Fort Bliss, development is now taking place at great distances from central El Paso. Combined with the homogeneous character of new residential subdivisions, this pattern forces new residents into very long automobile trips to meet daily needs, which in turn creates nearly unsolvable traffic congestion on El Paso's major roads. Excessive travel for daily needs is costly to the individuals who must provide and fuel private vehicles (as discussed in the Housing Element). This travel is also becoming an increasing burden on society as fuel costs rise and vehicle emissions pollute the air locally while warming the climate globally.

Further outward expansion should be managed to meet the following public purposes:

- Discourage development of farmland along the Rio Grande, or environmentally sensitive lands such as critical arroyos and steep slopes, or tracts that may be added to the Franklin Mountains State Park.
- Generally discourage additional outward expansion unless it can be demonstrated to be essential to accommodate growth, and the land to be developed is an excellent location for urban expansion, and new neighborhoods will meet at least the minimum standards of the City's most revered older neighborhoods.
- Begin a new era of cooperation with El Paso County on managing growth, for instance by offering to relieve the County of the responsibility for regulating subdivisions in the City's extraterritorial jurisdiction, by providing City water and fire hydrants to existing development, and by assisting the County in other growth-related tasks. The City and County should jointly seek legislative approval that would allow the City and El Paso County to cooperate more closely in managing growth.

Growth Management Outside City Limits

Managing outward expansion is complex because of many competing interests, including the authority of nearby cities, El Paso County government, State government, rights previously granted to municipal utility districts, and the property rights of landowners.

Under Texas law, cities have very limited authority outside their City limits. This "extraterritorial jurisdiction" (ETJ) extends five miles outside El Paso, except where Socorro, Horizon City, Vinton, and Anthony have an overlapping ETJ.

Cities have the authority to annex unincorporated land in the ETJ into the city. El Paso also controls its own water and sewer utility and has consistently used its discretion over where utility lines can be extended to ensure that growth expands only onto contiguous land. The power to annex and to provide utilities (or to deny both) are essential to managing outward expansion. However, the State has granted other utilities the right to provide service in certain areas, overriding City control of utilities.

The power to levy impact fees and/or utility hookup fees is a financing mechanism but can also be an important tool for managing outward expansion. Growing on the outskirts usually requires expensive extension of roads and utility lines; some of the construction costs can be recouped through higher impact fees, but the long-term maintenance costs remain high.

Growth Management Within City Limits

Within the City limits, El Paso controls the zoning of land, regulates how land is subdivided, and has the authority to adopt a comprehensive plan. These are the primary powers that can be used to manage growth within the City limits and have some ability to influence growth beyond the City limits.

Nearly all land to the east of El Paso is privately owned or controlled by the State of Texas. Some of this land has already been approved for development or is considered to have a vested right to develop under Texas law. To the northeast and northwest, the City of El Paso owns most of the undeveloped land, making management of growth there more straightforward.

Each governmental power is subject to state law and to many decisions made in the past. A major purpose of this Element is to carry out these efforts in a clearly-defined outward growth strategy. The following sections of this Element will set forth this strategy in detail.

ADDITIONAL LAND NEEDED FOR EXPANSION

Comprehensive plans contain both short-term and long-term components. Certain portions of this plan, including this element and the Economic Development Element, look forward to the year 2030. The Transportation Element uses the year 2035 to match the target date used by the El Paso Metropolitan Planning Organization (MPO) for regional transportation planning.

Comprehensive plans are typically updated every 10 to 12 years, but they typically use long-term planning horizons 20 to 25 years into the future because infrastructure projects such as roads, transit, and utilities are major public investments that require long periods to plan, design, and construct. El Paso’s past experience matches this pattern: the 1999 comprehensive plan was based on the year 2025, and the 1988 comprehensive plan was based on the year 2010.

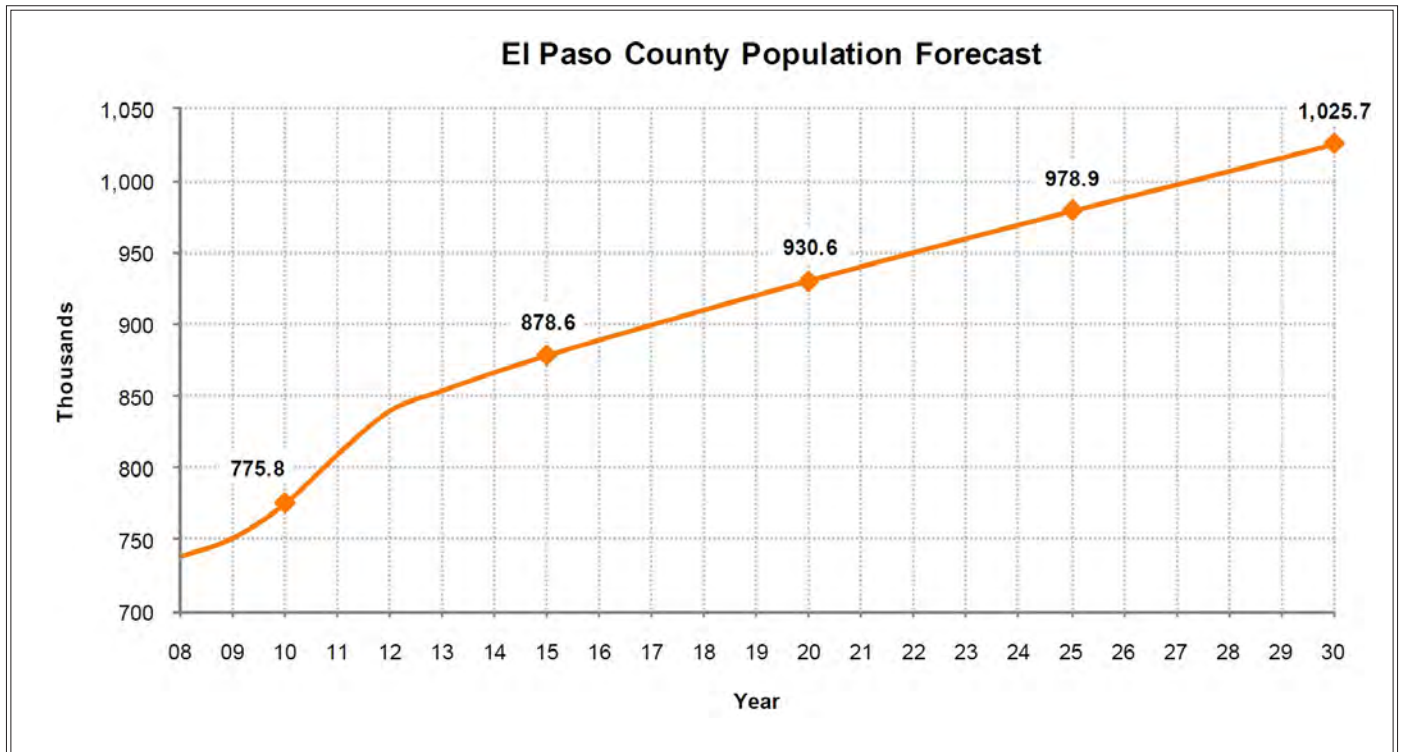
The Future Land Use Map in this element identifies where the expected population in 2030 will live and work. The expected number of people and jobs for 2030 is based on 2010 research by the Institute for Policy and Economic Development at UTEP, which considered effects of the Fort Bliss expansion and local industry recruitment efforts, as described further in the Economic Development Element. After a high-growth period ending in 2012, growth is expected to level off to about 1% per year through 2030, when the County’s population would reach 1,025,660.

This forecast anticipates an increase in the population of El Paso County of 249,880 residents between 2010 and 2030. Assuming the 2010 ratio of City/County population and City household size continues, this forecast would result in 202,653 additional people in the City of El Paso by 2030, requiring 67,777 additional dwelling units. The following analysis considers how this additional population would be accommodated on the Future Land Use Map.

The amount of land that will be consumed by future development depends on many factors, including:

- How compactly new development is designed. Compact development consumes less land for a given number of residents and jobs than sprawling development patterns.
- Whether future jobs are integrated into mixed-use communities rather than requiring separate office or industrial parks that would consume additional land.
- How much land is redeveloped at higher intensities.

This analysis considered availability of vacant parcels within previously developed areas of the City and undeveloped tracks within or near the City limits.



Source: U.S. Census Bureau (2008-09); Institute for Policy and Economic Development, UTEP.

This analysis examines land on the Future Land Use Map that is designated in the four major growth sectors (G-1, G-2, G-3, and G-4), plus land in the O-7 open-space sector which is the next tier of vacant land this plan anticipates would be developed.

The analysis began by determining the development capacity of anticipated compact development and redevelopment on City-owned land. A similar assessment was made of compact development by private developers on privately owned land.

The development capacity of land which may have vested rights under Texas law was then assessed, assuming development patterns will match those of the last ten years.

The development capacity of other vacant infill tracts larger than a city block was then estimated, assuming development patterns that match the historic pattern of their surroundings.

Based on these assumptions, 84,027 new dwelling units can be accommodated on the land described above. This amounts to approximately 124% of the 67,775 units needed for growth through 2030.

A lower percentage of growth would be accommodated if single-use office parks displace mixed-use communities. A higher percentage of anticipated growth can be accommodated on this same land if City regulations are modified as proposed in this comprehensive plan to introduce more multi-family housing. If these changes do not take place or are not effective, new dwellings will be needed on additional land by about 2035. This land would likely be in the O-6 sector which is east of the existing City limits and has been identified for potential annexation.

The MPO's *Mission 2035 Metropolitan Transportation Plan* was adopted in August 2010. Because it was prepared prior to this comprehensive plan, it was not able to use the latest growth projections or this element's Future Land Use Map as the basis for its 2035 regional road and transit network. Better-coordinated transportation planning can take place at the time of the next update to the MPO plan so that the MPO plan can identify road and transit improvements that match the growth patterns set forth in *Plan El Paso*.

**Developable Tracts in El Paso
(in G-1, G-2, G-3, G-4, and O-7 sectors)**

	Developable Acres	Density (DU per acre)	Dwelling Unit Capacity	Population Capacity
Potentially Vested, With Land Study:				
Central				
Westside	3,494	2.6	9,084	26,072
Northeast	1,209	2.6	3,143	9,022
Eastside	3,533	2.6	9,186	26,363
Lower Valley				
subtotal:	8,236		21,414	61,457
Potentially Vested, Still Zoned R-3 or R-F:				
Central				
Westside	178	2.9	516	1,481
Northeast	98	2.9	284	816
Eastside	149	2.9	432	1,240
Lower Valley				
subtotal:	425		1,233	3,537
Potentially Vested, Changed to G-4 in February 2012:				
Eastside	5,180	2.6	13,468	38,653
Lower Valley	146	2.5	365	1,048
subtotal:	5,326		13,833	39,537
Other Large Infill Tracts:				
Central	64	4.2	269	771
Westside	1,572	2.6	4,087	11,730
Northeast	1,372	2.9	3,979	11,419
Eastside	1,267	2.6	3,294	9,454
Lower Valley	1,591	2.9	4,614	13,242
subtotal:	5,866		16,243	46,617
Public Sector Smart Growth:				
PSB Northwest Master Plan	1,024	4.6	4,710	13,519
PSB Northeast Master Plan	3,750	3.9	14,531	41,705
PSB Painted Dunes	540	9.2	4,968	14,258
Northgate Mall	23	28.3	650	1,866
EPIA airport property	1,037	n/a	0	0
subtotal:	6,374		24,860	71,347
Private Sector Smart Growth:				
Montecillo (EPT)	292	8.6	2,500	7,175
MCA Medical Center	443	n/a	0	0
El Cruzero (Viramontes)	240	7.1	1,700	4,879
Aldea El Paso (Geltmore)	163	7.6	1,245	3,573
ASARCO East	102	9.8	1,000	2,870
ASARCO West	121	n/a	0	0
subtotal:	1,361		6,445	18,497
TOTAL:	27,588		84,027	241,157

AVAILABILITY OF POTABLE WATER

For its municipal water supply, El Paso County relies on surface water from the Rio Grande plus water from underground sources. EPWU-PSB currently supplies over 90% of all municipal water in El Paso County, half from the Rio Grande.

Water in the Rio Grande is supplied by snow melt in southern Colorado and northern New Mexico. Spring runoff is stored in the Elephant Butte Reservoir in southern New Mexico before being released for irrigation and municipal use. EPWU-PSB obtains water from the irrigation district (El Paso County Water Improvement District No. 1) through ownership of water rights land and by leasing water rights from agricultural water rights holders.

Wells near Canutillo supply groundwater from the Mesilla Bolson to the Westside; wells in northeast El Paso and near the airport supply the Eastside from the Hueco Bolson. These underground basins underlie portions of New Mexico, Texas, and Chihuahua. The Rio Grande plays an important role in the recharge and discharge of both basins.



Pumping from the valuable Hueco Bolson peaked in 1989 due to concerns over the sustainability of high pumping levels. Underground water levels had been declining and water quality had been decreasing as brackish water replaced the higher quality water being pumped out.

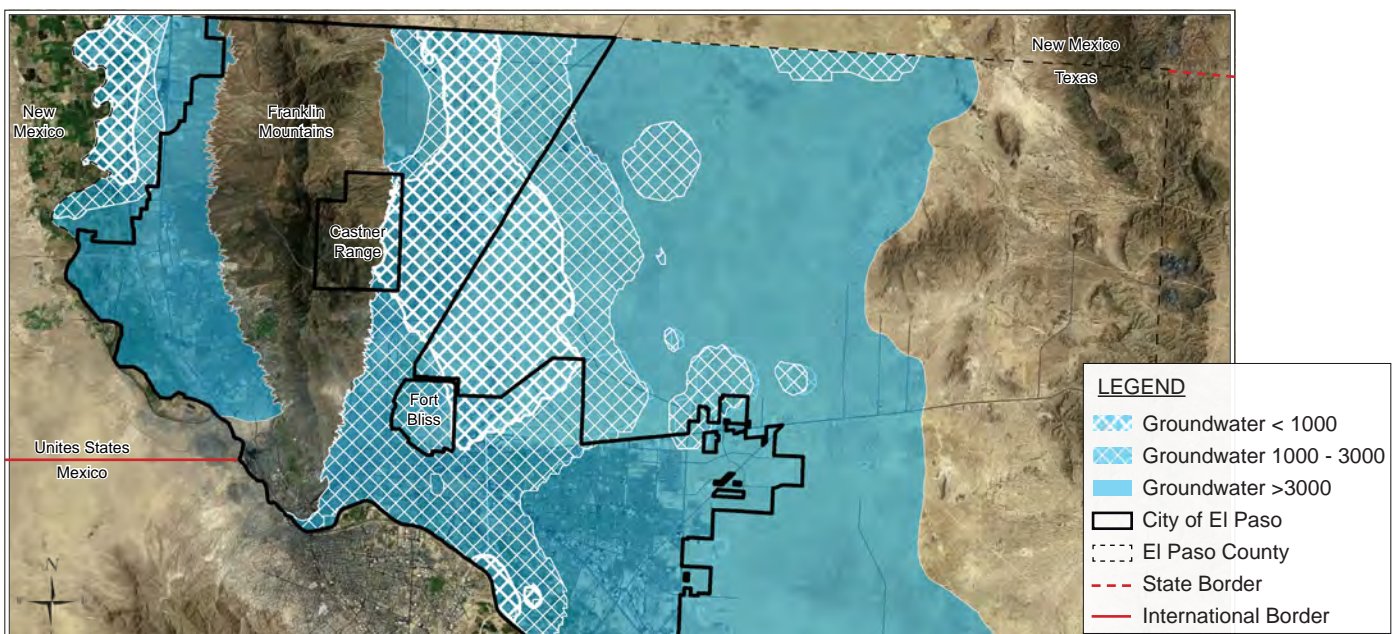
Six management strategies have been followed since that time:

1. Increase the use of Rio Grande water when it is available.
2. Decrease groundwater pumping except when Rio Grande water is limited.
3. Increase the per-gallon cost of water for high users as a conservation incentive.
4. Encourage desert plants that require little or no irrigation.
5. Expand the reuse of reclaimed water.
6. Promote consumer conservation with a variety of tools.

Demand for water has been declining since the late 1990s. Usage has been reduced from about 225 gallons per person per day in the 1970s to about 133 gallons per person in 2010.

Despite these efforts, additional water will need to be transferred from outside El Paso County to accommodate population growth between 2030 and 2040. Such transfers are often controversial and are more expensive than local sources. Careful management of local sources will minimize the amount of water that will need to be imported in the future.

Public costs increase when new development is placed on land that is distant from local water sources. The map below indicates areas in El Paso County where some groundwater from the Mesilla and Hueco Bolsons is of acceptable quality. The heavy white hatching indicates high quality water, suitable for drinking. Light hatching indicates lower quality brackish water that must be desalinated before use. No hatching indicates low-quality water. Desalination has proven feasible in El Paso County; a new plant near Fort Bliss intercepts brackish groundwater before it reaches freshwater wells and then converts it to high-quality water. However, this process is expensive because of its very high energy costs and the difficulty of safely disposing the residual briny water.



Groundwater Quality in El Paso County (in total dissolved solids)

OUTWARD EXPANSION STRATEGY

Step A: El Paso's Extraterritorial Jurisdiction

Within the City limits, El Paso has full authority over municipal planning, zoning, and the subdivision of land. Immediately outside the City limits, State law gives cities certain limited powers in an area known as their "extraterritorial jurisdiction" (ETJ).

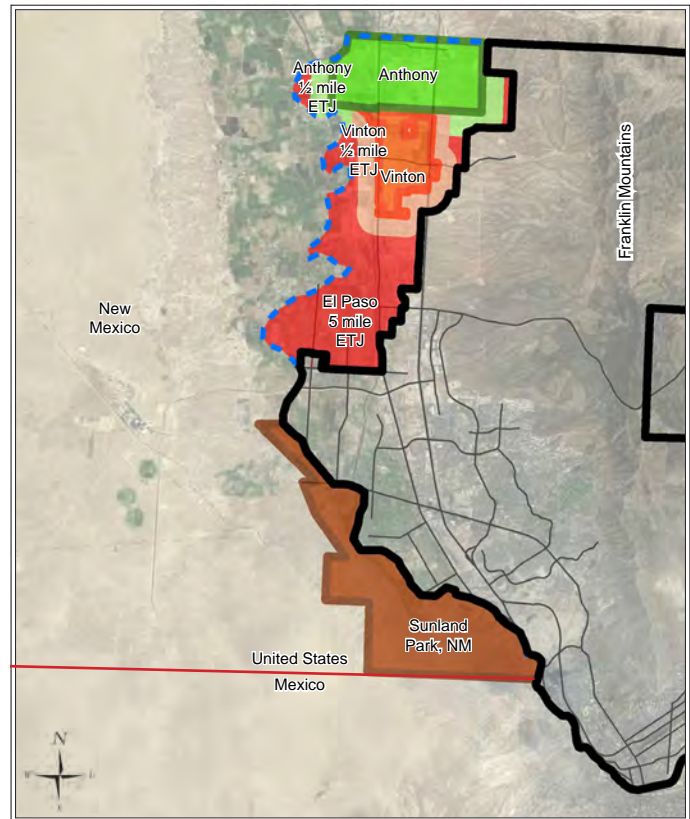
The size of the ETJ is defined by State law; for El Paso, it extends five miles beyond the City limits. Exceptions include land already in other cities, land previously in the ETJ of other cities, federal land, and land in New Mexico and Mexico.

Under Texas law, counties cannot use zoning to regulate the use of land in unincorporated areas. Likewise, cities cannot apply zoning in their ETJ; zoning is allowed only after land has been formally annexed into a city. However, cities do have the authority to regulate the subdivision of land within their ETJ. Border counties also have this authority. Currently, the subdivision of land in El Paso's ETJ requires approval of both City and County governments.

Prospective developers of land in El Paso's ETJ now start by seeking approval of a subdivision plat from the City based on the City's regulations. Then they must obtain similar approval from El Paso County based on the County's regulations before the City will formally approve the plat, allowing individual lots to be sold.

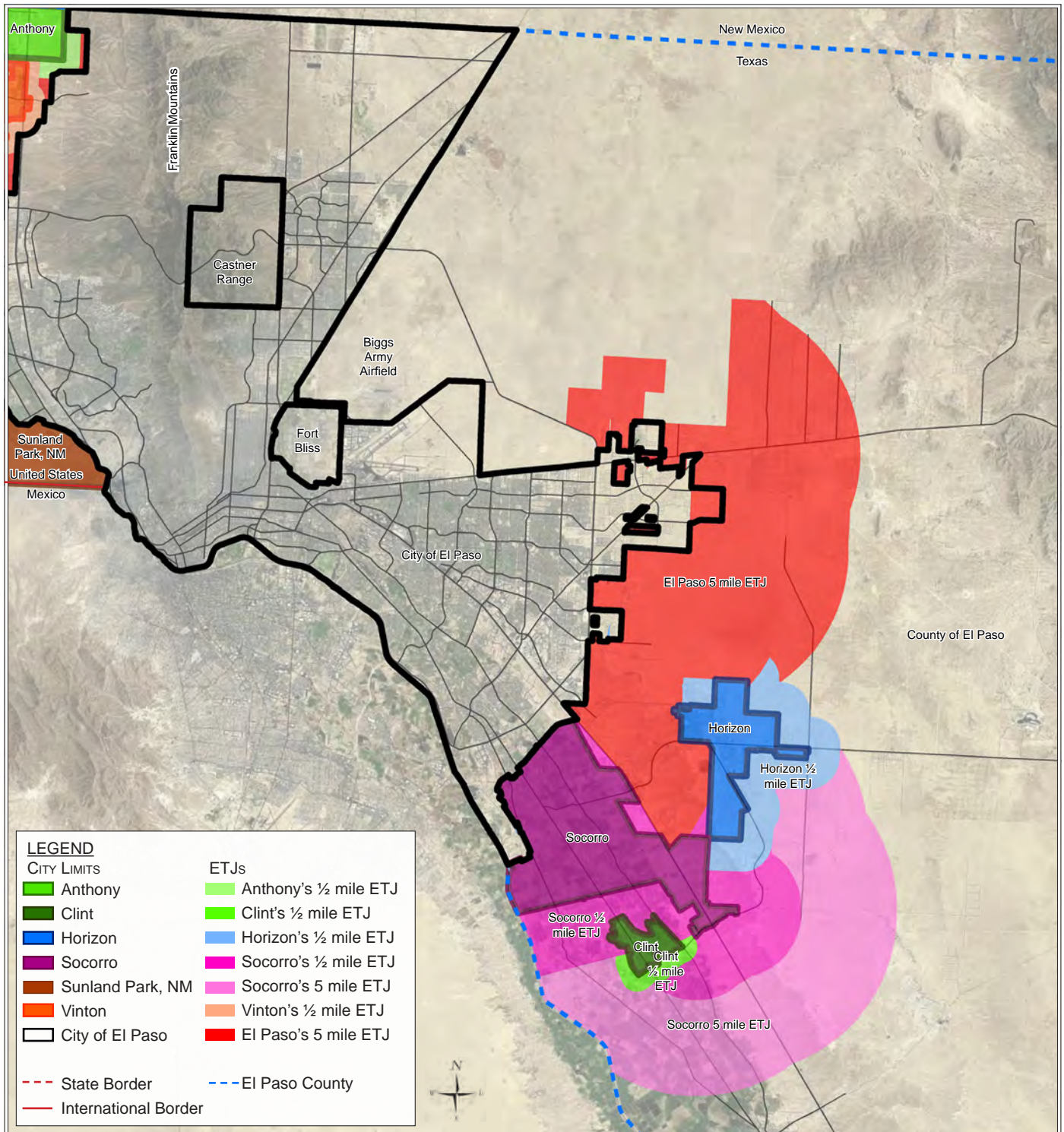
The City's Subdivision Code, Title 19, applies to land within the ETJ, with special provisions for ETJ land found in Chapter 19.11. That chapter should be strengthened as one method of carrying out this plan's policy of discouraging suburban sprawl (see Goal 1.6). For instance, new subdivisions in the ETJ could be required to have smaller blocks and/or higher intersection density than the suburban requirements currently found in Title 19. They could also be required to have better connectivity to surrounding development and SmartCode-compliant street designs. Some of these standards may conflict with subdivision platting standards set by El Paso County, but Title 19 (in accordance with State law) already provides that in case of conflicting City and County subdivision standards in the ETJ, the more stringent shall apply.

Chapter 19.11 regulates only the specific site owned by an individual developer. Individual subdivisions also need to be fully interconnected with each other and with a suitable regional road network. To accomplish this, Policy 1.6.2 at the end of this element proposes the refinement of El Paso's Major Thoroughfare Plan for the ETJ. By planning a densely interconnected road network for the ETJ, individual developers will not be creating isolated pods of development that can never become an integrated part of El Paso. Clearly, this kind of cross-jurisdiction coordination will require cooperation from City and County elected officials and transportation planning agencies.



Cities and Extraterritorial Jurisdictions

LEGEND	
CITY LIMITS	ETJs
Anthony	Anthony's 1/2 mile ETJ
Clint	Clint's 1/2 mile ETJ
Horizon	Horizon's 1/2 mile ETJ
Socorro	Socorro's 1/2 mile ETJ
Sunland Park, NM	Socorro's 5 mile ETJ
Vinton	Vinton's 1/2 mile ETJ
City of El Paso	El Paso's 5 mile ETJ
State Border	El Paso County
International Border	



Cities and Extraterritorial Jurisdictions

Step B: Annexation Policy

Texas law allows cities to expand their boundaries by annexing land that is within that city’s ETJ. After annexation, cities can apply zoning and collect city taxes and are obligated in return to provide municipal services.

Because of contentious disputes across the state, the laws governing annexation have changed frequently in recent decades and are likely to evolve further. Since 1999, each city has been required to adopt an annexation plan describing where unilateral annexations may occur beginning in three years. Cities can no longer unilaterally annex vast territories without development potential simply to keep other cities from annexing that land. Once annexed, a city is committed to providing municipal services. Many services, including police and fire protection, must begin immediately. Water and sewer (wastewater) service must begin within 2½ to 4½ years. An annexation plan can be amended at any time to expand the map of annexable land, but actual annexation of new areas must then wait at least three years.

Certain types of annexation are exempt from the requirement that they be described in the annexation plan. These statutory exceptions include areas with less than 100 dwellings, sparsely occupied areas where annexation is requested by landowners, city-owned land, and portions of colonias.

El Paso adopted its formal annexation plan in 1999, stating that the City had no immediate intention of annexing any land that was required to be in an annexation plan. In 2007 the City commissioned a study to reexamine annexation issues and evaluate impact fees on new development. As a result of that study, in 2009 El Paso officials made an important policy decision to keep the 1999 annexation plan in force without changes. The effect of this decision is to forgo unilateral annexations of already-developed land or vacant land where the owners do not wish to be annexed. This decision can later be modified if circumstances warrant, subject to the statutory three-year “waiting period” before unilateral annexations can take place.

In September 2009, City officials adopted, by resolution, a new “annexation policy” that defines areas where voluntary (“exempt”) annexations would be considered. The City also adopted new procedures for requesting annexation (Ordinance 17195). A number of minimum requirements must be met, including:

- The land must be contiguous with the existing City limits.
- The landowners must agree to build all local, collector, and arterial roads at their expense and must submit a general development plan for the area.
- The landowners must pay water and sewer impact fees plus an additional \$820 per unit annexation fee toward fire, police, libraries, and recreation centers.

With two adjustments, the new annexation policies can be made consistent with the strategies in this plan.

The first adjustment is that the 2009 preferred annexation map contains large tracts in the upper valley that are actively being farmed, particularly west of Doniphan Drive and north of Borderland Road. In this arid climate, viable farmland is limited to irrigated land in the Rio Grande valley. Much of this valuable resource has been lost due to El Paso’s location at one of the widest points along the valley. Remaining farmland should be considered a valuable resource whose displacement by urban expansion would be an unfortunate loss for the region. It would also eliminate a valuable opportunity for rural living near a major urban center.

Land south of Borderland Road has already been annexed into El Paso and is subject to the City’s 2004 Northwest Upper Valley Plan. Despite many statements about the value of the area’s rural character, that plan allows residential densities of 2½ units per acre, clearly a suburban density level unless development is concentrated on a portion of each tract, as shown on page 2.34.

Most land north of Borderland Road has not yet been annexed. Annexation creates an expectation that municipal services will be provided, which works against the long-term viability of farmland. Yet the land north of Borderland Road could still be developed in suburban patterns without annexation, especially if water and sewer service is extended to the area.

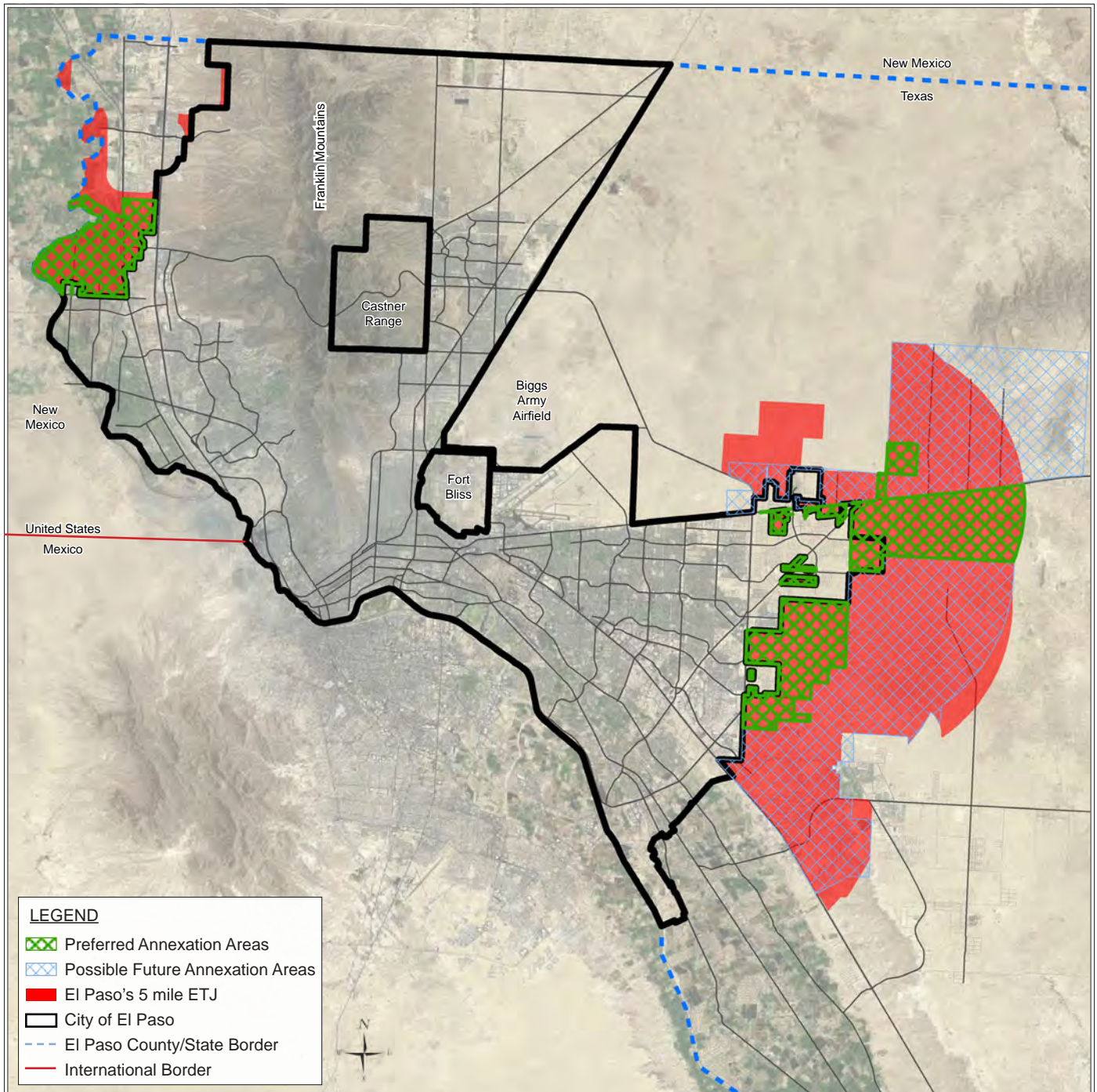
The City and EPWU-PSB should ensure that their individual regulations are complementary and do not encourage unnecessary development of irrigated farmland, which is identified on the Future Land Use Map in this Element as being in the O-3 open-space sector. Consideration needs to be given to incentivizing preservation of agricultural lands, including conducting a full evaluation of best practices that could mitigate their full development.

Examples to consider when dealing with irrigated farmland *inside* the City include:

1. Providing a density bonus for development of farmland when at least 50% of the lots allow for small-scale farming, the bonus being proportional to the area being reserved for farming (See Policy I.5.2)
2. Discouraging the rezoning of agriculture land except where a percentage of small-scale farming has been reserved.

Examples to consider when dealing with irrigated farmland *outside* the City include:

1. Removing irrigated farmland from the preferred annexation map (see Policy I.7.3).
2. Removing irrigated farmland from the City’s impact fee service area and the State’s map of Certificates of Convenience and Necessity (see Policy I.5.2).



Extraterritorial Jurisdictions and Preferred Annexation Areas

3. Amending Title 19 to limit plats and utility extensions to proposed developments that commit to permanently keep at least 50% of the land for farming or to subdivide the land into tracts that are themselves large enough to support small-scale farming (see Policy I.5.2).

The protection of farmland may also be accomplished through park credits, the purchase of development rights, outright purchase of land, or other mechanisms available to the City and County.

Step C: Water and Sewer Supply

Annexations and ETJ authority provide a city with tools to manage outward growth. However, the most critical management tool is often control over the extension of water and sewer (wastewater) lines. El Paso is in a better position than many other cities to effectively manage its outward expansion because it owns a large and well-managed utility system. Managing growth through utilities was standard practice until around 1990 when the system began to convert from a city-only service to a potential utility provider for large portions of unincorporated El Paso County.

There are several other factors that can also confound the use of utility management for managing growth. These include:

- The natural desire of utility operators to increase their customer base.
- State regulations that sometimes induce a utility to expand into new territory prematurely.
- Prior agreements or understandings that may have been reached with landowners or developers.
- Utility extensions might conflict with growth management goals but still be important to maintaining public health.

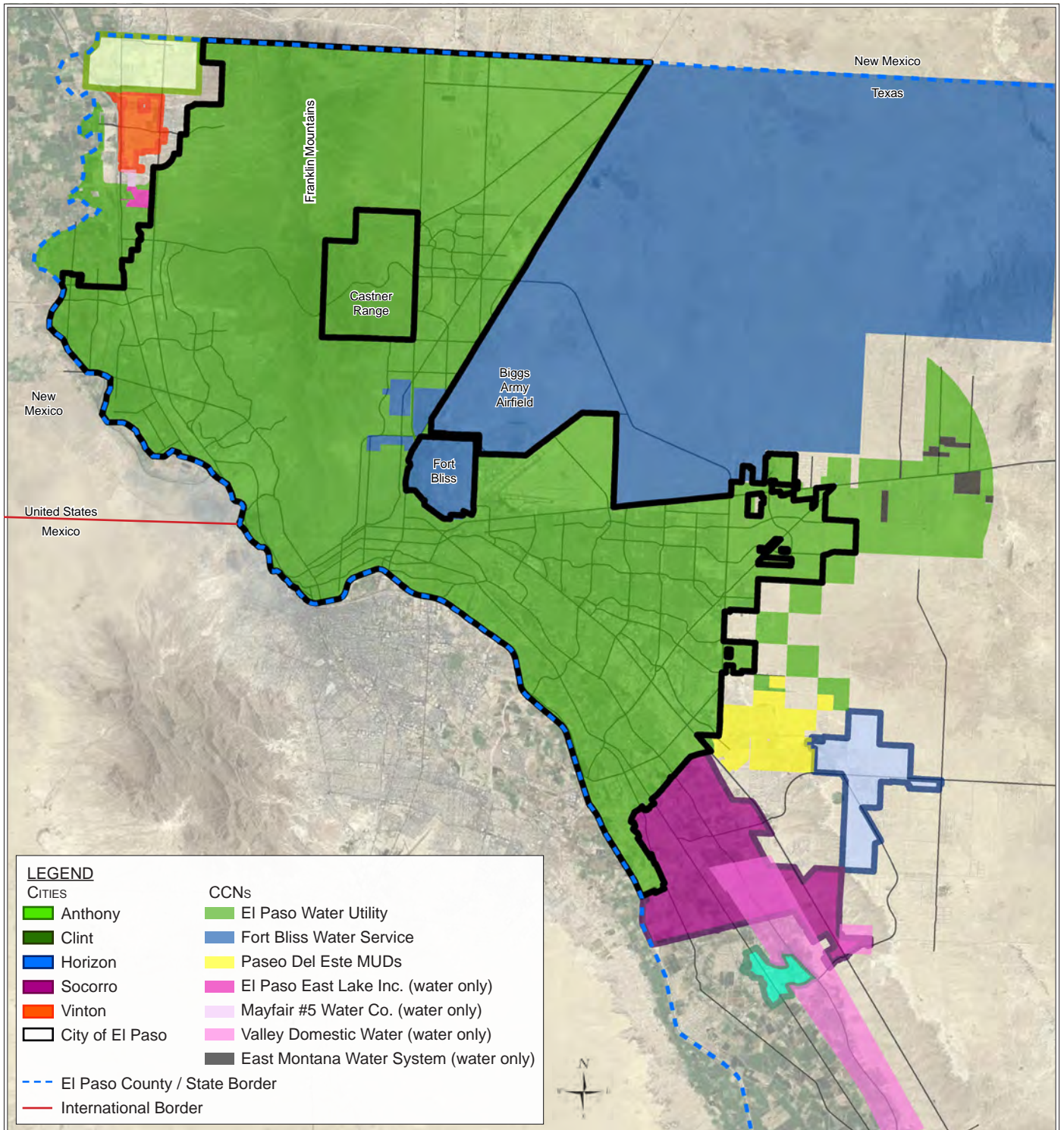
El Paso Water Utilities – Public Service Board

On May 22, 1952, and through Ordinance Number 752, the El Paso City Council created the El Paso Water Utilities – Public Service Board (EPWU-PSB), a governing board of trustees duly formed in accordance with Texas law, to operate, manage and have complete control of the El Paso waterworks plant and system and sewer system as a combined public utility. City of El Paso Water and Sewer Revenue Bonds, authorized by a general election held on December 8, 1951, were issued for the purpose of improving and extending the system and to provide for the payment of principal and interest on such bonds by pledging the net revenues from the operation of the system. The EPWU-PSB purchased property in respective areas of the City to grow the system and meet the needs of the City and its inhabitants in the future, and utilizes the water rights, wells, reservoirs and other related facilities and equipment for the operation of such. As managers of the land, over 24,000 acres, the EPWU-PSB maintains a fiduciary responsibility for the assets it secures on behalf of its ratepayers. Particular to any land sales, the EPWU-PSB must declare the lands inexpedient to its system. Once a declaration is made, the El Paso City Council is then required to authorize the land sale and condition for its development. The choice of whether the City should sell land, and how, is within the discretion of both the El Paso City Council and the EPWU-PSB.

The State ultimately decides which utility has the authority (and responsibility) to provide service outside the City limits. The Texas Commission on Environmental Quality grants “certificates of convenience and necessity” (CCN) to utilities that authorize them to provide retail water and sewer service. In areas that El Paso hopes to annex, it makes sense for EPWU-PSB to hold a CCN to preclude another utility from doing so. In areas further from the City limits, it might also seem logical for EPWU-PSB to hold a CCN, especially if the other utility’s ability to provide service is questionable or it might install substandard distribution and collection systems. However, even long-term planning for utility line extensions can spur suburban sprawl because that planning will create expectations that affect the value of land and cause subsequent investments that work against the City’s planning goal of inward rejuvenation instead of outward sprawl.

At present, EPWU-PSB holds a CCN for water and sewer service well beyond the City limits and even beyond the preferred annexation areas described previously. EPWU-PSB should evaluate the viability of modifying the CCN boundaries to match the new O-6 “Potential Annexation” sector (see Policy I.8.4). A CCN amendment requires state action, and certain legal implications could serve to impede future boundary adjustments. If a boundary adjustment is practical and beneficial, a CCN amendment should be requested by EPWU-PSB. Any future expansion to CCN boundaries should correspond to the City’s outward growth policies as enumerated in *Plan El Paso*.

EPWU-PSB officials can commit to provide service outside the City limits even in the absence of potential annexation (see, for instance, Section 19.11.010.D of the City’s subdivision standards). Sometimes these commitments can eliminate the incentive for a landowner to seek annexation. A commitment to provide utilities is probably more influential in shaping the path of growth than the City Council’s power to annex and zone land for development – yet it can take place without the knowledge of other City officials.



Certificates of Convenience and Necessity (CCN) for Water and Sewer Service

Impact Fees

Recent changes in fiscal policy are adjusting the way utilities influence regional growth patterns. In 2009 the City Council decided to begin charging “impact fees.” Although the council decided against charging additional impact fees to pay for road improvements, builders now must pay a fixed impact fee that will cover 75% of the capital cost of providing water and sewer service projected over the subsequent ten years. These fees apply to all land within three designated “impact fee service areas” on the Westside, the Northeast, and the far Eastside. The fees are set at a fixed rate for each new dwelling unit in each service area, regardless of where a property is located within that service area. These impact fees replaced various prior methods of calculating the cost of service, which generally were based on a more detailed analysis of the cost of providing service to specific development projects. Credits have been built into the rates to reflect monthly utility fees that may also be used to pay for capital improvements; and the impact fee rates increase for larger water users.

Several aspects of the new impact fees may be creating unintended consequences for the City’s growth policy:

- A majority of the service areas are undeveloped land toward the outer reaches of the City limits. This is logical from a growth management perspective to the extent that it makes growth on the periphery pay to extend utility lines. Yet there are areas even further toward the periphery that are not in these service areas; City growth policy should be clearer that utilities won’t be extended to those areas to reduce expectations that growth can leapfrog to those tracts.
- Other impact fee service areas are in the ETJ outside the City limits, yet the boundaries are not the same as the preferred annexation areas described previously. This discrepancy could induce development activity even beyond the preferred annexation areas because the City appears to be committing to provide utilities in those very remote areas.
- Under the terms of the impact fee ordinance, any builder in a service area pays the same impact fee regardless of the actual cost of extending service to that particular property. Because the service areas are so large (about 63 square miles combined), property owners might insist that EPWU-PSB extend service to them regardless of the financial or growth management implications of that extension. In addition, the fees are based on a pro-rata share of the entire cost of water and sewer service for each service area. In effect, the impact fee program is an ambitious financing mechanism that funds development on the City’s periphery. The land-use assumptions upon which the impact fees are based should be adjusted to reflect the policies in this comprehensive plan; impact fee service areas and rates could then be adjusted accordingly.

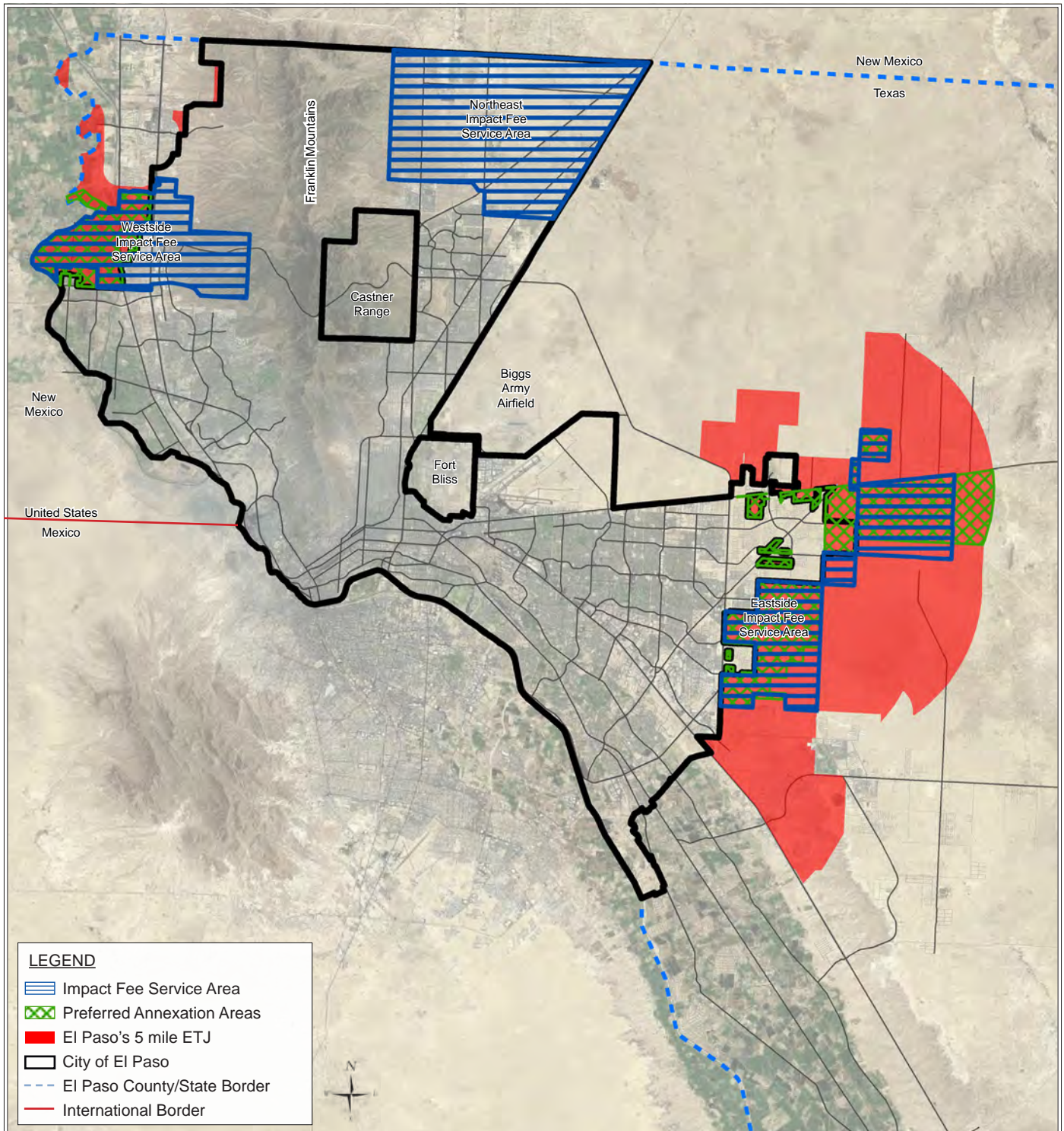
- When establishing impact fee rates, the City Council decided to charge only 75% of the actual costs for extension of services. The remaining expenses will be absorbed by EPWU-PSB, which hopes to recover the money over time through utility bills – but there is no guarantee that this will happen. Thus, a program that was intended to make development on the periphery pay its full costs seems to be partially subsidizing that very development pattern.
- Under the new impact fee program, developers in the impact fee service areas have the benefit of eliminating the uncertainty that project-specific computations add to the development process, and the final cost may even be lower. Both factors are helpful to developers; the City may be inadvertently subsidizing and encouraging development at the periphery, which works against the goal of favoring infill development.

With certain adjustments, El Paso’s impact fee program could fully support the strategies in this comprehensive plan. A study of these potential adjustments should be conducted by the City and the EPWU-PSB to determine their implications and practicality and to consider other strategies that might achieve the same goals.

The first adjustment would be to modify the impact fee service areas (see Policy I.8.2). In the northwest, this change would eliminate the upper valley farmland and retain all land within the City limits. In the northeast, this change would eliminate land that is designated as O-1 “Preserve,” O-2 “Natural,” and O-5 “Remote” on the Future Land Use Map. In the far east, this change would make the impact fee service area identical to the “Potential Annexation” area. These changes would avoid any impression that utility expansion policy is different than City growth policy and would preclude potential claims that future utility service beyond a preferred annexation area is guaranteed because of a simple impact fee payment.

The second adjustment would be to recalculate the land-use assumptions upon which the impact fee rates were based to reflect the adjusted impact fee service areas and the other outward growth strategies in this comprehensive plan (see Policy I.8.3). The impact fee rates could then be re-adopted, preferably without the current 25% discount.

A third adjustment seems impractical at this time due to restrictions in State law but should be considered as a potential future adjustment. This adjustment would be to begin charging impact fees for transportation improvements to developers in the three impact fee service areas. Transportation to and from a peripheral location is far more costly than development nearer central El Paso, yet the State does not allow cities to charge transportation impact fees in the ETJ, which is a major part of the El Paso’s impact fee service areas. Transportation impact fees could still be charged within the City limits. However, most of the remaining land in the impact fee service areas is City-owned land where the



Extraterritorial Jurisdiction and Impact Fee Service Areas

City has more direct control over managing growth and could require developers to pay for extra transportation costs through sales contract provisions instead of impact fees.

Step D: Future Land Use Map

The previous sections have described several different tools that are available to manage El Paso’s outward growth:

- El Paso regulates the subdivision of land in the ETJ, up to five miles beyond the City limits.
- The Comprehensive Plan’s Major Thoroughfare Plan includes a network of future roads throughout the ETJ.
- El Paso’s authority to annex, or decline to annex, can strongly influence growth patterns.
- EPWU-PSB has been granted a certificate of convenience and necessity to provide utilities everywhere within the City and considerably beyond in several directions.
- EPWU-PSB can provide, or decline to provide, water and sewer service outside the City limits.
- The City now charges impact fees for water and sewer service; the rate structure can be a growth management tool and might be able to recover the cost of water rights.
- The City could charge transportation impact fees to generate revenue and influence growth patterns.

Each of these tools is complex in its own right, being subject to State law, court decisions, technical analyses, and prior vesting decisions. It is not surprising that the results of these efforts sometimes conflict with one another. Now that El Paso has experience with each tool, the tools need to be refined in a coordinated fashion to more efficiently carry out the City’s planning and fiscal policies.

A “Future Land Use Map” is an ideal means by which to precisely formulate City growth policy and definitively map the results so later implementing actions, including refinements to the tools listed above, can be guided by a consolidated vision of the City Council.

A Future Land Use Map is an integral part of this comprehensive plan. This map is a replacement for the “General Land Use Map” in El Paso’s 1999 comprehensive plan. The 1999 map provided very little guidance as to outward expansion because it used detailed zoning-like designations even on already-developed land. Most of the undeveloped land within the City also received these designations (except for the Franklin Mountains, some parts of Fort Bliss, and City-owned lands in the far northwest). Some land in the ETJ also received designations, but the comprehensive plan did not indicate how those areas were selected. The 1999 map did not address the timing of potential development beyond indicating that some amount of development was expected by the year 2025.

To provide a clear guide to the form, direction, and timing of future growth, the new Future Land Use Map contains two separate but related components. The first is a base map that defines distinct sectors for all of El Paso County. There are two types of sectors: seven “O” or open-space sectors where growth is delayed or not anticipated, and nine “G” or growth sectors, where urban development is encouraged immediately.

The boundary of the “O-6” sector is a defining factor in managing outward growth because O-6 means “Potential Annexation” – developable land not in a growth sector today but which may be needed for outward expansion at some point. City decisions about annexations, ETJ regulations, impact fees, and utility expansions should be based on the boundaries between the nine growth sectors, the O-6 Potential Annexation sector, and the other open-space sectors.

The seven open-space sectors can be described as follows:

- **O-1 – Preserve:** Publicly owned land such as the Franklin Mountains and Hueco Tanks State Parks, all City and County parks and public drainage areas, and cemeteries (even if private). These lands will not be developed due to their ownership and current use.
- **O-2 – Natural:** Foothills, bosques, wetlands, critical arroyos, and other natural features owned by private or public entities but currently without protected status. Examples include the Castner Range and private tracts in and around the Franklin Mountains and Hueco Tanks State Parks. City regulations and policy decisions should help keep these lands in their natural state for drainage, natural habitat, and scenic protection. Public acquisition should be considered especially when key drainage features can be protected.
- **O-3 – Agriculture:** Active farmland in the Rio Grande Valley. Changes to City codes and policies may limit plat and utility approvals beyond the City limits in a coordinated effort to protect significant portions of farmland.
- **O-4 – Military Reserve:** Fort Bliss training areas north and east of the main cantonment, Biggs Army Air Field and East Fort Bliss. To the extent possible, these lands should not be developed because they are needed for military training.
- **O-5 – Remote:** Remote land in the desert and mountains. Except where vested rights are in place, City regulations and policy decisions should not encourage urban development during this planning period, which extends until 2030. It is not known at this time whether O-5 land will be needed for development further in the future.

- **O-6 – Potential Annexation:** Potentially developable land that is not needed for urban expansion at this time but is available if expansion is needed. Land can be re-designated from O-6 to a growth sector through a formal amendment to the Future Land Use Map.
- **O-7 – Urban Expansion:** Developable land currently owned by the City of El Paso where master planning is underway for potential urban expansion before 2030 using Smart Growth principles.

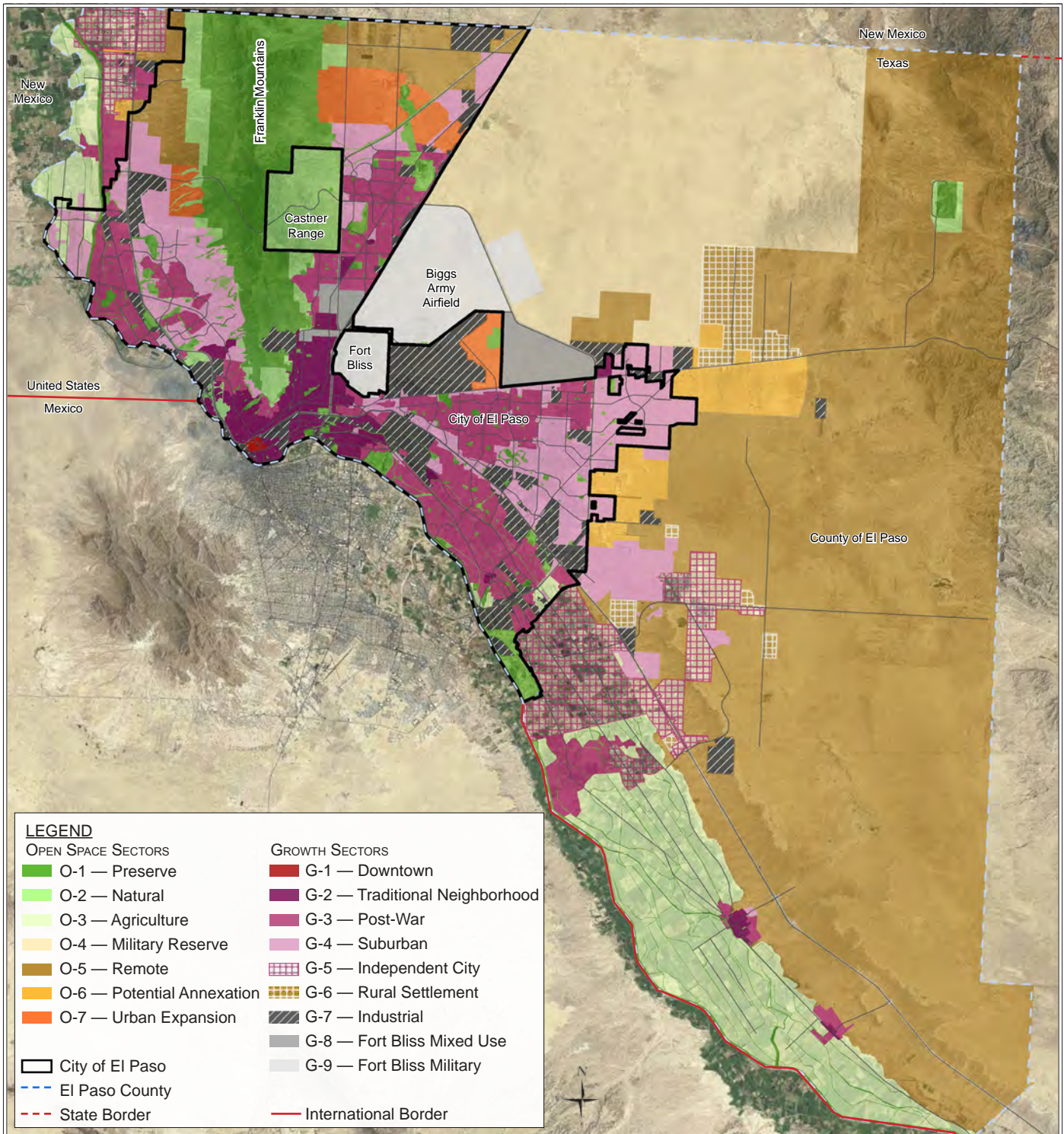
The seven open-space sectors are applied to land that is not currently part of the El Paso's urban economy. In contrast, the nine growth sectors are applied to urbanized or urbanizing land. No attempt has been made in *Plan El Paso* to determine if or how much additional land may be needed for outward expansion after 2030.

The nine growth sectors can be described as follows:

- **G-1 – Downtown:** This sector includes the historic core of Downtown plus the larger Downtown area from Paisano Drive north to I-10, including the arts and convention center, Union Depot, City Hall, County Courthouse, United States courthouse, and Mexican Consulate. El Paso's "Invest First in Downtown" policies apply in this sector.
- **G-2 – Traditional Neighborhood:** This sector includes the remainder of central El Paso as it existed through World War II. Blocks are small and usually have rear alleys; buildings directly faced streets; schools, parks, and small shops are integrated with residential areas. This sector is well-suited for use of the SmartCode as a replacement for current zoning when planned in conjunction with specific neighborhood plans or identified in this Comprehensive Plan.
- **G-3 – Post-War:** This sector applies to transitional neighborhoods typically developed from the 1950s through the 1980s. Streets were laid out with curvilinear patterns without alleys and shopping centers are located at major intersections behind large parking lots. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.
- **G-4 – Suburban:** This sector applies to modern single-use residential subdivisions and office parks, large schools and parks, and suburban shopping centers. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.

- **G-5 – Independent City:** This sector identifies the incorporated cities of Anthony, Clint, Horizon, Socorro, and Vinton. El Paso plans and regulations have no effect in these cities.
- **G-6 – Rural Settlement:** This sector applies to existing scattered subdivisions in non-urban locations. Some rural settlements are becoming suburbanized but most are still rural in character with a large percentage of vacant lots and very limited public services. Additional rural settlements are neither needed nor desirable due to excessively long commutes, difficulty in providing services to scattered homes, and an enormous surplus of existing vacant lots.
- **G-7 – Industrial:** This sector applies to industrial parks, large free-standing industrial uses, refineries, non-military airfields, trucking terminals, and mines, all on large tracts in areas dominated by vehicles. This sector is essential to El Paso's economy; however, when an industrial use becomes obsolete, there can be potential for mixed-use redevelopment of the site. This sector also includes the existing rail yards which could be redeveloped as mixed-use communities if the rail yards were moved out of town.
- **G-8 – Fort Bliss Mixed Use:** This sector identifies non-military portions of Fort Bliss that are or can become integral parts of El Paso. Non-military development should be eligible for annexation into the City of El Paso provided it meets the Smart Location Principles and the Neighborhood Patterns contained in policies of the Urban Design Element of *Plan El Paso*.
- **G-9 – Fort Bliss Military:** This sector identifies the main cantonment of Fort Bliss, Biggs Army Air Field, and East Fort Bliss, all located outside the El Paso City limits. Despite El Paso's lack of jurisdiction, healthy development at Fort Bliss is as important to El Paso as any other economic sector.

In addition to these sixteen base sectors, the Future Land Use Map contains a series of overlays that define key generators of movement and economic activity, plus prime locations for development and redevelopment. These overlays are described on the following pages.



Future Land Use Map - Base Sectors

Note: Under Texas law, a comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

In addition to the base open-space and growth sectors, the Future Land Use Map contains a series of overlay designations. These overlays define key generators of movement and economic activity, prime locations for new compact neighborhoods, and protection zones.

Nine types of overlay designations are shown on the Future Land Use Map. The first five are specific geographic points of movement and activity:

- **Border Crossings:** The four international ports of entry between El Paso and Juárez are key regional links for the movement of people and freight, including raw materials and finished products traveling to and from maquiladoras in northern Mexico.
- **Colleges:** Campuses of the University of Texas at El Paso and El Paso Community College are major activity centers for students, teachers, and staff.
- **Hospitals:** Hospitals are major activity centers for patients, doctors, and staff.
- **Regional Transportation Hubs:** The El Paso International Airport and the Union Depot are major regional transportation hubs, supplemented by numerous bus terminals between the border and Downtown El Paso.
- **Local Transfer Centers:** The eight transfer centers operated by Sun Metro are key links in daily movement through El Paso.

The sixth and seventh overlay designations are geographic areas where compact walkable neighborhoods are a key goal of City policy:

- **Rapid Transit System (RTS) Stops:** Four bus rapid transit lines are planned by Sun Metro. Each will terminate at a designated transfer center while also offering additional stops at approximately one-mile spacing. Each stop is designated on this map by a circle with an indeterminate outer edge. This circle indicates a presumed area of influence around each RTS stop where passengers will be arriving and departing as pedestrians. Each of these stops has the potential to generate or reinforce compact walkable redevelopment due to increased pedestrian activity. Each stop is also a highly desirable location for future residents and businesses who will be able to depend on regularly scheduled, high-quality public transportation.
- **Future Compact Neighborhoods:** A larger series of future compact neighborhoods are also designated on this map, including one surrounding each local transfer center. El Paso has only a limited number of areas where compact walkable development or redevelopment can take place with convenient access to existing services and facilities.

Each of these areas provides an excellent opportunity for El Paso to grow without the constant outward expansion of past decades.

Illustrative plans in other elements of *Plan El Paso* visualize the future physical context of each future compact neighborhood and many RTS stops and transfer centers

The eighth and ninth overlay designations are protection zones that identify land that deserves special attention in the planning and development process:

- **Arroyos:** Many arroyos have been destroyed or replaced by engineered channels. Other arroyos are already being protected by public ownership or private covenants. Arroyos as identified in this overlay have neither been destroyed nor protected and would likely be endangered by careless development practices in the future. The edges of the arroyos shown on this map are generalized.
- **Military Buffer:** In certain locations, new neighborhoods and other noise-sensitive land uses would be subject to potentially severe noise impacts from training activities at Fort Bliss. These uses should not be introduced into the designated military buffer zones.

Compact Urban Areas

The designation of base sectors and overlays allows the City of El Paso to group together a series of designations where special incentives, policies, or regulations should apply.

The Urban Design and Transportation Elements of *Plan El Paso* use this technique by defining as “Compact Urban” all land in the following designations:

- Base Sectors: G-1, G-2, and O-7.
- Overlays: Local Transfer Centers, RTS Stops, and Future Compact Neighborhoods.

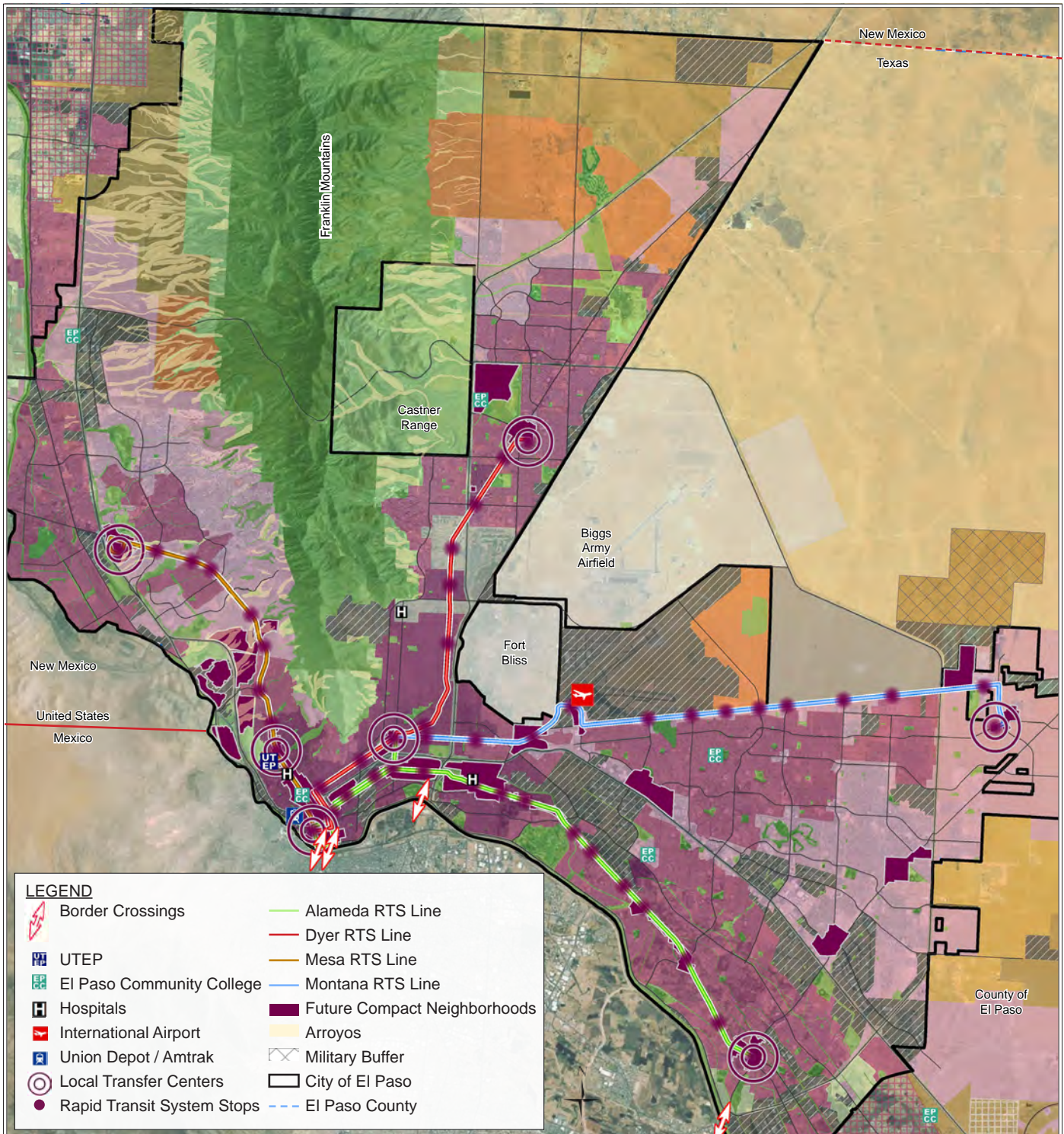
In Compact Urban areas, the Transportation Element indicates that more walkable thoroughfares are anticipated, as discussed in “Compact Urban, Drivable Suburban” on page 4.36.

The Urban Design Element indicates that the preferred locations for higher density development are sites in Compact Urban areas (see policies under Goals 2.1 through 2.5), though additional locations are not precluded.

Those policies are carefully worded to make it clear that a different set of standards will apply to thoroughfare design, new development, and redevelopment outside of Compact Urban areas, such as in the remainder of the G-3 “Post-War” and the G-4 “Suburban” sectors, while not precluding this approach elsewhere.

PLAN EL PASO

Strategies for Addressing Community Concerns



Future Land Use Map - Overlays

Note: Under Texas law, a comprehensive plan shall not constitute zoning regulations or establish zoning district boundaries.

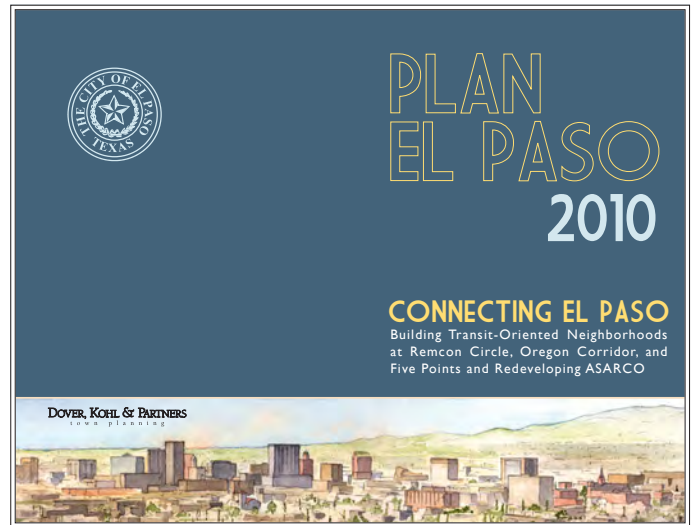
DESIGN GUIDANCE

General guidance for urban design within growth sectors G-1 through G-4 is provided on the following pages.

Similar guidance is provided for open space sectors O-3, O-6, and O-7; some urban development is anticipated in each of those sectors.

As noted within each sector’s narrative, more specific guidance can be found in other elements of *Plan El Paso*, particularly the Urban Design and Downtown Elements as well as the Community Design Manual in Appendix D.

Additional guidance can be found in the 2010 report entitled: *Plan El Paso 2010 – Connecting El Paso; Building Transit Oriented Neighborhoods at Remcon Circle, Oregon Corridor, and Five Points and Redeveloping ASARCO* by Dover, Kohl & Partners.



G-1 – Downtown: This sector includes the historic core of Downtown plus the larger Downtown area from Paisano Drive north to I-10, including the arts and convention center, Union Depot, City Hall, county courthouse, United States courthouse, and Mexican Consulate. El Paso’s “Invest First in Downtown” policies apply in this sector.

Design Guidance: Downtown El Paso is remarkably intact, with most historic buildings still standing and an abundance of civic buildings. The traditional thoroughfare grid is largely in place. Pedestrian-oriented streetscape improvements, coupled with on-street parking, will help manage vehicular speed and create better accessibility and interaction between pedestrians and vehicles.

Well-built and beautifully crafted buildings line Downtown streets; however, many are vacant except for discount outlets on the ground floor. Particular focus should be placed on renovating and leasing the upper floors to provide new housing and employment options through adaptive reuse.

New buildings should continue the tradition of multi-story, multi-use buildings with retail on the first floor and offices or residences on the upper floors. The reintroduction of a stable, mixed-income residential population will provide a market for a wider range of dining and entertainment options.

Design References:

- Downtown Element of this plan.
- *Connecting El Paso*: See pages 4.4 through 4.10 and A.4 through A.6.



G-2 – Traditional Neighborhood: This sector includes the remainder of central El Paso as it existed through World War II. Blocks are small and usually have rear alleys; buildings directly faced streets; schools, parks, and small shops are integrated with residential areas. This sector is well-suited for use of the SmartCode as a replacement for current zoning when planned in conjunction with specific neighborhood plans or identified in this Comprehensive Plan.

Design Guidance: G-2 neighborhoods already have walkable thoroughfare grids, a mix of uses and housing types, historic buildings, parks, and a strong sense of character. The City’s priorities are improving public infrastructure, restoring any abandoned buildings, and infilling empty lots and parking lots with street-oriented buildings.

Many G-2 neighborhoods are challenged by recent, auto-oriented development that turns its back to the street. Many of the new buildings feature blank walls toward the street or poorly proportioned façades that contribute little to the public realm. These buildings could be improved with windows and doors that add visibility, openness, light, and natural supervision to the sidewalk. Restoring a continuous street frontage will restore the sense of place in older neighborhoods.

Design References:

- Urban Design Element of this plan.
- *Connecting El Paso:* See pages 3.4 through 3.5, 3.11, 4.11 through 4.27, and A.7 through A.12.



G-3 – Post-War: This sector applies to transitional neighborhoods typically developed from the 1950s through the 1980s. Streets were laid out with curvilinear patterns without alleys and shopping centers are located at major intersections behind large parking lots. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.

Design Guidance: Suburban retrofits in the G-3 sector can take either of the large-scale forms described below for the G-4 sector, but often are more incremental in scope.

The G-3 thoroughfare network, while curvilinear and without alleys, is already well-connected internally and to the regional network. However, major corridors are generally lined with the same auto-oriented development that has crept into the G-2 sector; the same remedies are needed here. The greatest retrofit efforts should take place at each proposed RTS stop, which will be energized by the presence of passengers. Future development around transit stops and transfer centers should be compact, character rich, and designed with an identifiable center and edge wherever possible. Amenities should be provided to allow daily needs to be met. Parking should be consolidated and shared.

Design References:

- Urban Design Element of this plan.
- *Connecting El Paso:* See pages 3.6 through 3.10.



G-4 – Suburban: This sector applies to modern single-use residential subdivisions and office parks, large schools and parks, and suburban shopping centers. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.

Design Guidance: Suburban retrofits usually take one of two forms. The first is new development on vacant skipped-over tracts, in which case the design guidance is similar to the O-6 and O-7 sectors. The other form is major redevelopment of well-located but underutilized land, typically obsolete shopping centers or industrial sites. Occasionally this redevelopment is carried out in a single stroke, but usually it occurs incrementally as the market arises, through the creation of new streets and blocks and the replacement of existing buildings with new street-oriented buildings. Additional buildings fill in empty lots that create the “missing teeth” along the streetwall.

New development should include a mix of uses, including housing, offices, and stores. Street connections are made to nearby neighborhoods along with streetscape improvements and the addition of green and civic spaces.

Design References:

- Urban Design Element of this plan.
- *Connecting El Paso:* See pages 3.6 through 3.10; 4.28 through 4.39; and A.13 through A.16.



O-3 – Agriculture: Active farmland in the Rio Grande Valley. Changes to City codes and policies may limit plat and utility approvals beyond the City limits in a coordinated effort to protect significant portions of farmland.

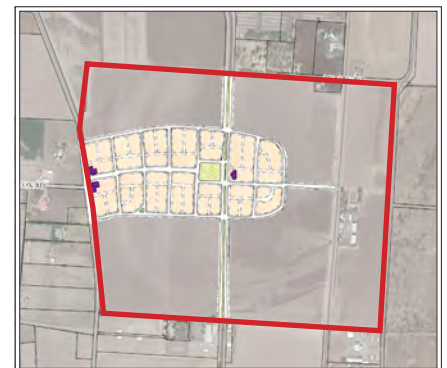
Design Guidance: As much irrigated farmland as possible should be retained for permanent use as commercial farms and rural homesteads.

When suburban development rights have already been granted, development can be clustered into compact, complete, connected neighborhoods. The same amount of development can be accommodated on less than half the site, allowing the preservation of farmland on the remainder. Each neighborhood consists of a range of dwelling types, respecting the rural character of the area. A public square often marks the center of the neighborhood and creates a gathering place for events and farmers markets. Civic buildings or pavilions mark the entrance and center of the neighborhood.

Examples such as Serenbe, near Atlanta, and Hampstead, in Montgomery, Alabama, demonstrate how compact, walkable neighborhoods can be created in ways that maintain rural character while preserving farmland.

Design References:

- Urban Design Element of this plan. See page 2.36 through 2.37 and Policies 2.1.13 and 2.6.3



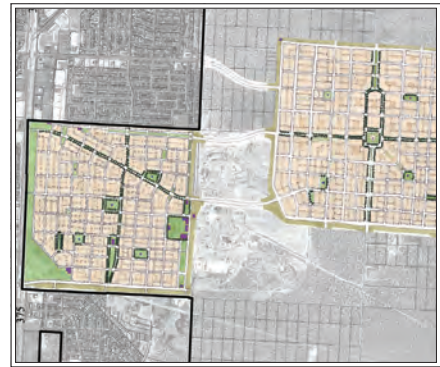
O-6 – Potential Annexation: Potentially developable land that is not needed for urban expansion at this time but is available if expansion is needed. Land can be redesignated from O-6 to a growth sector through a formal amendment to the Future Land Use Map.

Design Guidance: New neighborhoods should allow driving to be an option rather than a necessity. Every neighborhood has a vibrant center at its heart, where neighbors can meet and fulfill some daily needs. Blocks immediately surrounding the center accommodate a variety of building sizes, including multi-story, mixed-use buildings, apartment buildings, rowhouses, and detached homes. This variety creates the ability to live, work, and shop within walking distance.

Civic buildings provide focal points within each neighborhood. Buildings front onto greens rather than turning their backs to them. Small blocks are key to walkable neighborhoods. An interconnected thoroughfare network allows residents to access all parts of the neighborhood, and other neighborhoods, without having to use the regional network. Alleys provide access to the middle of blocks where additional parking may be located.

Design References:

- Urban Design Element of this plan: See pages 2.38 through 2.39 and 2.80 through 2.81.



O-7 – Urban Expansion: Developable land currently owned by the City of El Paso where master planning is underway for potential urban expansion before 2030 using Smart Growth principles.

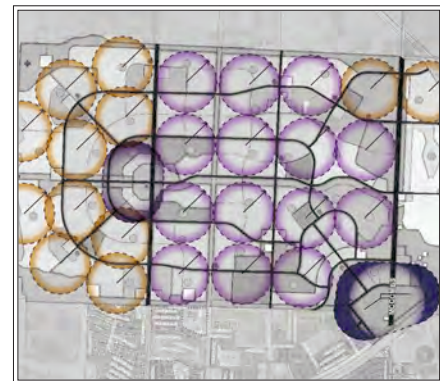
Design Guidance: Development of these large tracts should be organized by assignment of “community types” as described by the SmartCode: Regional Center Developments (RCD), Traditional Neighborhood Developments (TND), and Clustered Land Developments (CLD). Each community type is based around pedestrian sheds (a five-minute walk) and each pedestrian shed would provide a mix of housing types and sizes throughout a neighborhood. The result is a connected network of walkable neighborhoods.

RCDs should be located where more commercial density or main streets are desired, such as along existing heavily traveled corridors or at the intersection of four neighborhoods. The placement of TNDs and CLDs depends on the size and type of neighborhood to be developed. CLDs require more undeveloped land and should be utilized in locations that have large preserved areas.

Schools and their play fields should be located where multiple neighborhoods meet, allowing more children to get to school by their own accord, reducing the need for busses and parents driving to school each day.

Design References:

- Urban Design Element of this plan: See pages 2.38 through 2.48.



GOALS & POLICIES

Overall Goal: Encourage infill development within the existing City over peripheral expansion to conserve environmental resources, spur economic investment, repair social fabric, reduce the cost of providing infrastructure and services, and reclaim abandoned areas.

Downtown

Goal 1.1: The City of El Paso places the highest priority on the reinvigoration of Downtown, whose strategic location, walkable blocks, and historic buildings will once again make Downtown a vibrant destination and center of culture, shopping, government, and the arts. These policies, and policies in the Downtown Element of *Plan El Paso*, apply to land in the G-1 “Downtown” growth sector on the Future Land Use Map (see Goal 1.10).

Policy 1.1.1: City policies and programs should encourage the rehabilitation of upper stories of existing Downtown buildings as office, retail, entertainment, and residential space. Financial incentives should be considered to encourage investment from the private sector.

Policy 1.1.2: The City encourages new multi-story mixed-use buildings with windows and doors facing all sidewalks to be constructed on vacant lots. The City should not require any on-site parking for buildings Downtown.

Policy 1.1.3: Downtown redevelopment strategies will include new and improved civic buildings and civic spaces, plus shared parking for residents, employees, and visitors.

Policy 1.1.4: As civic buildings are added, updated, or replaced, they should be integrated into El Paso’s original street network and other land uses rather than being isolated in large complexes of civic buildings.

Policy 1.1.5: The City’s historic landmark design regulations should be expanded to highlight Downtown’s architectural heritage, to avoid unnecessary damage to this valuable resource, and to ensure that new buildings maintain and improve this historic character.

Traditional Neighborhoods

Goal 1.2: The City of El Paso highly values the traditional neighborhoods that were laid out in all directions from Downtown and will maintain and improve their highly walkable character, transit accessibility, diverse mix of land uses, and historic building stock. These policies apply to land in the G-2 “Traditional Neighborhood” growth sector on the Future Land Use Map. Also see goals and policies in the Urban Design Element.

Policy 1.2.1: The City should maintain and strengthen the historic landmark status of Austin Terrace, Chihuahuita, Magoffin, Manhattan Heights, Old San Francisco, Sunset Heights, Ysleta, and the Mission Trail Historic Corridor and District.

Policy 1.2.2: The City will actively consider historic landmark status for additional qualifying neighborhoods.

Policy 1.2.3: Vacant and underutilized parcels in and around the City’s traditional neighborhoods can be excellent locations for redevelopment that adds housing, shopping, employment, entertainment, and recreational options for nearby residents and transit patrons. Redevelopment of such sites should mesh with the scale and character of these existing neighborhoods rather than imposing a suburban or high-rise model on traditional neighborhoods. The City’s zoning and development regulations should be modified accordingly. Additional infill incentives should be considered by the City.

Neighborhood Retrofits

Goal 1.3: The City of El Paso wishes to diversify its post-war and suburban neighborhoods in strategic locations in order to increase the variety of housing options, including rowhouses, apartments, and condominiums, and to expand opportunities for employment and neighborhood shopping without requiring long car trips.

Policy 1.3.1: Most neighborhoods, even new ones, would benefit from a greater variety of activities within walking and bicycling distance. For instance, a greater number of smaller parks are preferable to a few larger ones that are accessible only to those with a private vehicle. Likewise, smaller schools often become the centerpiece of their neighborhoods rather than distant facilities to which most students must be driven or bused each day. This policy is most applicable within the G-3 “Post-War” and G-4 “Suburban” growth sectors on the Future Land Use Map.

Policy 1.3.2: Sun Metro bus routes and rapid transit system (RTS) stops and transfer centers offer independence to those who live in drivable neighborhoods but do not have access to a car. The land near transfer centers and RTS stops offers major redevelopment opportunities to take special advantage of those facilities. These locations are designated as overlays on the Future Land Use Map (see Goal 1.10).

Policy I.3.3: The City has adopted the following special study area plans pursuant to the 1999 Comprehensive Plan:

- a. Rim/University (2001);
- b. Northwest Upper Valley (2004);
- c. Chihuahuita (2004);
- d. PSB Westside Master Plan (2005);
- e. PSB Northeast Master Plan (2005; amended 2007 & 2008);
- f. Downtown 2015 (2006);
- g. Medical Center of the Americas (2008, amended 2011); and
- h. Connecting El Paso (2011).

These special study area plans will remain in effect, except for any provisions that may conflict with this Comprehensive Plan, until such time as any of these study area plans are amended or repealed by the City Council.

New Neighborhoods

Goal I.4: The City of El Paso notes that recent development patterns have created isolated and oversized concentrations of homogeneous land uses which force residents into automobile travel for daily needs and make it difficult for residents to stay within the same neighborhood when they need a different type or size of housing. The City wishes to augment this conventional development pattern with strategic suburban retrofits or urban infill where practical. This goal and policy apply to land in G-4 “Suburban” growth sector and to future development in the O-6 “Potential Annexation” and O-7 “Urban Expansion” open-space sectors on the Future Land Use Map. G-3 and G-4 sectors, as depicted on the Future Land Use Map, may be permitted to continue development and uses as are consistent with the surrounding and existing development in the area. Also see goals and policies in the Urban Design Element.

Policy I.4.1: The City’s zoning and land development regulations should be reviewed and amended when appropriate to encourage new neighborhoods to have:

- a. Greater interconnection of internal streets;
- b. Provision of small parks and civic functions within neighborhoods;

c. A greater variety of housing types within each neighborhood; and

d. Protection of natural features such as critical arroyos.

Outward Expansion

Goal I.5: The City of El Paso has grown primarily by outward expansion. This pattern has become untenable because the undevelopable wedges created by Fort Bliss and the Franklin Mountains have forced outward expansion so far from central El Paso. The amount of commuting required by this development pattern throughout the City will be increasingly impractical in an era of high gasoline prices and the need to control climatic changes caused in part by overuse of fossil fuels. The City of El Paso will be cautious about authorizing further outward expansion until it can be demonstrated to be essential to accommodate growth and the land to be developed is an excellent location for expansion.

Policy I.5.1: The City strongly recommends that further outward expansion take the form of complete new neighborhoods that have characteristics of El Paso’s most revered older neighborhoods. This policy applies to future development in the O-6 “Potential Annexation” and O-7 “Urban Expansion” open-space sectors on the Future Land Use Map.

Policy I.5.2: This plan discourages urban development of irrigated farmland along the Rio Grande, which is designated in the O-3 “Agriculture” open-space sector. The City and EPWU-PSB should ensure that their individual regulations are complementary and do not encourage unnecessary development of irrigated farmland. Consideration needs to be given to incentivizing preservation of agricultural lands, including conducting a full evaluation of best practices that could mitigate their full development.

a. Examples to consider when dealing with irrigated farmland *inside* the City include:

- i. Providing a density bonus for development of formerly active farmland when at least 50% of the lots allow for small-scale farming, the bonus being proportional to the area being reserved for farming.
- ii. Discouraging the rezoning of agriculture land except where a percentage of small-scale farming has been reserved.

b. Examples to consider when dealing with irrigated farmland *outside* the City include:

i. Removing irrigated farmland from the preferred annexation map (see Policy 1.7.3).

ii. Removing irrigated farmland from the City's impact fee service area and the State's map of Certificates of Convenience and Necessity.

iii. Amending Title 19 to limit plats and utility extensions to proposed developments that commit to permanently keep at 50% of the land for farming or to subdivide the land into tracts that are themselves large enough to support small-scale farming.

c. The protection of farmland may also be accomplished through Park Credits, the purchase of development rights, outright purchase of land, or other mechanisms available to the City and County.

Policy 1.5.3: Arroyos are ravines carved over many years by rainfall moving across the earth. Arroyos feature a high degree of biodiversity and are an important part of the local ecology and landscape and the regional drainage pattern. This plan discourages urban development of remaining critical arroyos through the following means:

a. In the immediate future, a critical arroyo map should be prepared to identify critical arroyos and related ecologically sensitive lands that should be entirely preserved. This map should supplement the 2007 *Green Infrastructure Plan for El Paso*.

b. A generalized map of arroyos has been adopted as an overlay on the Future Land Use Map in this comprehensive plan. That overlay should be supplemented or replaced by the new critical arroyo map through a comprehensive plan amendment.

c. Under nearly all circumstances, critical arroyos should be maintained in their natural state rather than being filled, channelized, or piped.

d. Arroyos can form attractive public spaces that add value to adjacent neighborhoods provided continuous access remains available abutting the rim of the arroyos and private lots are arranged so that fronts of buildings face the arroyos.

e. The protection of critical arroyos may be accomplished through Park Credits, the purchase of development rights, outright purchase of land, or other mechanisms available to the City and County.

Policy 1.5.4: The City wishes to begin a new era of cooperation with El Paso County on the management of growth.

Policy 1.5.5: Explore the potential of a transferable development rights program to shift development from conservation areas to preferred areas for growth recognizing the limitations of such a program. Successful TDR programs place a fixed density on potential sending areas and limit density in receiving areas except by use of transferred rights.

Policy 1.5.6: EPWU-PSB is encouraged to work with the City to identify infill infrastructure capacity opportunities and/or limitations within the City.

Policy 1.5.7: The City will explore the inclusion of transit impact fees for development on the outskirts of the City to accommodate increased transit need in locations where the population density may not otherwise justify transit expenditures. Any new impact fees must be in accordance with local and state impact fee limitations.

Extraterritorial Jurisdiction

Goal 1.6: The City will use the limited authority granted by Texas law to regulate the subdivision of land within its ETJ in order to shape future growth in accordance with *Plan El Paso*.

Policy 1.6.1: The City should strengthen its existing regulations that regulate the subdivision of land within the ETJ. Future subdivisions should be required to have smaller blocks and better connectivity to surrounding development than is currently required.

Policy 1.6.2: Future subdivisions also need to be interconnected with each other and with a suitable regional road network. This comprehensive plan's Major Thoroughfare Plan needs to be improved with a more tightly interconnected road network for the ETJ so that future subdivisions will not create isolated pods of development that are unlikely to become an integrated part of El Paso (See Goal 4.3).

Annexation

Goal 1.7: The City of El Paso will use the annexation authority granted by Texas law to cautiously shape the future City boundaries in accordance with *Plan El Paso*.

Policy 1.7.1: Since 1999, the City of El Paso has maintained a policy against forcing unilateral annexations of already-developed land or vacant land. Should circumstances change, the City may revisit this policy and modify its formal annexation plan.

Policy 1.7.2: The City of El Paso also maintains a separate annexation policy that defines areas where voluntary annexations would be considered upon petition by affected landowners. In 2009 this policy was revised to require that voluntarily annexed land:

- a. Must be contiguous with the existing City limits;
- b. The landowners must agree to build all local, collector, and arterial roads at their expense and must submit a general development plan for the area; and
- c. The landowners must pay water and sewer impact fees plus an additional per-unit annexation fee toward fire, police, libraries, and recreation centers.

This annexation policy should continue to require Smart Growth commitment on the larger tracts in the development agreements that accompany formal annexation.

Policy 1.7.3: This annexation policy should be revised to remove from its preferred annexation map the large irrigated tracts in the upper valley that are actively being farmed, particularly west of Doniphan Drive and north of Borderland Road. This removal is intended to help keep this valuable resource from being displaced by urban expansion.

Policy 1.7.4: In addition to the adjustment in Policy 1.7.3, the preferred annexation map should be revised after formal consideration of the annexation potential of land in Southeast Fort Bliss that military officials may make available for private development.

Water & Sewer Service

Goal 1.8: The City of El Paso will continue using access to its water and sewer utility as a tool to shape growth in and around the City in accordance with *Plan El Paso*.

Policy 1.8.1: The City should consider amending Title 19 of the City code to define the extent to which providing utility service outside City limits would require City Council approval.

Policy 1.8.2: The City and EPWU-PSB should evaluate the current impact fee program to consider the following modifications to the impact fee service areas:

- a. In the northwest, adjusting the service area to eliminate upper valley farmland that lies outside the City limits and may be removed from the revised map of preferred annexation areas pursuant to Policy 1.7.3.
- b. In the northeast, adjusting the service area to eliminate land that is designated as O-1 “Preserve,” O-2 “Natural,” and O-5 “Remote” on the Future Land Use Map.
- c. In the far east, adjusting the service area to match the new “Potential Annexation” boundary on the Future Land Use Map so that utility expansion policy reinforces and carries out City growth policy.

Policy 1.8.3: The City and EPWU-PSB should evaluate whether the land-use assumptions upon which the impact fee rates are based should be adjusted to reflect the outward growth strategies in *Plan El Paso*. This evaluation should consider adjusting impact fees to capture 100% of the allowable cost.

Policy 1.8.4: EPWU-PSB should evaluate the viability of modifying its state-issued Certificate of Convenience and Necessity (CCN) boundaries to match the “Potential Annexation” sector (O-6 on the Future Land Use Map). Future expansion to the CCN should follow the City’s outward growth policies.

Industrial Lands

Goal 1.9: The regional economy depends heavily on manufacturing. The City of El Paso will designate ample land that is well-suited for industrial facilities that are best located north of the border and will ensure that industrial facilities do not adversely affect the health, safety, or welfare of the community. These policies apply to land in the G-7 “Industrial” growth sector on the Future Land Use Map.

Policy 1.9.1: Designate locations for industrial development in each planning area to reduce travel time for employees.

Policy I.9.2: Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas.

Policy I.9.3: Allow recreational, educational, and community uses to locate in light industrial and office parks and allow service commercial facilities in all industrial and office parks.

Policy I.9.4: Discourage access to industrial development through residential areas.

Policy I.9.5: Obsolete industrial sites and railyards pose technical challenges to redevelopment but are often ideally located within the City to offer new choices and opportunities for El Paso residents. The City should take affirmative steps to maximize this potential. These sites are generally in the G-7 “Industrial” growth sector on the Future Land Use Map (See Goal 4.11).

Future Land Use Map

Goal I.10: A new Future Land Use Map is an integral part of *Plan El Paso*. This map has been created to assist City officials and private developers in understanding the growth management goals and policies of this plan, particularly as to the form, direction, and timing of future development (see Goal 1.11). The designations on this map are subject to change as El Paso grows and *Plan El Paso* is modified accordingly.

Policy I.10.1: The Future Land Use Map contains two separate but related components. The first is a base map that defines seven open-space sectors and nine growth sectors for all of El Paso County. The second is a map of series of nine overlays that define key generators of movement and economic activity, plus prime locations for new compact neighborhoods and protection zones.

Open-Space Sectors

Policy I.10.2: The seven open-space sectors on the base map are defined as follows:

O-1 Preserve: Publicly owned land such as the Franklin Mountains and Hueco Tanks State Parks, all City and County parks and public drainage areas, and cemeteries (even if private). These lands will not be developed due to their ownership and current use.

O-2 Natural: Foothills, bosques, wetlands, critical arroyos, and other natural features owned by private or public entities but currently without protected status. Examples include the Castner Range and private tracts in and around the Franklin Mountains and Hueco Tanks State Parks. City regulations and policy decisions should help keep these lands in their natural state for drainage, natural habitat, and scenic protection. Public acquisition should be considered especially when key drainage features can be protected.

O-3 Agriculture: Active farmland in the Rio Grande Valley. Changes to City codes and policies may limit plat and utility approvals beyond the City limits in a coordinated effort to protect significant portions of farmland.

O-4 Military Reserve: Fort Bliss training areas north and east of the main cantonment, Biggs Army Air Field, and East Fort Bliss. To the extent possible, these lands should not be developed because they are needed for military training.

O-5 Remote: Remote land in the desert and mountains. Except where vested rights are in place, City regulations and policy decisions should not encourage urban development during this planning period, which extends until 2030. It is not known at this time whether O-5 land will be needed for development further in the future.

O-6 Potential Annexation: Potentially developable land that is not needed for urban expansion at this time but is available if expansion is needed. Land can be redesignated from O-6 to a growth sector through a formal amendment to the Future Land Use Map.

O-7 Urban Expansion: Developable land currently owned by the City of El Paso where master planning is underway for potential urban expansion before 2030 using Smart Growth principles.

Growth Sectors

Policy I.10.3: The nine growth sectors on the base map are defined as follows:

G-1 Downtown: This sector includes the historic core of Downtown plus the larger Downtown area from Paisano Drive north to I-10, including the arts and convention center, Union Depot, City Hall, County Courthouse, United States courthouse, and Mexican Consulate. El Paso’s “Invest First in Downtown” policies apply in this sector.

G-2 Traditional Neighborhood: This sector includes the remainder of central El Paso as it existed through World War II. Blocks are small and usually have rear alleys; buildings directly face streets; schools, parks, and small shops are integrated with residential areas. This sector is well-suited for use of the SmartCode as a replacement for current zoning when planned in conjunction with specific neighborhood plans or identified in this Comprehensive Plan.

G-3 Post-War: This sector applies to transitional neighborhoods typically developed from the 1950s through the 1980s. Streets were laid out with curvilinear patterns without alleys and shopping centers are located at major intersections behind large parking lots. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.

G-4 Suburban: This sector applies to modern single-use residential subdivisions and office parks, large schools and parks, and suburban shopping centers. This sector is generally stable but would benefit from strategic suburban retrofits to supplement the limited housing stock and add missing civic and commercial uses.

G-5 Independent City: This sector identifies the incorporated cities of Anthony, Clint, Horizon, Socorro, and Vinton. El Paso plans and regulations have no effect in these cities.

G-6 Rural Settlement: This sector applies to existing scattered subdivisions in non-urban locations. Some rural settlements are becoming suburbanized but most are still rural in character with a large percentage of vacant lots and very limited public services. Additional rural settlements are neither needed nor desirable due to excessively long commutes, difficulty in providing services to scattered homes, and an enormous surplus of existing vacant lots.

G-7 Industrial: This sector applies to industrial parks, large free-standing industrial uses, refineries, non-military airfields, trucking terminals, and mines, all on large tracts in areas dominated by vehicles. This sector is essential to El Paso’s economy; however, when an industrial use becomes obsolete, there can be potential for mixed-use redevelopment of the site. This sector also includes the existing rail yards which could be redeveloped as mixed-use communities if the rail yards were moved out of town.

G-8 Fort Bliss Mixed Use: This sector identifies non-military portions of Fort Bliss that are or can become integral parts of El Paso. Non-military development should be eligible for annexation into the City of El Paso provided it meets the Smart Location Principles and Neighborhood Patterns contained in policies of the Urban Design Element of *Plan El Paso*.

G-9 Fort Bliss Military: This sector identifies the main cantonment of Fort Bliss, Biggs Army Air Field, and East Fort Bliss, all located outside the El Paso City limits. Despite El Paso’s lack of jurisdiction, healthy development at Fort Bliss is as important to El Paso as any other economic sector.

Overlays

Policy I.10.4: In addition to the base sectors, the Future Land Use Map contains a series of overlays that define key generators of movement and economic activity; prime locations for new compact neighborhoods; and protection zones:

a. Border Crossings: The four international ports of entry between El Paso and Juárez are key regional links for the movement of people and freight, including raw materials and finished products traveling to and from maquiladoras in northern Mexico.

b. Colleges: Campuses of the University of Texas at El Paso and El Paso Community College are major activity centers for students, teachers, and staff.

c. Hospitals: Hospitals are major activity centers for patients, doctors, and staff.

d. Regional Transportation Hubs: The El Paso International Airport and the Union Depot are major regional transportation hubs, supplemented by numerous bus terminals between the border and Downtown El Paso.

e. Local Transfer Centers: The eight transfer centers operated by Sun Metro are key links in daily movement through El Paso.

f. Rapid Transit System (RTS) Stops: Four bus rapid transit lines are planned by Sun Metro. Each will terminate at a designated transfer center while also offering additional stops at approximately one-mile spacing. Each stop is designated on the map by a circle with an indeterminate outer edge. This circle indicates a presumed area of influence around each RTS stop where passengers will be arriving and departing as pedestrians. Each of these stops has the potential to generate or reinforce compact walkable redevelopment due to increased pedestrian activity. Each stop is also a highly desirable location for future residents and businesses who will be able to depend on regularly scheduled, high-quality public transportation.

g. Future Compact Neighborhoods: A larger series of future compact neighborhoods are also designated on the map, including one surrounding each local transfer center. El Paso has only a limited number of areas where compact walkable development or redevelopment can take place with convenient access to existing services and facilities. Each of these areas provides an excellent opportunity for El Paso to grow without the constant outward expansion of past decades.

h. Arroyos: Many arroyos have been destroyed or replaced by engineered channels. Other arroyos are already being protected by public ownership or private covenants. Arroyos as identified in this overlay have neither been destroyed nor protected and would likely be endangered by careless development practices in the future. The edges of the arroyos shown on the map are generalized.

i. Military Buffer: In certain locations, new neighborhoods and other noise-sensitive land uses would be subject to potentially severe noise impacts from training activities at Fort Bliss. These uses should not be introduced into the designated military buffer zones.

Policy 1.10.5: The Future Land Use Map identifies two base sectors with existing walkable urbanism (G-1 and G-2), one with planned walkable urbanism (O-7), and three overlays where walkable urbanism is anticipated to emerge (Local Transfer Centers, RTS Stops, and Future Compact Neighborhoods). The Transportation Element of *Plan El Paso* defines these as Compact Urban areas where multimodal transportation design will become the norm to enhance neighborhood character, safety, and walkability (see policies under Goal 4.1).

Application of *Plan El Paso*

Goal 1.11: The City of El Paso will use the principles set forth in *Plan El Paso* as tools to shape future development, to protect natural resources, to direct capital improvements, and to guide public policy in a coordinated manner for the mutual benefit of El Paso's residents and landowners.

Policy 1.11.1: *Plan El Paso* provides the basis for amendments to the City of El Paso's zoning and subdivision regulations, which are currently found in Titles 19, 20, and 21 of the City's code. The adoption of *Plan El Paso* does not change the zoning districts on any property, nor does it interfere with or extend vested rights.

Policy 1.11.2: *Plan El Paso*, including its Future Land Use Map, will be used as policy guidance in situations such as the following:

- a. Amendments to El Paso's zoning and subdivision regulations will be a major implementing tool for converting *Plan El Paso's* goals and policies into objective standards.
- b. Rezoning of land is another implementing tool of *Plan El Paso* (see Policy 1.11.3). Public hearings to rezone land can be initiated by the landowner or by the City, as provided in Title 20.
- c. Decisions on farmland protection should be guided by *Plan El Paso*, particularly by Policies 1.5.2 and 2.6.3.
- d. Decisions on arroyo protection should be guided by *Plan El Paso*, particularly by Policy 1.5.3.
- e. Decisions on annexing land should be guided by *Plan El Paso*, particularly the policies under Goal 1.7.

f. Decisions on potable water and wastewater should be guided by *Plan El Paso*, particularly the policies under Goals 1.8, 5.1, 5.2, 5.4, and 10.1 to 10.6.

g. Decision on natural resource protection should be guided by *Plan El Paso*, particularly the policies under Goals 5.3, 5.11, and 10.12 to 10.17.

h. Decisions on stormwater should be guided by *Plan El Paso*, particularly the policies under Goals 5.5 and 10.8.

i. Decisions on the design and placement of parks should be guided by *Plan El Paso*, particularly the policies under Goals 5.8, 5.9, and 5.10.

j. Decisions on the design and placement of thoroughfares should be guided by *Plan El Paso*, particularly the Transportation Element.

k. Decisions on the design and placement of publicly owned civic buildings and civic spaces should be guided by *Plan El Paso*, particularly the Urban Design, Downtown, and Public Facilities Elements.

Policy 1.11.3: Decisions on rezoning requests will be made in accordance with *Plan El Paso* and in accordance with all requirements of City and State law. When evaluating whether a proposed rezoning is in accordance with *Plan El Paso*, the City Council may also consider the following factors:

a. The proposed zoning district's effect on development or redevelopment of the property, particularly whether the rezoning will further or at least not conflict with specific policies listed under other goals of *Plan El Paso*.

b. Whether the property is in a "Compact Urban" area, defined in *Plan El Paso* as being in a base sector with existing walkable urbanism (G-1 and G-2) or planned walkable urbanism (O-7), or in an overlay where walkable urbanism is anticipated to emerge (Local Transfer Centers, RTS Stops, and Future Compact Neighborhoods). For instance, Compact Urban areas:

i. are preferred locations for higher density development and redevelopment (Policy 2.1.12);

ii. are ideal for a balance of housing, jobs, shopping, recreation, and civic uses (Policy 2.2.6);

iii. will be served by walkable thoroughfares (Policy 4.1.5); and

iv. are suitable for zoning districts that would orient most buildings toward streets (Policy 2.4.5).

c. The proposed zoning district's effect on the property and surrounding property, after evaluating the following factors:

i. The physical context of the property and surrounding properties, including recent or anticipated changes to that context.

ii. Any historic district or other special designations that may be applicable.

iii. Any adopted small area plans (see Policy 1.3.3), including land-use maps in those plans.

iv. Potential adverse effects that might be caused by approval or denial of the requested rezoning.

v. Anticipated effects on the natural environment.

vi. Whether the area is stable or in transition.

vii. Any changed social, economic, or physical conditions that make the existing zoning no longer suitable for the property.

URBAN DESIGN

2

Overall Goal: Incentivize development projects of exemplary location and design throughout the City.

Current Conditions	2.2	<i>El Paso Community College</i>	<i>2.67</i>
<i>Urban Design</i>	<i>2.2</i>	<i>Angel's Triangle</i>	<i>2.68</i>
<i>Downtown</i>	<i>2.4</i>	<i>Eastside: Community Concerns</i>	<i>2.70</i>
<i>Neighborhood Public Spaces</i>	<i>2.5</i>	<i>Eastside Strategies for Addressing</i>	
<i>Building Types</i>	<i>2.6</i>	<i>Community Concerns</i>	<i>2.71</i>
<i>Architecture</i>	<i>2.10</i>	<i>Hawkins Boulevard & Gateway Boulevard</i>	<i>2.72</i>
<i>Streets</i>	<i>2.11</i>	<i>Zaragoza Road</i>	<i>2.74</i>
<i>Landscape</i>	<i>2.12</i>	<i>Zaragoza Road & I-10</i>	<i>2.77</i>
<i>Parking</i>	<i>2.13</i>	<i>Zaraplex on Zaragoza Road</i>	<i>2.80</i>
<i>Lighting, Sign & Utilities</i>	<i>2.14</i>	<i>Montana Corridor Transfer Center</i>	<i>2.82</i>
Community Concerns	2.15	<i>East of Zaragoza Road</i>	<i>2.84</i>
Strategies for Addressing		<i>El Paso's Avenue</i>	<i>2.86</i>
Community Concerns	2.17	<i>Mission Valley: Community Concerns</i>	<i>2.88</i>
<i>Central: Community Concerns</i>	<i>2.18</i>	<i>Mission Valley: Strategies for Addressing</i>	
<i>Central: Strategies for Addressing</i>		<i>Community Concerns</i>	<i>2.89</i>
<i>Community Concerns</i>	<i>2.19</i>	<i>Alameda Avenue</i>	
<i>Segundo Barrio</i>	<i>2.20</i>	<i>Midway Drive to Yarbrough Drive</i>	<i>2.90</i>
<i>Railyards "Central Park"</i>	<i>2.22</i>	<i>Ysleta & Mission Valley Transfer Center</i>	<i>2.93</i>
<i>Mesa Street Near UTEP</i>	<i>2.24</i>	Goals & Policies	2.102
<i>Cincinnati Avenue</i>	<i>2.28</i>	<i>Smart Location Principles</i>	<i>2.102</i>
<i>Alameda Avenue</i>		<i>Neighborhood Patterns</i>	<i>2.103</i>
<i>Piedras Street to Patriot Freeway</i>	<i>2.30</i>	<i>Street Design Principles</i>	<i>2.103</i>
<i>Glenwood Street to El Paso Drive</i>	<i>2.32</i>	<i>Building & Site Design Principles</i>	<i>2.104</i>
<i>Bassett Place Mall</i>	<i>2.34</i>	<i>Civic Space Principles</i>	<i>2.106</i>
<i>Reconfiguring Outparcels</i>	<i>2.38</i>	<i>Rural & Open Space Design Principles</i>	<i>2.106</i>
<i>Airport</i>	<i>2.39</i>	<i>CNU Accreditation</i>	<i>2.106</i>
<i>Westside: Community Concerns</i>	<i>2.40</i>		
<i>Westside: Strategies for Addressing</i>			
<i>Community Concerns</i>	<i>2.41</i>		
<i>West Transmountain Road</i>	<i>2.42</i>		
<i>Upper Valley Development</i>	<i>2.46</i>		
<i>Development Abutting Arroyos</i>	<i>2.48</i>		
<i>Schools</i>	<i>2.50</i>		
<i>Neighborhood Playgrounds</i>	<i>2.50</i>		
<i>Northeast: Community Concerns</i>	<i>2.52</i>		
<i>Northeast: Strategies for Addressing</i>			
<i>Community Concerns</i>	<i>2.53</i>		
<i>SmartCode Demonstration Site:</i>			
<i>Community Type Scale</i>	<i>2.54</i>		
<i>Multiple Neighborhoods Scale</i>	<i>2.56</i>		
<i>Neighborhood and Lot Scale</i>	<i>2.60</i>		
<i>Northgate Mall Redevelopment</i>	<i>2.63</i>		

"PLANNING SHOULD BE COMPREHENSIVE. EVEN THOUGH A GRAND URBAN DESIGN COULD ONLY BE REALIZED IN BITS AND PIECES, AND OVER A LONG PERIOD OF YEARS, STILL WE SHOULD ALWAYS KNOW WHERE WE ARE GOING... CITIES GROW MOSTLY BY ACCIDENT IN RESPONSE TO TRENDS IN THE REAL ESTATE MARKET. VERY LITTLE THOUGHT IS GIVEN TO THEIR QUALITATIVE CHARACTERS. BUT THERE COMES A TIME WHEN DEVELOPMENT MUST BE SUBJECT TO CONTROL, WHEN FURTHER GROWTH MUST BE PLANNED..."

– GEORGE EDWARD KESSLER

CURRENT CONDITIONS

URBAN DESIGN

The City's urban design is the sum of the design of all its individual elements, both the built environment and the natural environment, and their relationship to one other. Primary elements of the built environment include public open spaces, buildings, site design, streetscapes, parking, and signage. Primary elements of El Paso's natural environment include trees, plantings, arroyos, mountains, and other features of the landscape.

Urban design is a response to an existing set of conditions. The response to these conditions is functional in nature but also reflects social, economic, political, aesthetic, and symbolic intentions. Urban design is a mix of problem-solving and art. It is a willful act.

El Paso's urban design represents a mosaic of solutions to accommodate human activity under different sets of conditions and in the pursuit of a variety of different goals. As an art however, urban design is more than the satisfying of purely functional requirements of a building program. The end result of urban design efforts define the character of a City.

Good urban design allows for the future redevelopment or reuse of areas in a way not necessarily perceived when originally designed and constructed. It also allows flexibility of use and allows areas to reinvent themselves over time as popular attitudes shift.

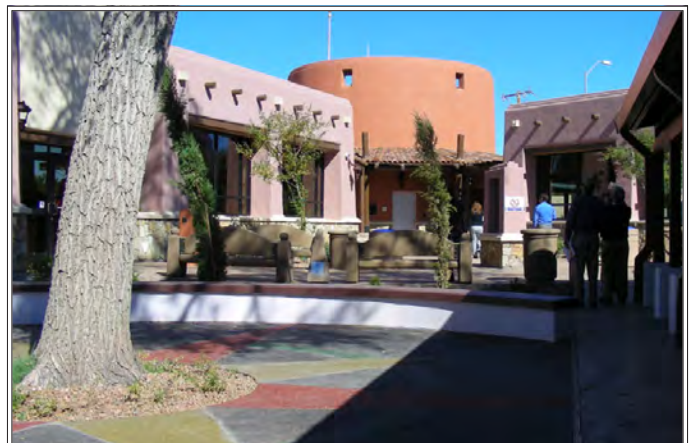
The overall urban design of a City ties together the physical planning with land use and policy planning. Where the urban design of El Paso has been successful, places were created that people have enjoyed, reused, and taken care of for generations.



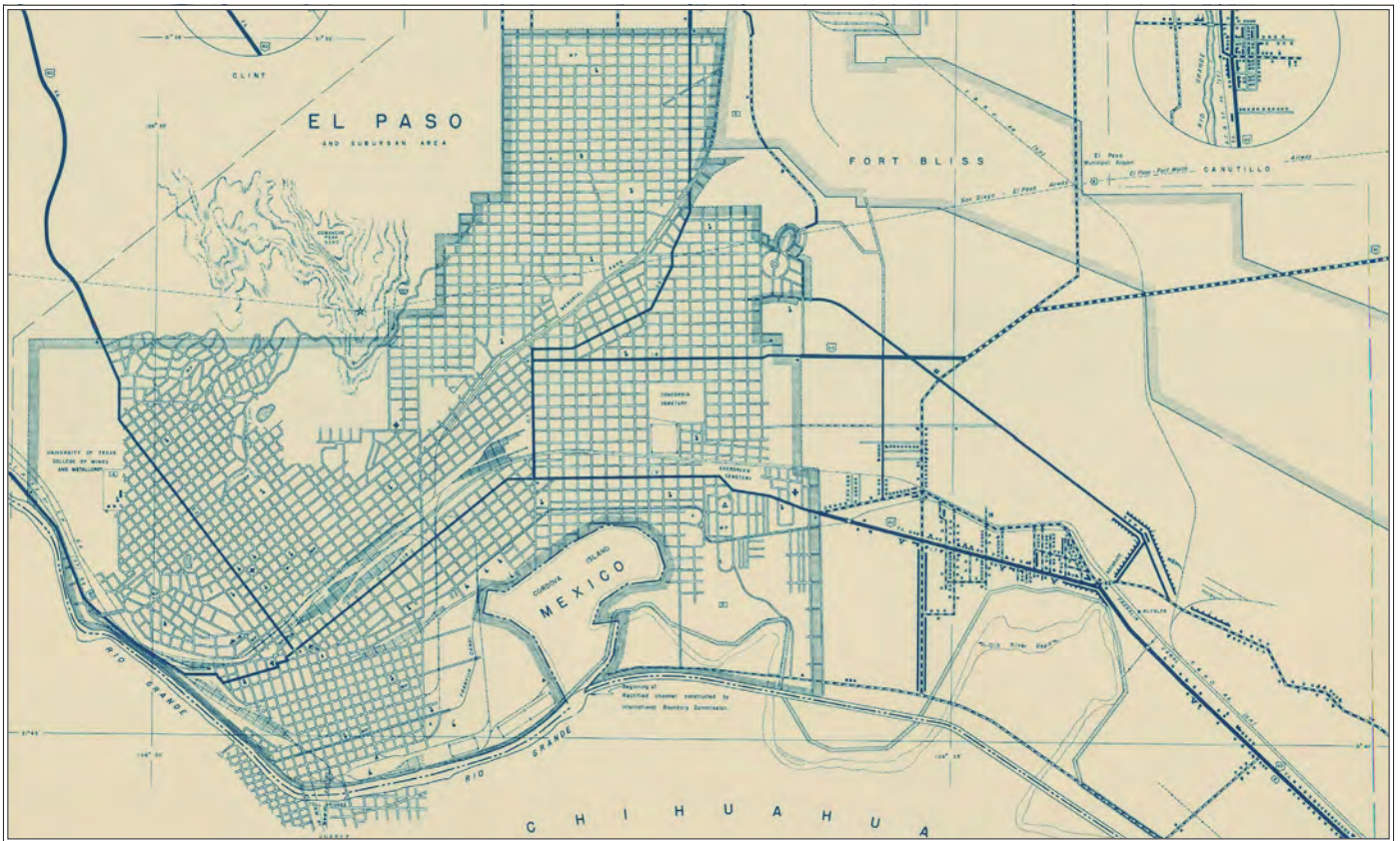
South El Paso Street



Madeline Park

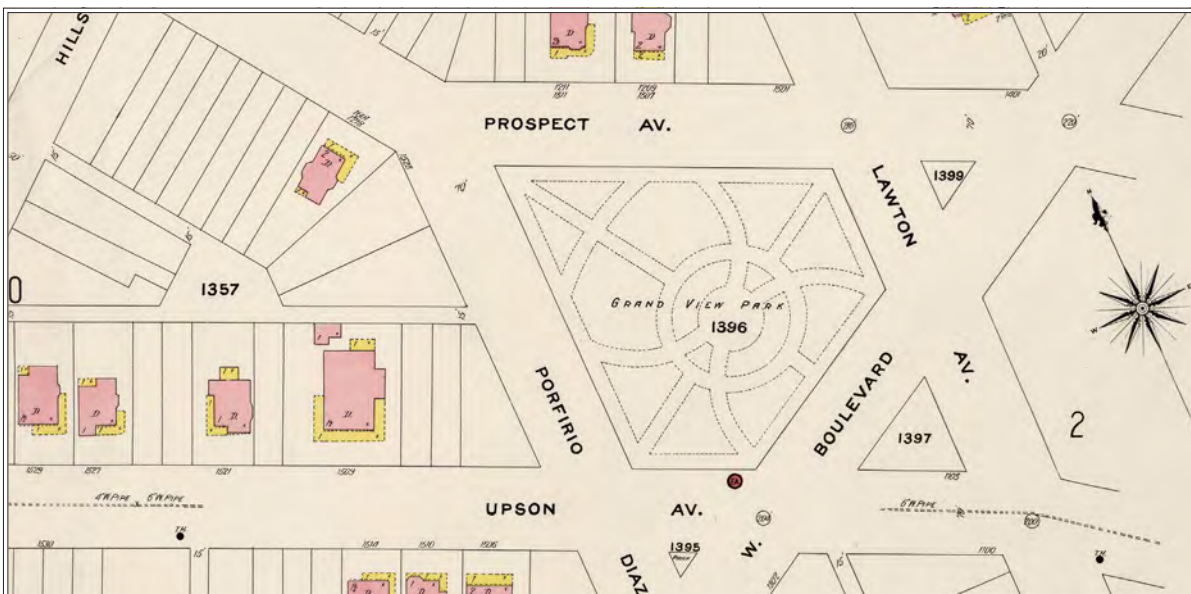


Nestor A. Valencia Mission Valley Transfer Center



Street Map, 1940

The Downtown grid laid out by Anson Mills is evident in the 1940s street map. On the east side of the Franklin Mountains the grid shifts from an alignment based on the Rio Grande River, streets of Juárez, and railroad, to one based on cardinal directions: north, south, east, and west. The grid has proven resilient to the fluctuations of market and international relations and has hosted a myriad of different uses throughout history.



Sanborn Map, 1908

Historically, where street grids are made irregular to adapt to topography, such as at Mundy Park, the resulting geometry varies from the typically orthogonal, square block pattern of El Paso. These formal, triangular symmetries are used to reconcile the irregular shape. Homes vary in size on the same street and all homes face the public space with front porches.

DOWNTOWN

Within Downtown, El Paso hosts a variety of urban open spaces. San Jacinto Plaza, Cleveland Square Park, and the Arts Festival Plaza are high-profile spaces which see an increasing amount of use. Neighborhood pocket parks like Armijo Park, Tula Irrobali Park, and the linear greens of 8th Avenue have continued to be the centers of the South Central and Chihuahuita neighborhoods.

The City has created a central pedestrian system of greens, plazas, comfortable streetscapes, and pedestrian passages connecting the Union Plaza District, Civic Center, Pioneer Plaza, Plaza Theater, Art Museum, and San Jacinto Plaza within the Downtown core. These pathways cater to visitors from both outside the City and residents by offering an interconnected network of destinations.

This system is incomplete in segments, however, and this is where pedestrians face hostile environments. These places are the result of streets that lack pedestrian amenities like sidewalks and street trees. They are often wide, high-speed, one-way streets, and with buildings which do not address the street. These problematic features create uninteresting, even dangerous, unwatched areas.

Filling in the gaps in the pedestrian system Downtown has been part of a larger initiative to revitalize Downtown El Paso. This initiative has included building public and private sector partnerships to stimulate investment in mixed-use developments for vacant infill properties, and encourage business owners to rehabilitate historic structures. Downtown-wide parking strategies to build structured parking help to address the parking demand that once encouraged the tearing-down of buildings and squares.



San Jacinto Plaza is a versatile space surrounded by a showcase of landmark buildings.



Public spaces, such as the space between Pioneer Plaza and the Arts Festival Plaza, offer a walkable environment with outdoor dining.



The historic neighborhood parks of Segundo Barrio and Chihuahuita have local, year-round use.

NEIGHBORHOOD PUBLIC SPACES

El Paso has a wide spectrum of park spaces of varying degrees of functionality and quality.

Neighborhood parks created prior to World War II, like Mundy Park and Madeline Park, date from a period in which the park was considered a prime selling feature for the neighborhood and it was designed accordingly. As automobile ownership increased and neighborhoods were built in less walkable and connected formats, recreational space has become privatized in the form of larger personal yards. The quality of the neighborhood public spaces has decreased in recent decades with most new neighborhood open spaces being minimally equipped simply to satisfy requirements within the subdivision code.

Arroyo Park is one of the few neighborhood parks created from an arroyo. Arroyo Park forms a distinctive edge between the Kern Place and Rim-University neighborhoods and features a scenic drive along its edge, and recreational facilities such as tennis courts and mountain bike trails. By contrast, in most recent neighborhood designs, the arroyos are eliminated, replaced with a relatively small concrete channel and walled off, transforming the historic value and beauty of the land into a drainage ditch.

Several recent initiatives bode well for the future of El Paso's new parks. In an ongoing initiative to improve the usability and attractiveness of public spaces created through the subdivision process, the City has lowered the minimum size requirements of parks to give them a more comfortable scale. The City also requires a row of tree plantings around the perimeter of the parks and encourages developers to include public facilities like playgrounds.



Most recently built open spaces meet large, mandated size requirements but have few other positive features. Surrounding homes are often situated with their backs turned to these spaces.



Small neighborhood parks were once developed as amenities. The increase in adjacent property values resulted from thoughtful design.



Arroyos can make spacious, interesting park spaces with long trails, like at Arroyo Park.



New open spaces that are designed as pocket parks, with less acreage but with more programming, are becoming more common in the City.

BUILDING TYPES

Building Types

The building types illustrated in the master plans are types already found in El Paso. In some cases they are El Paso's most prized addresses though often not currently allowed to be built under the existing zoning and land development regulations. The permitted relationship of buildings to the public space and to one another should be calibrated from successful existing relationships already found in El Paso. Many of the best building types, and the public realms that they shape, preceded the current regulations. The building types and outdoor spaces the community wishes to emulate can be studied, codified and built new in other areas.



Mixed-use Building



Live/Work Building



Apartment Building



Mansion Apartment



Duplex House



Small House



Neighborhood Commercial Building



House



Mansion House



Accessory Dwelling Unit



Civic Building

Building Style

New homes and buildings should observe local architectural patterns for renovating or building new. The purpose of this is to preserve local culture and social traditions. Architectural quality also facilitates local acceptance of infill development by respecting the existing context.

The various styles of El Paso architecture all share a common intention - to provide relief from the sun while capturing as many breezes as possible. Generously scaled porches, tall ceilings, full-height windows, shade gardens, porch fans and wood shutters all distinguish the traditional architecture of El Paso and the desert southwest from elsewhere in the country. In addition to individual elements, desert southwest architecture possesses certain compositional features discussed below.

Simplicity

Most traditional architecture is simple. Its beauty is to be found in its balance, order, proportion, and compositional harmony. A traditional house is often a simple form, like a rectangular box, with secondary subordinate masses added.

In general buildings should be rectangular in plan with more complex massing achieved by adding simple masses. Additive massing allows incremental enlargement of buildings over time. The aggregate complexity of the building maintains a sense of order because one mass is dominant over other smaller masses.

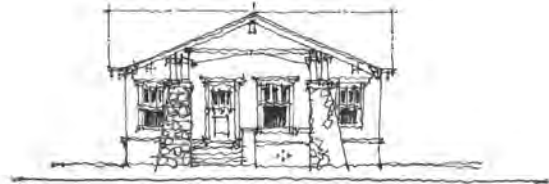
The most important building elements, such as a generous porch or a well-designed door surround, should be emphasized. This should be balanced by simplifying other elements. This creates a hierarchy where attention is focused on a building's most important parts. A well-balanced design should be interesting but not overwhelming or confusing.

Decoration should respect the hierarchy of building elements in a façade. It should also respect the hierarchy of the building's importance within the neighborhood. Background fabric buildings should typically be less ornate than civic or focal buildings.

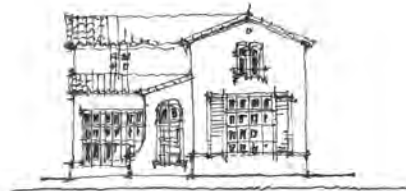
Practicality

The elements of traditional El Paso buildings are based on engineering necessity and exhibit a decorative frugality. Decorative elements with no functional purpose are rare and when done, are understated.

Traditional building elements evolved for practical, functional reasons. Shutters provide security and protect windows during storms. Dormers provide light and air for attic rooms. Simple massing and standardized proportions were used because it is less expensive and easier to construct buildings that are not unnecessarily complicated.



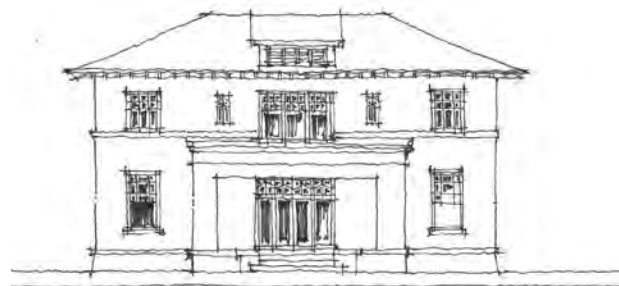
Small House: Craftsman



Small House: Spanish Revival



Corner Duplex: Pueblo-Colonial



Large House: Craftsman

Modern building materials such as waterproof membranes and sealants have reduced the pragmatic need for practical traditional details. This unfortunately often results in traditional building elements that are detailed in ways that look as though they would not actually function.

When traditional building elements are used, they should look as though they could actually perform their task. Think of the practical reasons for a traditional building element being used and ask – could it really work? Shutters for instance, should ideally be operable, but at least look like they are capable of covering the windows with which they are paired with. Purely decorative touches should resemble their historic, functional appearance. The discipline of architecture has formalized the arrangements and proportions of classical and traditional elements. Columns and entablatures, when done correctly, have looked fairly consistent through time.

Apparent Structure

Contemporary construction methods such as long horizontal spans and cantilevers have made possible buildings that visually appear to defy structural logic. These gravity-defying details can be very disconcerting to the eye when applied in a traditional building.

When designing, keep in mind the structural characteristics of traditional materials being employed, even if hidden structural elements are used. Wood has more tensile strength than masonry, and therefore may span further if used as a trabeation. Masonry has greater compressive strength than wood but cannot span as far, unless configured as a load-bearing arch. Therefore door and window openings are narrower. Columns should be sized appropriately for the mass and proportion of structure above them. Brick spanning an opening should be supported by a lintel or arch. Details that look like they could work structurally give a feeling of comfort and permanence to the building and neighborhood.

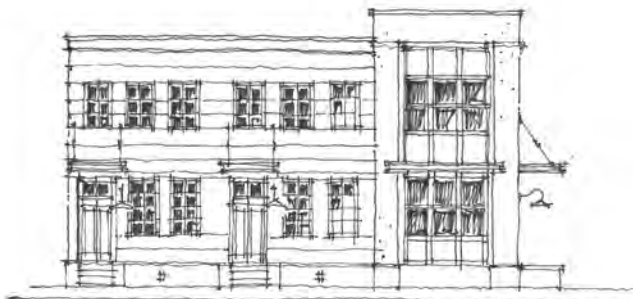
Texture

New traditional buildings should be designed with texture so that the complexity added by shadows becomes a part of the composition. Windows should be set in a few inches to provide depth and a feeling of substantiality. Eaves and moldings should be designed with authenticity and the shadows they cast in mind.

Creativity

It must be stated that the purpose of these guidelines is not to stifle individual creativity. Commodity, firmness and delight remain the first principles of architecture but the way of achieving these goals remain open to interpretation.

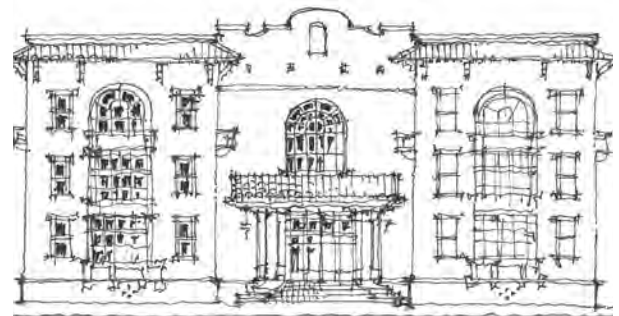
There is no substitute for an architect who can dedicate their skill and training to each individual project. However, the ultimate judge of architectural quality is the general public and their values are to be discovered in the buildings that have been preserved and protected through the generations.



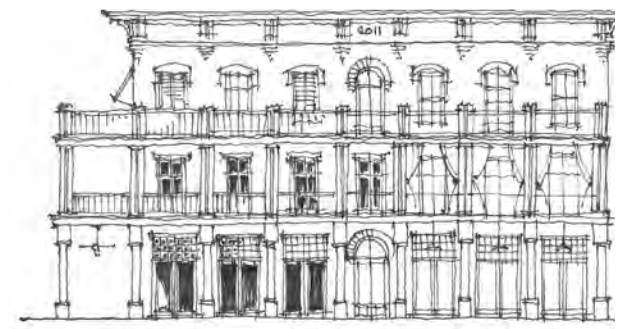
Townhouses: Contemporary



Townhouses: Mission-Spanish



Apartment Building: Mission-Spanish



Mixed Use: Italianate

ARCHITECTURE

El Paso's historic architecture includes buildings designed artfully with both function and beauty in mind. They showcase a variety of styles. Neoclassical, Beaux Arts, Italian Renaissance, Prairie, Craftsman, Modern, and International, with a particularly strong emphasis in Mission, Spanish Eclectic, and Pueblo Revival. In every style, adjustments have been made to adapt to the regional climate. Overhangs, recessed doorways and windows, colonnades, arcades, and a maximum provision of natural ventilation, sunlight, and views characterize El Paso's historic structures.

Historic missions and communities, like Ysleta in Mission Valley, tend to be of an Adobe style. Downtown El Paso hosts unique historic architecture including the Union Depot built in 1905-1906 and designed by Daniel Burnham in a Neo-Classical Revival Style. One of the most prolific architects was El Paso resident Henry C. Trost (1860-1933). Trost designed over 200 buildings in El Paso, including the Abdou Building, Camino Real Hotel, the Newberry Building, the Basset Tower, the Palace Theatre, the Plaza hotel, Singer Sewing Company Building, State National Bank Building, and the recently renovated White House Building.

The University of Texas at El Paso (UTEP) has its own unique architectural style depicted throughout its campus. Beginning in 1917 the school adopted a Bhutanese style of architecture. The distinct architecture unifies the campus and sets it apart from the rest of the City.

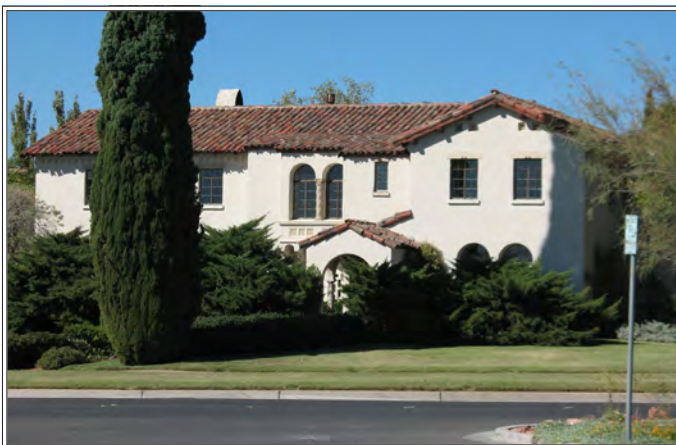
Residential architecture throughout the City is eclectic. Older residential neighborhoods close to the Downtown have buildings in a variety of styles.



Monumental civic buildings like the Scottish Rite Temple are recognizable landmarks in El Paso.



Multi-family housing in Downtown El Paso accommodates numerous households of differing income levels.



The Spanish Mission style responds to climactic conditions with wide eaves and strategic use of windows to control the heating effect of the El Paso sunlight.



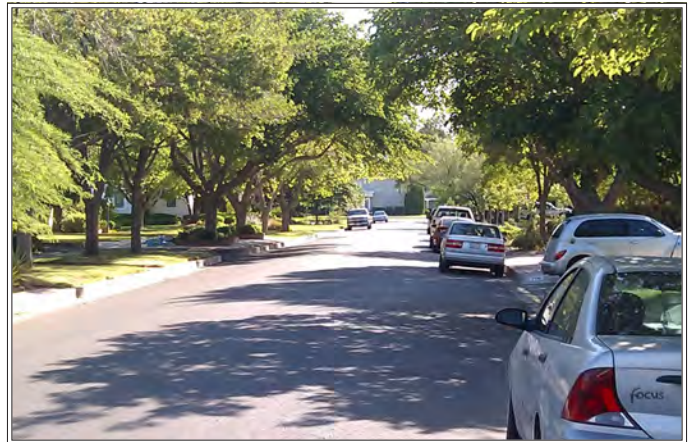
Henry C. Trost's largest concentration of buildings anywhere in the country can be found in El Paso. Trost & Trost architects was a firm of national repute at the turn of the 20th century.

STREETS

The design of El Paso's streets has evolved over time as the design of neighborhoods and commercial centers have changed. Streets were once multimodal, accommodating pedestrians and the streetcar as well as the automobile. Once street designs began to change to formats that only accommodated cars, automobiles became dominant and eclipsed the other modes of transportation.

In the City's historic pre-auto neighborhoods, trees continue to improve property values and establish a sense of place. Urban street trees are planted in aligned rows, with regular spacing using consistent species. Proper, formal tree placement shapes public space, produces shade continuous enough to make walking viable, and has a calming effect on traffic. The street trees which have endured through the years are typically native species which are drought and pollution tolerant.

An essential distinction of the City's vibrant, pedestrian-oriented districts, like the Union Plaza District, South El Paso Street, and Cincinnati Street, is that the whole public space is designed as an ensemble. Auto elements (such as travel lanes, parking, and curbs), public components (such as trees, sidewalks, and lighting), and private elements (shopfronts and buildings) are coordinated to create a unified outdoor space.



El Paso's historic neighborhoods benefit from an investment in the public realm with wide planting strips, street trees, and on-street parking.



Many of El Paso's post-war neighborhood streets are unfortunately designed with the sole purpose of moving traffic quickly, and feature few pedestrian amenities.



South El Paso Street has seen over a hundred years of changing uses yet continues to thrive by preserving the pedestrian realm.



Wide streets with one-story buildings and parking between the building and the street are typical of El Paso's arterial roadways.

LANDSCAPE

Located in the Chihuahuan Desert, at the base of the Franklin Mountains in the Rio Grande Valley, El Paso is home to a wide variety of habitats. El Paso hosts many areas where long-maintained landscape elements define public and private spaces, provide well-shaded parks and plazas, and create aesthetic appeal, while granting environmental benefits. Increasingly, the City and its residents are using drought-tolerant landscape and porous ground coverings. Native, naturalized plants and xeriscaping are becoming more frequently installed than imported trees and plants.

Many desert plants, especially some species of cacti, are fragile and slow-growing. Once impacted by development, they may take decades to return to their former state. For this reason, neighborhoods developed without innovative site design practices to preserve existing vegetation must either make a concentrated effort to plant new trees and care for them or go indefinitely without any vegetation.

There is a tradition of stone walls in the City that utilizes locally quarried rock. Local materials and low rock walls can improve the visual appearance of the City when used in moderation. The stone walls are most appealing when they are used to define the edge of property and help to define the space between public and semi-public areas. When taller walls are needed, the low stone wall can be used as a base for a more transparent material such as wrought iron. Unfortunately, the wholesale walling off of neighborhoods with tall, solid rock walls has created unwatched streets and high walls have become the dominant visual image of the City for people traveling the along the City's arterial roads.



Native, drought-resistant plants used with pervious surfaces, like local gravel, create varied landscapes.



Formal greens with tree cover and long views mark some of the City's most choiceworthy public spaces.



Grand public lawns of sod are used effectively when they also serve as drainage facilities such as at the UTEP Biosciences Research Building.



Stone walls of local granite unify the built environment with the natural environment.

PARKING

Perhaps the greatest determinant of urban design in El Paso at present is the way in which parking is handled. Parking can be planned unobtrusively in parking decks lined with buildings (such as at the Oregon Transit Station), at the rear of urban blocks, or underground (such as at the Camino Real Hotel); valuable parking can also be provided on-street (the historic neighborhoods of the Rim Road, Sunset Heights and Manhattan Heights are examples).

On the other hand, parking lots located in front of buildings make modes of travel other than automobiles inconvenient, if not impossible. Walking or biking between destinations becomes dangerous and uncomfortable (as in the case of most of Mesa Street). Unlined parking garages (as is present at the Civic Center and at the Union Plaza Transit Terminal garage) create long, unwatched, and tedious environments. Excessive impervious areas like parking lots can also accelerate stormwater run off, overwhelm natural hydrological systems, and lead to flooding.



The Union Plaza Transit Terminal garage is an asset to the Union Plaza District because it provides plentiful parking. However its blank ground level façades have a dampening effect on other street activity.



Residents in historic neighborhoods rely in part on on-street parking to satisfy their parking needs.



Architectural detail loses much of its effect behind large parking areas.

LIGHTING, SIGNS, & UTILITIES

The location and scale of lighting, signs, and utilities in El Paso is typically a response to the uses and character of areas.

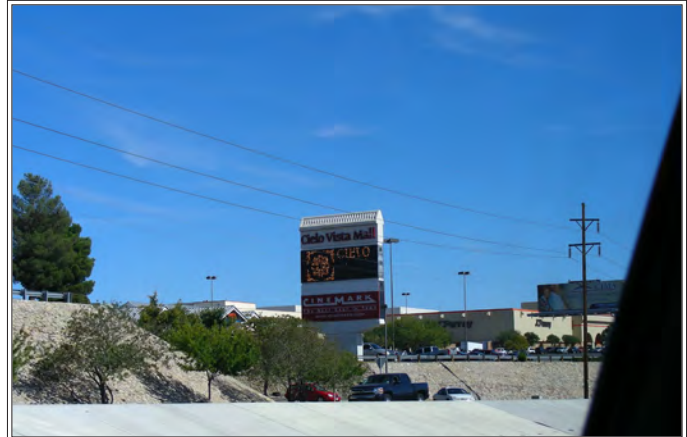
Lighting and signage in pedestrian-oriented areas and along major thoroughfares are very different in nature. At times, highway-appropriate lighting and signage occur in pedestrian environments where they should be small and focused toward pedestrians and not vehicles. Lighting, road signs, and other street furniture often interrupt sidewalks and the pedestrian realm, inhibiting pedestrian circulation. A critical component of creating a scenic corridor is control of signage along the roadway. Uncontrolled signage becomes a blighting factor and promotes a negative image which affects tourism, investment decisions, and economic development.

Lighting for major thoroughfares tend to come from large “cobra head” fixtures because of the need to light large areas brightly to increase visibility for drivers, especially at large interchanges. Lighting for pedestrians should come from smaller scaled lamps, and then fixtures do not need to be as bright. The use of lower light levels and “dark sky compliant” fixtures also helps to reduce light pollution throughout the community.

Tall signs are prevalent along major thoroughfares throughout the City. These large billboard type signs, detached from buildings, became common with strip shopping center development. They are intended to catch the eye of drivers as they zip by on busy, fast moving thoroughfares. Signs tend to be large, numerous, complex, and located away from buildings and next to roadways in order to increase the amount of time a driver can see and read the sign as they drive by with time to slow down and pull off the main thoroughfare to reach their destination.

Signs on historic buildings within the Downtown are different from the shopping center signs. Although some of them are large, they create identity and wayfinding. Some signage is incorporated into the architecture of buildings and becomes a natural part of the façade. This type of signage enhances and defines the architecture of a building.

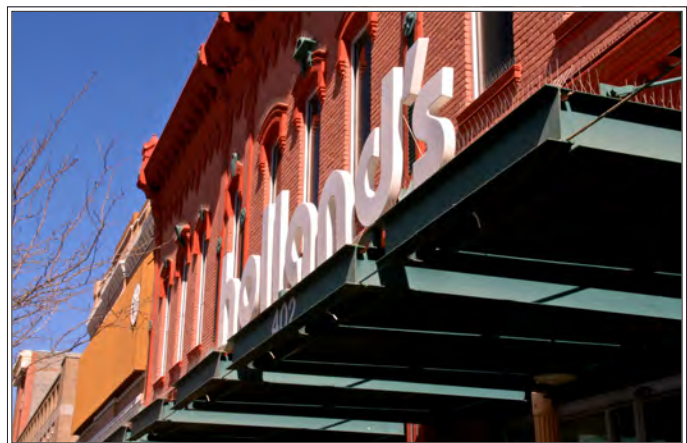
In the older parts of the City, utilities are located within the alleys, freeing the main thoroughfares from the visual clutter of utility poles, overhead wires, mechanical equipment, and utility boxes. The newer suburbs and more rural parts of the City do not have alleys and so utilities are located within the public streets, often within the limited pedestrian zones. At the building level utilities are often located facing streets or on roofs with no screening, to the detriment of the community.



Large monument billboard signs detached from structures are visible to cars along the highway.



Signage that is incorporated into the architecture of the building helps to enhance the character of the Downtown.



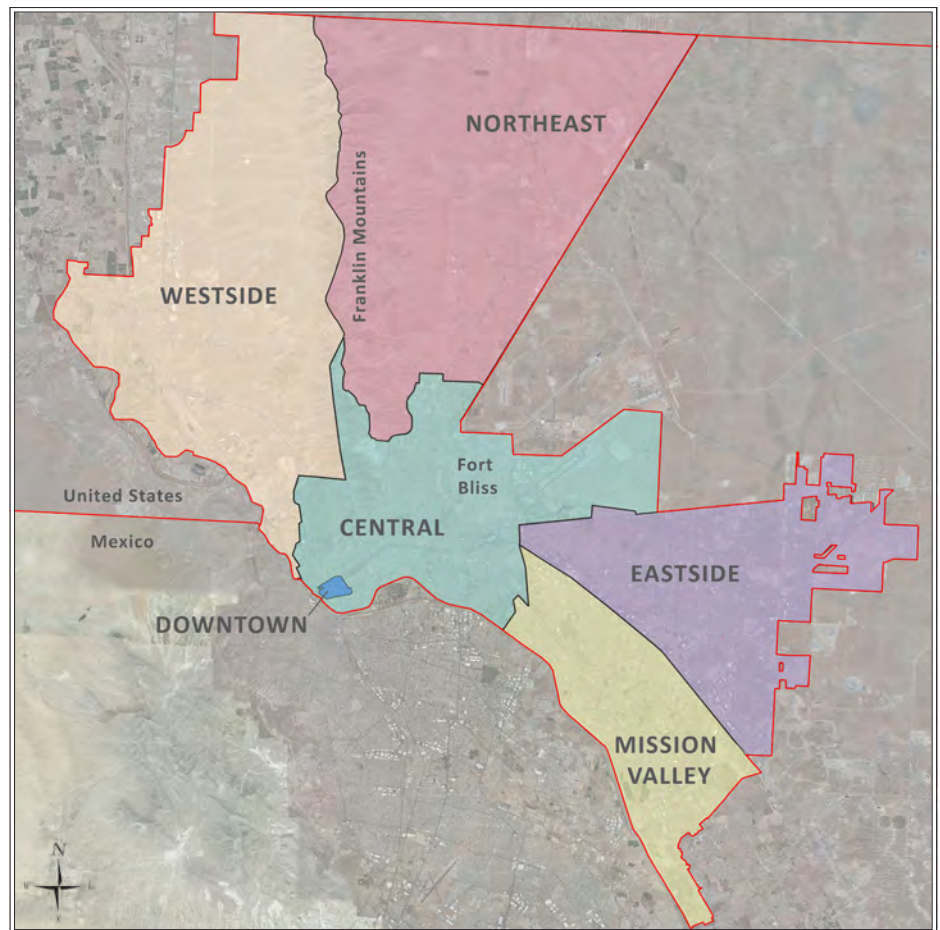
Simple vertical lettering above a marquee is visible to both pedestrians and vehicles.

COMMUNITY CONCERNS

ONE SIZE DOES NOT FIT ALL

El Paso is diverse and the urban design concerns and strategies for each area of the City differ depending on the current form of development, varying types of development pressures, and physical characteristics. Although some community concerns are universal, specific concerns for each sector of the City (Central, Westside, Northeast, Eastside, and Mission Valley) have been addressed in following sections. This section focuses on the overall community's concerns followed by strategies for addressing them.

Within each main sector, there is a focus on redevelopment opportunities and strategies for reimagining the existing environments into viable, flexible, development patterns that meet many of the City's overall development goals.



Areas of the City

Respond to Context

The City of El Paso has three distinct geographic areas that should each be approached with different strategies: the desert, the mountains, and the valley.

The desert areas of the City are areas where a majority of growth has taken place and can be subdivided into West, Northeast, and East. Further development in these areas should concentrate on enhancing, connecting, and retrofitting existing urban areas with sustainable development in an ecologically responsible manner.

The mountains are an important natural resource that should be protected. The most significant natural areas are protected by Franklin Mountain State Park. Beyond the protected areas, there is a significant amount of development that has taken place at the foot of the Franklin Mountains. Further development in these areas should respect the natural topography of the land and protect the arroyos. These natural features serve as invaluable natural drainage features and natural wildlife corridors while achieving the goal of a more livable and sustainable city.

The valley contains the only productive irrigated farm land in the region, and as such is a unique and important resource for the City that should be preserved. Irrigation ditch corridors are also used for recreation by hikers and horse owners. The area affords the City a unique rural environment that many residents value. Any development in this area should preserve farmland areas and the rural character that surrounds them.

Recent Development Does Not Resemble Favorite Places

The L&J Cafe on Missouri Avenue receives the highest reviews from residents from all over El Paso for many reasons, but one is that it is a restaurant with an authentic neighborhood feel. The historic structure was built to fit within the neighborhood. It is not surrounded by a field of parking. It is, instead, right up to the street, and the building's parking is along the street. The signage is small pedestrian-scale, and the building's architecture is authentically from El Paso. No new restaurants have the charm of L&J Cafe, though its formula for success – its design – is entirely replicable.

Each generation in El Paso inherits the legacy and responsibility handed down from predecessors such as Anson Mills, Henry C. Trost, and Daniel Burnham. El Paso residents are charged with managing change so that ecology, economy, and culture are sustained and advanced. The keys to this are straightforward: first, to adhere to the lessons in reliable precedents, and second, to treat each planning decision as an important part in a cumulative chain of events.

El Paso's community character is not the result of piecemeal development; El Paso's character is found in its compact, connected historic neighborhoods, rural valley preservation, and Downtown. El Paso could improve its quality of life and gradually construct an enhanced human habitat by growing more complete neighborhoods – if growth and reinvestment can be channeled into positive physical forms, and each new debate about growth is approached with a problem-solving attitude.

To meet this challenge, El Paso must strive to restore its existing urban centers and neighborhoods, reconfigure sprawling suburbs into communities of real neighborhoods and diverse districts, conserve natural environments, and preserve El Paso's built legacy.

Place Buildings by the Street; Place Parking in the Rear & On-street

Parking should be located on-street and behind buildings in mid-block parking lots or parking garages that are lined with buildings instead of in fields of parking in front of buildings. This will allow buildings to be street-oriented and enhance the public space of the street by making it accessible to multiple modes of transportation, such as pedestrians and bicyclists in addition to vehicular traffic.

More Useful Public Spaces

During the charrette process, community members expressed the desire for a “greener” El Paso. Participants stressed the need for more street trees, useful park spaces, and connections between parks. As a result, in this plan importance has been placed on balancing infill development and redevelopment with restoring and protecting open space. San Jacinto Plaza is a model of a “Law of the Indies” urban park that serves the entire community. It contains public art, connectivity through the park, shade trees, seating for people, and a pavilion for concerts. Most new subdivisions contain public park acreage due to City regulations, but these spaces are often devoid of activity due to a lack of programming, shade of any kind, and access. The lack of in-depth planning for neighborhood parks leaves them underutilized and often buildings literally turn their backs on them. Although large open lawns in parks can be useful for playing pick-up sports games, residents want more activities in their parks, even if the end result is a smaller park. Residents also desire playgrounds shaded by canvas while shade trees are established and have time to grow. They also want their parks connected to a larger system of City parks with walking and biking trails.

Access to larger urban parks is preserved in El Paso through parks like Arroyo Park and the Franklin Mountains State Park. Other opportunities for large urban parks, similar to Arroyo Park, should be explored in each part of the City.

Prioritize Streets for Walkability

Corridors such as Mesa Street and Alameda Avenue are being converted into transit spines as part of the El Paso Rapid Transit System (RTS) Plans. These corridors (especially Mesa Street and Alameda Avenue) and the areas around transfer stations and bus stops should become prioritized streets for walkability. All transit users begin and end their journeys as pedestrians. Prioritizing streets for walkability enlivens the areas around transit and bus stops to attract more users and to help businesses close to stations thrive. Creating higher quality pedestrian environments makes transit options more effective. Transfer stations should be integrated within a surrounding city-style form of mixed-use centers. This will attract users for transit services.

The paths along streets to the transfer stations or bus stops should be direct and pleasant. They should be of the highest pedestrian quality and not pass across or by exposed parking lots, blank walls or other dead zones that are unpleasant to pedestrians.

Prioritizing for walkability along the transit corridors will attract more pedestrians along the route and also make a more pleasant environment to drive and ride through. A street tree campaign should be started to increase the planting of street trees.

New Neighborhoods Discourage Homebuying

El Pasoans expressed that new neighborhoods in East, West and Northwest El Paso were not inviting or attractive. This sentiment was expressed especially by young people, currently renting apartments, who said that they could not muster enough enthusiasm for purchasing in the new neighborhoods. El Pasoans state that the historic neighborhoods tended to be out of the price range of first-home buyers. New subdivisions routinely present a wall to major streets and look uninviting. Subdivision life was described as “dull” and “boring.” New architecture displays a mismatch of styles, and lack a proportional logic. Charrette participants said that the development community “should plant more trees,” “should hire architects,” and make the subdivisions look “less cookie-cutter.”

More Walkable, Mixed-use Neighborhoods

Every new neighborhood in El Paso should incorporate some level of mixed-uses and be designed with pedestrians and cyclists in mind. Having living, working, shopping, educational, and recreational opportunities in close proximity (within walking or biking distances) is an advantage of growing importance as cities mature. Specialized developers can form joint-ventures in order to achieve a mixed-use community without having to alter their business models significantly.

In addition to a mix of uses, neighborhoods should strive to have a diversity of housing types to limit the monoculture of suburban housing. This will help to create affordable housing throughout the City without creating large concentrations of any one type of housing. A diversity of housing also allows a variety of people in different stages of their lives to live harmoniously together, generating a more stable, active community.

STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS

Appropriate Signage and Lighting

Signage and lighting should be selected based on its appropriateness to its context. Highway auto-oriented lighting is appropriate along major thoroughfares, but should not be used in neighborhoods or urban, pedestrian contexts. Pedestrian-scaled lighting used in pedestrian-oriented environments provides enough light for pedestrians and motorists while not overly flooding the night sky with unnecessary harsh lighting. Pedestrian-scaled lighting is typically characterized by shorter light poles (less than 15' tall posts), lower levels of illumination, and shorter spacing between lamp posts. Dark sky compliant lighting fixtures can also help reduce light pollution throughout the city. Although lower levels of light are typical in pedestrian areas, adequate pedestrian lighting at intersections, mid-block crossings, and transit stops are essential for pedestrian safety.

Signage should also be context sensitive. Signage along highways and strictly auto-oriented corridors tends to be oversized and detached from buildings (because buildings are not street-oriented, but sit behind fields of parking). This is so that speeding cars have enough time to see signage and are able to slow down and turn as they approach a desired business. Conversely, in more pedestrian-oriented environments, all modes of mobility move slower. Pedestrians, bicyclists, and motorists are all moving at slower speeds. This allows for signage to be smaller and scaled more toward the pedestrian. Even slow moving cars have the ability to see signage and slow down to turn at the next intersection to loop back to a business or access parking in mid-block locations.

Leadership in Energy and Environmental Design for Neighborhood Development (LEED-ND) and Urban Design:

The LEED for Neighborhood Development rating system was created to provide an objective system for evaluating neighborhood-scale “smart growth,” “livability,” and “green development” given the many varying interpretations of these terms. LEED certification was originally used to evaluate single architectural projects but was expanded to include neighborhood development. LEED-ND was created by the United States Green Building Council (USGBC), the Congress for the New Urbanism (CNU), and the Natural Resources Defense Council (NRDC).

LEED-ND criteria encourage healthy living, reduce urban sprawl, and protect the environment. Each illustrative plan within this Comprehensive Plan was designed to meet LEED-ND criteria; however, full certification is not possible until the project is constructed. LEED has four levels of certification: Certified, Silver, Gold, and Platinum. Certification is based on three categories for evaluating development: Smart Location and Linkage, Neighborhood Pattern and Design, and Green Construction and Design.

While it may be tempting to simply require all new development in El Paso to be LEED-ND Certified to insure the highest level of performance, this is often not realistic given physical, economic, institutional, and political challenges. LEED-ND can continue to provide an objective guideline. However, the most relevant principles from the system have been translated into Comprehensive Plan Goals and Policies, with many tailored to the particular challenges and aspirations of El Paso.

CENTRAL: COMMUNITY CONCERNS

A large portion of the central sector of El Paso consists of the Downtown. Specific strategies for addressing the Downtown core have been addressed in previous plans and studies such as the 2006 *Downtown Redevelopment Plan* and *Plan El Paso 2010: Connecting El Paso – Building Transit-Oriented Neighborhoods and Redeveloping ASARCO*, as well as the Downtown Element of this Comprehensive Plan. Because Downtown is covered in detail elsewhere in the Comprehensive Plan, and in corresponding plans, this section on urban design in the Central sector addresses the area outside of the Downtown core.

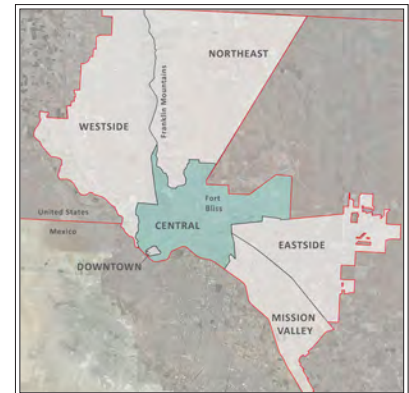
Segundo Barrio is Not Downtown

Segundo Barrio is a neighborhood adjacent to Downtown in the same way as Sunset Heights. As such, the strategies for addressing this historic community should be different from strategies for the Downtown. As investment and revitalization of the Downtown occurs, the large-scale development of the Downtown need not bleed over into Segundo Barrio. Preservation and infill should be the focus of strategies for the neighborhood in order to enhance the community, without pricing the present inhabitants out of the market.

Enhance Mesa Street and the Entertainment District

Mesa Street from the Downtown area to Glory Road is a bustling collection of restaurants and small businesses, culminating in one of El Paso’s two “entertainment districts” at Cincinnati Avenue. The community desires for this stretch of road to behave as a multimodal street and become more than just a throughway to the Westside of the City. This area, adjacent to UTEP and running parallel to the improved Oregon Corridor RTS line, is utilized by many students and others that arrive by transit, bike, or on foot. In order to help the corridor thrive and make it easier for people to access businesses, the streets should be enhanced with wider sidewalks, bike facilities, on street parking, and street trees to allow accommodations for all modes of travel.

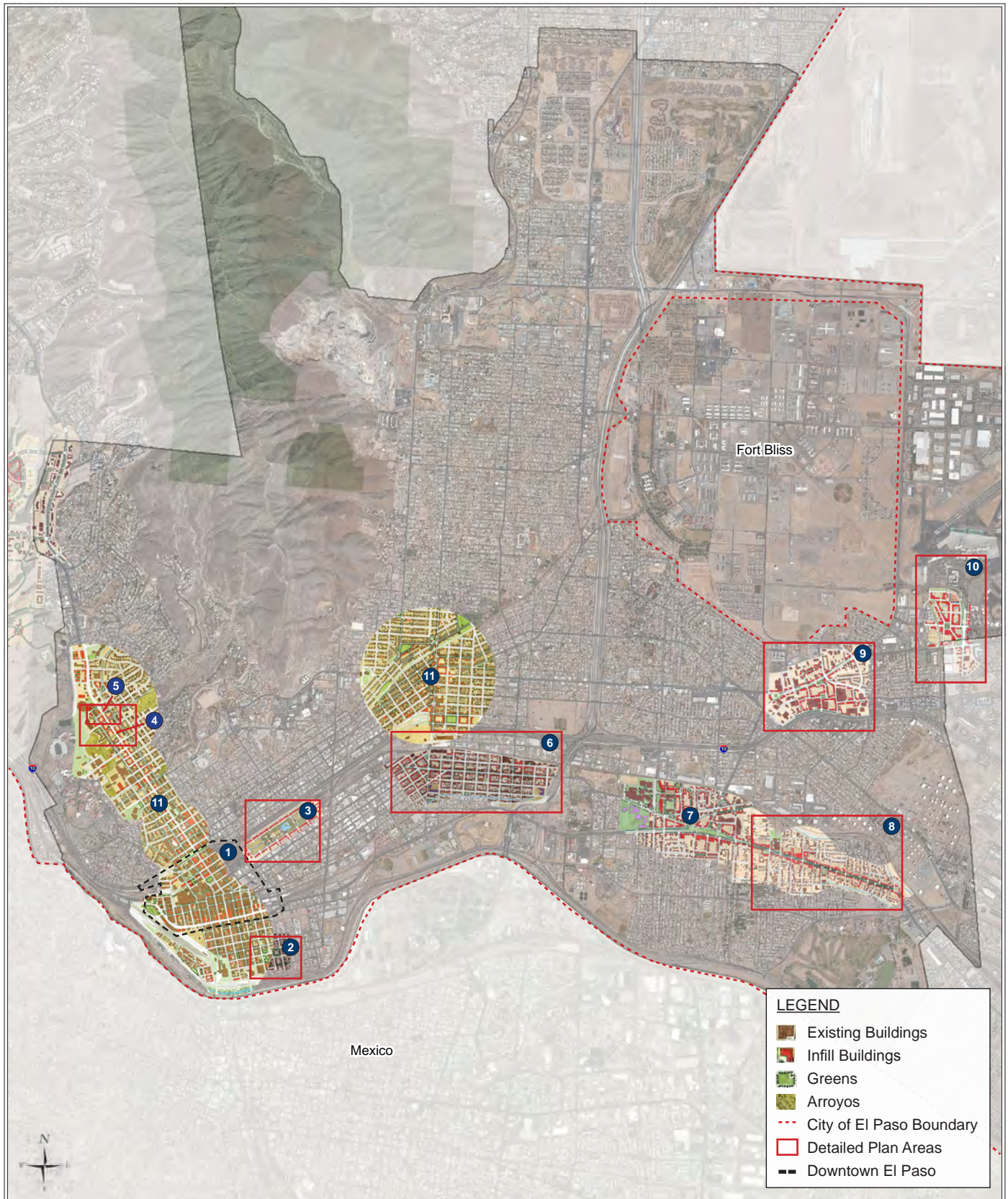
Small surface parking lots currently line Mesa Street between the right-of-way and businesses, creating numerous curb cuts and separating businesses from one another. The new Glory Road Transfer Station at the end of the Oregon Corridor provides additional parking at the end of Cincinnati Avenue, which should offset the need for some of this surface parking.



Illustrative Plans

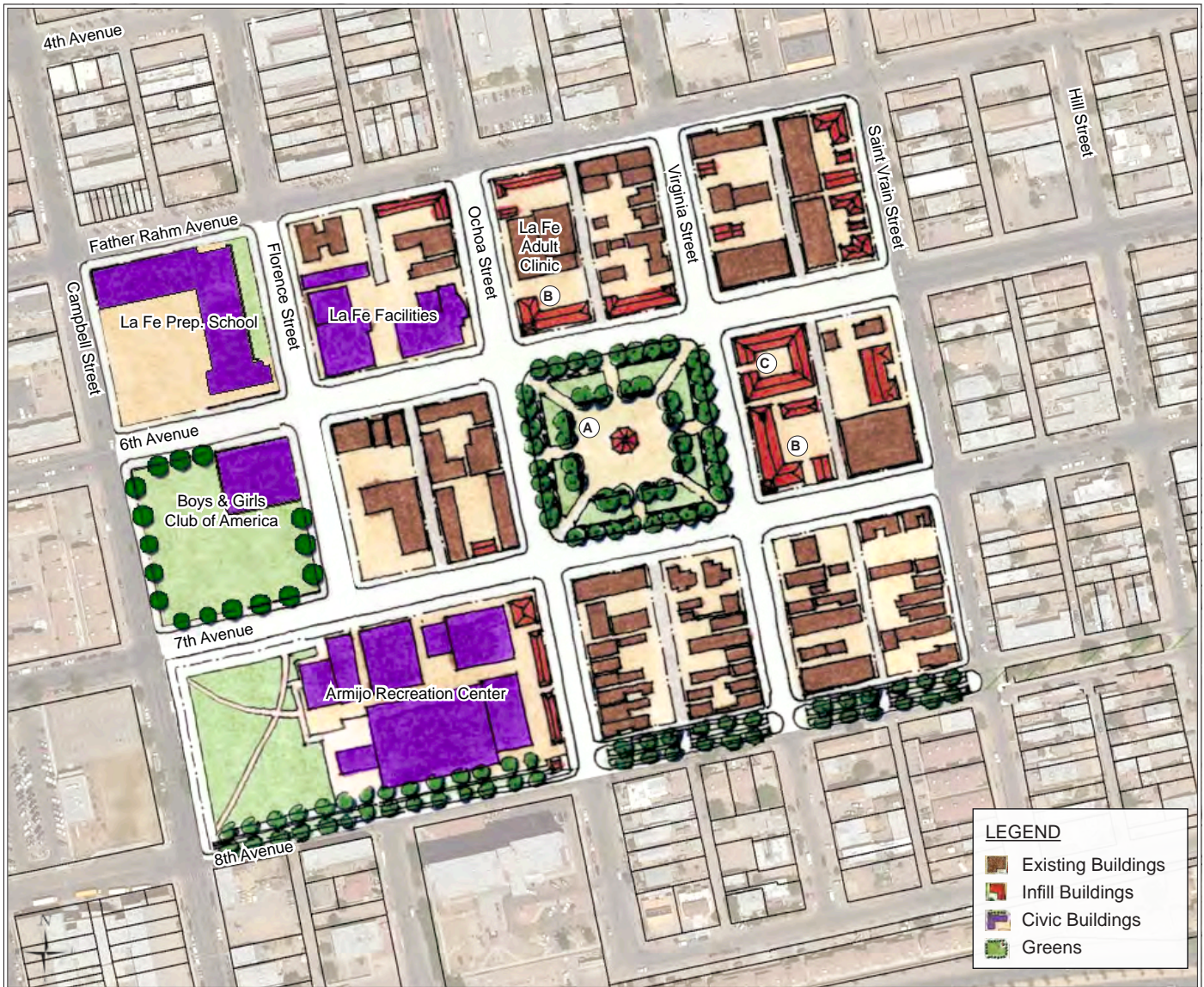
- 1 Strategies for addressing the redevelopment of City Hall, Union Plaza District improvements, Convention Center, and San Jacinto Plaza area are addressed in the Downtown Element of *Plan El Paso*.
- 2 Segundo Barrio: Preservation of the existing historic neighborhood and addition of new open space.
- 3 Railyards “Central Park”: If the storage railyards are relocated, a large inner part of the City can be redeveloped to create more useful park spaces and reconnect parts of the City.
- 4 Mesa Street: Re-balancing of the street for multiple modes of transportation along a walkable corridor.
- 5 Cincinnati Avenue: Creation of a pedestrian-oriented area to strengthen the entertainment district restaurants and businesses by enhancing the existing sense of place and encouraging walking.
- 6 Alameda Avenue – Piedras Street to Patriot Freeway: Prioritizing Alameda Avenue as a walkable corridor and reinvigorating the historic commercial street.
- 7 Strategies for addressing the Medical Center of the Americas area are addressed in the Health Element of *Plan El Paso*.
- 8 Alameda Avenue – Glenwood Street to El Paso Drive: Filling in the gaps to create walkable neighborhood fabric.
- 9 Bassett Place Mall: Redevelopment of a shopping mall into a mixed-use center.
- 10 Airport: Sample design for a new hotel and entertainment area for visitors by the airport.
- 11 Strategies for addressing the Oregon corridor and Five Points area are addressed in the *Plan El Paso 2010: Connecting El Paso - Building Transit-Oriented Neighborhoods and Redeveloping ASARCO* report.

CENTRAL: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative plans for several key planning areas demonstrate important community design and planning strategies for the Central area of El Paso.

SEGUNDO BARRIO



General Recommendations

Ⓐ New central green space

Ⓑ Infill development should be of a similar character and size as existing buildings.

Ⓒ Courtyard buildings provide additional housing.

SEGUNDO BARRIO**Strategic Infill**

Existing lots within the Segundo Barrio are relatively small, and any infill should occur on existing lots in a similar scale to the surrounding neighborhoods. New homes should utilize traditional strategies for energy consumption such as passive cooling and heating. Multi-family buildings can be arranged in courtyard type buildings with doors and windows facing public rights-of-way in order to provide eyes on the street. The most important aspect of any infill or revitalization in this historic part of town is that the existing residents are able to stay and not become priced out or forced out of their community.

Neighborhood Green Space

Traditional greens can be inserted into the neighborhood in locations where entire blocks become vacant. These greens can become community gathering spaces for festivals.

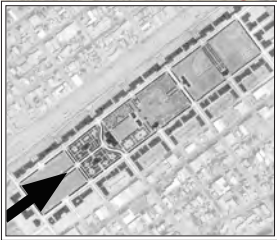


Vacant parcels in Segundo Barrio can be assets to the community.

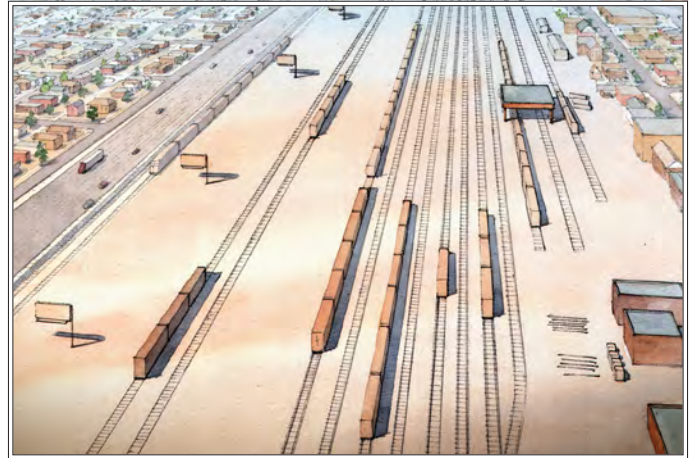


Segundo Barrio can be infilled with community gardens and new multi-family buildings, adding to the vitality of the neighborhood.

RAILYARDS “CENTRAL PARK”



El Paso residents have expressed a desire for a grand public open space that can serve as a central park for the City. One possible site for such a space is the underutilized, centrally located railroad yards just south of I-10 between Campbell Street and Cotton Street. The railroad functions on this site have been reducing in size for years, and may move to another location entirely. If the railyards relocate, over eighty well-located acres could become available for use as a grand new central park for the City, plus development sites to provide the urban fabric and economic benefit to make it feasible.



Existing railyards south of I-10

Space for a Wide Variety of Park Uses

The Central Park, as envisioned, is large enough to contain a variety of functions. There is space for open informal play fields, sites for pavilions and gardens, active recreation play fields, and a pond for paddle boats. The park can be configured to include sites for grand focal civic structures as well. Over time, as the City finds the need for new museums or performance spaces, they can be placed here. If well-designed, views of these focal structures can become signature postcard views for the City.

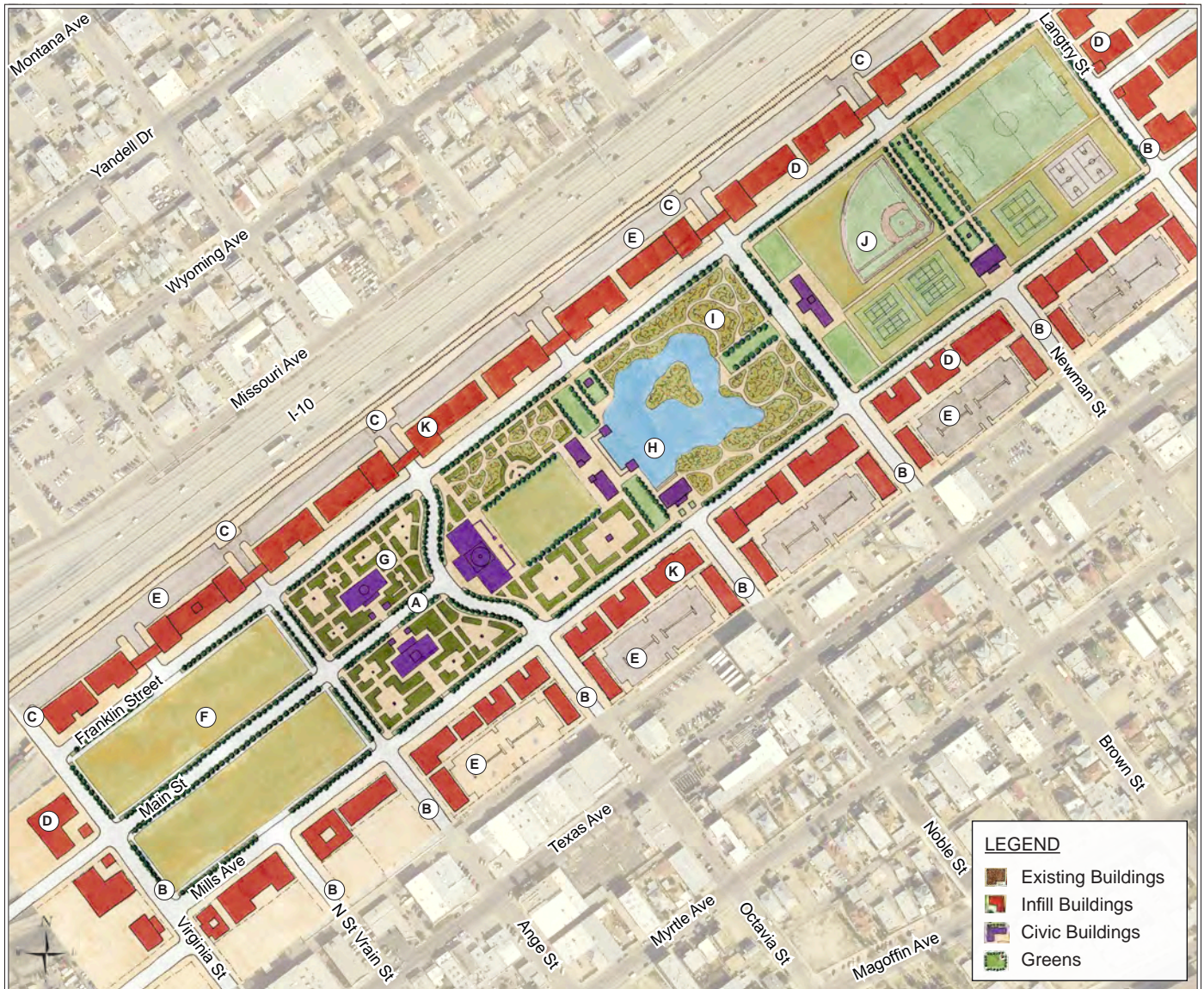
Strong Built Park Edges

Care must be taken in the layout of the park to include sites around all edges for the infill of cohesive urban fabric. New buildings around the edges of the park will benefit greatly from their close proximity to the park. They must in turn provide the best possible edges for the park by facing it with high quality façades featuring front doors and windows facing the park. Streets around the edges of the park, lined with trees and fronted by beautiful buildings, will be wonderful places to stroll.



A grand new Central Park for El Paso

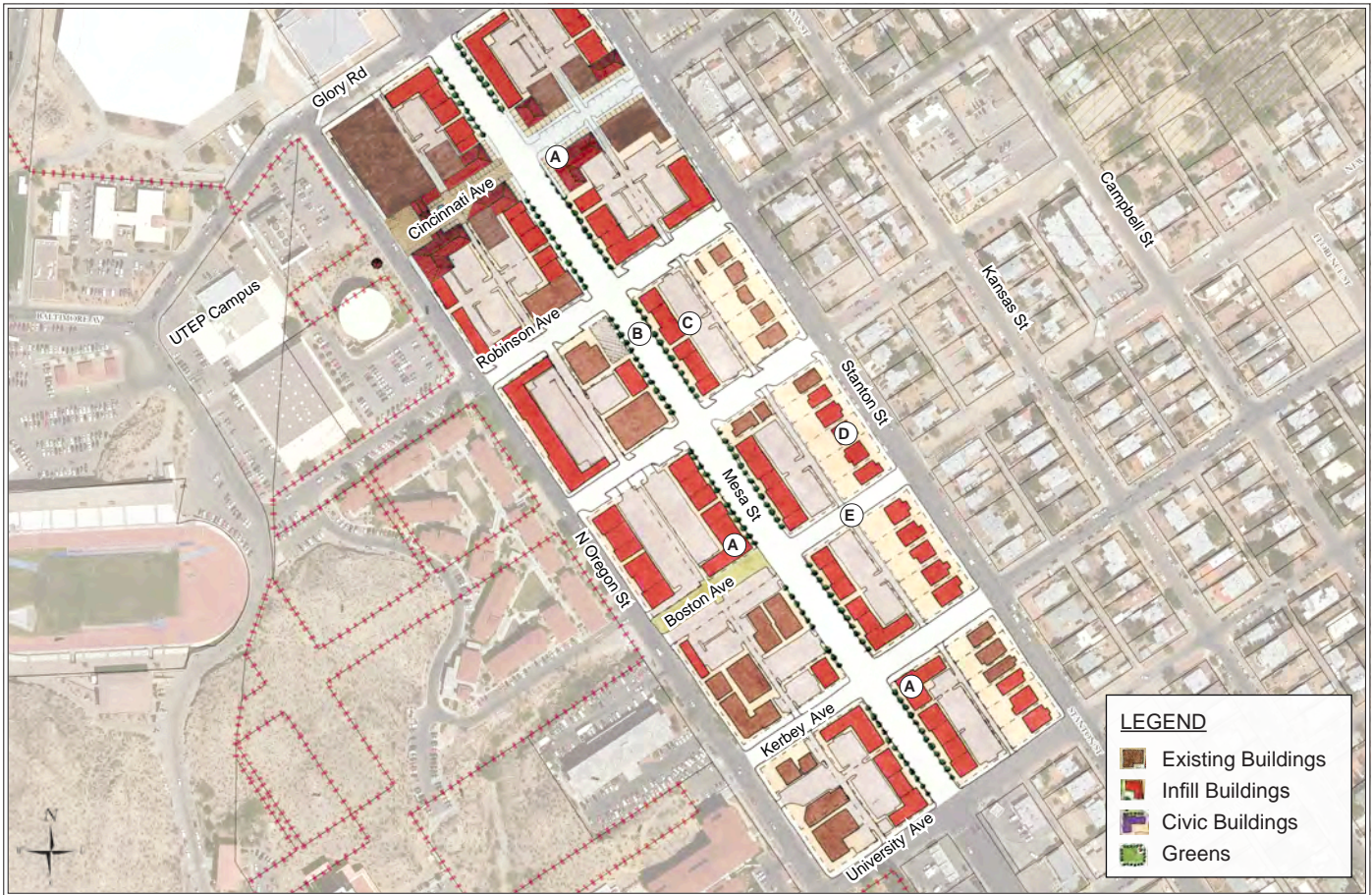
RAILYARDS “CENTRAL PARK”



General Recommendations

- A** Main Street is extended into the park, terminating on a site for a new signature civic building.
- B** Streets are extended providing access to all areas within the park.
- C** Streets crossing the park align with those north of I-10 to facilitate possible future connections across or under the interstate.
- D** Sites for new buildings providing eyes on the public space are reserved around all sides of the park.
- E** Parking lots are located behind buildings and screened from view from public streets and spaces.
- F** Open flexible play fields,
- G** Civic pavilions with gardens,
- H** A paddle boat pond,
- I** A desert garden, and
- J** A variety of active play facilities accommodating sports such as: soccer, baseball, tennis, and basketball.
- K** Development should be in the form of dense, street-oriented buildings of sufficient intensity to support transit service and produce income to endow the long-term maintenance of the park.

MESA STREET NEAR UTEP



General Recommendations

- A** New, street-oriented buildings should embrace the sidewalk and face the street with windows and doors.
- B** On-street parking should be used to provide a transition between moving vehicles and pedestrians on the sidewalk.
- C** Parking lots should be located mid-block.
- D** Stanton Street should be faced by new buildings which are appropriate in scale to the existing neighborhood fabric, helping to smooth the transition to the neighborhood.
- E** Where possible, new street connections should be explored to increase connectivity and subdivide oversized blocks.

Mesa Street near UTEP – Existing Conditions

Mesa Street serves as both a primary corridor leading into Downtown El Paso, as well as the main street within one of the City’s nighttime entertainment districts. Many of the City’s fine restaurants and nightlife destinations reside on Mesa Street. Current conditions have unfortunately been designed with a focus solely on facilitating automobile travel. Little attention is currently paid to sidewalks, curb-cut locations, or any other items which contribute to the pedestrian experience. The lack of pedestrian facilities hampers short trips on foot to businesses from the surrounding community, often only a block (or less) away. While the posted speed limit is 35 mph, the majority of cars currently travel down Mesa Street at speeds between 40 and 50 mph - well above the safe range for pedestrian activity.

Mesa Street near UTEP – Proposed Improvements

In order to improve the experience along Mesa Street, the City should employ a step-by-step approach to improvements. Adjusting travel lane dimensions, widening sidewalks, and encouraging street-oriented buildings will, over time, improve the behavior of drivers, pedestrians, and bicyclists. Many of the existing buildings on Mesa Street house successful commercial operations. A phased approach to changes will allow the current uses and businesses to remain, while gradually enhancing and optimizing the streetspace, setting the stage for redevelopment in appropriate locations.

MESA STREET NEAR UTEP

Mesa Street functions in many ways like El Paso’s “Main Street” offering the greatest variety of shopping, dining and services of any of the City’s corridors. The street’s design, however, is not in keeping with its role. Mesa’s prominence in the transportation network should be reflected through memorable, dignified street design that lends a positive impression of the City.

Streets of both character and capacity achieve a more pleasant pedestrian experience, lure more businesses, and increase economic vitality. Additional housing options increase the numbers of residents and visitors in the area who can access these amenities by foot.



Existing conditions



STEP 1: Mesa Street is converted to a multiway boulevard. Street trees, a central median, slip lanes, bike lanes, and parallel parking are added, and bus stops are incorporated along the outer medians. Paved sidewalks and dignified lighting replace gravel landscaping along the edge of parking lots.

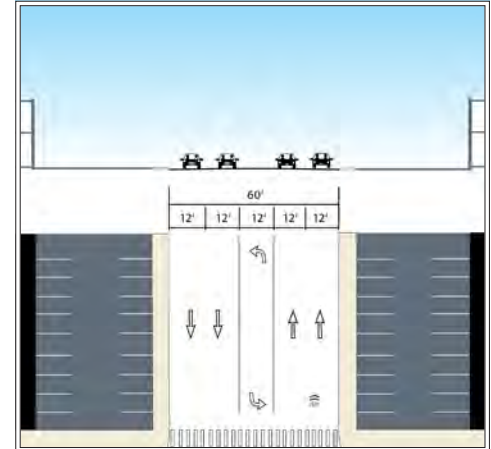


STEP 2: A canopy of street trees enhances the quality of the streetscape and provides shade to passers-by. Infill development replaces parking lots, and pedestrian interest is held with pedestrian-scaled façades, storefronts and signage. Additional infill is constructed on the northern side of Mesa Street, and the corridor begins to feel like a unified whole. Pedestrian safety is bolstered by a combination of design elements. Parallel parking provides convenient access to businesses. Street-oriented architecture, with doors, windows, and balconies that face the street, creates a natural sense of surveillance.

MESA STREET NEAR UTEP



Mesa Street - Existing Conditions



Mesa Street - Existing Street Section

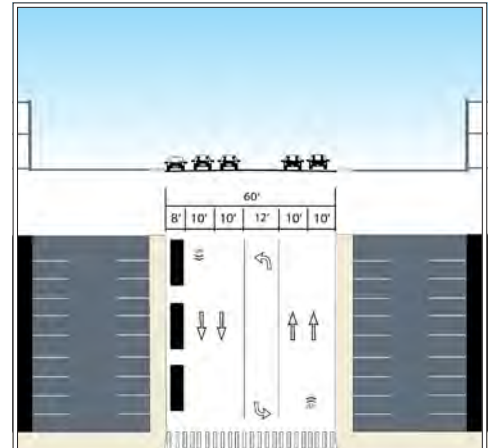
Mesa Street – Existing Conditions

Despite being one of the City’s key entertainment districts, Mesa Street’s current physical configuration lacks spatial definition and fails to enable a sense of place that fosters walkability or active street life. The wide travel lanes, continuous turn lanes, and lack of visual friction encourage vehicle speeds above the posted speed limit of 35 mph. Buildings are typically set far from the street, behind parking lots. Many of the adjacent strip shopping centers have frequent or continuous curb cuts which result

in discontinuous sidewalks, inhibiting pedestrian safety and comfort. The configuration of signage is optimized for visibility by fast moving motorists, not pedestrians.



Mesa Street - Step I Visualization



Mesa Street - Step I Street Section

Mesa Street – Step I

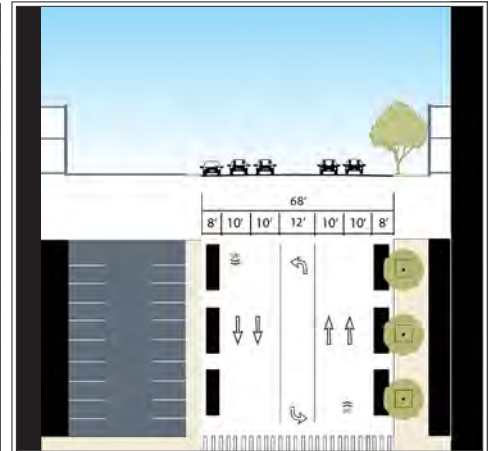
In Step I, on-street parking should be implemented on one side of the street, adjacent to the existing sidewalk. No private redevelopment is necessary to implement this improvement; it is accomplished simply by adjusting travel lane dimensions within the roadway from twelve feet to ten feet. The on-street parking should occur on the west side of Mesa Street for three blocks between Glory Road and Boston Avenue and on the east side of Mesa Street between Boston Avenue and University Avenue. This first stage of changes to the roadway will begin to slow

down drivers due to the slight decreases in lane size and incorporation of on-street parking. Including on-street parking in the street’s design will help to increase safety along the sidewalk and begin to effect drivers’ behavior. This parking will be vital for future street-oriented buildings. In addition, “sharrow” symbols should be painted on the outside travel lanes to indicate to drivers that the street is meant to be shared with cyclists.

MESA STREET NEAR UTEP



Mesa Street - Step 2 Visualization



Mesa Street - Step 2 Street Section

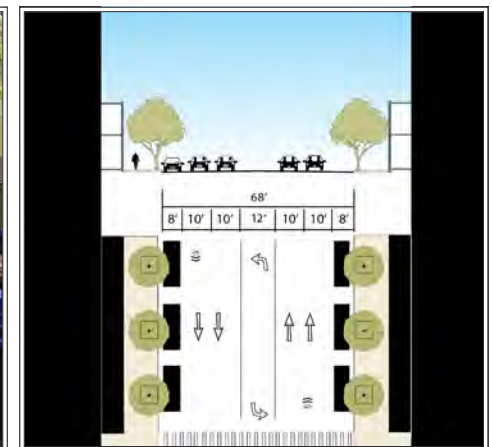
Mesa Street – Step 2

Building upon the foundation established in the first phase of improvements, future redevelopment along Mesa Street should include additional adjustments to the lane width dimensions. In Step 2, the curb location will shift by approximately eight feet to allow for on-street parking on the opposite side of the street of the parking provided as part of step 1. New buildings will enjoy an address on a wide sidewalk which is protected by the on-

street parking spaces. Street trees and pedestrian scaled lighting should also be added along the street edge to shade and light the pedestrian realm. New development should be required to have buildings located close to the thoroughfare with off-street parking positioned behind the building and away from the sidewalk. The buildings should be street-oriented, featuring doors and windows which face and address the public realm.



Mesa Street - Step 3 Visualization

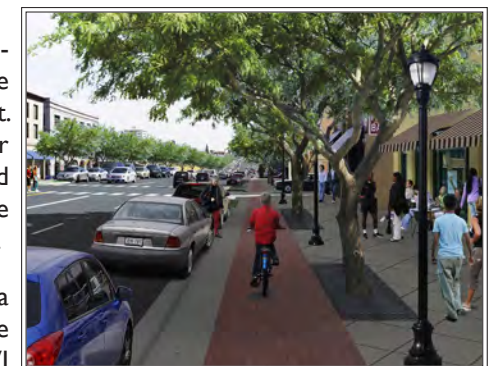


Mesa Street - Step 3 Street Section

Mesa Street – Step 3

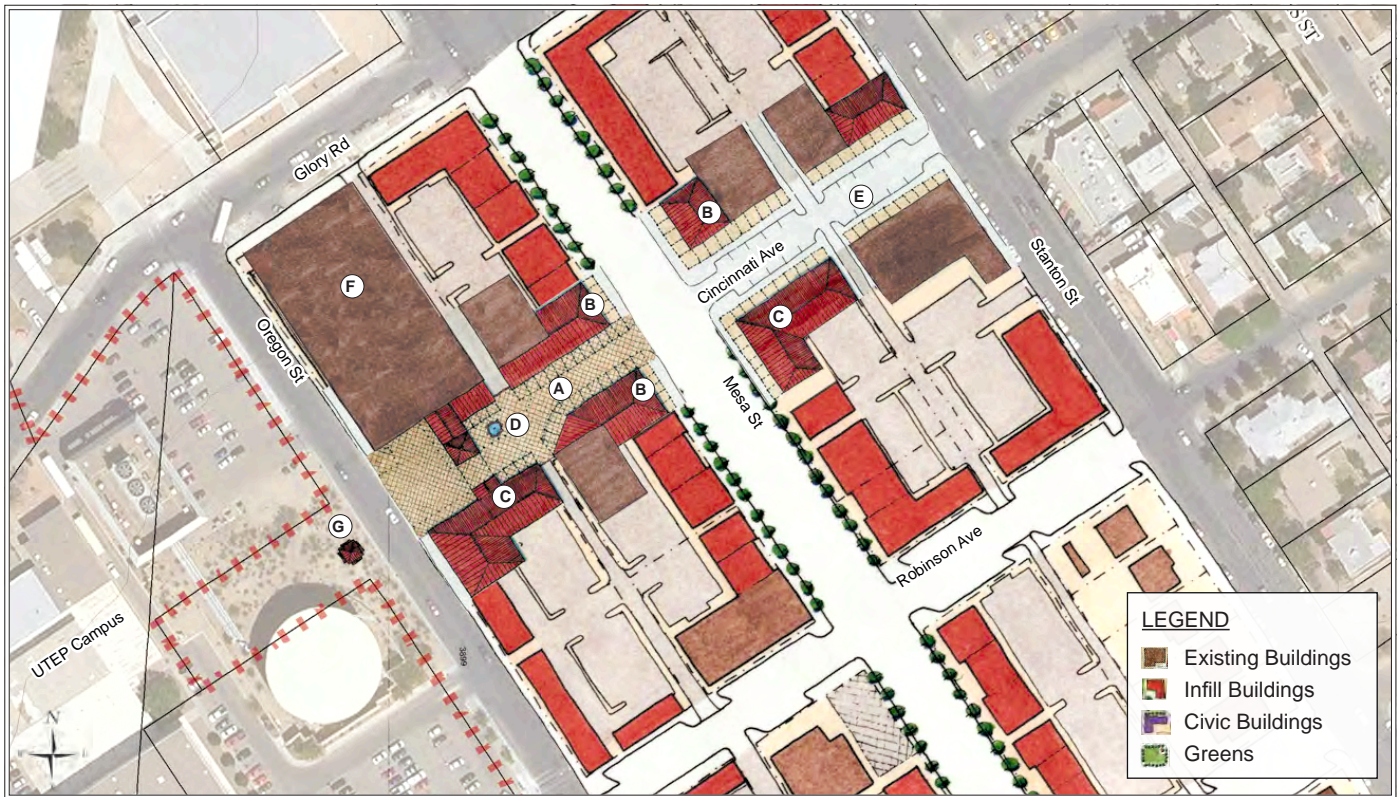
As additional redevelopment opportunities become available, new buildings should follow the pattern established in previous steps. Positioning buildings at the back of wide sidewalks on both sides of the street will change the spatial composition of Mesa Street. The effect will be a more intimate and comfortable street which encourages slower vehicle speeds and increases pedestrian and cyclist activity. The visual friction created by the new building placement, street trees, and on-street parking will help to civilize driving behavior and make Mesa Street more comfortable for pedestrians and cyclists.

An alternative design for Mesa's Street's new wide sidewalks can incorporate a cycle-track which provides a safe, off-street location for cyclists. Cycle-tracks are widely used in Europe and throughout the United States in places like Madison, WI and New York, NY and are often part of a large-scale connected bicycle network.



Mesa Street - Step 3 Cycle-track option

CINCINNATI AVENUE



General Recommendations

- Ⓐ A unique paving pattern should be used to signify pedestrian-dominant portions of Cincinnati Avenue.
- Ⓑ New additions containing doors and windows should be used to help make existing buildings more street-oriented, while keeping existing structures, uses, and investments intact.
- Ⓒ New buildings should be located close to the street and should feature massing that helps to shape the street space.
- Ⓓ Infill facing the pedestrian-dominant portion of Cincinnati Avenue should form an especially high degree of spatial enclosure.
- Ⓔ Parallel parking should replace angled parking, creating space for wider sidewalks in front of businesses.
- Ⓕ Existing Glory Road RTS Transfer Station and parking garage.
- Ⓖ A focal feature should cap the end of Cincinnati Avenue.

Cincinnati Avenue – Existing Conditions

The heart of El Paso’s Cincinnati Avenue entertainment district, on the edge of the University of Texas, El Paso (UTEP) campus, is home to several of the City’s most vibrant restaurants and shops. Cincinnati Avenue also offers a direct connection to the City’s Rapid Transit System (RTS) at the Glory Road Transfer Station at the end of the street. Despite these great ingredients for walkability, the design of Cincinnati Avenue is not yet optimally conducive to pedestrian activity. Narrow sidewalks, auto-oriented street dimensions and buildings set far apart behind parking lots currently make walking and biking uncomfortable - even dangerous.

Cincinnati Avenue – Proposed Conditions

In order to solidify Cincinnati Avenue as a premier walkable destination, it is imperative to provide streetscape improvements that will place a renewed emphasis on the public realm. In place of surface parking lots which currently abut sidewalks, new street-oriented liner buildings (narrow buildings placed between the pedestrian realm and parking areas) should be added over time help to provide spatial enclosure and “eyes on the street.” New paving patterns should be used to help transform the street into a plaza shared by vehicles and pedestrians. A change in pavement color and texture, paired with more intimate street proportions, will alert drivers to the presence of pedestrians. Arcades and colonnades over sidewalks can be used to reinforce walkability while addressing the demands of El Paso’s climate.

CINCINNATI AVENUE



Existing Conditions

With the implementation of a new Rapid Transit System (RTS) stop nearby along the Oregon Corridor, Cincinnati Avenue will become the main connection between the RTS and the entertainment district. It is also home to a newly built parking garage which serves both the district, UTEP, and the RTS. Unfortunately, the current conditions on Cincinnati Avenue include uncomfortably narrow sidewalks which are faced by blank walls, angled parking, and parking lots.

Incremental Improvements

Improvements over time for Cincinnati Avenue should include modifications to existing buildings and adjustments to street design elements that will serve to enhance the pedestrian experience and street activity. The inclusion of pavers or a textured paving pattern is a signal to vehicles that this is a pedestrian-dominant area within the city, and will encourage slower speeds and increased awareness. Street-oriented buildings should front the sidewalks with doors and windows to help provide a comfortable place for pedestrians to walk. Colonnades, arcades, and balconies should reach across the sidewalks and provide shade and shelter for a more comfortable pedestrian experience. New street-oriented building fabric will provide additional opportunities for retailing and dining in this high pedestrian traffic area.

Proposed Improvements at Dusk

The Cincinnati Street entertainment district comes to life especially during the evenings when residents and UTEP students congregate to eat and drink. Lighting from within restaurants and bars as well as from signage, street lamps and other light fixtures should continue to increase, as a signal to everyone that they are in a special, vibrant place and to be more aware of pedestrians and cyclists.



Existing Conditions



Proposed Improvements



Proposed Improvements at Dusk

ALAMEDA AVENUE - PIEDRAS STREET TO PATRIOT FREEWAY



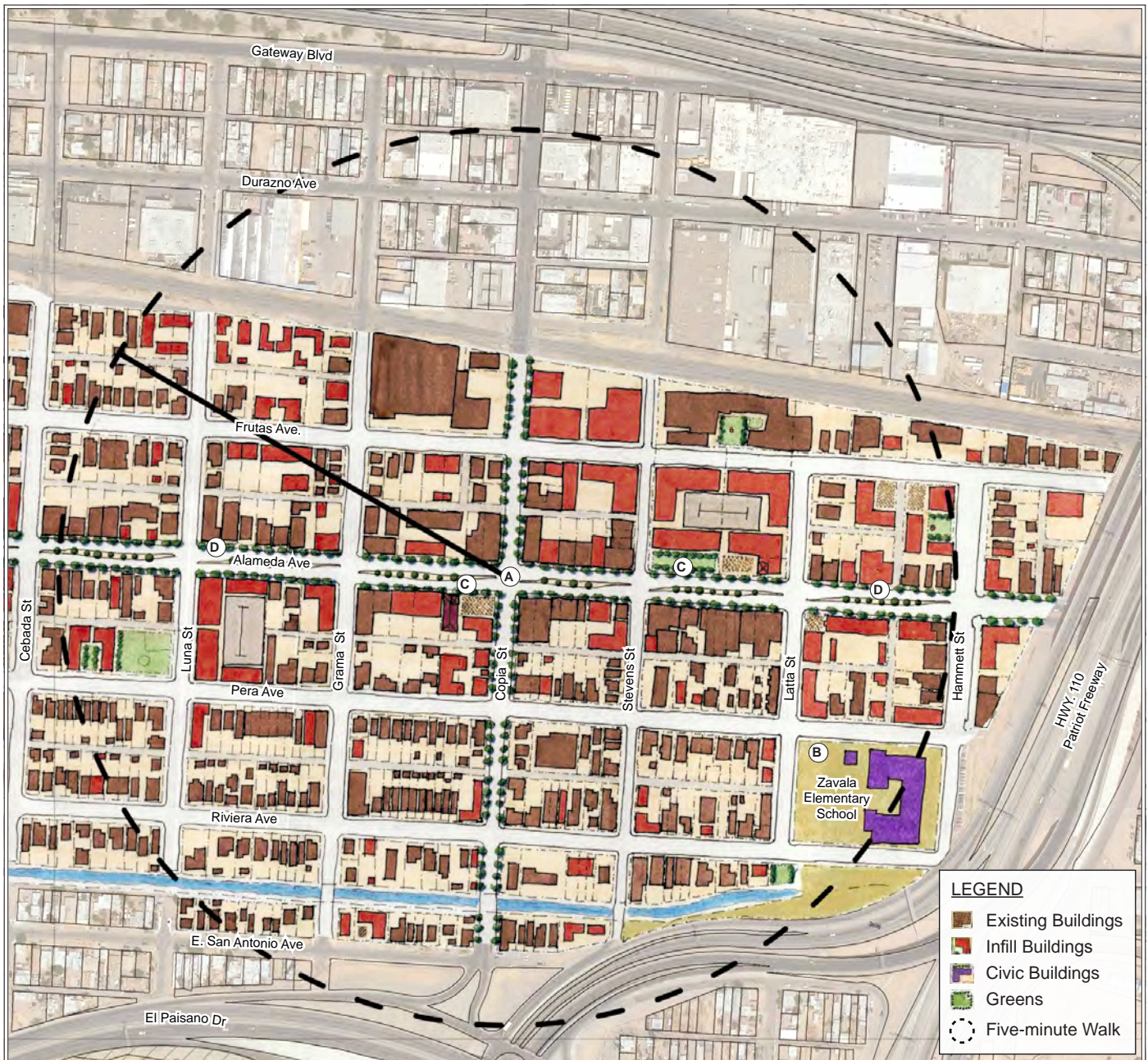
Alameda Avenue, also known as Texas Highway 20, begins at Texas Avenue and runs southeast to the City’s limit and into the County. A variety of cafes and restaurants, stores, and services are located along Alameda Avenue, to the west of Patriot Freeway, and make this avenue a vital commercial corridor. Protection and enhancement should be a focus for this area given the fine-grained integration of commercial life on the corridor and residential life in the neighborhoods. The area also features many historic buildings and high quality street-oriented building fabric.

As Alameda Avenue continues east of Patriot Freeway it cur-

rently begins to fray. The buildings, sidewalks, and streets are in need of repair. Uses along the corridor often do not cater to nearby residences. Underutilized lots and used car dealers dominate the streetscape. The traffic that once traveled Alameda Avenue now travels I-10 and this shift caused much of the disinvestment along the corridor.

Alameda Avenue still accommodates many motorists and has a built-in customer base in the surrounding neighborhoods. With careful enhancement and revitalization, this area is poised for a more prosperous future.

ALAMEDA AVENUE - PIEDRAS STREET TO PATRIOT FREEWAY



General Recommendations

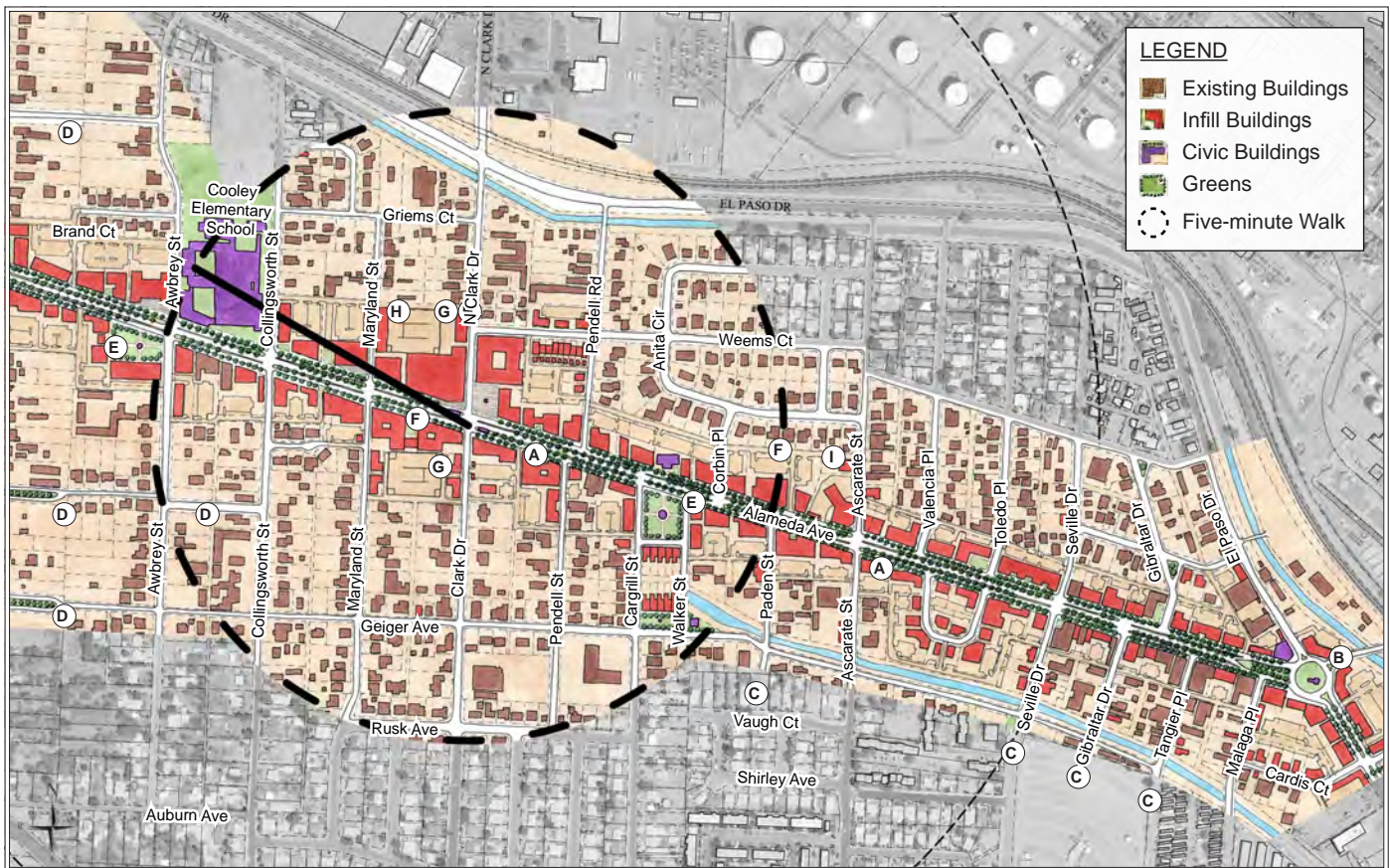
- A** The City’s planned RTS system has the potential to support compact centers of reinvestment and redevelopment at select areas along the route, especially within a short, five-minute walk of the stations. Emphasis should be placed on repair of the street fabric with new infill buildings.
- B** The many children that walk to neighborhood schools should be accommodated by safe streets with ample sidewalks and slow speeds on and off Alameda Avenue.
- C** Opportunities for constructing small greens or plazas on abandoned and underutilized lots should be sought near neighborhood centers, to distinguish the heart of the community from other areas along the linear corridor.
- D** The term “alameda” means “public walk shaded with trees” and Alameda Avenue once had a continuous canopy of trees. Regularly spaced street trees should be restored to the median and both sides of the street along Alameda Avenue. The planting strips throughout the neighborhoods should also be used for replanting trees.

ALAMEDA AVENUE - GLENWOOD STREET TO EL PASO DRIVE

In its current state, Alameda Avenue from Glenwood Street to El Paso Drive is highly auto-oriented. It is two lanes in each direction with an often interrupted, unplanted median. Used car lots, auto repair shops, and junkyards are the primary uses along the street. Buildings are set back from the right-of-way with numerous curb cuts and parking dominates the front portions of the lots.

Create a Mixed-Use Environment

As redevelopment opportunities occur, a balance of new buildings and open spaces should be sought. A greater mix of uses should also be pursued to allow for daily functions to be accomplished within a short five-minute walk of residences. This will additionally help to attract pedestrians to the avenue and create an active and walkable street. There is a stronger sense of security with increased pedestrian traffic, window shoppers, outdoor diners, and cyclists.



General Recommendations

- A** Alameda Avenue should be adjusted to incorporate dedicated bus lanes, on-street parking, and wider sidewalks.
- B** Use of a roundabout should be explored to allow smoother vehicular movements at the intersection of Alameda Avenue and El Paso Drive.
- C** Additional pedestrian / vehicular bridges across the canal should be pursued, to increase connectivity.
- D** New streets should be pursued to reduce the size of superblocks.
- E** Additional civic spaces should be added to provide gathering places for neighborhood residents.
- F** New buildings should be constructed close to the street with parking placed at the rear of the lot.
- G** Parking structures should be sited in key locations along the corridor to allow consolidation of parking needs.
- H** Large footprint retailers and their parking needs should be accommodated within the existing block structure without adversely disrupting the pedestrian experience.
- I** Gas stations should be designed so that the pumps are placed to the rear of the lot with the building facing the street.

ALAMEDA AVENUE - GLENWOOD STREET TO EL PASO DRIVE

Balanced Street Section

Alameda Avenue should, over time, be converted into a more pedestrian-friendly, less auto-dominant environment. Adjusting the physical design of the street is the first step in the transformation of Alameda Avenue. One of Sun Metro's new Rapid Transit System (RTS) routes runs along Alameda Avenue. The proposed street design, illustrated below, includes a dedicated bus lane in each direction allowing buses to move faster than the surrounding traffic. Travel lanes should be reduced to one in each direction, with a parallel parking lane on both sides of the street. Sidewalks should be widened.

Addition of a new roundabout at the intersection of Alameda Avenue and El Paso Drive should be studied. By replacing the existing traffic signal with a roundabout, vehicular and pedestrian movement capacity through the intersection will likely improve. A roundabout is also a potentially safer alternative for pedestrians, cyclists, and vehicles.

Many of the streets in the neighborhoods to the south of Alameda Avenue terminate at an irrigation/drainage canal. Several of the streets should potentially bridge over the drainage canal to link the residents of these neighborhoods to Alameda Avenue. These additional connections to Alameda Avenue would help to improve the overall circulation in the area.

Building Placement & Use

Buildings that are set back away from the right-of-way are generally less conducive to creating walkable environments. Buildings should generally be placed close to front property lines. Priority should be placed on increasing the number of mixed-use buildings along the Alameda Avenue corridor. In addition to bringing the buildings up toward the right-of-way, street trees should be added to help to reduce the perceived width of the street. Where feasible, parking should be located at the rear of lots and accessed from an alley. In many cases, an alley can be added incrementally as properties along Alameda Avenue redevelop, to provide for rear parking access. Moving parking to the rear of lots and active uses to the front of lots will help to form streets that comfortably facilitate multiple modes of travel including transit, cycling, walking, and auto.

Promote Neighborhood Gathering Spaces

One of the elements lacking within the residential areas along the Alameda Avenue corridor is green spaces where local residents can gather. It is important to create neighborhood gathering spaces to reinforce a sense of community. The plan below shows two examples of such spaces, located where pedestrian sheds meet between neighborhoods and at the RTS stop for this stretch of Alameda Avenue. These spaces could be further activated with neighborhood-serving uses such as a super market where people shop for groceries before heading home or getting on the bus.



Detail of the proposed street section for Alameda Avenue and the intersection with El Paso Drive.

BASSETT PLACE MALL

Bassett Place Mall is located at the junction where the Eastside, Northeast, and Mission Valley portions of the City meet. The area is hemmed in by I-10 to the south, Fort Bliss to the north, and is surrounded by large amounts of commercial development and surface parking lots making the area a prime infill and redevelopment opportunity with high visibility along I-10. Because the site is almost completely impervious to water, additional infiltration and green spaces can improve the environmental performance of the area even while rebuilding the site in a dense, mixed-use format. Public open space can be created in the form of new streets and town squares that will reduce block size and therefore increase ease of access for pedestrians, cyclists, and drivers.

Montana Avenue, the First Wave of Improvement

Montana Avenue is one of the few roads that connects the far east side of El Paso back to the central portion of the City. The roads linkage to all parts of the City is one of the reasons it was selected as one of the RTS corridors and should benefit from the first improvements, including wider sidewalks, crosswalks, human-scaled lighting, accommodations for transit vehicles, and street trees in some locations.

The Invisible Network of Support

Alleys and secondary streets are important for many reasons. First, they enable trash pick-up, parking, and other building services such as loading and unloading to occur away from the view of the street and the walking environment. Second, they may relieve traffic pressure upon Montana Avenue. Currently, some adjacent parking lots lack connections between one another, so drivers must return to Montana Avenue rather than move from one lot to another. This can be remedied by first connecting parking lots, and then by creating a network of alleys, secondary streets, and drive aisles that can be thought of as a commonly shared circulation system.

Plan for Diversity

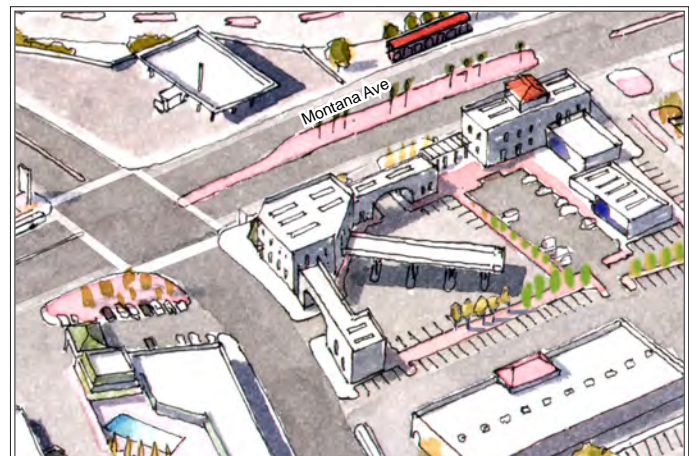
Currently, this section of Montana Avenue seems to offer only auto-oriented retail. Retail diversity can be increased by introducing smaller footprint buildings, pedestrian-friendly buildings that are visitable by customers arriving by car and by foot, and by reducing building setbacks. Reducing setbacks will allow signs to shrink, as they are meant not to catch the attention of a driver moving at high speeds, but rather the attention of pedestrians, cyclists, and drivers moving at lower speeds.

Creating a Street-Oriented Gas Station Along Arterials

A typical gas station has a small service store at the rear of the lot with gas pumps open toward the arterial streets. The typical gas station configuration leaves the corner at intersections open and contains wide curb cuts, often extending the length of the lot. This area contains all auto oriented development which makes the sense of space and quality of street life non-existent. The same ease of use of a gas station can be accomplished without the detriment to the public realm by placing the service store at the corner of the lot while having the gas pumps at the rear of the lot. Curb cuts can be reduced, but access to the service station is similar to the typical configuration.

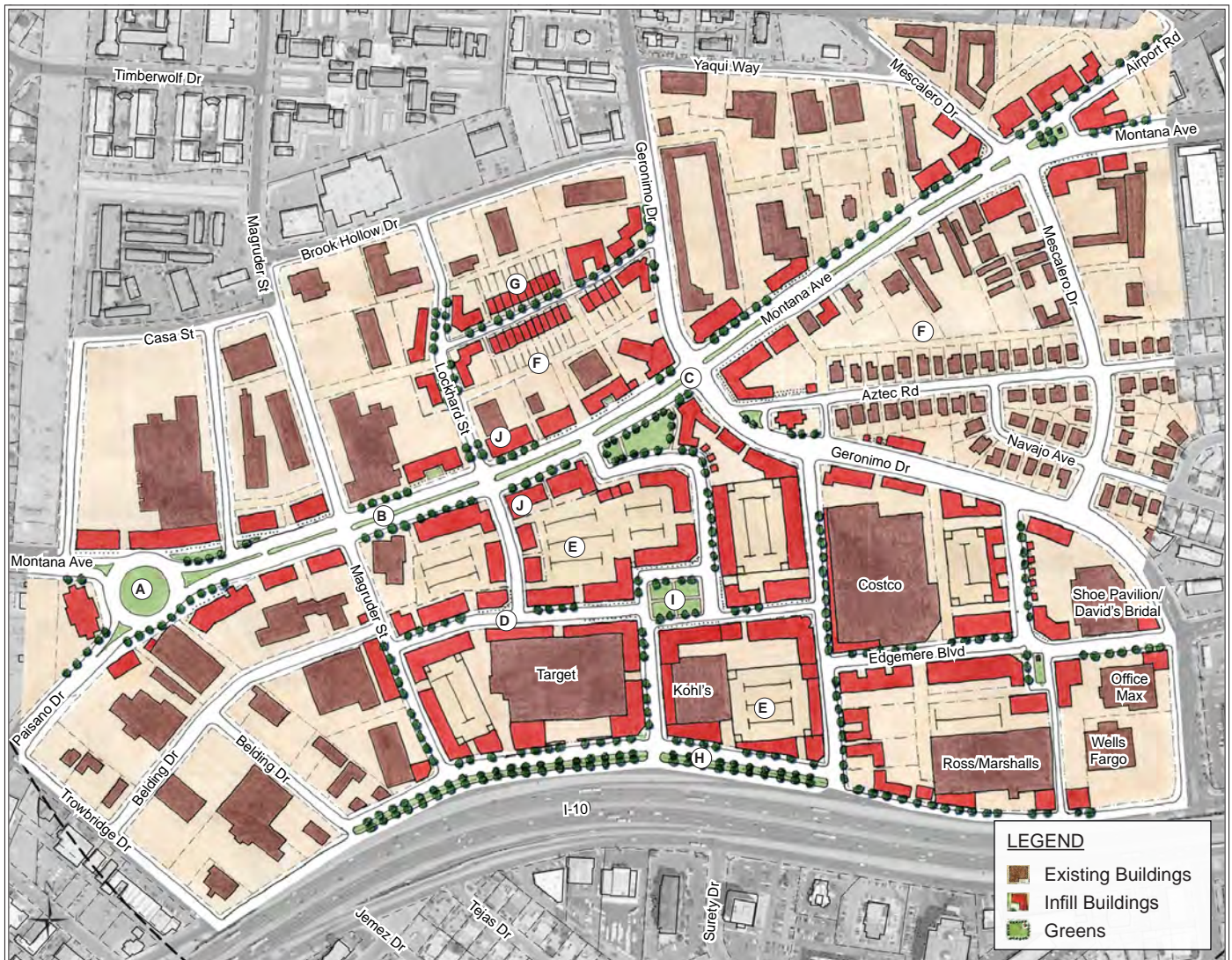


Existing Conditions: Existing suburban commercial development includes a typical gas station at the intersection of two arterial roads.



A "gas-backwards" flips the conventional layout of a gas station by placing the convenience store at the corner and the gas pumps in the rear.

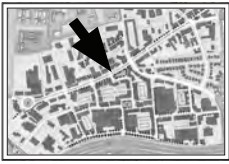
BASSETT PLACE MALL



General Recommendations

- A** The intersection of Paisano Drive and Montana Avenue should be reconfigured as a two-lane roundabout.
- B** Montana Avenue should be configured with wider sidewalks, crosswalks, bus shelters, and street trees.
- C** The intersection of Geronimo Drive and Montana Avenue should have a bus shelter and be defined by multi-story buildings.
- D** The superblock of the Bassett Place Mall can be divided into smaller blocks to create new addresses for development and increase permeability and walkability.
- E** Shared parking analyses, on-street parking on side streets, and strategically placed parking structures can reduce the amount of surface parking lots. Parking structures, surface lots, and any blank walls should be lined with buildings containing habitable space.
- F** Once alleys are introduced, curb cuts on Montana Avenue can be reduced and parking and trash pick up can be moved to the rear of lots.
- G** Introducing urban, residential building types, such as rowhouses, flats, and live-work units, enables more people to live within walking distance of transit stops and commercial space, thereby reducing automobile dependence and encouraging physical activity.
- H** A landscaped buffer and access lane allows for a better presentation of development along I-10.
- I** New gathering spaces can serve as recreational fields, passive parks, or even as performance venues.
- J** Rather than turn their backs to the street or sit behind large surface parking lots, buildings should draw close to the avenue, shaping the street space and providing shade for pedestrians.

BASSETT PLACE MALL



The following sequence illustrates the potential for an incremental transformation over time of Bassett Place Mall. Near term projects would include public investments in infrastructure to encourage long term investments on private property.



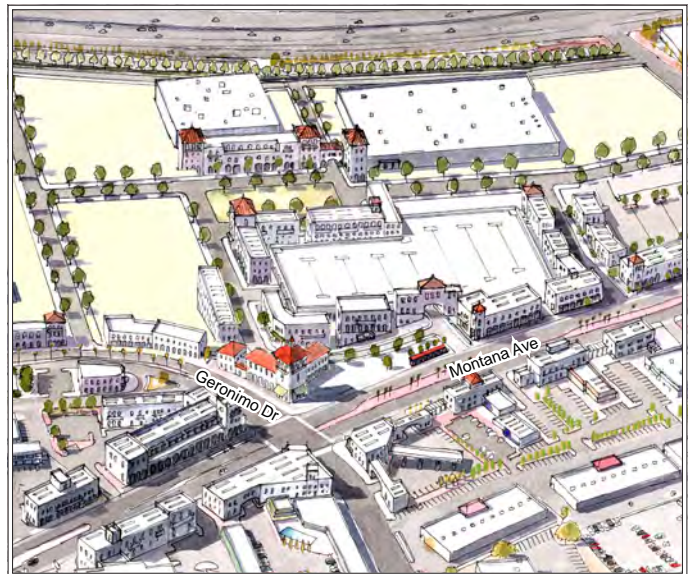
Existing Conditions: Bassett Place Mall is visible from I-10. The enclosed mall is surrounded by acres of parking. Parcels along Montana Avenue are developed in an auto-oriented manner.



Step 1: Crosswalks, bus shelters, and a designated transit lane begin to make Montana Avenue more hospitable to the RTS and its riders. A corner gas station can be reconfigured as a “gas backwards,” as illustrated previously on page 2.34.

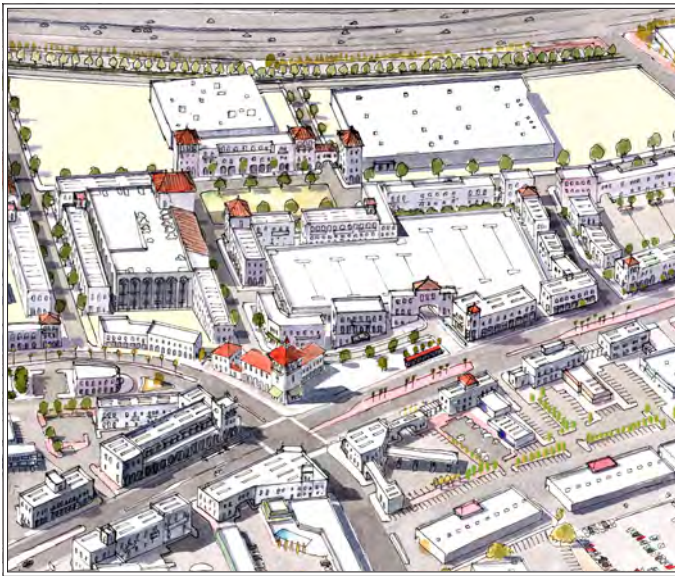


Step 2: Infill and redevelopment build out the street wall along Montana Avenue. Along with the redevelopment opportunities on the other three corners, a focal building at the bus stop begins to create the a complete sense of place by placing street-oriented development on all sides of the intersection.

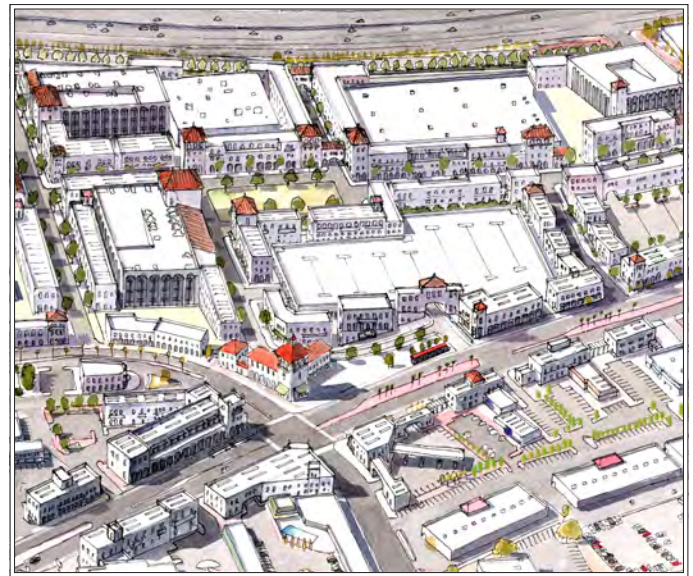


Step 3: Streets and public spaces are created on the mall site. Buildings fill in around the parking deck and portions of the mall are removed to create mixed-use buildings. Anchor stores may be kept and built around as mid-block areas. Topographical changes allow for a deck of parking to be built without the need for ramps. The new development helps shape a public square, creating an outdoor room.

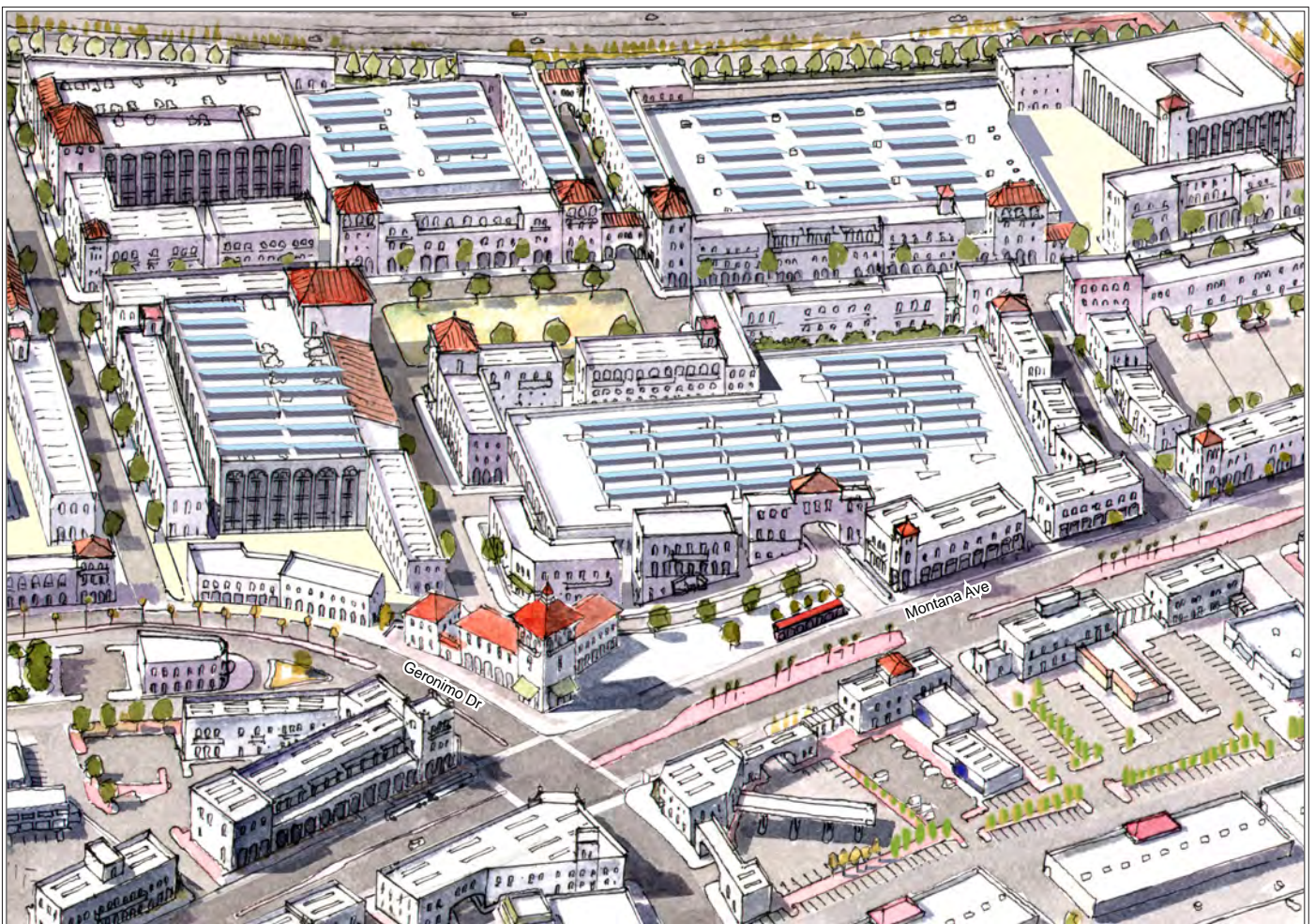
BASSETT PLACE MALL



Step 4: A lined parking structure provides additional parking.



Step 5: Reserved building parcels are developed.



Step 6: Long-term improvements would include liner buildings with habitable space that surround large footprint buildings and garages. Rooftops of large-footprint anchor stores and garages can be ideal sites for harvesting solar energy, moving this district towards a future of reduced reliance upon the electrical grid. Surface parking lots may be replaced with parking structures as real estate values and land-scarcity justify such an upgrade.

RECONFIGURING OUTPARCELS

As illustrated at the Bassett Place Mall, the commercial strip can be retrofitted throughout the City while existing auto-oriented businesses remain in use. The following is a typical example of developing street-oriented buildings while auto-dependent, drive-thru buildings potentially remain open if desired.



Existing Conditions: Currently, there are too few crosswalks between Bassett Place Mall and the opposite side of the street. The sidewalks are discontinuous due to the number of curb cuts and rather than forming a street wall, buildings poke out of parking lots.



Step 1: The main arterial is reconfigured; the outermost lanes re-striped to accommodate buses. On-street parking is added, sidewalks are made more continuous, and crosswalks are added. Parking lots are reconfigured to allow for building pads at the fronts of the lots, while the rear portions of the lots are planted with shade trees; drive-thrus remain.



Step 2: Infill buildings provide a continuous street wall along Montana Avenue and colonnades shade the sidewalk. Driveways and intersecting streets should have speed tables to make the sidewalk appear continuous. Roof terraces can have private outdoor space for offices or apartments and photovoltaic panels on the roof can reduce reliance on the electrical grid.

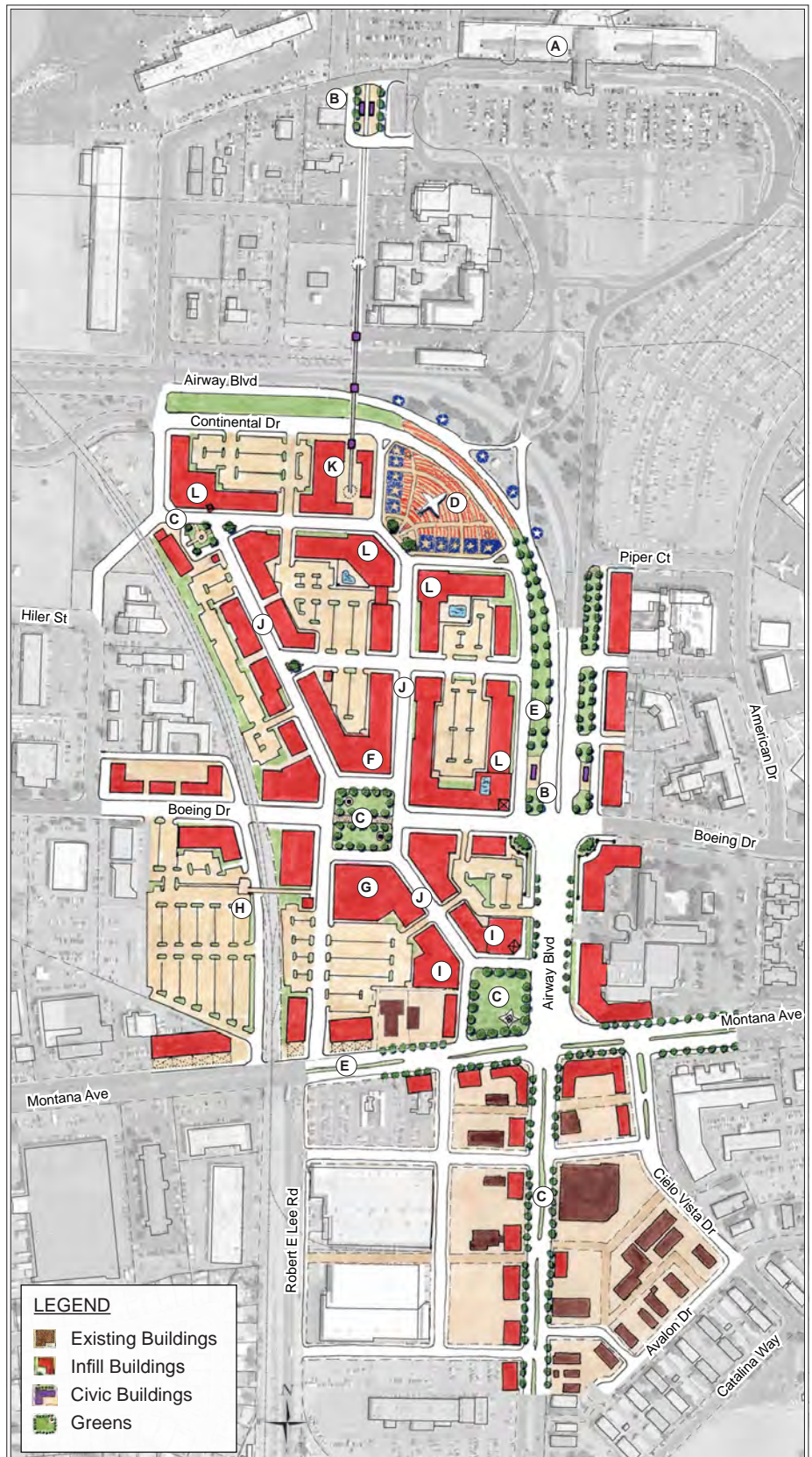
AIRPORT

The area outside of the airport has been populated with multiple hotels. This area can become better organized so that instead of a few hotels sprinkled between parking lots, it can become a destination in itself that has activities for visitors and residents alike.

The RTS transportation system will connect to the airport making it possible to visit much of El Paso without renting a car.

General Recommendations

- (A) Airport Terminal
- (B) RTS Stops
- (C) New public squares form important gathering spaces and act as catalysts for new mixed-use development.
- (D) A new memorial forms the backdrop to the airport and the entrance to the development.
- (E) Adjacent roads are traffic-calmed and made more pedestrian friendly.
- (F) New development capitalizes on the proximity to the airport and the access to the City's RTS system, creating a vibrant, mixed-use walkable district.
- (G) Entertainment venues, such as a movie theatre located adjacent to the central square, will bring visitors and residents to the district.
- (H) A pedestrian bridge over the railroad tracks connects overflow parking to the district.
- (I) A street-oriented corner store on a new green at the intersection of Montana Avenue and Airway Boulevard frames the view leading toward the center of this new district.
- (J) Traffic calmed streets with street-oriented buildings provide shade that make it possible to walk in El Paso.
- (K) Pedestrian bridge connecting to the airport ends in a plaza.
- (L) Hotels are reconfigured into street-oriented buildings.



WESTSIDE: COMMUNITY CONCERNS

Preserve The Views of the Franklin Mountains

One of El Paso’s greatest natural features is the tip of the Franklin Mountains extending into the City. The Franklin Mountains provide El Paso with access to large amounts of scenic open space, hiking trails, mountain biking, and picturesque drives just a short distance from large portions of the El Paso community.

Transmountain Road, one of the few east-west connections between the Westside and northeast portions of the City, is currently largely undeveloped and offers a scenic entrance to the Franklin Mountains. Residents do not want the unspoiled mountain views replaced with forgettable, highway-style suburban commercial development dominated by large, low-slung buildings randomly scattered amidst parking lots. Development that occurs should be controlled so as to limit detracting views of the Franklin Mountains.

Preserve The Valley

El Paso is surrounded not only by desert, but also by a diversity of farmland located in the valley around the Rio Grande. The upper valley has its own unique identity within El Paso which should be respected. The farmland, horse trails, and rural community character should be preserved. As development pressure increases in the valley over time, a simple “no growth” scenario is not likely to be practical. Growth will likely eventually come to the valley, and as such it should be planned for. One solution that allows for growth but still preserves the character and working landscape of the valley is to incentivize clustered developments. Clustering is the locating of housing at a higher density on just a part of a site, thereby preserving open space and working landscapes on the remainder of the site.

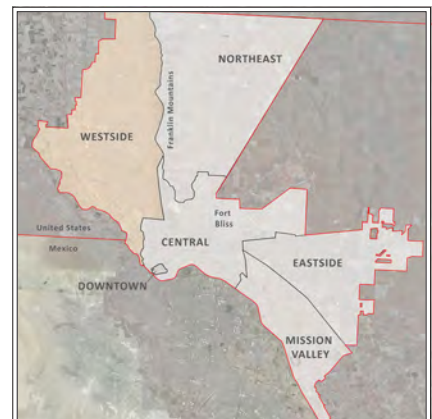
If housing is not allowed to cluster, and large lot zoning (such as 2.5 units per acre) is permitted, this will likely result in the subdivision of entire sites into private individual lots, leaving no meaningful open space or landscape being preserved. The unfortunate result would be the creation of suburban subdivisions similar to those constructed in recent decades throughout El Paso, and a loss of the farmland and open space that give the valley its unique character.

Streets in the Valley should be Different than Streets Elsewhere in the City

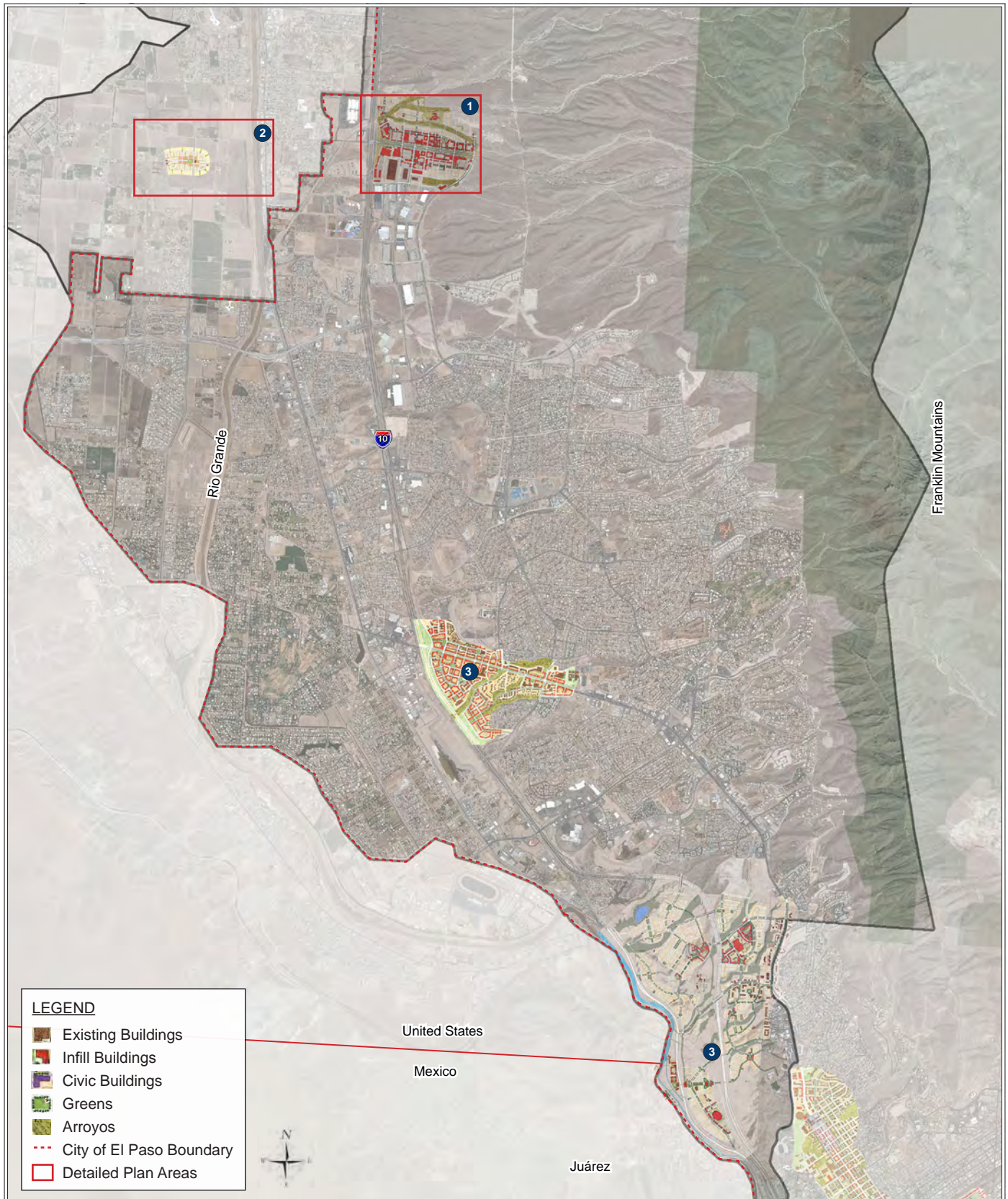
Another aspect that sets the valley apart from the rest of the City is its rural roads. Even as development comes to the valley, the scenic nature of the rural roads should remain. This includes narrow lanes, drainage swales instead of gutters, and trails instead of sidewalks. Mobility via horseback riding and biking should be emphasized, however, so that not every errand is by car or truck.

Illustrative Plans

- 1 West Transmountain Road: Strategy for the preservation of the entrance to the Franklin Mountains while still permitting vested development rights and the ideal way development should address adjacent arroyos.
- 2 Upper Valley Development: Strategy for allowing development in the upper valley while preserving farmland, open space, and the rural character of the area.
- 3 Strategies for addressing the ASARCO sites and Remcon Circle area are addressed in the *Plan El Paso 2010: Connecting El Paso - Building Transit-Oriented Neighborhoods and Redeveloping ASARCO* report.



WESTSIDE: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative plans for planning areas demonstrate community design and planning strategies for the Westside of El Paso.

WEST TRANSMOUNTAIN ROAD

West Transmountain Road is an important corridor that links the Westside and Northeast of El Paso. Transmountain Road is also one of the main entry points into the Franklin Mountains, enabling El Paso residents access into the Franklin Mountains State Park to enjoy outdoor recreation such as hiking and mountain biking as well as spectacular views. Development pressure along the Transmountain Road corridor, especially near the intersection with I-10, is increasing and the area is currently zoned commercial with few restrictions. The following strategies offer ways to shape future development so that the views and scarce ecology of the mountains are conserved.

Tame the Arterial

West Transmountain Road is currently slated by TxDOT to become four lanes with a wide median and with frontage roads on either side to access adjacent properties. The four lane section is to extend all the way through the Franklin Mountains, while the frontage roads are planned to extend from Pipeline Road to Desert Boulevard. This is a conventional suburban configuration, and would feature buildings pushed far from the road with parking in the front (a conventional auto-oriented development model).

A second, preferred alternative scenario should be investigated, transforming Transmountain Road into a multiway boulevard and making it an attractive destination rather than just a commercialized suburban corridor to move vehicles quickly over the mountains. A multiway boulevard is comprised of a series of parallel traffic lanes that separate high-speed vehicles from slow-speed vehicles. The slow-speed access lanes along the edges of a boulevard allow buildings with a variety of uses to move closer to the street. It then becomes possible, for example, for restaurants to have attractive outdoor dining – something that would not be viable in a conventional arterial section. Wide medians between a boulevard's through lanes and access lanes additionally allow a pedestrian and bike trail to be incorporated into the boulevard design, creating a safer environment for these users and allowing the street to move multiple modes of transportation: pedestrians, cyclists, and vehicles.

Create Mixed-Use Neighborhoods

While the parcels along Transmountain Road are zoned for commercial use, it is important to integrate residential, office, and other uses into the area. Providing a mix of uses will help create a supply of retail customers within close proximity to stores. It will also help reduce the distance people need to travel to meet some of their daily needs, greatly reducing or often eliminating the need for travel by car for every trip. Residential and other uses should be utilized as a transition between the mixed-use blocks along Transmountain Road and the scenic arroyos.

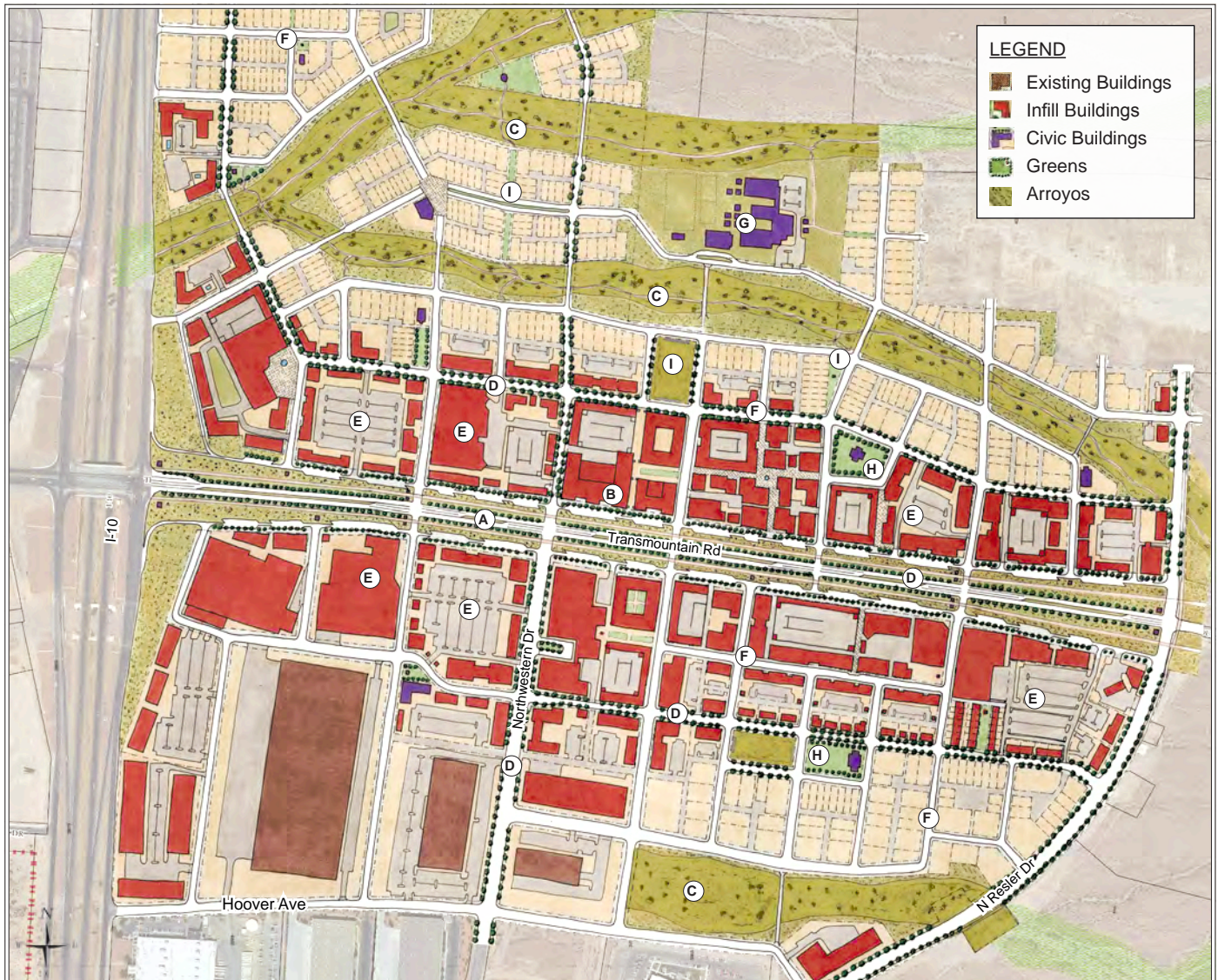
Accommodate Large-Format Retail in a Pedestrian-Scaled Environment

Many of the parcels along Transmountain Road are large and lend themselves to large-format retail and warehouse development. This type of single-use development has its economic benefits, but also results in an unwalkable auto-dominant environment that increases fuel consumption and congestion on the regional road network. The benefits of large-format uses can be maintained, while mitigating by drawbacks, by integrating them into a traditional street and block network. Commute times can be reduced, and fuel can be conserved by shortening some trips and keeping others off of the regional road network. Large parking fields characteristically associated with large-format uses can be accommodated in several ways. In most cases, the parking can be located within the interior of a block adjacent to the use. This block is then lined with additional varied-use buildings that help to screen the parking. In other cases, structured parking can be located adjacent to the large-format use. Being located within a block structure also allows on-street parking to be used to meet some parking needs, as well as allowing for passenger loading zones and parking directly in front of retailers.

Preserve Arroyos

Wherever possible, critical arroyos should be preserved. Incorporating the arroyos as features of any development plan allows nature to be brought into the development while preserving the natural stormwater flow of the area. Providing ready access to nearby open spaces, such as arroyos, is a time-tested method for increasing the value of adjacent real estate. Neighborhoods should be designed so that public access along the arroyos is maintained by way of a street frontage or pedestrian trails. Lots should face toward the arroyos, extending the benefits of these public spaces to numerous residents. Multi-use trails can be added within the arroyos which can, in some cases, connect to trails within Franklin Mountains State Park.

WEST TRANSMOUNTAIN ROAD



General Recommendations

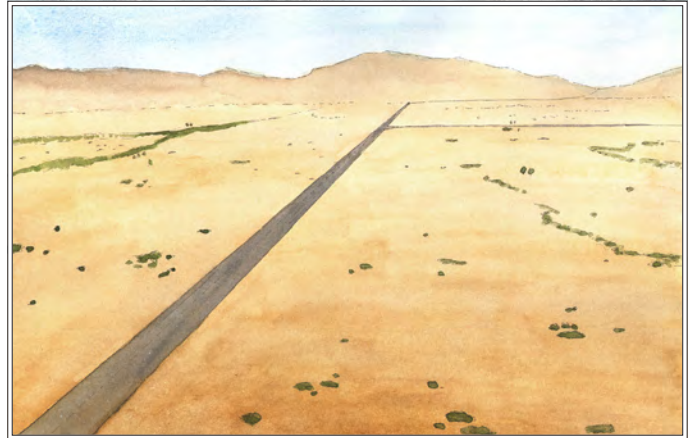
- (A) Transmountain Road should become a multiway boulevard with landscaped medians and local access lanes.
- (B) Street-oriented, varied-use buildings should front Transmountain Road, creating a pedestrian-oriented environment.
- (C) Arroyos should be preserved as open space amenities.
- (D) Street trees should be planted along primary streets.
- (E) Large-format retailers should be incorporated into blocks, with their parking areas screened by liner buildings.
- (F) Neighborhood streets should form an interconnected network.
- (G) Schools should be provided to serve residents of the new neighborhoods.
- (H) Neighborhood civic space should be designed to provide a gathering place for residents.
- (I) Public streets and civic open spaces should be utilized, where possible, to provide connections to natural open space and the arroyos.

WEST TRANSMOUNTAIN ROAD



Conventional Suburban Highway Scenario - Not Preferred

Below is an example of how Transmountain Road would look if built in a conventional suburban format. This auto-dominant model of development has, all too often in recent decades, been typical on the majority of major arterials in El Paso. The design focuses on the movement of vehicles to the detriment of everything else, including quality views to and from the Franklin Mountains. High-speed traffic moves through middle lanes with exits directing vehicles onto fast-moving parallel frontage roads to access the parking lots of adjacent properties. Single-use buildings, likely to be either warehouses or large-format retail stores, would be located to the rear of these parking fields, pushing people as far away from the roadway as possible. There is very little sense of place in this strictly auto-oriented development pattern, where everyone must drive large distances. Sidewalks are generally non-existent; regardless, no one would want to walk in this type of environment. Billboards and tall monument signs are placed to appeal to speeding motorists. The businesses along this type of road are those where you arrive and depart by car



Transmountain Road – existing conditions

– there would be no reason to linger or to want to walk anywhere including from one store to another. On Transmountain Road, this type of design would do little to add to the landscape in which it is placed. While a view corridor to the Franklin Mountains would likely be maintained as the buildings are low and far from the road, the view would be framed by a mundane, placeless scene that could be anywhere, and that would greatly detract from the beauty and uniqueness of the landscape.



Transmountain Road – conventional suburban highway scenario

WEST TRANSMOUNTAIN ROAD

**Preferred Multiway Boulevard Scenario**

A preferred, alternate treatment of Transmountain Road envisions a multiway boulevard built within the existing right of way. This type of design achieves the traffic movement goals of conventional highway designs while also creating a pedestrian-friendly destination and sense of place unique to El Paso. Much like a highway, the central lanes of the multiway boulevard would move higher speed vehicles; the main difference is in the side access lanes. While highway frontage roads typically function only as movers of vehicles, the slow moving boulevard side access lanes create an environment where slow-speed motorized vehicles, non-motorized vehicles, and pedestrians can safely interact. An additional benefit of these slow lanes is that they provide valuable addresses for businesses.

As the traffic is much slower, and pedestrian accommodations exist, people are more likely to feel comfortable in this environment. Restaurant tables can be placed next to these slow streets. Buildings can have doors and windows that face the street. On-street parking helps fulfill the parking needs of the businesses.

Wide medians separate the faster central lanes from the slower traffic in the side access lanes. These medians may be landscaped with native vegetation and provide a safe location for hiking and biking trails. The medians are also locations for civic art – they provide sites for monuments, statues, pavilions, and other works of art.

As in the conventional suburban highway scenario, the multiway boulevard would preserve a view corridor to the Franklin Mountains but the elements that frame the view would also add to the beauty of the landscape, rather than detract from it.








Transmountain Road – potential boulevard scenario

UPPER VALLEY DEVELOPMENT

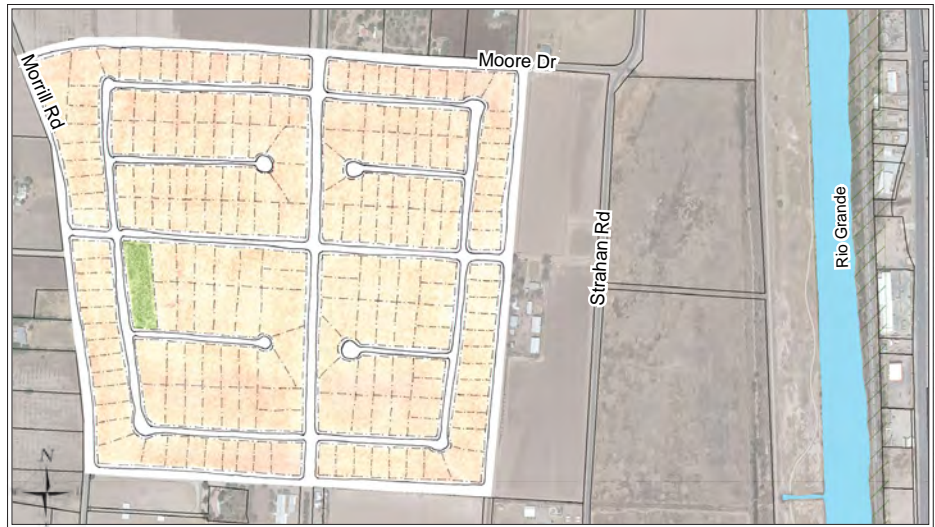
Farmland Preservation

Although the City has identified the Upper Valley as an area for future expansion, concerned residents have fought to put limits on new development in an effort to preserve rural lands. The *Save the Valley* initiative helped to pass a master plan amendment limiting new construction in the upper valley to a density of 2.5 dwelling units per acre. At a maximum build-out, however, this restriction to low-density, spread out development has the inadvertent potential to accelerate the destruction of rural and farmland areas for the development of moderately larger lots. Examples around the country have proven this density of development to be a recipe for maximum land consumption, high vehicle miles traveled, and an economically and ecologically unsustainable form of growth. The accompanying diagrams and renderings illustrate the result of developing at 2.5 units per acre versus clustering the same development rights on a portion of a site while preserving the rest of the land for open space or farmland.

LEGEND	
	Existing Buildings
	Infill Buildings
	Civic Buildings
	Greens
	Arroyos



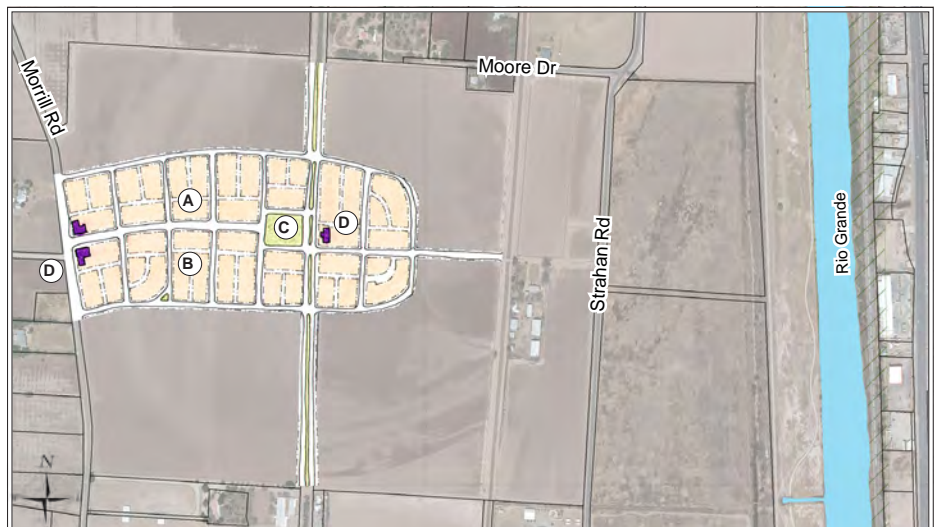
Upper Valley — Existing Conditions



Upper Valley Development — Conventional Development

General Recommendations

- (A) Development should be clustered into compact neighborhoods, preserving farmland and open space in perpetuity.
- (B) Neighborhoods should consist of a range of dwelling types, while respecting the rural character of the area.
- (C) Neighborhoods should feature a main public gathering place for events and farmer's markets.
- (D) Important sites within neighborhoods should be reserved for civic buildings.



Upper Valley Development — Clustered Development with the same number of dwellings

UPPER VALLEY DEVELOPMENT



Efforts should be made when developing to protect as much land as possible for permanent use as productive farmland and natural open space.

The current zoning requirement of a maximum of 2.5 dwelling units per acre should be preserved with the intent of exploring lower density zoning restrictions for future development of the Upper Valley area. An alternative development option should be available allowing for the clustering of development rights into compact, complete, connected neighborhoods. These illustrations show how development could be accommodated into a more compact area, helping to preserve a much larger amount of land outside of the developed areas. Development under this scenario should be predicated on the transfer of development rights for the usable agricultural land preserved by clustering. The City of El Paso should facilitate implementation of a targeted TDR program to support this development alternative.

Compact, walkable neighborhoods can be created in a way that maintains a rural character and fosters a sense of community, while preserving land for agriculture that benefits the neighborhood and larger community. Development in the Upper Valley should strive to follow these best practices and create world-class examples of sustainable rural communities.



Upper Valley — Example of Existing Conditions: A square quarter-mile is farmed by a single land owner.



Example of Conventional Development in the Upper Valley: A square quarter-mile site is completely consumed by 225 units at a density of 2.5 units per acre.



Example of Clustered Development in the Upper Valley: By allowing the same 225 permitted units to be clustered on a portion of the square quarter-mile, the remainder of the site could be preserved in perpetuity as usable agricultural land.

DEVELOPMENT ABUTTING ARROYOS

El Paso’s arroyo gulches are an important part of the local ecology and landscape. Carved over many years by the movement of rainfall across the earth, these shallow, moist ravines feature a high degree of biodiversity.

Arroyos as Great Public Spaces

If development is properly configured, arroyos can form very attractive public spaces that add value to adjacent neighborhoods. The key is to provide continuous public access along the neighborhood edge abutting the rim of the arroyo. This should be done with a public street or a public pedestrian walkway. Next, lots must be arranged so that the front or side façade faces the arroyos (not the backs of buildings). This will ensure that the walkway around the rim of the public space of the arroyo is beautiful and feels looked after. If frequent access points are provided, the arroyo will function as a valuable amenity for an entire neighborhood. An example of this is Arroyo Park which lies between the Kern Place and the Rim-University neighborhoods.

The Difficulty of Arroyos as Dedicated Parks

One of the reasons that arroyos rarely become parks is due to the issuance of park credits to land developers. The City currently provides developers with a 50% park credit for

preserving arroyos as open space, however, the City is particular regarding which arroyos can fulfill the park credit requirements. Developers cannot count on an arroyo being counted as open space early in the subdivision design process when the decision to incorporate an arroyo must be made. Additionally, the development community is not guaranteed City maintenance of the arroyo by the Parks Department and other departments.

The definition of an arroyo is also a complicated question. These natural features vary in size, depth, and ecological importance from case to case. The City currently utilizes the *Mountain to River – A Green Infrastructure Plan for El Paso*, adopted in January 2007, as a basis for arroyo and other ecologically sensitive area protection. Another question that arises is whether the arroyo only be counted as park space if it is preserved rim to rim, or can stabilizing walls that support channel slopes be used to reduce overall size?

Certainty for the development community can only come from a clear definition of the term “arroyo” and mapping of preferred arroyos and arroyo portions to save. Maintenance responsibilities would also have to be outlined before the subdivision design process begins.



When adjacent development is configured to face the arroyos as often as possible, arroyos can serve as valuable linear neighborhood parks.



Billy Rogers Arroyo Park is a 75 acre natural area located near the center of El Paso, between the Kern Place and Rim Road neighborhoods. The park designation protects about a mile of the arroyo that extends from the South Franklin Mountains to the Rio Grande.



Arroyo Park was a purposely preserved arroyo during the area's subdivision. The dry creek bed temporarily fills with water after heavy rains as water drains from the Franklin Mountains and this created a hazard to new houses. The park was also recognized as a possible amenity early in the design process. In time the arroyo raised property values of surrounding homes.
Image source: US GIS.



A public walk around the rim of an arroyo. Houses face the pathway and protective walls keep the arroyo safe for small children without eliminating the views.

SCHOOLS

Current development practices create large isolated schools surrounded by drives and parking lots, creating an environment where everyone is forced to drive. Even when a school is located adjacent to a neighborhood a large physical separation and unwelcoming, unwalkable drives discourages neighborhood residents from walking or biking to school.

Creating walkable, neighborhood-friendly schools require attention to detail in the school's relation to the neighborhood. Bringing school buildings close to the street help to narrow the gap between school and neighborhood and encourage a closer interaction between schools and the neighborhoods they serve. Streets surrounding a walkable school should be designed as low-speed, tree-lined, pedestrian friendly thoroughfares. Well-designed pedestrian friendly streets will encourage students to walk and bike from surrounding neighborhoods in a safe environment. Students that walk to school can also help the school district save money on busing children to school, especially in a future of more expensive energy prices.

The activity of children being dropped off and picked up at school can be filtered to surrounding neighborhood streets reducing the need for large stacking lanes. On-street parking adjacent to the school helps to alleviate the need for large drives and reduces the design speed of the road, making the street more walkable and crossable. Sports fields and other facilities can be integrated and shared with the surrounding community. Doing so will help the schools become a center for the entire community and create a place that can be used all day long, seven days a week.

NEIGHBORHOOD PLAYGROUNDS

Close proximity to playgrounds is very important when creating family-friendly neighborhoods. Ideally, no residence should be more than a couple of minutes walk from a neighborhood playground.

For playgrounds to feel safe and well looked-after, they must be faced by the front presentation faces (not backs) of buildings. Buildings can front playgrounds either across streets, or across pedestrian sidewalks. Shade from the intense El Paso sun is critical. Playgrounds should be equipped with a combination of trees, landscaping and structures to provide shady spots.

If playgrounds can be located adjacent to a neighborhood store or coffee shop, parents can buy a cool drink or a snack to enjoy while sitting and watching their children play.



Great playgrounds can be surprisingly small. They should be easy to walk to for surrounding residents.



General School Design Recommendations

- Ⓐ Welcoming and memorable front entrances for each school face the street.
- Ⓑ Buildings are placed to form well-shaped outdoor spaces.
- Ⓒ Parking lots are screened from view from the street.
- Ⓓ Classrooms are arranged around courtyards.
- Ⓔ Colonnades, porticos, and louvered shutters provide shade.
- Ⓕ Connected sidewalks, shaded by street trees, make it possible to walk or bike to school.
- Ⓖ Multi-building campuses are created with connecting outdoor pathways.



NORTHEAST: COMMUNITY CONCERNS

Control Development on Public Lands

The City of El Paso owns large amounts of land in the northeast portion of the City that is managed by the El Paso Water Utility and Public Service Board (EPWU-PSB). The northeast portion of the City is also where many El Paso residents get their drinking water. The City lands should be protected and only controlled growth should occur in this area. Responsible growth can be achieved by making more complete communities instead of continuing single use outward sprawl. The City of El Paso adopted the SmartCode in July 2008 in order to control growth in the City, particularly on City-owned properties. Large portions of the City lands are currently being planned utilizing an assortment of mixed-density zones. Although these plans conform to Smart Growth principles, revised plans should be developed to limit large parcel single-use subdivisions.

More Housing for Military Families

The northeast portion of the City is a desirable area for Fort Bliss personnel and their families due to its proximity to base entrances. Although base personnel do not necessarily remain in El Paso for long periods of time, many wish for a sense of belonging and community during the years that they are stationed in El Paso. Creating affordable housing for families close to Fort Bliss is a primary concern for residents in the northeast portion of El Paso.

Redevelop Northgate Mall

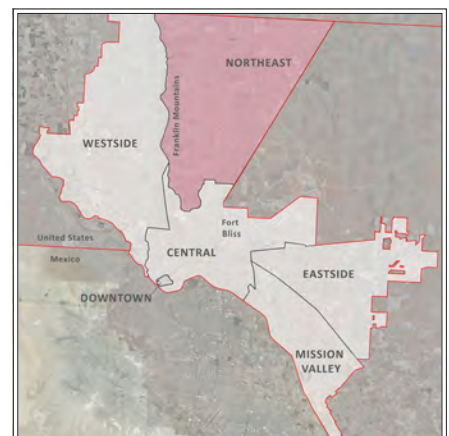
Northgate Mall is slated to be the location of the Rapid Transit System (RTS) terminus along the Dyer Corridor. As such, the property should be redeveloped in coordination with the construction of the RTS transfer station. Northgate Mall is uniquely located along Dyer Street, adjacent to a high school and surrounded by single-family homes. The high demand for retail moved to the north where Dyer Street meets Transmountain Road, leaving this former mall site, in a key location, available for other uses. With a pedestrian-friendly redesign and a fine-grained mix of uses, this former mall site is available for other uses to form a new heart of the surrounding neighborhood. Uses should focus on a well-balanced blend of residential, commercial, office, restaurants and workplace. The redesign should also feature important public amenities, such as a park or plaza, and a community center.

Make Neighborhoods Safer Through Design

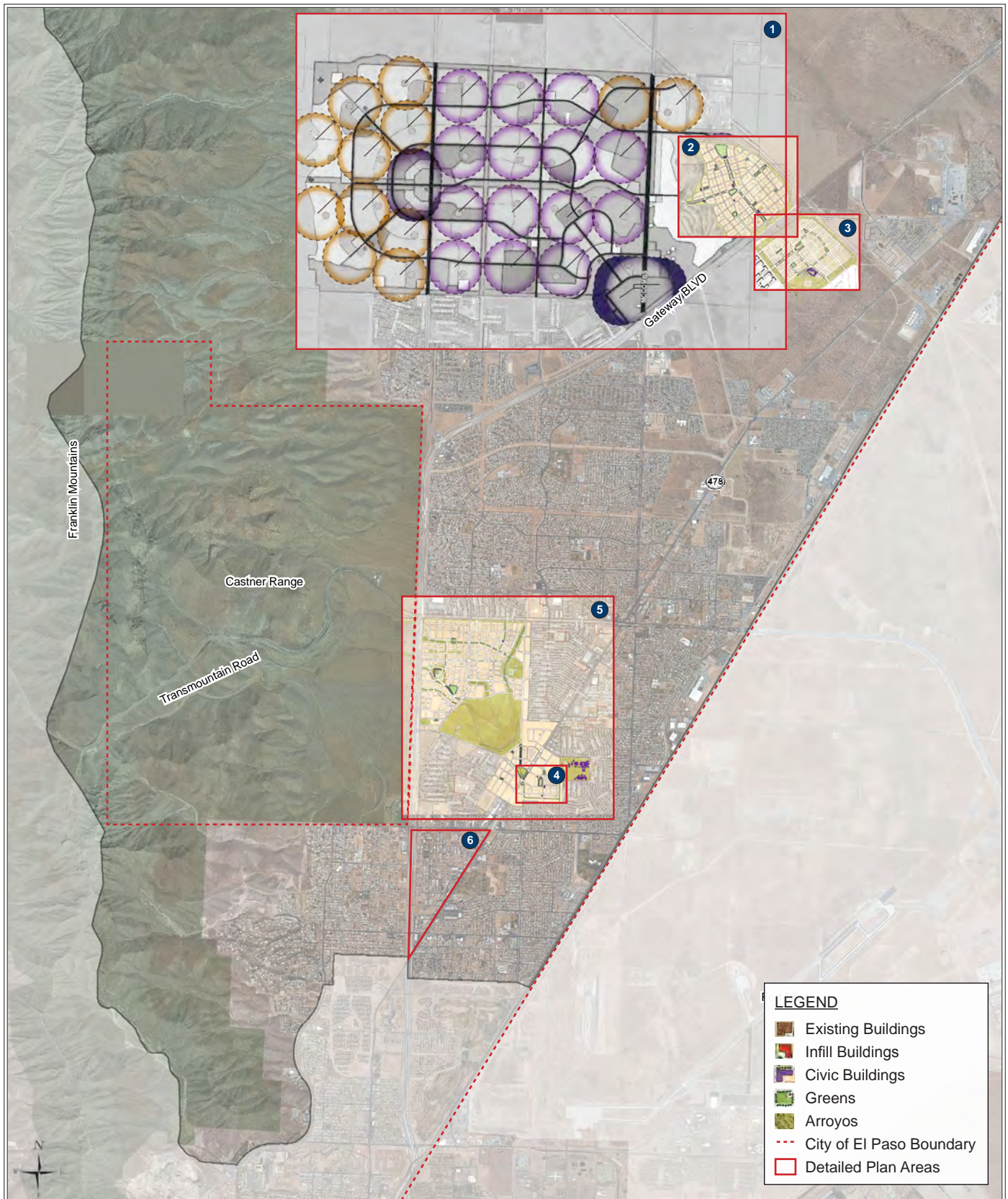
Although El Paso has largely grown in a contiguous manner, as new areas developed some older ones have become neglected and partially abandoned. These areas often feel unsafe and undesirable. Reinvesting in these areas will take time, but they can be revitalized and be made vital again. In order to limit the amount of outward sprawl, it is important for the City to encourage investment in and redevelopment of underutilized and vacant parcels in order to responsibly accommodate increasing populations on already disturbed lands.

Illustrative Plans

- 1 SmartCode Demonstration Sites: Demonstrates the application of the SmartCode on large tracts of land by using community types to create diverse neighborhoods.
- 2 SmartCode Demonstration Sites: Demonstrates the application of SmartCode regulations at the level of multiple neighborhoods.
- 3 SmartCode Demonstration Sites: Demonstrates the application of the SmartCode planning at the individual neighborhood and lot level.
- 4 Northgate Mall: Strategy for redeveloping the Northgate Mall area into a mixed-use transit-oriented development centered around the Northgate RTS Transfer Station.
- 5 El Paso Community College: Strategy for infilling development in skipped over parcels within developed portions of the City.
- 6 Angels Triangle: Strategy for adding infill and reconfiguring blocks to create safer neighborhoods in accordance with Crime Prevention through Environmental Design (CPTED) principles.



NORTHEAST: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative plans for planning areas demonstrate community design and planning strategies for Northeast El Paso.

SMARTCODE DEMONSTRATION SITE: COMMUNITY TYPE SCALE

El Paso is expecting to grow into large parcels of undeveloped land at the edges of the developed City. Although some residents question the sustainability of building on the City lands, current development plans and zoning exist for many of these areas, and responsible plans for building in the future should be put in place. Sample demonstrating sites in the northeast sector of the City have been selected to illustrate how the SmartCode can be used to plan large parcels of undeveloped land. These plans are illustrative only and are not intended to be the exact layout of the properties illustrated. Plans for the SmartCode demonstration areas have previously been prepared using General Mixed-Use zoning which is intended to be a zoning that permits a general mix of uses and densities. Initial sector plans using this conventional zoning approach for this area typically show a good mix of uses and density throughout the 3,300 acres to the west of Highway 54 (Patriot Freeway). However, upon looking at the details of these plans, the development of a connected network of mixed-use, walkable neighborhoods that support both affordable living and smart growth is not sufficiently mandated nor accomplished. Use of the City's SmartCode regulations would likely solve these shortcomings.

Use SmartCode Community Types to Plan Large Areas

An approach to planning new communities at the scale of multiple neighborhoods with more certainty in the final outcome, form, and sufficiently integrated mix of development would be to use Community Types as described by the El Paso SmartCode. By overlaying the area to be developed with a series of Regional Center Developments (RCD), Traditional Neighborhood Developments (TND), and Clustered Land Developments (CLD), the intensity and type of development to occur is prescribed while not limiting a quarter-mile neighborhood to a single use. Each community type is based around a pedestrian shed, or five minute walk, and each pedestrian shed would provide a mix of housing types and sizes throughout a neighborhood. The resulting community design would consist of a connected network of walkable neighborhoods. The network of interconnected neighborhood streets would provide an easy choice of multiple routes throughout the surrounding neighborhoods, connecting residents to open space, services, and potentially public transit and employment opportunities. Neighborhood design would provide for non-residential uses appropriate to place type and each neighborhood would have its own identity, focused around its own central public space.

RCDs should be located where more commercial density or main streets are desired and supportable. These would be located either along existing heavily traveled corridors such as Highway 54 or at the intersection of multiple neighborhoods.

The SmartCode demonstration site for community types illustrates two RCDs. The first is located along the visible frontage where the property is adjacent to the major thoroughfare and will have the greatest visibility from the larger community as they pass the site. This location for an RCD also has an advantage as the properties across the thoroughfare could also be developed as a mixed-use center creating a sense of place that expands across the roadway. The second RCD is located along Martin Luther King Jr. Boulevard, adjacent to the edge of several neighborhoods. This location makes the RCD within a ten-minute walk of a large number of households and enjoys the benefit of being along an existing roadway that may be used by people living outside the SmartCode demonstration area.

The placement of TNDs and CLDs depends on the size and type of neighborhood to be developed. CLDs require more undeveloped land and should be utilized in locations that have large preserved areas. They should be located on the lands primarily approaching the slopes of the Franklin Mountains as more of the land is within the natural flowways of the arroyos. This will allow some development to occur while preserving the natural landscape, habitats, and drainage of the mountains. The flatter portions of the land should be designated as TNDs.

Place Schools at the Edges of Walkable Neighborhoods

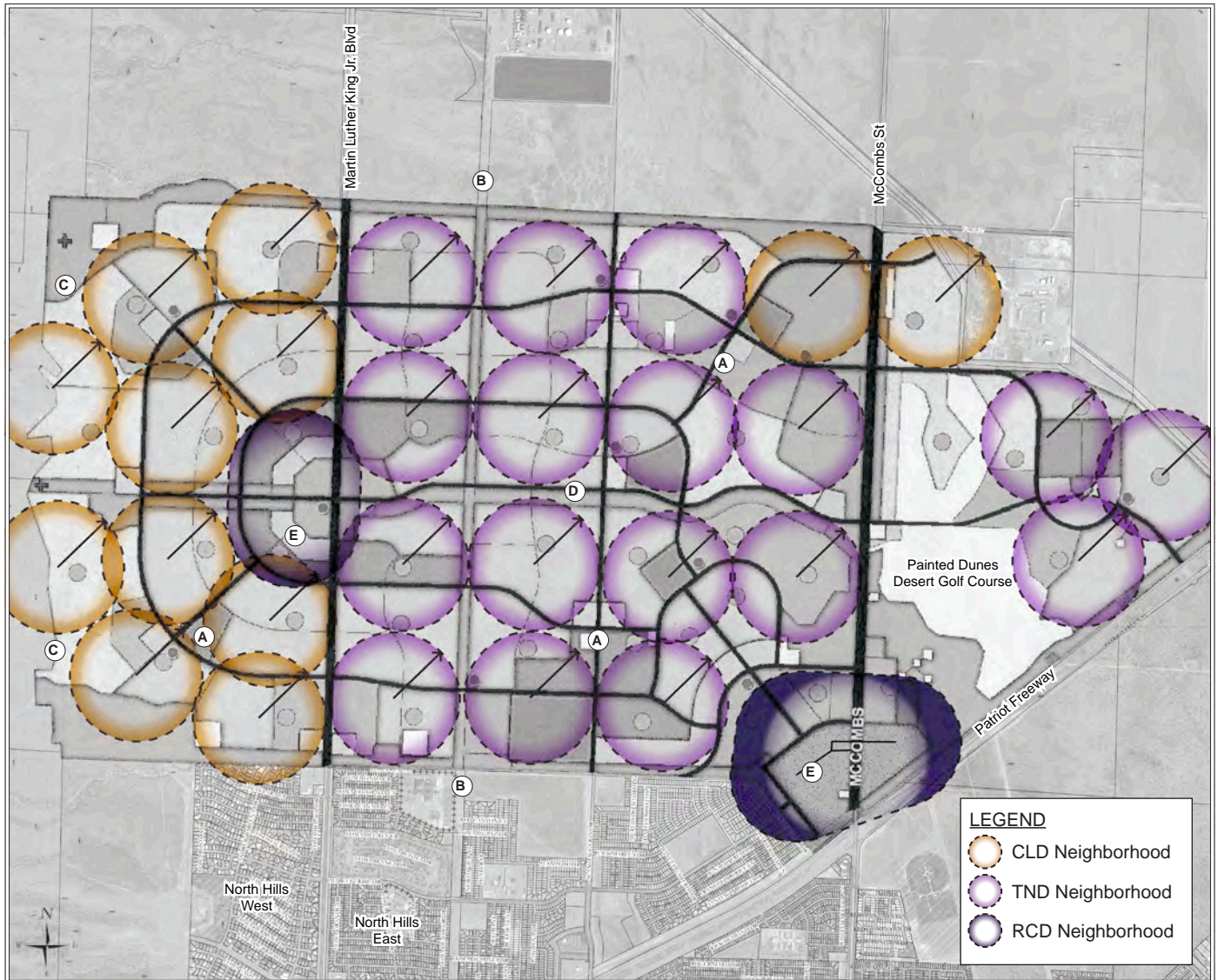
Schools and their play fields should be located where multiple neighborhoods meet. Ideally, the schools would be utilized by the surrounding neighborhoods. By locating schools within walking or biking distance of several neighborhoods, more children are able to get to school by their own accord, reducing the need for buses and parents needing to drive their children to school.

Organize the Community With Edge Roads

Development can be accessed and organized by a series of avenues along the edges of neighborhoods.

In the SmartCode demonstration site for community types, a grand avenue running through the center of the neighborhoods connects McCombs Street and Martin Luther King Jr. Boulevard. This avenue is strengthened by the adjacent neighborhoods whose perimeter lots would face out towards the avenue. This strong central spine and other neighborhood edge roads helps facilitate direct travel between neighborhoods and creates a sense of a strong shared community space. Additional street connections between neighborhoods would also exist to create an overall permeable street network.

SMARTCODE DEMONSTRATION SITE: COMMUNITY TYPE SCALE



SmartCode Community Types placed over an existing master plan using General Mixed-Use zoning to demonstrate planning large mixed-use areas.

General Recommendations

- A** Schools should be located at the edges of neighborhoods.
- B** An existing utility easement should be located along the edge of neighborhoods.
- C** Arroyos and the slopes of the Franklin Mountains should be preserved by building smaller clustered developments as permitted.
- D** A grand avenue can connect McCombs Road and Martin Luther King Jr. Boulevard and lead toward an RCD.
- E** RCDs should be located by existing roads to increase use by passers-by.

SMARTCODE DEMONSTRATION SITE: MULTIPLE NEIGHBORHOODS SCALE



General Recommendations

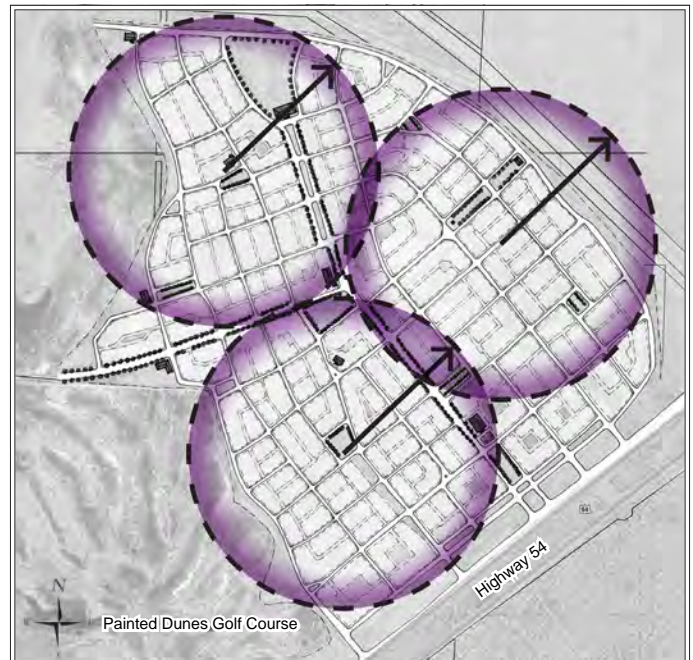
- Ⓐ A frontage road parallel to the major thoroughfare creates opportunities for on-street parking and a more domesticated address for residential on-street units to front toward.
- Ⓑ Residential units should face toward greens and the edges of neighborhoods.
- Ⓒ A large green should create a central focus between all of the neighborhoods.
- Ⓓ Special sites should be reserved for civic buildings.
- Ⓔ A connected block and street network should be created, linking the proposed neighborhoods.
- Ⓕ Small greens create special places throughout the neighborhoods.
- Ⓖ Stormwater can be retained in greens and mid-block locations.

SMARTCODE DEMONSTRATION SITE: MULTIPLE NEIGHBORHOODS SCALE


Designing at the Level of Multiple Neighborhoods

SmartCode community types should be used to organize large amounts of undeveloped land and help create an overall street network. As plans become more detailed, the SmartCode provides regulations on a required mix of housing types, uses, and community space. The three TND neighborhoods between an existing golf course and a major thoroughfare have been drawn in more detail here as an example to illustrate how the community type designation creates the framework for detailing the neighborhoods with the additional SmartCode regulations.

At this scale of neighborhood planning, the network of greens and civic spaces and detailed network of blocks and streets should be identifiable. Even though neighborhoods will likely have edges defined by streets, lots should face out toward streets. The exact mix of units and location of specific lot lines does not need to be determined at this time, but the allocation of transect zones should be identified. The mix of transect zones, size of blocks, thoroughfare types, and civic spaces should be known and in compliance with the El Paso SmartCode.



Community Types



LEGEND
 TND Neighborhood

Neighborhoods

This SmartCode demonstration site is to be located between an existing golf course and a major thoroughfare. This area is approximately 350 acres, a size large enough to accommodate three TND pedestrian sheds. Note that the shape and size of each neighborhood is roughly the size of a pedestrian shed, but the neighborhoods are not circular and do not always stay within the confines of the pedestrian shed. The pedestrian shed should be used as an organizational tool that is refined when this scale of design is worked out. Each pedestrian shed, or neighborhood, should have its own identifiable center and edge.



Neighborhoods

LEGEND
 Neighborhood
 5 Minute Walk

SMARTCODE DEMONSTRATION SITE: MULTIPLE NEIGHBORHOODS SCALE

Street Network

The street network should feature the major streets connecting between the neighborhoods. The street network in this example connects to the larger community across the golf course to McCombs Street. A secondary circulation route connects each of the main civic centers within the neighborhood. Each neighborhood has secondary parks and special places which are also connected within each neighborhood and to the adjacent neighborhood green network (refer to Civic Space diagram on top, right hand corner of page 2.59).



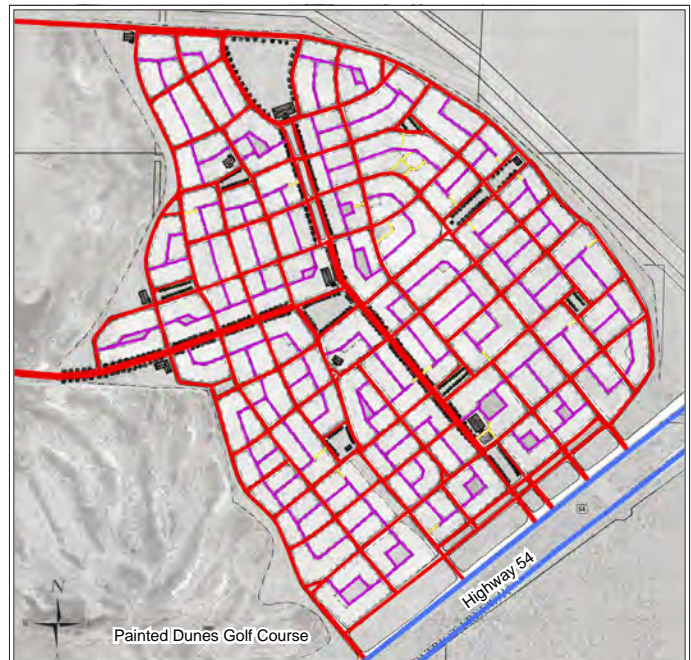
Street Network

LEGEND

- Existing Streets
- Proposed Main Streets
- Proposed Streets

Street, Alley, & Pedestrian Path Network

In addition to the streets, alleys should organize the blocks so that the fronts of buildings and lots can face the street while garages and parking are accommodated off of the alleys. Pedestrian connections to the rear lots (off the alleys) enhance the pedestrians' ability to circulate through multiple routes and around the neighborhoods.



Street, Alley, & Trail Network

LEGEND

- Existing Streets
- Proposed Streets
- Alleys
- Pedestrian Paths

SMARTCODE DEMONSTRATION SITE: MULTIPLE NEIGHBORHOODS SCALE

Civic Spaces

Neighborhoods should be organized around a series of greens, civic building locations, and open spaces. A large central green should mark the center of each neighborhood and each green should take on its own form. In this example, one neighborhood has a long narrow green with small civic buildings at each end. Another is a large rectilinear, almost square, green with smaller attached greens leading towards it for three blocks from the major thoroughfare. The third central green is smaller, creating a more intimate space for its center. In addition, there are larger common greens where all of the neighborhoods merge. This common center allows the three neighborhoods to unite into a connected network of walkable neighborhoods. Either at this common green, or out by the major thoroughfare, would be the ideal location for a small corner store, retail, offices, or transit stop locations.

Smaller common green spaces should be located throughout the neighborhoods, creating special spaces and amenities for a majority of the housing.

Special sites should be reserved for civic buildings. Locations should be deliberately selected that will conclude the long view down a street or for anchoring a prominent street corner or neighborhood square. These unique settings within the neighborhood are permanent anchors for civic pride.



Civic Spaces

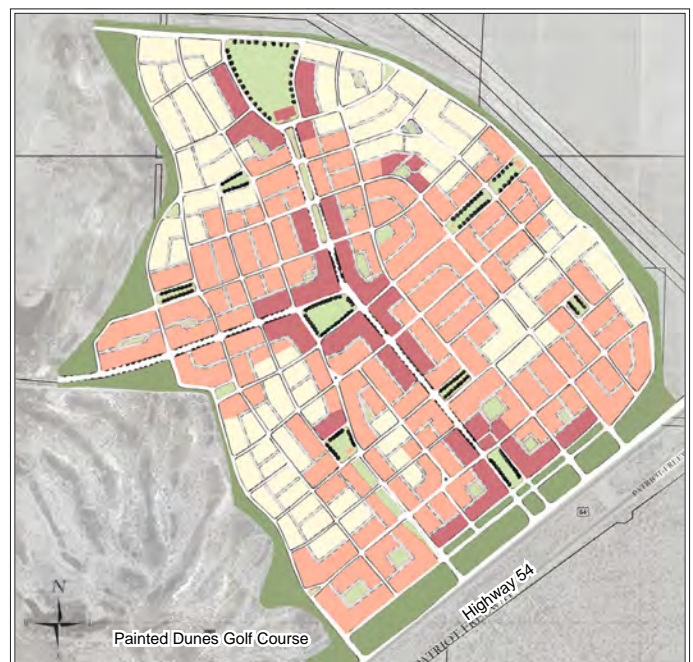
LEGEND

- Formal Green Spaces
- Secondary Spaces
- Open Space
- Civic Buildings

Proposed Transect Zones

A series of mixed-use transect zones should be prescribed for the neighborhoods in accordance with Table 14 of the El Paso SmartCode. T5 sections of the neighborhood should be concentrated around the green that is common to all of the neighborhoods, with some additional T5 development located in this example along the major thoroughfare. General neighborhood areas consist of T4 with T3 located around the edges of the neighborhood.

The building types and density for each of the transects are prescribed in Table 14 of the SmartCode. The mix of transects and densities within them create variations within each neighborhood that prevent monocultures.



Proposed Transect Zones

LEGEND

- Special District
- Parks
- T1 - Natural
- T3 - Sub Urban
- T4 - General Urban
- T5 - Urban Center

SMARTCODE DEMONSTRATION SITE: NEIGHBORHOOD AND LOT SCALE

Once neighborhoods have had a block structure established and alleys have been designed, the final scale of community development plans occurs when the detailed mix of unit types is lotted out and platted. Alleys help to illustrate the intended

direction that lots will face, and where larger fields of parking may be located in mid-block locations. This level of detail is important so that streets are properly fronted with buildings.



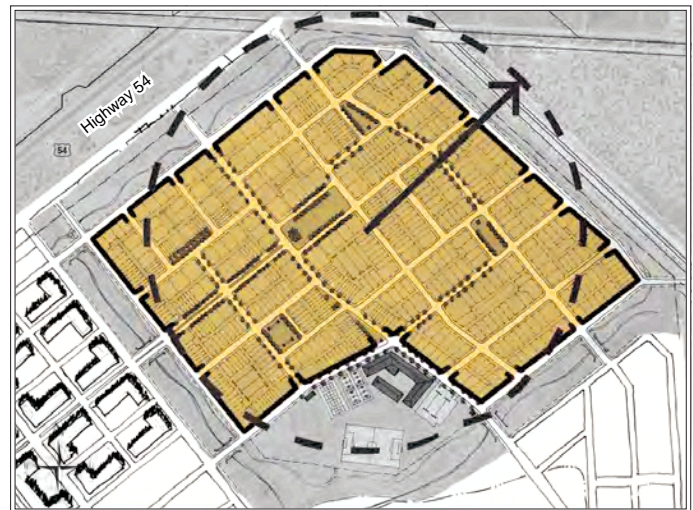
General Recommendations

- (A) A corner store could be located by the central green of the neighborhood.
- (B) Parking for commercial, office, and apartment buildings should be accommodated in mid-block locations.
- (C) The elementary school building should be located fronting the street with the bus drop-off and parking located to one side of the building.
- (D) School fields should be community amenities and accessible to the neighborhood during non-school hours.
- (E) Overflow parking for the school can be located at the interior of adjacent blocks.
- (F) Walking trails may encircle each neighborhood adjacent to drainage areas.
- (G) Neighborhoods should consist of wards; each ward should have its own small, central space in addition to the larger central space at the center of the neighborhood.
- (H) Regular connections should be made to adjacent neighborhoods.

SMARTCODE DEMONSTRATION SITE: NEIGHBORHOOD AND LOT SCALE

Neighborhood

Note that the shape and size of the neighborhood is roughly the size of a pedestrian shed, but the neighborhood is not circular and does not always stay within the confines of the pedestrian shed. The pedestrian shed should be used as an organizational tool that is refined when this scale of design is worked out. Each pedestrian shed, or neighborhood, should have its own identifiable center and edge.



Neighborhood

LEGEND

- Neighborhood
- 5 Minute Walk

Civic Spaces

A large green should be centrally located to serve as a gathering space for the entire neighborhood. A corner store and potentially a small amount of neighborhood retail could be located on the green with parking located within the block and on the street.

In addition to the large central green, each of the quarters, or wards of the neighborhood should have its own small gathering space, which helps to give each segment of the neighborhood its own identity. Denser building types, such as apartment buildings and rowhouses, could be located close to these greens. Small houses and larger single-family homes could be located further from the center of the neighborhood.

Schools with large playfields should generally be located at the edge of a neighborhood so as not to disrupt the neighborhood's pedestrian walking shed. If possible, a school may be located adjacent to the edge of more than one neighborhood, increasing the number of households within walking distance. The school building itself should be located towards the street. The bus drop off and parking lot should be located unobtrusively so as not to disrupt pedestrian connectivity from the neighborhood to the school. Schools fields should be located toward the edge of the neighborhood and can be outside of the pedestrian shed.

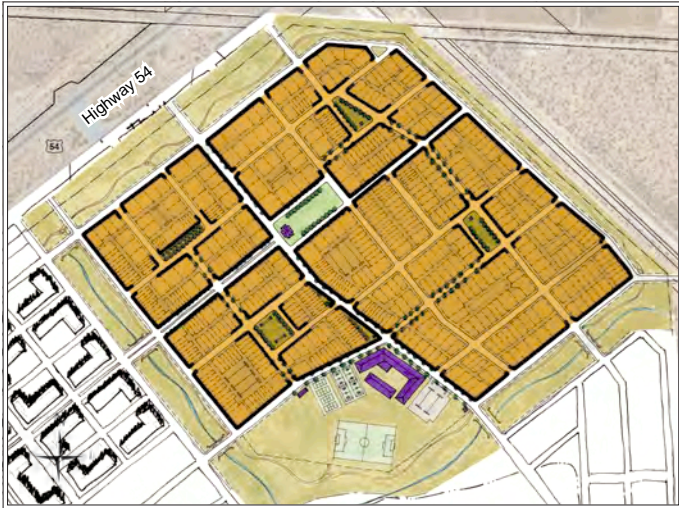


Civic Spaces

LEGEND

- Formal Green Spaces
- Secondary Spaces
- Open Space
- Civic Buildings

SMARTCODE DEMONSTRATION SITE: NEIGHBORHOOD AND LOT SCALE

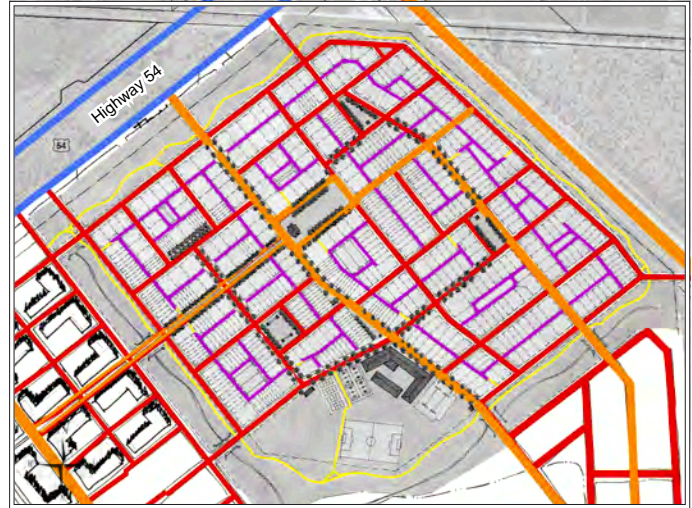


Ward Map

At this level of detail it can be seen that the neighborhood is broken down into different wards, each with its own central community space.

LEGEND

- Neighborhood Ward



Street Network

A high level of street connectivity is achieved by creating multiple routes and connections to adjacent neighborhoods.

LEGEND

- Existing Streets
- Proposed Main Streets
- Proposed Streets
- Alleys
- Pedestrian Paths



Proposed Transect Zones

The transect zones and densities are allocated in accordance with the Smart Code.

LEGEND

- T5 - Urban Center
- T4 - General Urban
- T3 - Sub Urban
- T1 - Natural
- Special District



Unit Types

Unit types can be located within multiple transects. Each neighborhood has a mix of unit types creating a diverse, mixed community.

LEGEND

- Single-Family
- Rowhouses
- Mansion Apartment
- Mixed - Use

NORTHGATE MALL REDEVELOPMENT

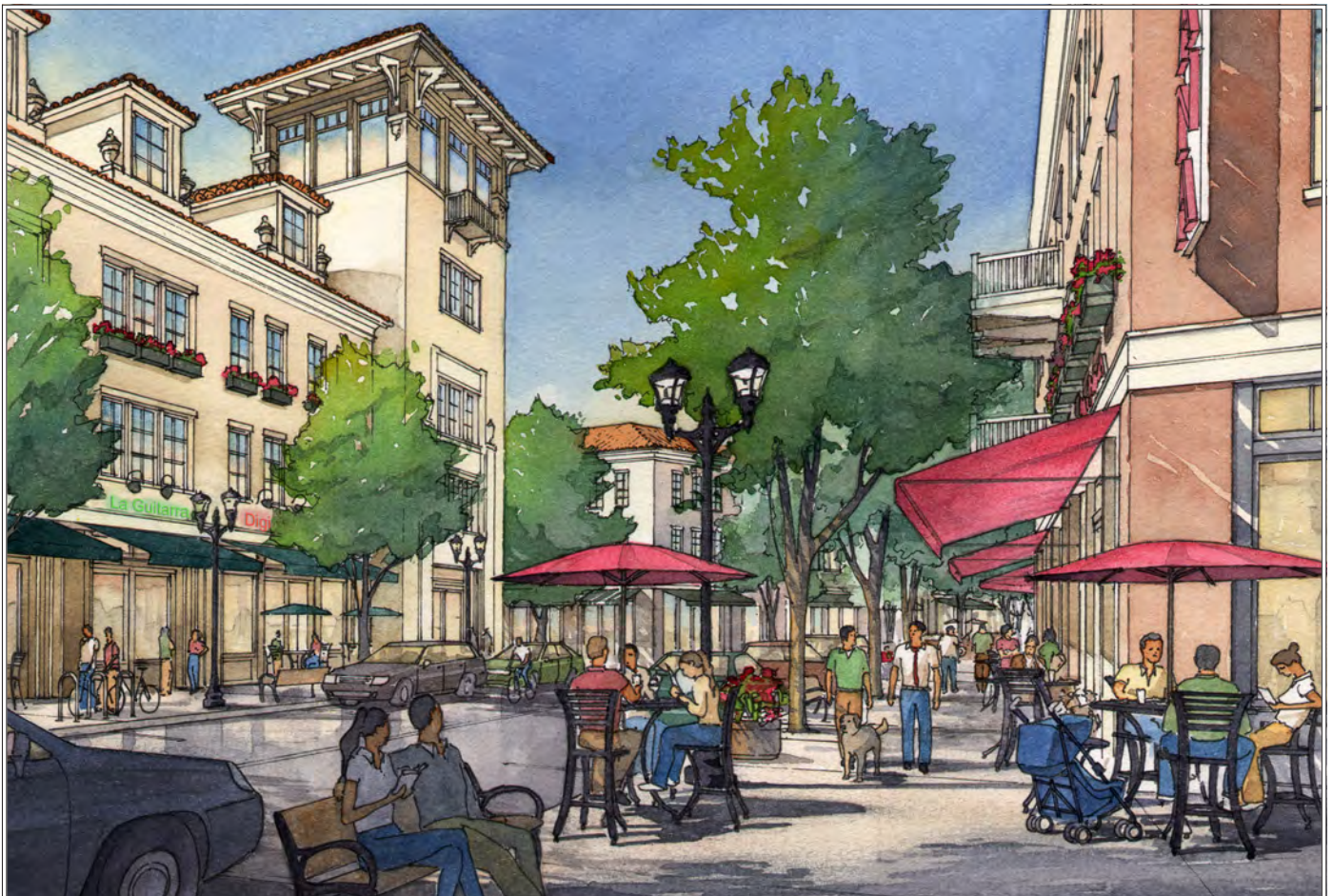
Main Street Northgate

The former Northgate Mall site may no longer be able to support large, regional destination shopping, however it could support a multi-story mixed-use main street if connected to the City's Bus Rapid Transit System and as part of a complete urban setting with a "built-in" customer base of shoppers within walking distance. Mixed-use buildings with retail on the ground floor in shopfront format and residential or office above could provide a unique destination for the community. Ample tree-lined sidewalks with awnings and cafe dining should become the rule by use of the El Paso SmartCode. Parking lots are located mid-block in order to not detract from the pedestrian experience.

By capitalizing on the inherent advantages of walkable, urban development, Northgate's Main Street can effectively take advantage of the City's investment in rapid transit system (RTS), civic, and recreational spaces. These amenities help ensure that residents from all parts of the City will visit the main street while residents of the settlement enjoy the luxury of living in a complete neighborhood.



The Northgate Mall complex is currently vacant and unused and scheduled for demolition.



Mixed-use development at the heart of the neighborhood provides a Main Street for the entire community.

NORTHGATE MALL REDEVELOPMENT

Northgate Transfer Center

The Northgate Transfer Center should be an important anchor in the redevelopment of the entire Northgate Mall site into a town center. Likewise, the greater Northgate neighborhood should be a critical asset to the Transfer Center. With this in mind, it is important that the Transfer Center be designed in such a way as to encourage pedestrians to walk throughout the entire site. Parking for transit should be provided mid-block in order to maintain the visual interest of the public realm. Blocks should be a walkable size. Transit terminal buildings should be designed as proud monuments that reflect the history and culture of El Paso.

Wren Avenue should be redesigned as a more welcoming, pedestrian-friendly thoroughfare. Narrowing the existing traffic lanes should give enough room to add on-street parking. The outer lanes can also be converted to bus-only lanes to facilitate the movement of buses and give transit priority.



Fixed-route buses circulate into the transfer center. Parking is provided in a mid-block structure with habitable buildings facing public spaces.



RTS service circulates around a formal civic square allowing faster circulation of express buses.



A new RTS terminal can make a proud civic structure. Memorably located at the end of the park and defining the “outdoor room” of the square the transfer station would welcome pedestrians, drivers, and transit riders.

NORTHGATE MALL REDEVELOPMENT

Northgate Transit-Oriented Development

The redevelopment of Northgate Mall presents a unique opportunity to reshape this important node as transit-oriented development. By providing a variety of housing types and uses, the site can become a dynamic, diverse center that will complement the City’s transit investments and create a center for the surrounding community. The City’s addition of civic amenities, such as playing fields and a community center, will add value to the neighborhood.

Creating an urban fabric that will take advantage of these amenities, and reduce dependence on the automobile, would provide a wide range of benefits. To achieve these goals, single-use buildings and surface parking lots should be replaced with multi-story, mixed-use buildings, and an interconnected network of walkable streets. These traffic calmed, tree-lined streets should form walkable blocks with buildings facing the streets in order to create attractive, meaningful, pedestrian-friendly spaces. Streets should accommodate the automobile but should also be safe, comfortable, and interesting for the pedestrian.



A variety of housing types and civic amenities should be incorporated in the neighborhood.



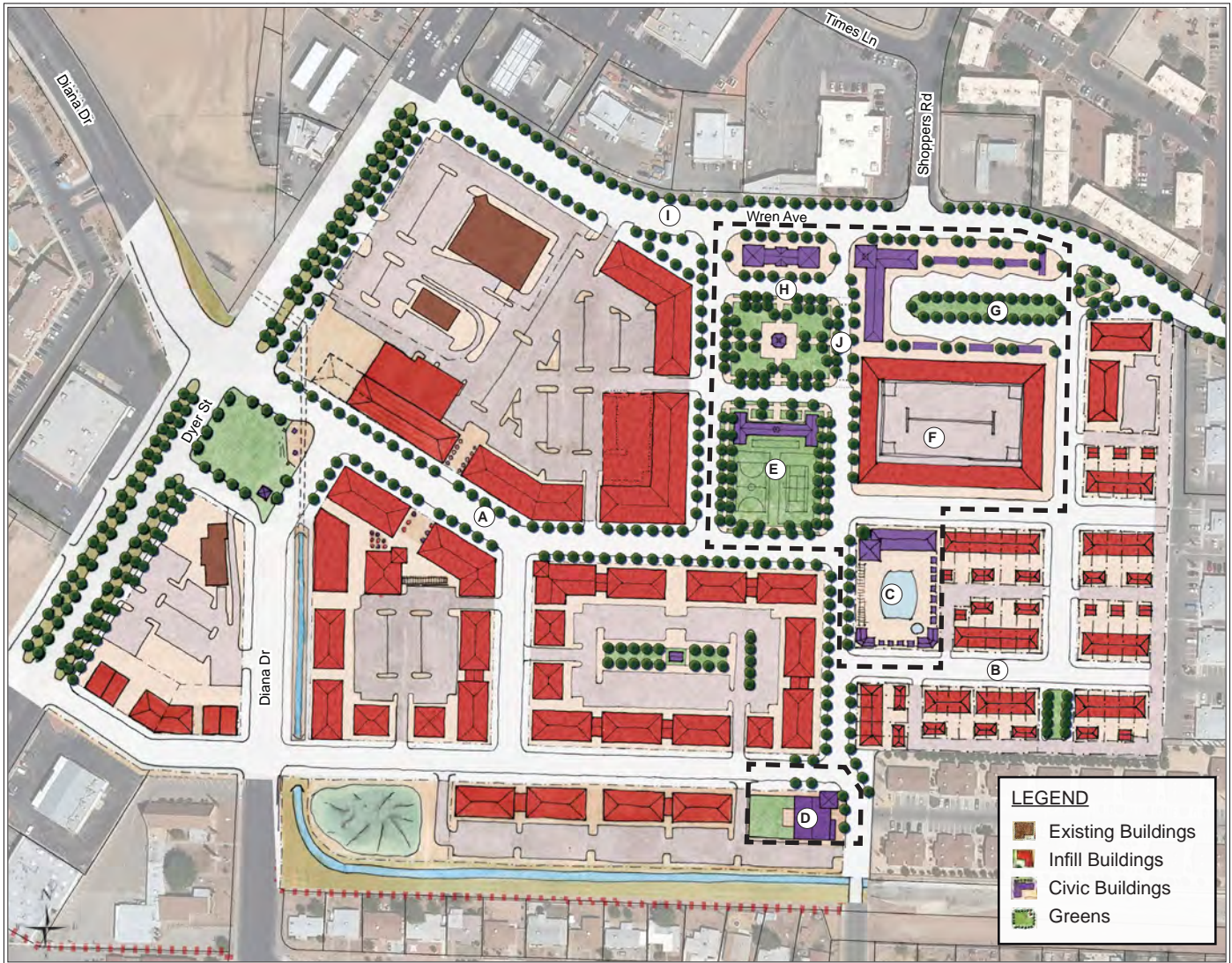
A complete, walkable neighborhood with a variety of building types and spaces would form an important center for the surrounding community.



A pedestrian-friendly neighborhood street should feature a variety of housing types, a design for slow driving, and sidewalks within conversation distance of front porches.

NORTHGATE MALL REDEVELOPMENT

The terminus of the Dyer Corridor RTS line is located at the Northgate Mall property. To capitalize on the transportation investment in this location, the vacant Northgate Mall should be redeveloped to better support this expanding infrastructure.



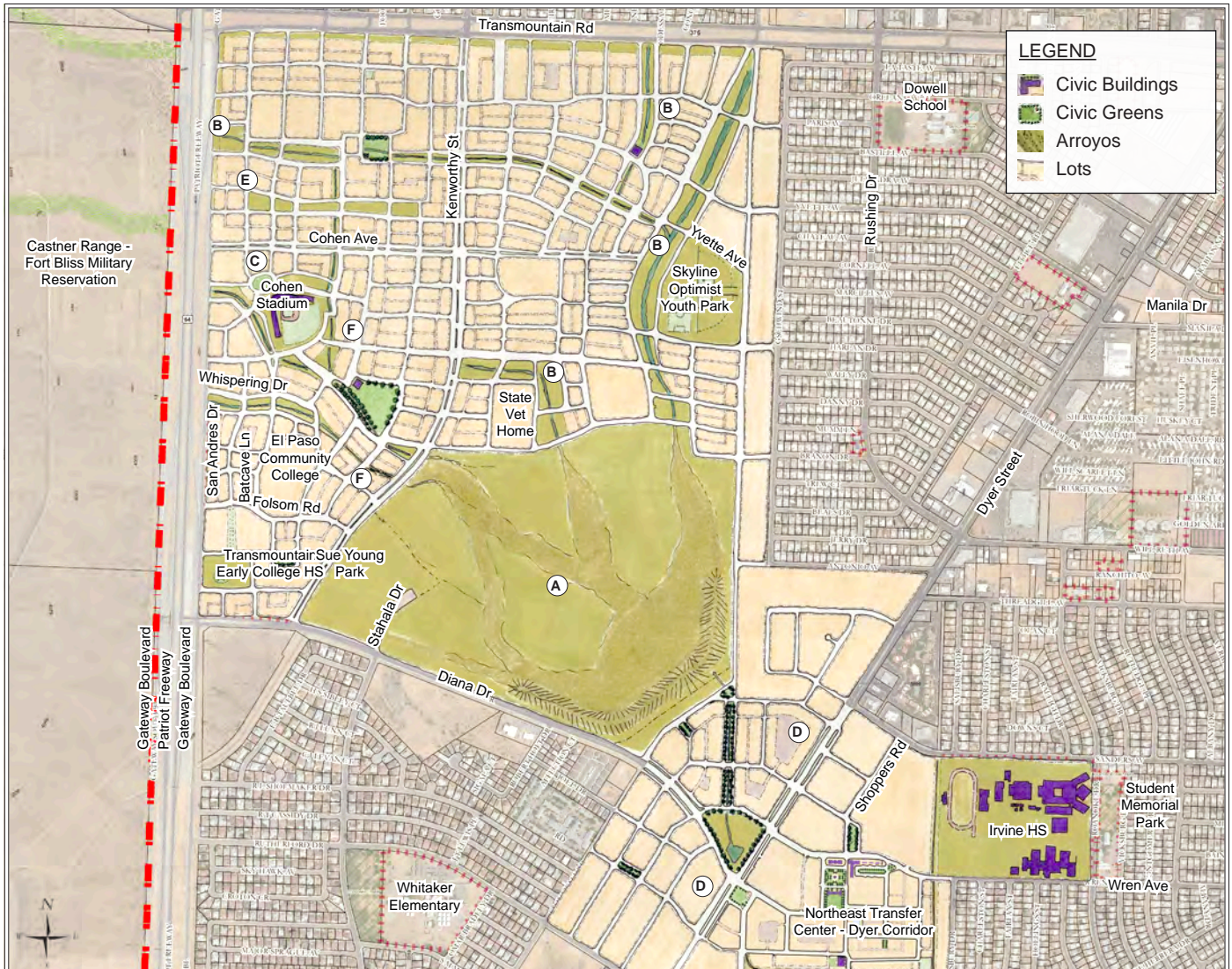
General Recommendations

- A** A lively, pedestrian-friendly, mixed-use main street with on-street parking and continuous street trees should become the center of the community.
- B** Residential streets should be lined with a variety of housing options, including apartment buildings and rowhouses.
- C** A community center provides an amenity to the neighborhood.
- D** A daycare facility should be provided within walking distance of homes and workplaces.
- E** A public park with basketball, tennis, and bocce ball courts could provide recreational opportunities within the neighborhood.
- F** A parking structure for the Northgate Transfer Center should be lined on all sides by habitable buildings.
- G** Fixed-route buses circulate at the edge of the neighborhood with space for a Transfer Center and Sun Metro offices.
- H** RTS buses could have a dedicated space facing the central square adjacent to the Transfer Center.
- I** Traffic lanes on Wren Avenue could be narrowed, giving room for on-street parking and converting outer lanes to bus-only lanes.
- J** A street adjacent to a formal green with a gazebo could be reserved for events like farmers markets.

EL PASO COMMUNITY COLLEGE

The area surrounding the El Paso Community College off of Transmountain Road and Highway 54 has a lot of potential for future development. The area contains many assets to the community, including a movie theatre, Cohen Stadium, Skyline Optimist Youth Park, El Paso Community College Transmountain Campus, a veterans home, and Sue Young Park. The area also contains an arroyo and major flowway connecting the Franklin Mountains to a large catchment area used to hold flood waters.

Although development should not occur within the arroyo and catchment area, space between existing development can be infilled to create an interconnected, walkable community and provide affordable student housing. A series of linear greens can become a central organizing feature of the neighborhoods and allow water to continue to flow in a natural pattern toward the catchment area. The El Paso Community College neighborhoods could connect into the mixed-use development at the Northgate Mall location on the other side of the catchment area.



General Recommendations

- (A)** Existing stormwater catchment area should be preserved.
- (B)** Existing flowways should be protected and enhanced as amenities.
- (C)** A roundabout by Cohen Stadium could provide a drop-off location.
- (D)** Connections to Dyer Street could be realigned to make better frontages.
- (E)** Linear greens clean stormwater and provide great addresses.
- (F)** In time, infill buildings should inhabit parking lots of existing amenities and retail.

ANGEL'S TRIANGLE



The Angel's Triangle area is bordered by the Patriot Freeway, Hondo Pass Avenue, and Dyer Street. The Triangle is characterized by large blocks; some are square, and others are elongated in the north-south direction. The Freeway is a barrier to connectivity with

neighborhoods to the west. There is also a perception that safety and security may be lacking on certain blocks in the neighborhood. The following drawings show how a typical superblock can be transformed over-time to provide livable densities while incorporating principles of sustainability and Crime Prevention through Environmental Design (CPTED).

From Superblock to Walkable Village

1. Introduce New Streets and Paseos

Increasing the permeability of large blocks by introducing new slow-moving streets and paseos is the first step in creating a walkable village. A paseo is a pedestrian-only street or walkway that provides shortcuts through long blocks. Their design should be tipped in favor of the pedestrian. Currently, there are informal pathways traversing the blocks in Angel's Triangle. Because the blocks are excessive in size, they are already be-

ing reduced by drivers and pedestrians who ignore property boundaries. This informal mid-block traffic occurs despite the absence of buildings, leading to a safety and natural surveillance problem. As these informal pathways evolve over time into slow-moving streets or pedestrian paseos, care should be taken that they are properly fronted by existing and infill buildings to provide adequate natural surveillance.

2. Use Architecture to Encourage Safety

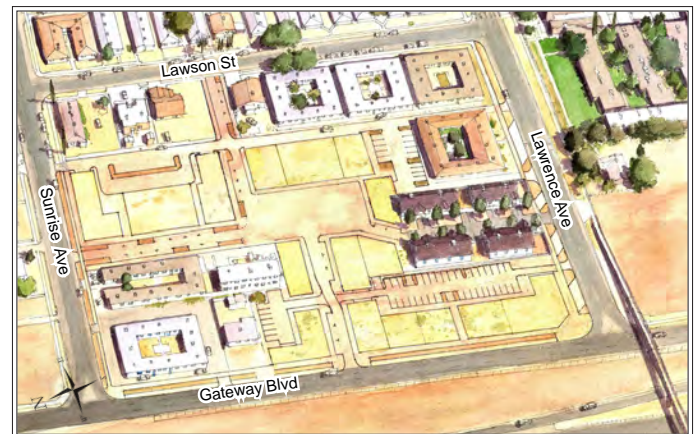
New courtyard buildings should not only provide transparency and loggias inward, but also offer transparency and fenestration outward, toward the public and semi-public realms. Accessory dwelling units and rear façades provide natural surveillance to alleys and rear parking courts. Mixed-use commercial buildings increase pedestrian traffic and encourage walking, adding to the village-like atmosphere. Multi-story buildings have more people viewing an area and give a better view toward the street creating more surveillance and "eyes on the street."

3. Shape New Plazas

Small plazas can be created as former superblocks are subdivided. These plazas should be lined by buildings with a high degree of transparency.

4. Increase Self-Sufficiency

Planting courtyards, paseos, and placitas with desert-adapted or edible plants can create new habitat and enable the community to achieve a degree of self-sufficiency. Retrofitting existing buildings and designing new buildings to harness the sun's power can reduce demand for costly, non-renewable energy. The roofs of courtyard buildings should typically slope inward to direct rainwater into underground cisterns.



Existing Conditions. While courtyards are an excellent climatic architectural response, the courtyards in the sample block have most of their windows facing inward. Façades facing the public realm or semi-public spaces suffer from blankness or small size and number of doors and windows.

CPTED Solutions, Step 1: Divide the block into four blocks that are better scaled to the surrounding block structure. Formalize the currently informal pathways into slow-moving streets. Plat the resulting blocks to encourage unit type diversity. Establish a clear sense of fronts and backs.

ANGEL'S TRIANGLE



CPTED Solutions, Step 2: Infill buildings reinforce the sense of fronts and backs. Lots and blocks are clearly defined by building fronts and garden walls.



CPTED Solutions, Step 3: Desert-adapted trees and plants are installed on existing and proposed planting strips and swales. They are spaced wide enough and staggered in order to maintain surveillance "line of sight" across public spaces.



Sustainability: Flat roofs are ideal for photovoltaic panels that can be gradually introduced onto buildings. Courtyards can be planted with desert-adapted and edible plants.

EASTSIDE: COMMUNITY CONCERNS

Control Eastward Expansion

As development pressure continues to grow in El Paso, the eastern edge of the City, particularly along Zaragoza Road, has become an attractive location for unbridled expansion to occur. The vast majority of this existing development does not do a sufficient job of providing for the multiple needs of its residents or customers. For the most part, these projects are typically single-use in nature. Little effort has been made to allow the mixing of uses.

Residential Subdivisions

In the case of residential development, the homes of each subdivision often fit within a narrow range of size and income level. There is little, if any, variety in unit type. The green spaces that are mandated appear to be the leftover spaces within the development, with minimal thought given to their placement within the neighborhood. Many of these spaces lack the appropriate landscaping that would help to make them an attractive place for residents to spend leisure time.

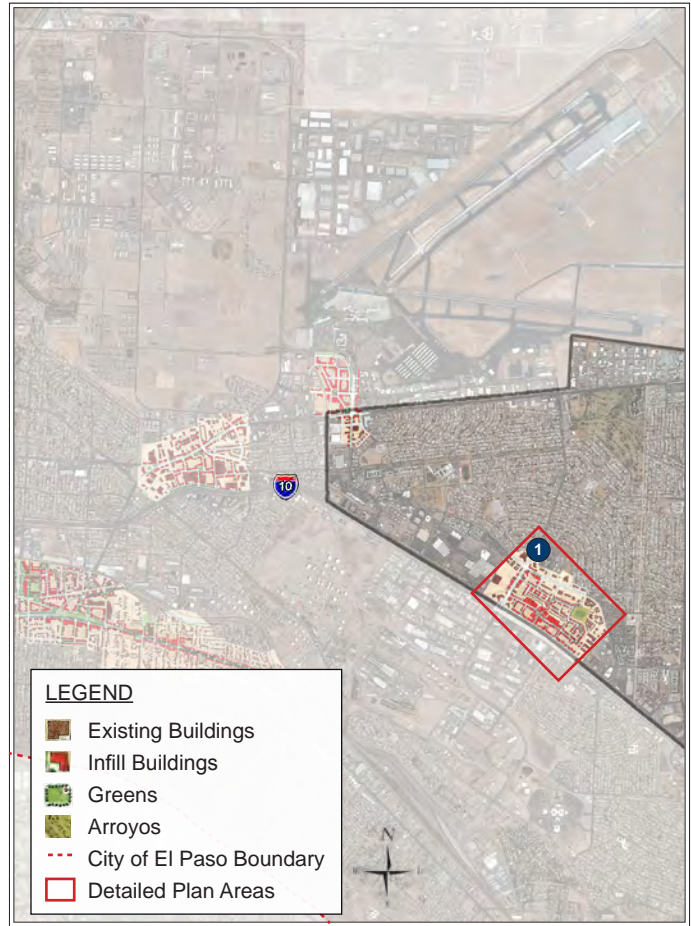
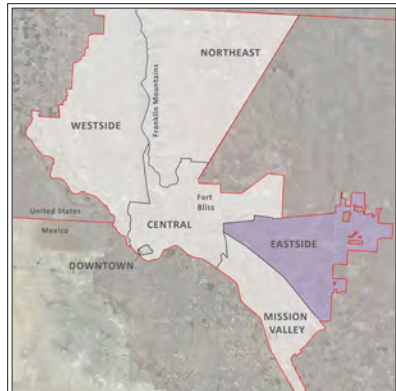
In some cases, houses are sited so as to turn their backs on these spaces. The rock walls surrounding many of these developments cut them off from their surroundings and as a result, the streets that connect them have a very sterile, hostile character.

Commercial Strips

Commercial development on the Eastside has generally followed the strip-mall or big-box model surrounded by a sea of parking. The overabundance of parking in front of these stores assumes that all customers will be arriving in their cars. Little effort is made in the siting of these developments to integrate them into neighborhoods. Often, the only way to access stores is from the arterial road network.

Deteriorating Streets

Major streets like Viscount Boulevard and Montwood Drive have deep potholes which make navigating the area difficult. Safety striping along the street has worn off. Sidewalks are often too narrow for pedestrians and many of the sidewalk crossings do not have ramps for wheel chairs. Periodic street maintenance throughout the City should be regularly addressed.

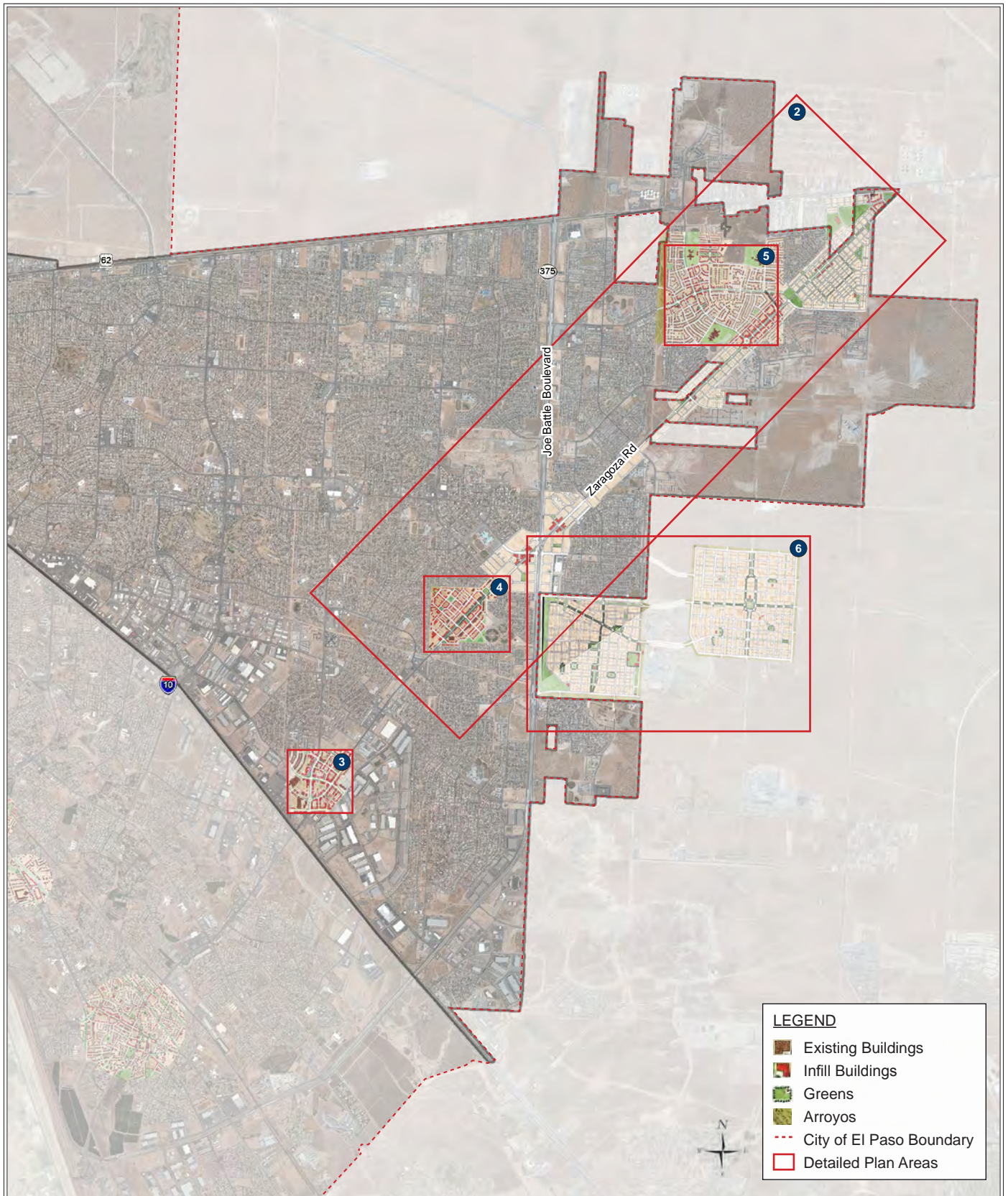


Illustrative plans for planning areas demonstrate community design and planning strategies for the Eastside of El Paso.

Illustrative Plans

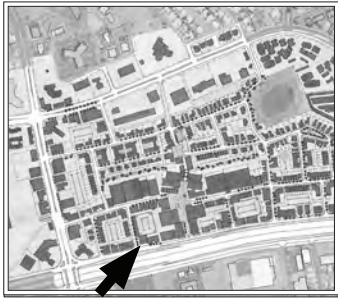
- 1 Hawkins Boulevard and Gateway Boulevard: Example of densifying and diversifying an existing urban area.
- 2 Zaragoza Corridor: Strategy for making a multiway boulevard on an arterial street.
- 3 Zaragoza Road and I-10: Strategies for creating coherent blocks, streets, and a sense of place out of large commercial blocks.
- 4 Zaraplex: Strategy for reconfiguring a strip mall and unlocking potential on isolated properties.
- 5 Montana Corridor Transfer Center: Sample design for the end of the Montana Corridor RTS Line.
- 6 East of Zaragoza: Demonstration of controlling growth outside the eastern edge by utilizing the SmartCode principles.

EASTSIDE: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative plans for planning areas demonstrate community design and planning strategies for the Eastside of El Paso.

HAWKINS BOULEVARD & GATEWAY BOULEVARD



The site of the now demolished Farah Building offers an opportunity to create a signature mixed-use neighborhood adjacent to the Cielo Vista Mall and I-10. Current plans for the site call for a high-end shopping center, however a vision for a more walkable and complete neighborhood has been proposed, while incorporating similar retail building footprints.

Allow for Phasing but Create Complete Spaces

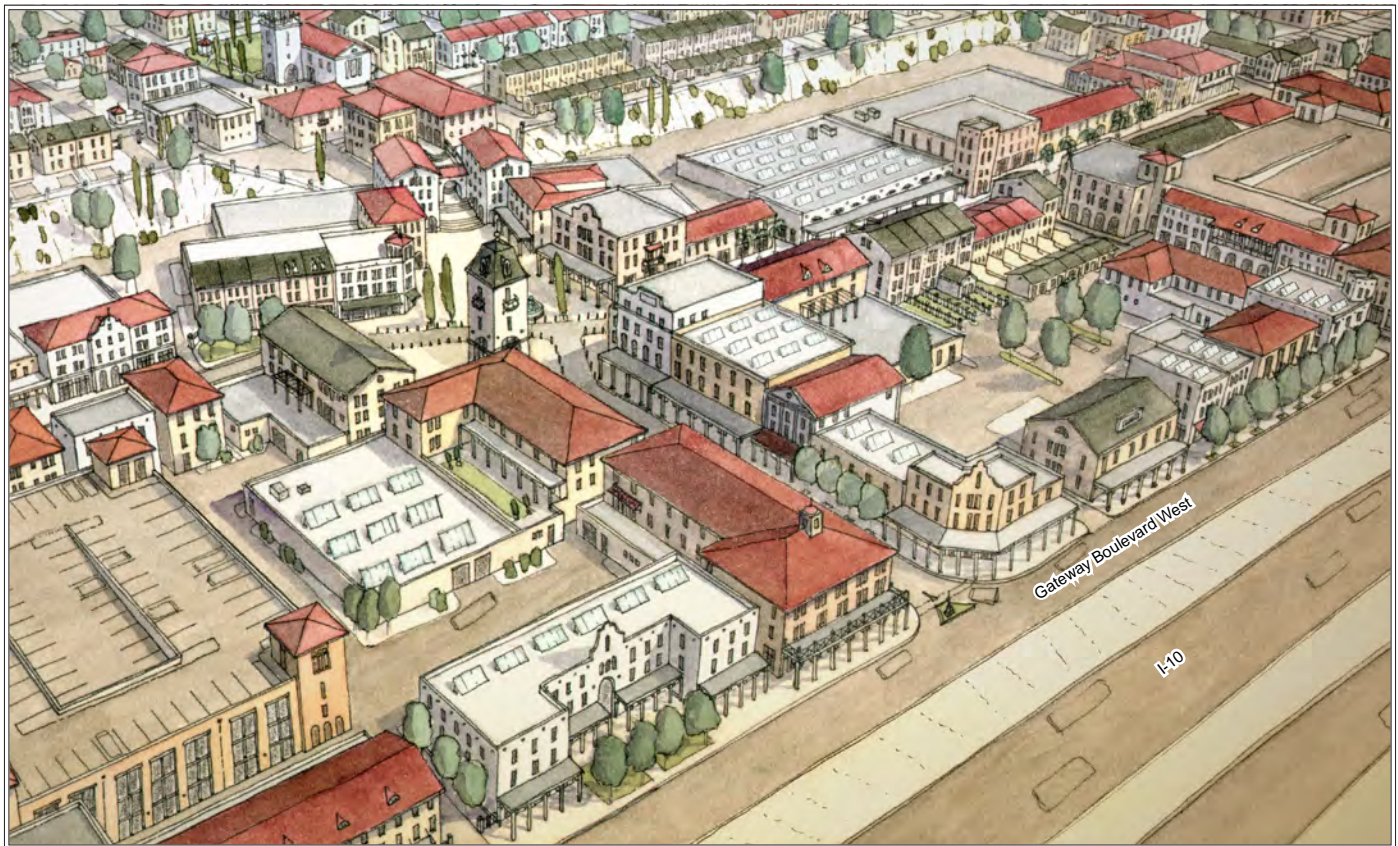
The key to creating a successful mixed-use neighborhood is to carefully phase development in a way that creates complete and active spaces each step of the way. While it makes sense to lay out many of the blocks and streets (along with infrastructure) early on, structures can be developed gradually. Phasing should focus on constructing both sides of a street segment or all sides of public spaces at a time to prevent a disordered looking development. Views at the end of each street and from each square and park space have been carefully terminated with new buildings to hide any unfinished blocks beyond.

Architecture which Responds to Local Precedent

In a dry climate such as El Paso's, trees cannot be relied upon in all locations to provide shade along streets and sidewalks. While trees may be planted and irrigated in special locations, architecture and building placement can help to make the pedestrian environment more comfortable. Arcades, colonnades, and galleries over the sidewalk should be an integral part of all buildings with shopfronts. Placing multi-story buildings across from each other along narrow streets allows them to cast shadows over the street for much of the day. The tradition of courtyard buildings and roofs with deep overhangs should also be revived to contribute to the historic character of the area and to create additional shade in both public and private spaces.

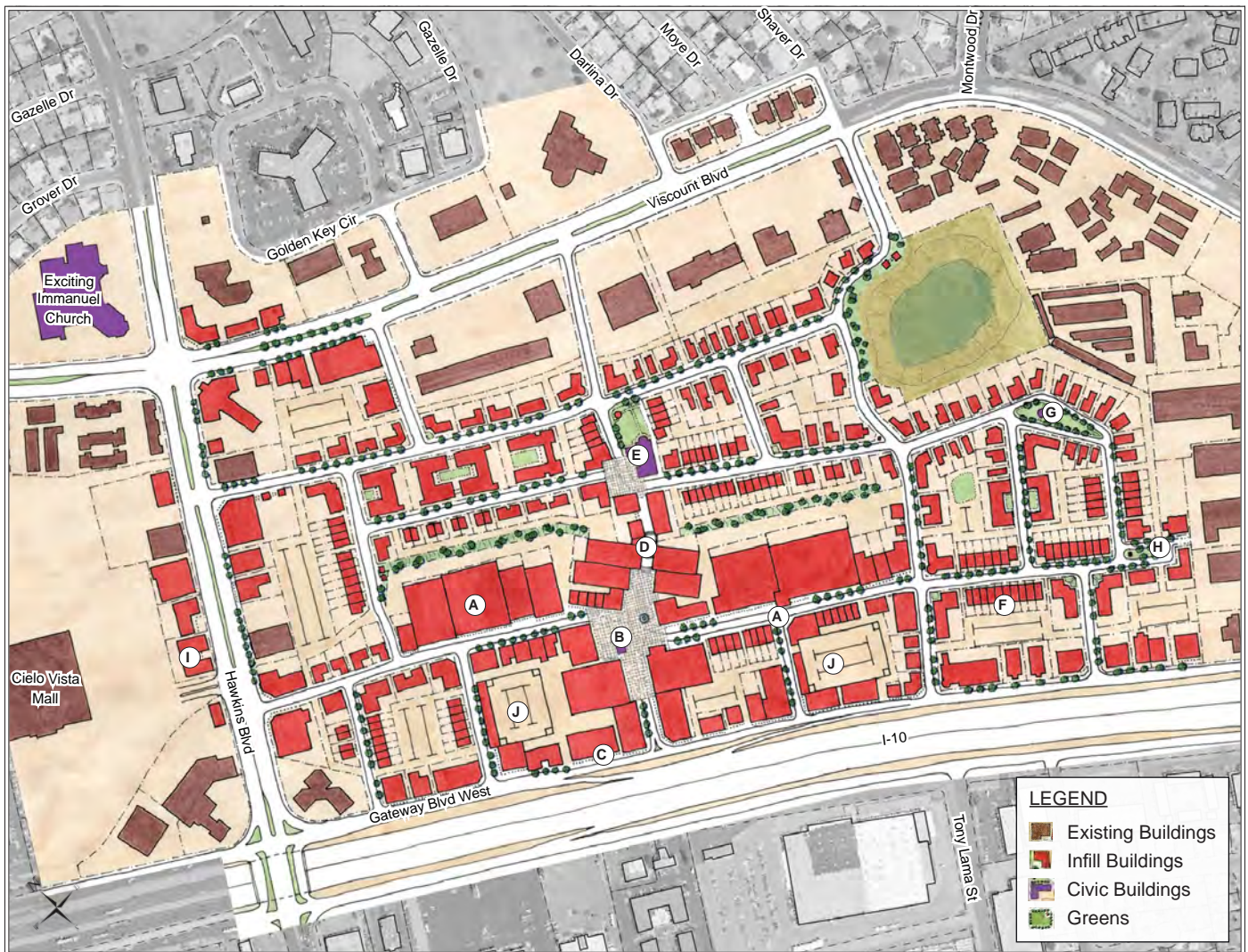
Plan for Future Expansion

The plans for the former Farah Building site includes a design for the adjacent parcel to the north. All streets and blocks have been designed such that the two areas could be developed at different times while still working seamlessly with one another. Future street connections to other adjacent parcels have been made possible as well.



View of new mixed-use development on the former Farah Building site. The central square and tower mark the heart of the neighborhood.

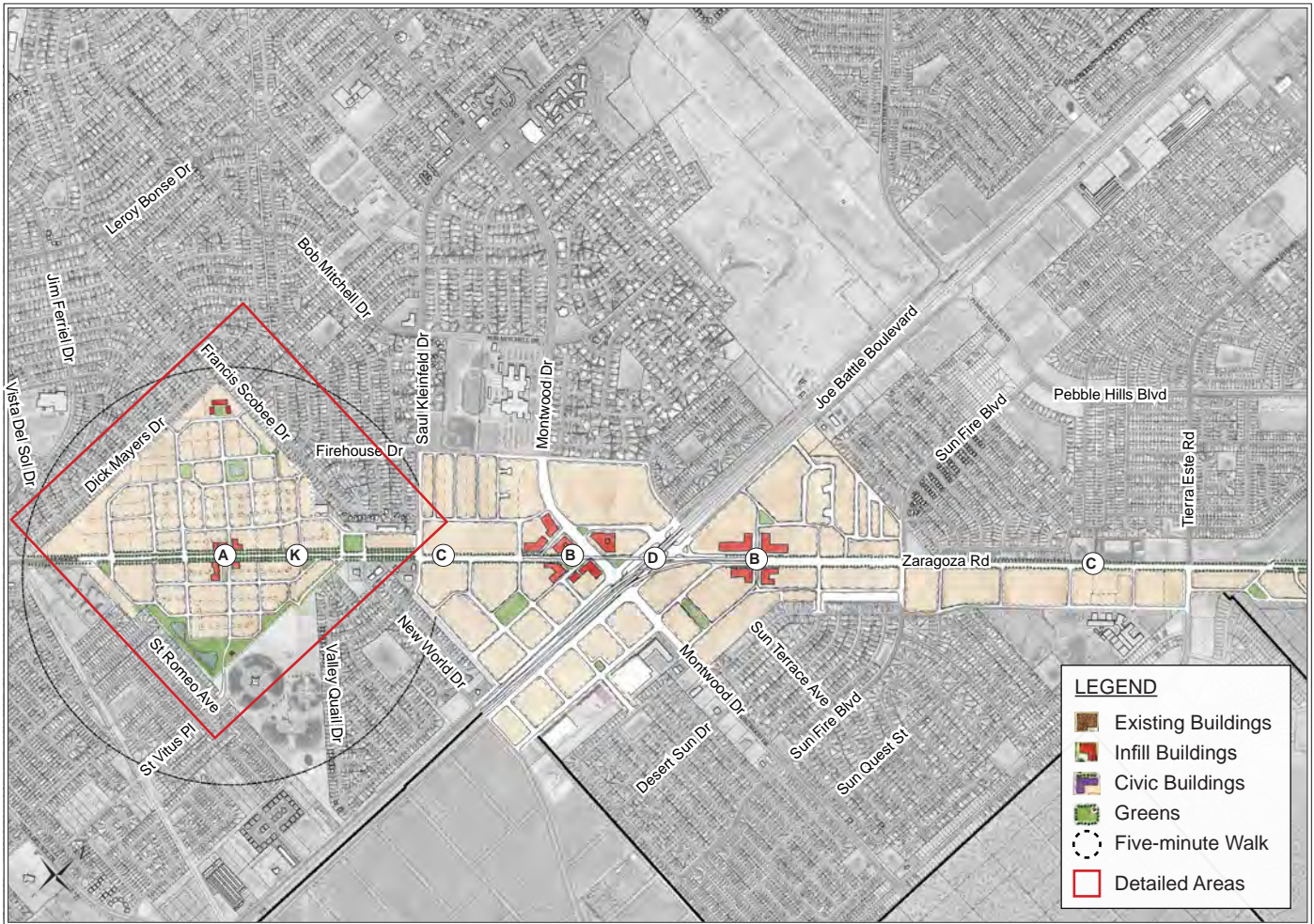
HAWKINS BOULEVARD & GATEWAY BOULEVARD



General Recommendations

- A** Large retail footprints are accommodated within a walkable, urban environment.
- B** A central plaza at the heart of the neighborhood is surrounded by shops and mixed-use buildings.
- C** Wide sidewalks are lined by shopfronts and are sheltered from the sun by arcades in most locations.
- D** A grand stairway leads pedestrians up from the central square to additional homes and shops on the development parcel above.
- E** A small neighborhood church or community center sits between a paved square and new park space.
- F** Outside the neighborhood center, streets are lined with a variety of housing types.
- G** A civic green and gazebo is surrounded by small detached single-family homes and courtyard apartment buildings.
- H** A pedestrian connection to the adjacent parcel has been designed to become a new street in the future.
- I** New buildings in the Cielo Vista Mall parking lot face onto Hawkins Boulevard, completing the street.
- J** Parking structures are lined by buildings, to hide them from the view of the street and other public spaces.

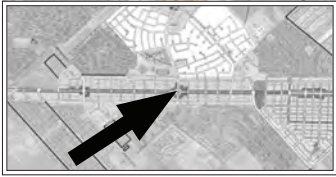
ZARAGOZA CORRIDOR



General Recommendations

- A** The Zaraplex is redeveloped into an urban center, using the redesign of Zaragoza Road into a multiway boulevard as a catalyst for walkable urban development.
- B** Urban centers are created on both sides of State Loop 375.
- C** Sections of the Zaragoza corridor between urban centers offer long-term opportunities for redevelopment.
- D** The intersection of Zaragoza Road with State Loop 375 is reorganized, creating more efficient circulation.
- E** The intersection of Zaragoza Road and Rich Beam Boulevard is transformed into a complete, walkable urban neighborhood.
- F** Walkable, urban residential development is built facing the new multiway boulevard.

ZARAGOZA CORRIDOR



Development along the Zaragoza Road corridor currently follows an auto-dependent pattern of isolated parcels of development. Large parts of the corridor, however, are still undeveloped, creating the opportunity to guide development in a coordinated form that builds toward a walkable environment with a diversity of mobility options including improved transit options and facilities.

Development along the Zaragoza Road corridor currently follows an auto-dependent pattern of isolated parcels of development. Large parts of the corridor, however, are still undeveloped, creating the opportunity to guide development in a coordinated form that builds toward a walkable environment with a diversity of mobility options including improved transit options and facilities.



Existing conditions on Zaragoza Road include high speed travel lanes and wide dirt medians making vehicular transportation the only option.

Zaragoza as a Multiway Boulevard

The implementation of a multiway boulevard on Zaragoza Road creates the infrastructure necessary to support a more balanced multimodal environment. A multiway boulevard would provide through center lanes, slower side access lanes with on-street parking and bicycle facilities, accommodations for improved transit, and wide sidewalks for pedestrians. An initial layer of mixed-use development faces the boulevard, establishing an urban environment. Parking is provided behind the buildings facing the boulevard. In mid-block locations, a parallel network of streets helps with circulation and lays the groundwork for future development.



Zaragoza Road is reconfigured into a multiway boulevard.

Over time, attached and detached residential development fills in along the parallel network of streets. Residential development provides a transition from higher density commercial uses along the boulevard to the detached single-family residential developments on either side of the corridor. The establishment of a walkable neighborhood surrounding the Zaragoza corridor provides new customers within walking distance of businesses and transit on Zaragoza Road. The neighborhood itself becomes an amenity, and attracts investment that reconnects surrounding neighborhoods to the corridor.



The blocks are filled in with street-oriented mixed-use development.



Zaragoza Road is reconfigured into a multiway boulevard, and an initial layer of mixed-use buildings are developed along the new corridor.



Over time, a complete neighborhood is developed along Zaragoza Road, with a diverse mix of uses and unit types.

ZARAGOZA ROAD & I-10



General Recommendations

- A** A coordinated, fine-grained, highly interconnected network of new streets and blocks is incrementally created as individual parcels are developed.
- B** Fronts of buildings face streets, squares, and plazas. Backs of buildings and service-related areas such as trash, loading, and parking are concealed in mid-block locations.
- C** Public investment in sidewalks, street trees, and on-street parking makes private development investments easier.
- D** Public squares and plazas are distributed throughout the new development.
- E** High traffic flow intersections may benefit from roundabouts.

ZARAGOZA ROAD & I-10

From Suburban Strip to Walkable Thoroughfare

Fix What Happens in the ROW

The first step in the conversion of an auto-oriented, commercial strip into a walkable urban thoroughfare is to optimize the public right-of-way (ROW). Continuous sidewalks, shade from landscaping and buildings, and on-street parking are critical. The public ROW is the common element tying all the various properties along the corridor together. By reconfiguring the ROW first, public investment can be leveraged to catalyze private redevelopment investments.

Build Complete, Whole Public Spaces

As private redevelopment occurs on individual parcels, the emphasis should be on creating a series of complete urban spaces. Finished, whole public spaces are inviting places where people want to be. It is critical when building a street segment, square, or plaza that the buildings shaping all sides of the space be constructed in order for the full value of the space to be recognized.

Plan for Connectivity Over Time

When laying out public spaces, keep in mind that an important goal is to increase connectivity by implementing an interconnected network of streets and blocks across property lines. An overall plan for connectivity should be followed so that as each parcel is developed, a well-connected urban fabric is created. Each parcel being developed must provide street connection points in the correct places so that neighboring properties can properly connect.

Correctly Orient Building Fronts and Backs

When implementing a block and street network, be sure that the front presentation faces of buildings face streets, squares, and plazas. Service functions such as trash collection, loading, and parking should be located in back, and be concealed mid-block. When this pattern is followed, public spaces, which occur between adjacent blocks, will be faced with high-quality façades and will therefore feel like inviting places to be.

A Rich Mix of Building Types and Uses

An interconnected network of properly-sized blocks and streets with a properly-oriented grammar of building fronts and backs is a highly flexible system. A tremendous variety of building types, sizes, and uses can be accommodated. Mixed-use buildings with retail ground floors can be placed facing important shopping spaces. This can transition to relatively high density residential fabric, which can then transition smoothly to single-family detached residences. Important focal sites should be reserved for civic buildings.

Setting a Walkable Precedent

As the first parcels along a suburban strip corridor begin to redevelop into a walkable format, they serve as a seed for additional walkable redevelopment. Over time, one parcel at a time, an auto-oriented corridor can grow into a remarkably multi-modal pedestrian and bike-friendly thoroughfare.

The retrofit of strip corridors into great walkable urban thoroughfares is a long-term process. Change often happens incrementally when a multitude of property owners are involved. A key to encouraging property owners to begin the process of retrofitting is to give them a strategy to achieve a high quality public space without necessarily needing the participation of neighboring property owners. With careful attention to building and parking configuration, great public spaces can be achieved on remarkably small parcels.



Version 1: This *placita*, or small plaza, configuration is ideal for corner sites. The two buildings are offset subtly to create a usable open space. An arched walkway provides pedestrian access from the rear parking lot, while connecting the buildings on their upper floors.



Version 2: This *placita* is formed by a "U"-shaped mixed-use building. A ground floor pedestrian passage through the building provides access to the rear parking area.

ZARAGOZA ROAD & I-10

East El Paso features a number of suburban, auto-oriented, commercial corridors. With careful planning and implementation, these corridors can grow to become complete streets that are amenities for adjacent walkable neighborhoods. Zaragoza Road near I-10 is one such corridor. Multiple property owners will need to work together to create a cohesive plan that can be implemented over time.



Existing Conditions: Suburban commercial development



Step 1: Adding trees, sidewalks, and on-street parking in the public ROW



Step 2: Initial private investment in street-oriented infill development



Step 3: Incremental infill links seamlessly to previous development



Step 4: New development adds up over time to form a walkable, mixed-use neighborhood.

ZARAPLEX ON ZARAGOZA ROAD



General Recommendations

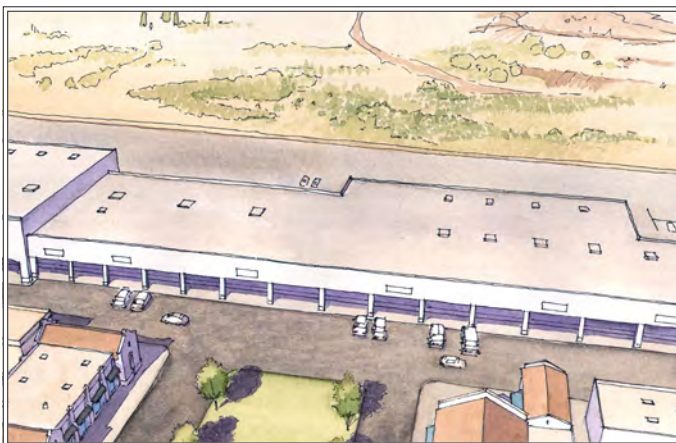
- Ⓐ Zaragoza Road is transformed into a walkable multiway boulevard, with buildings fronting the street.
- Ⓑ Public spaces are incorporated replacing underutilized parking lots and providing a center for the neighborhood.
- Ⓒ Parking is provided behind buildings in mid-block parking lots and decks.
- Ⓓ Existing buildings are incorporated into the urban neighborhood by reconfiguring their frontages into walkable streets with on-street parking.
- Ⓔ Retention areas are integrated as civic amenities.
- Ⓕ New tree-lined, walkable streets attract residential development.

ZARAPLEX ON ZARAGOZA ROAD

The Zaraplex shopping center on Zaragoza Road has the potential to be transformed from its current single use format, into a mixed-use, urban center. Through careful planning, urban buildings can replace under-utilized surface parking lots in front of the strip shopping center, creating urban streets and memorable public spaces. Left over land behind the Zaraplex can be developed into an urban neighborhood with a mix of housing types and sizes that capitalize on the proximity to a walkable urban center.



Existing Conditions: Suburban shopping center



Step 1: A public square is added and urban buildings help define the space. Under-utilized surface parking is replaced by buildings defining streets with on-street parking and additional parking mid-block.



Step 2: A street is cut through existing buildings to access the land beyond and increase connectivity through the site.



Step 3: A new neighborhood is connected to the commercial center.



Step 4: Over time, existing buildings are retrofitted as more urban types.

MONTANA CORRIDOR TRANSFER CENTER



General Recommendations

- A** The Montana Corridor RTS transit terminal and Fire Station #37 are designed with transit-oriented development centered around a public transit square.
- B** Streets adjacent to the transfer center are redesigned as pedestrian-friendly, multimodal corridors, encouraging new, quality, urban development.
- C** Development is designed with walkable streets and inviting public spaces.
- D** Hueco, an existing traditional neighborhood development under construction is built-out with a mix of uses and unit types.
- E** Zaragoza Road is redesigned as a multiway boulevard and developed as an important mixed-use corridor.
- F** Important connections are made in existing residential neighborhoods.

MONTANA CORRIDOR TRANSFER CENTER

The plan for the end of the Montana Corridor RTS transit terminal and Fire Station #37 creates a high-quality, transit-oriented urban environment centered around a public transit square. Buses circulate around the transit square, encouraging a high level of interaction between transit riders and development. The planned fire station anchors one corner of the square with a civic tower designed to interface with the pedestrian-oriented environment. Streets that are safe, comfortable, and interesting to the pedestrian will encourage transit riders to walk from their neighborhoods to use transit.

The City's investment in RTS for the area is dramatic and every effort should be made to develop the rest of the property in a way that is supportive of transit. Transit-oriented design requires an integration of uses and higher level of discipline in building siting and façade composition than is ordinarily required of suburban development. With its restaurants, offices, cafes, and green spaces, the ultimate plan for the center is to create a focal point for community life in a way that does not yet exist in this part of the City.



Proposed plan for the Montana Corridor RTS Transfer Center and Fire Station # 37. An area designated for parking could in time become a full parking garage which would be screened from view by multi-story buildings.



The Montana Corridor RTS Transfer Center envisioned as a vibrant urban environment. Buses circulate around a public transit square shaped by mixed-use buildings.

EAST OF ZARAGOZA ROAD

Driving as an Option, Not a Necessity

As development continues to occur on the Eastside, it should be configured in a way, and provide the amenities necessary, to allow driving a car to be an option rather than a necessity. The SmartCode seeks to remedy some of the problems that often come with conventional development that require the use of a car for all of a households daily needs. Two model neighborhood plans have been designed for the area east of Zaragoza Road; the designs demonstrate how ideal neighborhoods can be designed to allow a mix of uses while creating a livable place. The ideas and lessons contained in these plans can be transferred to other development sites around the City.

and where many of a resident’s daily needs can be met. Dense residential building types, mixed-use buildings, and civic buildings are all located in close proximity to each other. The variety of uses within this small area creates the ability to live, work, and shop within walking distance.

The neighborhood square, or placita, whether it is hardscaped or landscaped, is the place where residents can enjoy an evening stroll, the place where the holiday craft fair is held, the place where residents can engage in civic life. Its sides are lined by a variety of building types and uses, providing the necessary elements for a vibrant center for neighborhood activity. Lots are arranged to face these spaces, taking advantage of public amenities. The greens are appropriately landscaped, adding to the value of surrounding properties. Linear green spaces that penetrate the neighborhood place more residents within a short walk of nature.

A Vibrant Center

The neighborhood center is the heart of the neighborhood; it is the place where community members can come together to



General Recommendations

- Ⓐ Civic buildings provide focal points within each neighborhood.
- Ⓑ A central green space provides a gathering place for each neighborhood. Buildings front onto these greens rather than turning their backs to them.
- Ⓒ Thoroughfares connect to major streets in surrounding development, enhancing network connectivity.
- Ⓓ Small block sizes are a key component of a walkable neighborhood. Alleys provide access to the middle of blocks where parking may be located.
- Ⓔ Landscaped pedestrian paths bring more units within close proximity of nature and provide alternative routes for circulating through the neighborhood.

EAST OF ZARAGOZA ROAD**A Genuine Mix of Uses and Building Types**

One of the most important elements in neighborhood design is the mixing of uses and building sizes. The blocks immediately surrounding the square accommodate a variety of building sizes. Rowhouses and apartment buildings sit next to multi-story, mixed-use buildings. The upper floors of mixed-use buildings are occupied by residential flats or office space, providing a customer base for the retail uses on the ground floor. The variety of residential types allows for a diversity of income levels to be accommodated while providing everyone with the benefits of the central public space.

A Genuine Mix of Uses and Building Types

Complete communities serve the cycle of the day with a range of uses supporting daily needs. Complete communities serve the cycle of a lifetime with housing variety suitable for every period of people's lives: homes with yards for one's youth, apartments near interesting commercial and restaurant areas for young adulthood, large homes in sylvan settings to raise children in adulthood, and townhomes near services and public places in senior years.

The Tradition of Spanish Urbanism

The placita, the central square or plaza, is a time-tested element in the tradition of Hispanic urbanism. A settlement's first church was located on the placita. It was around the placita that the major streets would converge. From the first Spanish colony in the United States at St. Augustine, Florida (1565) to the last in Sonoma, California (1823) the placita marked the center of the community. This was done often in accordance to law. The Laws of the Indies mandated by Spain of new colonies required legible placitas for the location of civic buildings. Contemporary placitas throughout the region are a place for recreation, socializing, shopping, civic functions and dining.

Parking for the commercial uses is handled through the use of mid-block parking lots and on-street spaces. Parking for residents is typically accessed through rear alleys. By moving the parking to the middle of the block, the streets become more pedestrian-friendly spaces and a balance of all mobility options can be achieved on the streets.

Interconnected Streets

Another important principle is the idea of an interconnected network of streets. This allows residents to easily access all parts of the neighborhood, and other neighborhoods, without having to utilize the regional road network. This includes access for pedestrians and cyclists as well.



The neighborhood center offers attached units for seniors. Well planned communities compensate for declining incomes in later years by decreasing the cost of living.



The placita at the center of neighborhoods, transit hubs and mixed-use settlements could become a signature approach to public spaces in El Paso. This would show a continuity through time of the Spanish urban heritage.

EL PASO'S AVENUES

Making Collector Roads more Pedestrian-Friendly

El Paso's avenues, often referred to as collector roads, are cross city streets that connect neighborhoods. The following simulation illustrates ways of addressing an avenue between neighborhoods as a neighborhood edge road that is a multimodal street worthy of being a street address, instead of a barrier. By incorporating collector roads in the neighborhood fabric, there is a reduction in infrastructure costs which makes the overall City more pedestrian and bike friendly.

Typical Conditions Today: El Paso's avenues are like a speedway channeled between two six foot tall stone walls. Although the street section has five foot wide sidewalks behind a four foot dirt strip on either side, nothing about the design of the roadway or the way the buildings address the street make it a place that pedestrians would want or need to be. However, there are steps that can be done to make this street, or future streets, a more inviting part of a neighborhood. By thinking more about the design and configuring the street in a way that is dignified and that balances the needs of multiple modes of transportation, it can be an amenity to adjacent homes instead of something they must turn their backs toward.

Improvement Option 1: Adding street trees to the planting strip will provide shade in the brutal El Paso heat and break-up the visual appearance of the road as a speedway. The planting of drought tolerant trees will take a commitment by the City to water them until they are established, but once they are established they become relatively low maintenance while adding a tremendous benefit to adjacent neighborhoods for many years.

Improvement Option 2: If the road is thought of as a connecting neighborhood street instead of a thoroughfare between two places, houses may face the street instead of turning their backs toward it. More people would walk along the street if it is easier to access from their homes and there is shade provided. Openings in walls will allow people access to the street and the sidewalks. Portions of the solid stone wall could be replaced with more transparent materials such as wrought iron to create openings in the wall. More transparency in the street wall creates safer streets and more interest for a pedestrian or bicyclist.



Typical Conditions Today



Improvement Option 1



Improvement Option 2

Improvement Option 3: Additional drought tolerant plantings between the street trees creates a physical separation between the moving vehicles and the sidewalk. This will help pedestrians feel protected and more likely to use the street.



Improvement Option 3

Improvement Option 4: If the number of travel lanes are reduced in each direction with parking permitted on the street it would reduce the travel speed of cars, to one that pedestrians and bicyclists feel more comfortable being near. Also, by reducing the speed of vehicles, it reduces the chance of a pedestrian being critically injured if an accident does occur.

The on-street parking and single travel lane make the street function like a neighborhood street. Pedestrians will feel comfortable walking. Guests can park on the street and visit by entering through the gate facing toward the street. Vehicles are still able to travel from one point to another, but the street has been rebalanced to include other modes of travel and uses.



Improvement Option 4

Improvement Option 5: If the street were originally designed as a neighborhood street, there would be no need for the large solid wall. This street is still on the edge of two neighborhoods but it would be integrated as part of the neighborhood and a street that people would be proud to live on and use.



Improvement Option 5

MISSION VALLEY: COMMUNITY CONCERNS

Preservation of Farmland

Mission Valley is still one of the few areas in El Paso that is able to support productive farm fields. Although most of the farmlands are located within the County, outside El Paso’s City limits, every effort to preserve these areas should be encouraged. The few fields within the City limits should be preserved and measures to preserve the valuable farmlands with ETJ’s (Extrateritorial Jurisdictions) should be taken.

Flood Management

Historically the Rio Grande would flood periodically, making the upper and lower valley areas fertile with good soils. Today the river rarely floods due to modern controls of the river but poor street drainage, especially during the monsoon season, is a continuing concern for residents in the Mission Valley. Certain streets reliably flood. The drainage policy for new construction and the drainage around low-lying streets should be assessed to reduce the risk of flooding.

Preservation of Historic Resources

Mission Valley is rich with history, including the start of the historic mission trail that extends into El Paso County. Mission Valley is one of the oldest areas of El Paso, predating the development of the Westside by over 300 years. The historic missions, as well as portions of their surrounding original settlements can, in many cases, still be seen. These original settlements were located along the Rio Grande on arable land. Some of the oldest schools in the City are also located in the Mission Valley area. These historic Mission Valley schools, like Ysleta High School, are both socially and physically integral to their neighborhoods. Many of these schools have remarkable civic presence and face the street proudly. These historic assets create civic pride and contribute to community life. For this reason, the preservation of historic resources and buildings should continue, and be emulated throughout the City.

Gasoline Prices

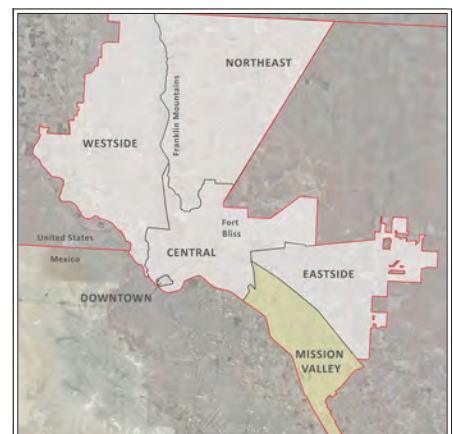
Mission Valley residents are especially vulnerable to rising fuel prices given their long commutes. Efforts should be made to cultivate a better jobs / housing balance over time in Mission Valley to reduce average commuting distances.

Dangerous School Zones

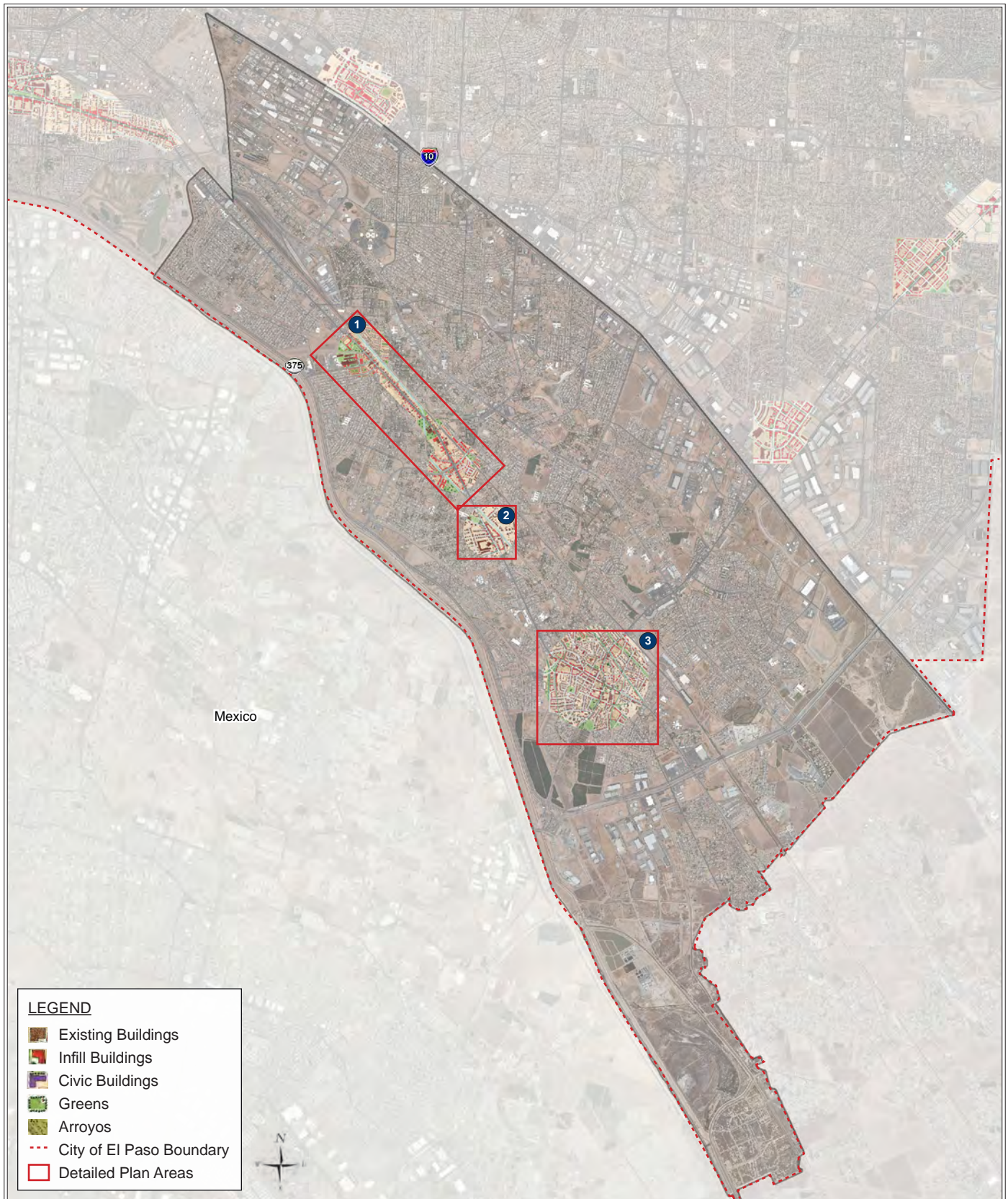
“Sallies,” removable school zone signs, were once placed in the center of roadways to signal to drivers that they were in a school zone; however, the State has outlawed the signs. Schools were required to replace the temporary signs with permanent signs; these are to be placed on the side of the roads, making the signs no longer in the driver’s direct field of view. Blinking signs may help signal drivers that they are in a school zone, but residents expressed interest in more permanent solutions. At the intersections where children tend to cross the street, traffic calming measures such as raised pedestrian crossings with textured surfaces, narrower traffic lanes, pedestrian-friendly curb radii and curb extensions should be included.

Illustrative Plans

- 1 Alameda Avenue from Yarbrough Drive to Midway Drive: Strategies for enhancing Alameda Avenue around the RTS stops
- 2 Strategies for Alameda Avenue and Hammer Way can be found in the Health Element.
- 3 Ysleta and Mission Valley Transfer Center: Strategic infill to subtly transform a historic community into a transit-oriented neighborhood around the Transfer Center.



MISSION VALLEY: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative plans demonstrate community design and planning strategies for the Mission Valley.

ALAMEDA AVENUE - MIDWAY DRIVE TO YARBROUGH DRIVE



General Recommendations

- (A) Parking garages should be shielded from view by liner buildings.
- (B) Riverside Park should receive enhancements such as the addition of trails, shade trees, pavilions and a play fields.
- (C) A new public library would provide convenient opportunities for adult education and interaction. The location not only allows the use for students of Riverside High School and Middle School, but the entire Alameda community at large.
- (D) Opportunities for new neighborhood parks should be pursued. Open spaces within the neighborhood are essential for community gathering, recreation, and community pride.
- (E) Shared community gardens are a productive public use for vacant parcels and should be facilitated. Produce can be shared among neighbors or sold at farmers markets.
- (F) A new street connection between Barton Street and Midway Drive can help to provide additional direct access to Alameda Avenue, as well as the proposed RTS line.
- (G) Street trees, wider sidewalks, pedestrian crosswalks, and a landscaped median should be implemented to improve the pedestrian environment along Midway Drive.
- (H) New infill buildings should respect the scale and character of the historic corridor.

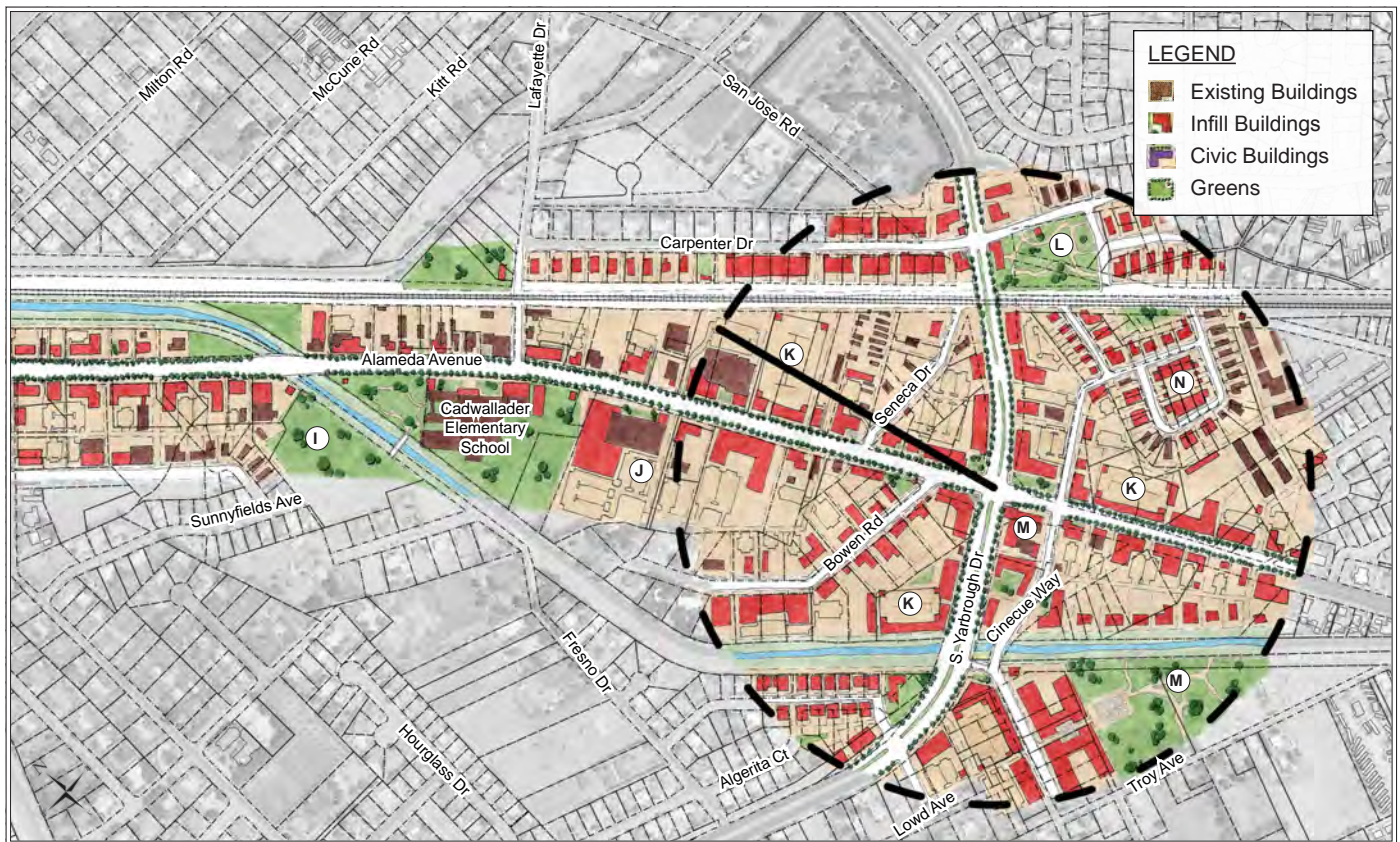
Anticipate Proposed Transit

Transit options in El Paso have been scarce, making personal vehicular travel the preferred mode of transportation. The proposed RTS line along Alameda Avenue will allow residents to travel safely and efficiently throughout El Paso without a car. The RTS will provide improved multimodal access, increased land development values around stations, and efficient time-travel savings. The proposed RTS stations at Yarbrough Drive and at Midway Drive allow for a higher density of buildings with parking garages to accommodate increased ridership.

Restore Connections

Connections to the Alameda Avenue corridor from neighborhoods to the northeast are few, making crossing over the railroad tracks and canal difficult. A road crossing the railroad tracks and canal should be introduced at Midway Drive to allow more connectivity for these neighborhoods. In the event that a future stop is proposed at Midway Drive, this connection would also allow increased accessibility to transit opportunities. As transit along the corridor develops, pedestrian routes should be enhanced and increased.

ALAMEDA AVENUE - MIDWAY DRIVE TO YARBROUGH DRIVE



General Recommendations

- I A pedestrian connection across the canal should be pursued to allow for better connectivity from nearby neighborhoods to the elementary school.
- J Over time, additions can be added onto existing buildings to complete the streetwall.
- K Parking should be located in the middle of the block and lined by habitable space. Additional parking spaces will be helpful to accommodate increased numbers of transit riders.
- L By introducing a variety of new park spaces, a green network can be assembled that improves the quality of life in the area and helps to create more sustainable neighborhoods.
- M Proposed RTS Stop and transit-ready development to accommodate a revived transit system along Alameda Avenue. This allows for more customers, employees, and shop owners to live within walking distance of the stores and workplaces, thereby keeping the shops viable while reducing vehicle trips.
- N Affordable housing should be introduced in a mixed-income setting with garden apartments arranged along narrow streets and intimate squares.

Increase Open Spaces and Parks

Greens and plazas should be introduced within close proximity to residences and schools to create opportunities for recreation, exercise, therapy, and education. Riverside Park, with the addition of walking paths and civic buildings, can be transformed into a more widely used space. Riverside High School currently has play fields for student use only, leaving the need for community athletic fields unfulfilled. Where nearby space is available, community athletic fields should be introduced. Small informal

pocket parks or hardscaped plazas can be integrated as the corridor develops, to break down the uniformity of façades and to create interesting spaces between buildings. Mid-block community gardens should be introduced within neighborhoods to stimulate social interaction, beautify neighborhoods, and provide a catalyst for community development. Community gardens can be as small as one plot, or can be many individual plots. Residents can form a small farmers market, or share produce with neighbors.

ALAMEDA AVENUE - MIDWAY DRIVE TO YARBROUGH DRIVE

CIVIC AND GREEN SPACES

Drainage and irrigation canals are prevalent in the Mission Valley sector of the City. They can be used as trailways or linear parks to act as a spine for a cohesive green and civic space network. Civic buildings and larger parks can abut the drainage canals and tie into the surrounding communities.



LEGEND

- Existing Civic Spaces
- Proposed Civic Spaces
- Civic Buildings

PROPOSED TRANSECT ZONES

The densest areas (T5) should be around intersections to support the RTS stops. The goal of making Alameda Avenue a prioritized walkable corridor can be achieved by making the balance of the corridor T4 to facilitate street-oriented buildings. Lots further away from transit stops within the neighborhoods should transition to more residential T3 zoning.



LEGEND

- Special District
- T3 - Sub Urban
- T4 - General Urban
- T5 - Urban Center
- T1 - Natural
- 5 Minute Walk

STREET NETWORK

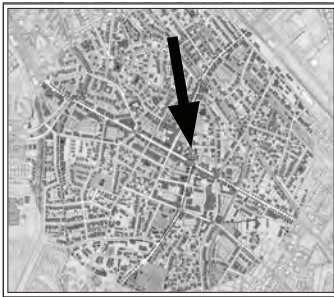
Alameda Avenue is one of the main east-west corridors running from Downtown El Paso out to the eastern edge of the City and beyond. The section of Alameda Avenue between Midway Drive and Yarbrough Drive unfortunately currently has few connections to the surrounding street network. This can be largely attributed to the drainage canal and adjacent railroad tracks to the northeast of Alameda, but there are also few connections to the residential areas to the southwest. A new street connection, crossing the canal and railroad track at the end of Midway Drive should be pursued.



LEGEND

- Existing Streets
- Proposed Streets
- Alleys
- Pedestrian Paths

YSLETA & MISSION VALLEY TRANSFER CENTER



Ysleta is unique due to its history, dense population, and small winding streets. The intricate small streets that are found throughout Ysleta should be emulated as new street connections are created. The character of the streets in this historic community should be preserved and enhanced

as new development opportunities arise instead of widening streets to the suburban dimensions found elsewhere in the residential fringes of El Paso.

Coordinate Land Use and Transportation Policies

Land use and transportation decisions should be made in conjunction with one another. A transportation decision was made to locate the end of the Alameda Avenue RTS corridor and the Mission Valley Transfer Center at the intersection of Zaragoza Road and Alameda Avenue. Accordingly, land uses around the transfer center should support that transit decision. For example, successful urban areas, like Ysleta, should not strive to have constantly free flowing traffic and excess parking. If roads are widened and large exposed parking fields created, this will diminish the need for the bus transit system and will also damage the historic character of the neighborhood thereby reducing the attraction of living in or visiting this historic community. Parking needs should instead be accommodated discreetly in small doses in mid-block locations.

Enhance the Pedestrian Environment

The most efficient and effective urban transit focuses primarily on serving pedestrians rather than park and ride customers. In order to facilitate transit use by pedestrians, the pathways from where people live or work must be continuous and enjoyable, without having the need to cross large parking lots or dead zones.

Increase Density Within a Ten Minute Walk of the Transfer Center

Ysleta already possesses a large population within a ten minute walk from the Mission Valley Transfer Center, but to best support transit, additional density should be encouraged. At the same time, pedestrian routes should be enhanced and increased.

Many blocks in the Ysleta area have large landlocked undeveloped areas at the center of the block with minimal or no frontage on a street. By providing access with a series of green spaces and/or pedestrian connections that cross through these blocks, additional housing opportunities can be created in mid-block locations. Where possible, this strategy should be paired with the creation or extension of rear alleys to allow parking and service access to the rear of the properties facing the streets. These new alleys could also serve units facing new mid-block public spaces.

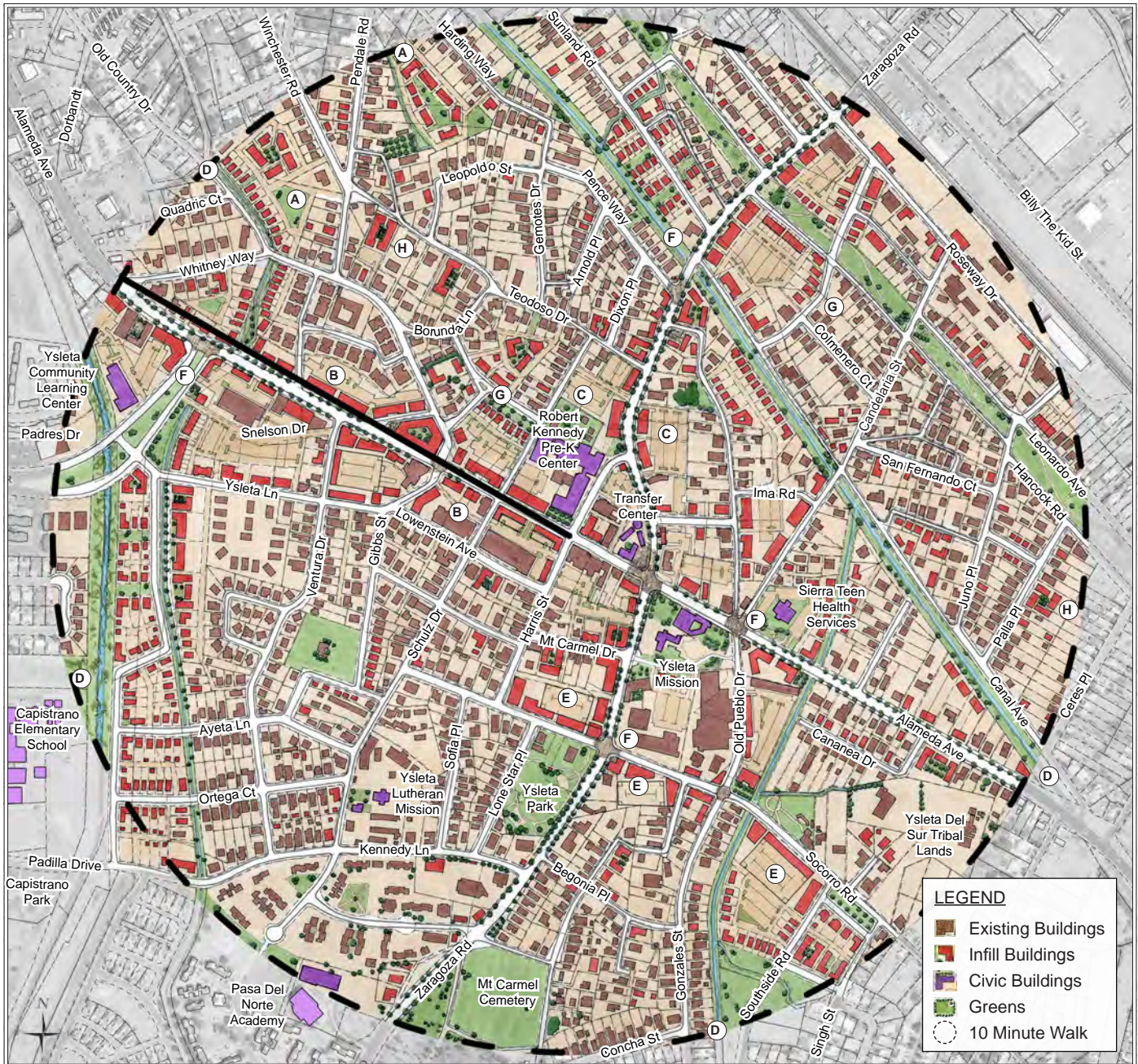
Provide a Destination that Celebrates Tigua Culture

Ysleta is one of the spiritual hearts of the city of El Paso as one of its first settlements. Ysleta is home to hundreds of Tigua tribal members who live within the urban setting and not on tribal lands. Accordingly, a design is required that facilitates a village-atmosphere and places redevelopment in a way that is respectful of past traditions and continuing social relations.



Mission Valley Transfer Center with street-oriented infill development across Zaragoza Road.

YSLETA & MISSION VALLEY TRANSFER CENTER



General Recommendations

- A** Where practical, the centers of large blocks should be infilled with new development that fronts green spaces.
- B** Where possible, portions of parking lots fronting Alameda Avenue should be infilled with new commercial and residential.
- C** The school and RTS transfer should center share parking lots.
- D** Trailways should be added along the drainage canals. New homes should typically face drainage canals with their fronts or sides, not backs.
- E** Structured parking should be implemented strategically to reduce the need for surface parking lots.
- F** Special paving patterns should be used to mark gateways to the community and alert motorists they are entering a special area where they need to be more aware of pedestrians and cyclists.
- G** New street connections should be pursued to improve connectivity in the neighborhood.
- H** Infilling larger lots with courtyard buildings increases the density around the transfer station.

YSLETA & MISSION VALLEY TRANSFER CENTER

Enrich Commercial and Office Opportunities

With increased density and increased modes of mobility, it is important to be able to meet one's daily needs in close proximity to where one lives or works. Alameda Avenue serves many of the community's needs, but typically at a cost to the pedestrian, in favor of automobiles. Large parking lots should be lined with commercial or residential uses, enhancing the pedestrian environment and eliminating dead zones. This will not only help pedestrians and reduce transportation problems, but will also help in recreating a self-sufficient local economy in the Ysleta area.

Boost Ridership with Tourists

The Ysleta Mission offers a unique opportunity as a tourist attraction at the end of the Alameda corridor RTS line. With a connected bus system, the transfer center allows people to easily visit the historic mission from various points around the City. This will additionally help to increase the potential transit ridership in this area.



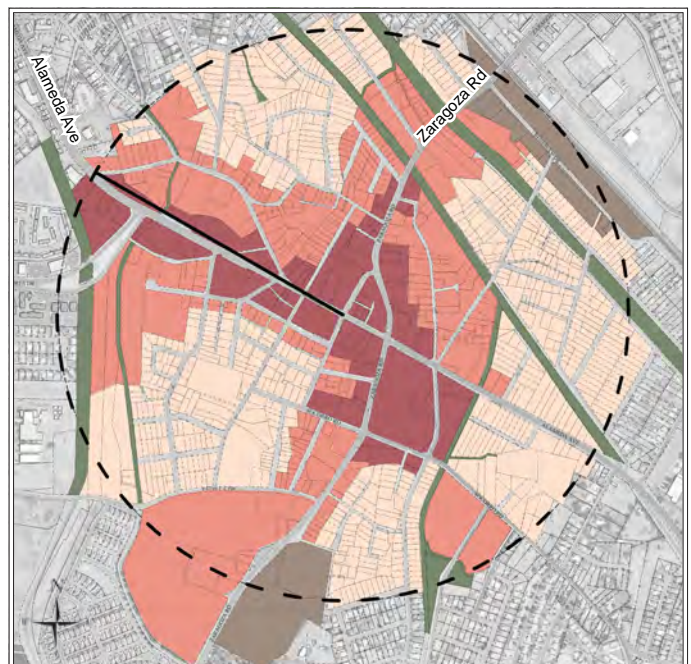
The Ysleta Mission is both a center of the Ysleta community and a landmark destination for visitors to El Paso. New homes, businesses, and services designed in context with the area, and with the pedestrian in mind, can enhance the experience of living in and visiting Ysleta.

Proposed Transect Zones

Rezoning the Ysleta area, especially within a ten minute walk from the Mission Valley Transfer Center, with transect zones per the El Paso SmartCode will help foster the desired urban form of growth. Rezoning the existing commercial areas along Alameda Avenue and Zaragoza Road as T5 - Urban Center promotes street-oriented buildings which will increase commercial and living opportunities while improving the pedestrian environment. Other neighborhood areas should be zoned as either T4 - General or T3 - Sub Urban, depending in the existing form of development. Transects will help the areas around the Mission Valley Transfer Center keep their existing character while encouraging additional infill over time.

Ten Minute Walk

Ten minutes or approximately 2,640' is the distance an average person will walk to reach a transit station or other large destination. This radius from the Mission Valley Transfer Center should be a priority focus area for redevelopment and infill.



Proposed Transect Zones

LEGEND	
	Special District
	T4 - General Urban
	T3 - Sub Urban
	T1 - Natural
	10 Minute Walk
	T5 - Urban Center

YSLETA & MISSION VALLEY TRANSFER CENTER

Civic and Green Spaces

The addition of mid-block greens and strategically placed parks will provide the recreational space necessary to maintain a healthy community. Ysleta has already begun to establish an effective green network with Ysleta Park, Pavo Real Park and a linear park stretching 1.5 miles including tennis courts, exercise stations, and five playgrounds. Additional green spaces throughout the neighborhood in mid-block locations will further enhance recreational opportunities for all residents and create pleasant walking routes throughout the neighborhood.

Ysleta features many civic institutions throughout and around its neighborhoods which should be preserved and enhanced. These include three elementary schools, a middle school, a high school, a Pre-K center, a senior center, Pavo Real Recreation Center, a Teen Center, several churches including the historic Ysleta Mission, the Mission Valley Transfer Center and Ysleta Del Sur Tribal Lands.

In addition to its generally well connected street and alley network, Ysleta also has the opportunity to utilize the drainage canals that run throughout the area as public spaces. By enhancing these canals and adding walking trails, the pedestrian network can be greatly increased. Whenever possible, new homes should either face or side toward these canals in order to keep them safe and interesting places to walk.



Civic and Green Spaces

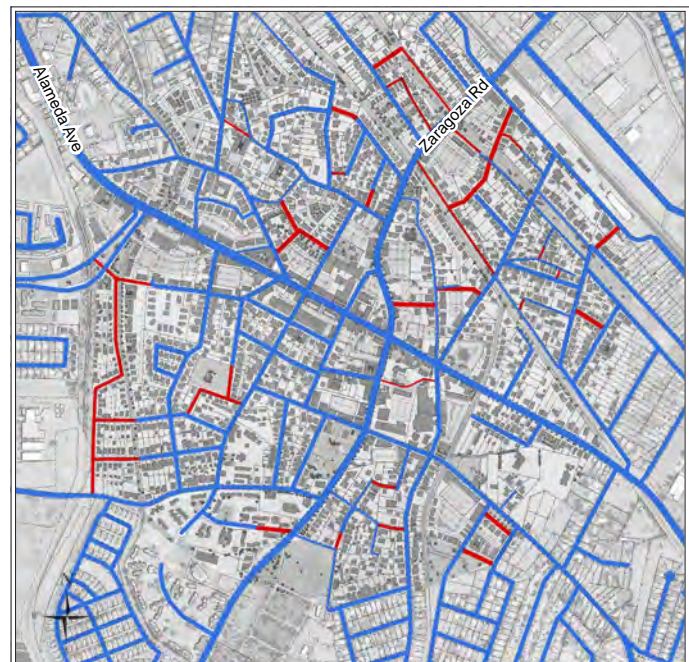
LEGEND

- Existing Civic Spaces
- Proposed Civic Spaces
- Civic Buildings

Street Network

Existing Streets: The Ysleta street network is well connected. Many of the existing streets are very narrow and slow-moving. The character of these streets should be emulated as new street connections are created or as roads are repaired and infrastructure is upgraded.

Proposed Streets: Several of the streets within this area dead end. In order to improve the street connectivity throughout Ysleta, these streets should be extended to connect to the surrounding street network. In addition, some new streets can be inserted to break up large blocks and create additional housing opportunities.

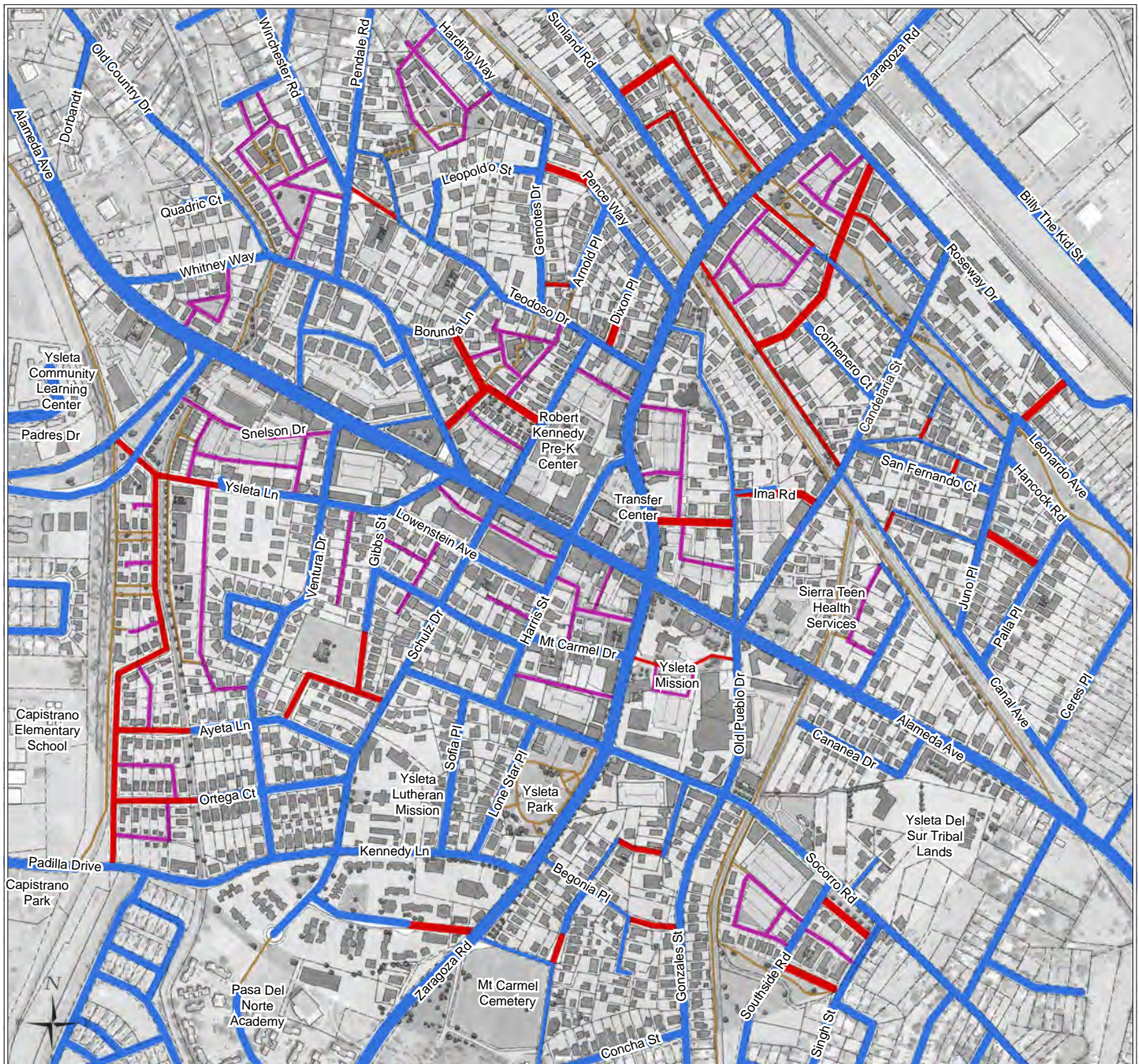


Street Network

LEGEND

- Existing Streets
- Proposed Streets

YSLETA & MISSION VALLEY TRANSFER CENTER



Street Network with Alleys and Pedestrian Paths

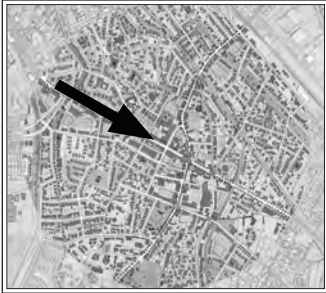
Alleys: There are few existing alleys in the Ysleta area. The network of alleys should be increased to improve opportunities for rear parking and service. Extending the alley network also aids in the ability to better utilize large parcels at the center of blocks.

Pedestrian Paths: The combination of streets, alleys, and pedestrian paths make up the pedestrian network. The more connected and continuous the pedestrian network is throughout an area, the greater the utility for the pedestrian. This will help to increase the distance a pedestrian will walk rather than choosing a different mode of transportation.

LEGEND	
—	Existing Streets
—	Proposed Streets
—	Alleys
—	Pedestrian Paths

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Alameda Avenue & Harris Street: Change Over Time



The following sequence illustrates the potential transformation of Alameda Avenue between Schutz Drive and Harris Street looking east towards the Mission Valley Transfer Center.



Existing Conditions: Alameda Avenue through the Ysleta area is currently not a pleasant environment for pedestrians. The roadway features two wide lanes of traffic in each direction. Sidewalks are narrow and squeezed between flowing traffic and large fields of parking with no protection from passing vehicles and lighting is oriented toward the vehicles. Between the intersections of Harris Street and Zaragoza Road, historic buildings frame the street, but elsewhere little effective spatial definition of the public space exists.



Step 1: Public improvements can be made that will enhance the pedestrian environment. Travel lanes in this section of Alameda Avenue should likely be reduced to one lane in each direction with a central left turn lane. This creates enough space within the right-of-way to add on-street parking to one side of the street. By widening the sidewalk, introducing pedestrian scaled lighting, and on-street parking, pedestrians begin to have a more comfortable, protected setting.

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Step 2: An underutilized green space between the Robert F. Kennedy Pre-K Center and Alameda Avenue should be transformed into a formal public green space by relocating the fence and adding streets trees. Additionally, a local market could be constructed at the intersection that fronts the street and shades the sidewalk with awnings.



Step 3: Parking lots should, over time, be lined with multi-story local-serving mixed-use buildings. Commercial stores and cafes activate the street while the upper floors can be filled with anything from additional retail to offices to residential lofts. On-street parking helps to mitigate the parking lost with the creation of the new liner buildings and supports street-oriented businesses.

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Socorro Road: Change Over Time



The following sequence illustrates the potential transformation of Socorro Road looking west towards Schutz Drive. This change-over-time is an example of how a typical neighborhood street near the Mission Valley Transfer Center could densify over time.

Existing conditions: The view is dominated by chain-link fences, utility poles, cobra-head lanterns, and wires. Empty lots present an opportunity for infill.

Existing conditions: The view is dominated by chain-link fences, utility poles, cobra-head lanterns, and wires. Empty lots present an opportunity for infill.

Step 1: Utility poles and wires should be placed underground and chain link fences should, where possible, be removed to dramatically improve the view.



Step 2: Infill housing should be used to fill in vacant lots in the neighborhood. Multi-family housing can be designed to look like a large mansion or house. Low stone walls similar to those found throughout the City can define yard edges and help to separate the public and semi-public realms.



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Step 3: Redevelopment or expansion of older housing stock can help make the neighborhood more complete.



STEP 4: Redesign of the roadway should be undertaken to narrow the curb-to-curb dimension, thereby increasing the perception of visual friction and discouraging speeding. Planting strips should be landscaped with desert-appropriate species and groundcover.

GOALS & POLICIES

Overall Goal: Incentivize development projects of exemplary location and design throughout the City.

Smart Location Principles

Goal 2.1: The City should change its growth pattern away from continuous outward expansion and toward integrated growth that minimizes environmental damage, reduces the need for excessive travel by private automobile, and can be served by public transportation.

Policy 2.1.1: City officials should consider the following “smart location” principles when evaluating rezoning requests and when locating and designing development on public land, seeking to achieve compliance with as many principles as possible.

Policy 2.1.2: Preferred locations for new development are sites near areas with a minimum of 90 intersections per square mile, as measured within ½-mile of the project’s boundary.

Policy 2.1.3: Construction of high-rise buildings should be encouraged only in areas well-served by public transit.

Policy 2.1.4: Development is encouraged to integrate jobs into or near residential neighborhoods, or to re-balance existing communities by adding jobs within a ½-mile radius of residential neighborhoods or by adding residences within a ½-mile radius of concentrations of jobs.

Policy 2.1.5: Development is encouraged on brownfields if site contamination can be remediated.

Policy 2.1.6: Development is encouraged along existing or planned bicycle networks where additional segments and/or secure bicycle storage can be added to the network.

Policy 2.1.7: Development is discouraged on sites or portions of sites within the 100-year or moderate-risk floodplains as defined by the Federal Emergency Management Agency (FEMA). Where development must occur within floodplains, development should be located on previously developed floodplains or in nonconveyance areas without flooding potential.

Policy 2.1.8: Development is discouraged on land outside the current City limits. Policies for land within El Paso’s extra-territorial jurisdiction and for annexation of land into the City are provided in the Regional Land Use Patterns Element under Goals 1.6 and 1.7.

Policy 2.1.9: Development is strongly discouraged within critical arroyos.

Policy 2.1.10: Development is discouraged on land with slopes greater than 15% and on land designated O-2 “Natural” on the Future Land Use Map.

Policy 2.1.11: Development is discouraged on sites where imperiled species or ecological communities have been identified.

Policy 2.1.12: Preferred locations for higher density development and redevelopment are sites in Compact Urban areas, which include the following land as identified on the Future Land Use Map:

- a. Existing walkable neighborhoods, identified as land in the G-1 “Downtown” and G-2 “Traditional Neighborhood” sectors.
- b. Planned walkable communities, identified as land in the O-7 “Urban Expansion” sector.
- c. Future redeveloped and infill neighborhoods, identified with these overlays: “Local Transfer Centers,” “RTS Stops,” and “Future Compact Neighborhoods.”

Policy 2.1.13: The development and redevelopment of land in Compact Urban areas is subject to certain additional policies identified under Goals 2.2 through 2.5. The Transportation Element contains other policies that affect Compact Urban areas. These principles should be utilized anywhere that City projects for retrofit and walkability are desired and practicable.

Policy 2.1.14: Development is strongly discouraged on irrigated farmland unless the proposed development commits to permanently keep at least 50% of the land for farming or to subdivide the land into tracts that are themselves large enough to support small-scale farming.

Neighborhood Patterns

Goal 2.2: The City of El Paso should change its growth pattern away from homogeneous land uses and return to a pattern of compact well-connected mixed-use neighborhoods.

Policy 2.2.1: City officials should consider the following neighborhood patterns when evaluating rezoning requests and also when locating and designing development on public land, seeking to achieve voluntary compliance with as many patterns as practical. While the land development code and state law ultimately dictate what shall be approved by the City, all design approaches that could increase the function, aesthetics, sustainability, marketability, and livability of projects should be discussed as part of the land development process. Consensus approaches should become changes to the land development code. The illustrative plans in various elements of *Plan El Paso* demonstrate the application of these design principles to a wide variety of sites within El Paso.

Policy 2.2.2: The design of new neighborhoods and additions to existing neighborhoods should strive for a mix of housing types to create neighborhoods that accommodate diverse ages and incomes and allow residents to trade up, downsize, or create multi-generational households without being forced to leave the neighborhood. Housing types include both small and large single-family detached homes, duplexes, townhouses, multi-family buildings, live-work units, and accessory dwelling units, and include both rental apartments and units that can be owned by their occupants.

Policy 2.2.3: Neighborhood patterns in Compact Urban areas should also follow the principles in the remaining policies under Goal 2.2.

Policy 2.2.4: Neighborhoods should strive to have a clearly defined center and edges that vary in intensity and character.

- a. Each new neighborhood should have a primary civic space such as a square or green near its physical center.
- b. Commercial and office uses at intersections should have direct paths to greens and squares.
- c. When edges of neighborhoods lie along major roads, smaller lots can be placed facing the arterial road to accommodate attached dwelling units.

- d. When edges of neighborhoods lie along natural features or farmland, larger lots can be placed there to increase the variety of the neighborhood's housing.

Policy 2.2.5: The design of new neighborhoods and additions to existing neighborhoods should strive for a balance of housing, jobs, shopping, recreation, and civic uses to avoid unnecessary travel and reduce infrastructure and public services costs.

- a. Ideally, 50% of new residences will be within a 1/4-mile radius of at least 4 diverse uses such as community-serving retail, services, civic/community facilities, and food retail.
- b. New neighborhoods of 300 units or more on an arterial road should provide a viable location for a corner store.
- c. Live-work units and a corner store to meet daily needs should be available within a 1/2-mile radius of all residences.
- d. Home offices and accessory dwelling units should be allowed on every lot.

Street Design Principles

Goal 2.3: The City of El Paso wishes to create complete networks of multimodal streets with ample shaded sidewalks and frequent on-street parking.

Policy 2.3.1: City officials should consider the following street design principles when evaluating rezoning requests and when locating and designing development on public land, seeking to achieve voluntary compliance with as many principles as practical. While the land development code and state law ultimately dictate what shall be approved by the City all design approaches that could increase the function, aesthetics, sustainability, marketability, and livability of projects should be discussed as part of the land development process. Consensus approaches should become changes to the land development code. The illustrative plans in various elements of *Plan El Paso* demonstrate the application of these street design principles to a wide variety of sites within El Paso.

Policy 2.3.2: Street networks should contain multiple paths for vehicular movement and should be designed using the following principles:

- a. New neighborhood streets should connect to the existing street network in all adjoining areas when practical.
- b. Bend new streets with restraint. Bending streets creates deflected vistas, but exaggerated curves are disorienting and difficult to connect to adjoining street networks.
- c. No single length of roadway should be completely straight for longer than 2,000 feet to slow the movement of vehicles, and provide visual terminations to streets to make them more appealing to walk. Challenging intersections can calm traffic, such as pin-wheel intersections, small roundabouts, triangular intersections, and staggered intersections.

Policy 2.3.3: The following street connectivity principles should be considered through amendments to Title 19 of the City's code:

- a. A meaningful increase in the required link-to-node ratio for Roadway Network Connectivity from the current 1.4 to increase the density of intersections.
- b. Dead-end streets and cul-de-sacs should be allowed only when required by topographic constraints or when conditions on adjoining property prevent existing or future connections.

Policy 2.3.4: Street designs in Compact Urban areas (see Policy 2.1.14) should also follow the principles in the remaining policies under Goal 2.3.

Policy 2.3.5: Street networks should be designed using the following principles:

- a. Limit average block perimeters in new development to no more than 2,000 linear feet.
- b. The connectivity of new streets in subdivision plats should be at least 120 intersections per square mile, counting only streets that are open to the public.
- c. Provide rear alleys for access to mid-block parking spaces, to provide an out-of-sight location for utility equipment, and to allow the fronts of buildings to be free of garage doors and parked cars.

Policy 2.3.6: Street spaces should be designed to create prominent public spaces with a comfortable sense of enclosure using the following principles:

- a. Provide street trees on both sides of at least 60% of streets, between the travel lanes and sidewalk, at intervals averaging no more than 40 feet.
- b. Provide 90% of streets with sidewalks at least 8' wide on retail or mixed-use streets and 5' wide on all other streets.
- c. Provide on-street parking on at least 70% of both sides of all new and existing streets.
- d. Limit driveway crossings to no more than 10% of the length of sidewalks.

Policy 2.3.7: Neighborhood streets should be designed using pedestrian-friendly street section assemblies from the City's SmartCode (Title 21) or from *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach* (Institute of Transportation Engineers, 2010).

Policy 2.3.8: Neighborhood streets should be designed for pedestrians and bicyclists by moderating the speed of motorized vehicles:

- a. 75% of new residential-only streets should be designed for a maximum target speed of 20 mph.

Building & Site Design Principles

Goal 2.4: The City of El Paso supports designing buildings and sites in a complementary manner so that buildings contribute to convivial street spaces.

Policy 2.4.1: The relationships between the fronts and backs of buildings are encouraged to ensure that public spaces have natural surveillance from buildings and to avoid the blighting influence created when the backs of buildings face public spaces.

- a. Fronts of buildings should face the fronts of other buildings, or the sides where necessary; fronts should never face the backs of other buildings.
- b. Residences may face minor and major arterials to avoid presenting blank walls. Alleys can be provided to create a vehicular entry to the lots instead of vehicular access directly from arterials.

Policy 2.4.2: Semi-public building elements such as porches and balconies add to the congeniality of neighborhoods and should be allowed within front setbacks. This applies to porches, stoops, bay windows, and balconies on residences.

Policy 2.4.3: Outdoor dining should be allowed on City sidewalks provided that chairs and tables are placed in a manner that allows a minimum 5 foot clear path for pedestrian movement.

Policy 2.4.4: Building and site design in Compact Urban areas (see Policy 2.1.14) should also follow the principles in the remaining policies under Goal 2.4.

- a. The goal of building and site design principles which provide that non-residential and multi-family buildings have surface parking lots placed at the side and rear of buildings may not necessarily apply to G-3 “Post War” and G-4 “Suburban” sectors unless the City has identified a suburban retrofit opportunity where the City will work in concert with multiple stakeholders to adopt an area specific plan that incorporates design standards.

Policy 2.4.5: The careless placement of off-street surface parking lots can blight surrounding properties and public spaces. This blight can be avoided by using the following principles:

- a. Non-residential and multi-family buildings should have their surface parking lots placed at the side or rear of buildings.
- b. Buildings should have no more than 20% of their lots devoted to surface parking lots, with no individual lot larger than 2 acres.
- c. Parking lots should be designed for pedestrians as well as cars with pathways with double allees of trees.

Policy 2.4.6: In non-residential and mixed-use developments, businesses and other community services on the ground floor should be strongly encouraged to be accessible directly from sidewalks along a public space, such as a street, square, paseo, or plaza, instead of accessible from a parking lot.

Policy 2.4.7: A majority of the principal entries to buildings should face public spaces such as streets, squares, parks, or plazas instead of facing parking lots.

Policy 2.4.8: New developments should place buildings close to streets using the following principles:

- a. At least 80% of the total linear feet of building façades should be within 25 feet of the sidewalk, and at least 50% of mixed-use and non-residential building façades should be within one foot of the sidewalk.
- b. Buildings should have functional entries an average of every 75 feet along non-residential or mixed-use buildings or blocks.

Policy 2.4.9: To achieve a sense of spatial enclosure, ideal building height to street width ratios are as follows:

- a. At least 15% of street frontages should have a ratio of 1:1 or greater (a minimum of one foot of building height for every one foot of street width).
- b. At least 40% of all street frontage should have a ratio of 1:3 or greater (a minimum of one foot of building height for every three feet of street width).
- c. Alleys are excluded from these measurements.

Policy 2.4.10: Encourage a reduction in the percentage of building walls that face streets that contain garage doors or service bays. A minimum of 20% of front walls containing garage doors or service bays should be encouraged.

Policy 2.4.11: Awnings, balconies, arcades, galleries, and colonnades should be allowed to extend into the right-of-way of City streets provided that adequate clearances are provided for pedestrian movement and for right-of-way maintenance.

Civic Space Principles

Goal 2.5: The City of El Paso wishes to supplement its neighborhood and regional park system with small civic spaces that are accessible to all citizens and are memorably placed in all new neighborhoods and mixed-use developments.

Policy 2.5.1: Civic buildings achieve prominence by strategic placement at the ends of streets, across greens, or at the center of greens, and by having grander proportions and materials than surrounding buildings, as described in the Public Facilities Element. Schools, recreational facilities, places of worship, and other civic buildings should be embedded within communities or on the edges of communities within walking distance.

Policy 2.5.2: Civic spaces are outdoor gathering places for public use. Civic spaces can be defined by a combination of physical factors including their size, intended use, landscaping, and the character of their edges, as described in the Public Facilities Element. New neighborhoods should be designed around optimal locations for civic spaces. Civic spaces should not be designated in awkward locations on residual tracts of land that are left over during the subdivision process.

Policy 2.5.3: Civic spaces in Compact Urban areas (see Policy 2.1.14) should also follow these principles:

- a. A civic space, such as a square, park, or plaza, of at least 1/6 acre in size should be lie within a 1/4-mile radius of 90% of dwelling units and non-residential building entrances.
- b. Scale civic spaces comfortably for users, avoiding civic spaces that are too large.
- c. Enclose most civic spaces with building fronts to create a comfortable sense of enclosure; 75% of the perimeter of civic spaces should have a minimum building height to street width ratio of 1:6 (a minimum of one foot of building height for every 6 feet of width of the street that circumscribes the civic space).

Rural & Open Space Design Principles

Goal 2.6: The City of El Paso encourages the protection and preservation of critical arroyos leading from the Franklin Mountains and farmlands along the Rio Grande valley.

Policy 2.6.1: Critical arroyos and farmland are to be protected through policies of *Plan El Paso*, parkland dedication requirements, conservation neighborhood design, conservation easements, and outright acquisition of land.

Policy 2.6.2: The City shall create a program by which Park Credits could be accepted for the dedication of any arroyo acreage when the arroyo is preserved in a relatively natural state rim to rim, is unfenced, is lined by walking paths at its ridge, and is faced by the fronts of buildings along the dedicated portions.

Policy 2.6.3: When farmland is developed in accordance with Policies 1.5.2, the tradition of farming and open space in the Rio Grande valley should be encouraged by:

- a. Mitigating the loss of farmland by placing perpetual agricultural conservation easements on an equal amount of comparable farmland within one mile of the project's boundary, and
- b. Providing permanent and viable growing space or greenhouses within the development of at least 80 square feet per residence, and
- c. Integrating the development into the Rio Grande Riverpark and Trail System, as described in the Sustainability Element.

CNU Accreditation

Goal 2.7: Increase education and CNU Accreditation throughout the City.

Policy 2.7.1: Continue City education in principles of design through the CNU Accreditation Program.

DOWNTOWN

3

Overall Goal: Direct public funding and private development of exemplary design to the Downtown where it will have economic and social benefits shared by the entire City.

- Current Conditions 3.2**
- Community Concerns 3.3**
- Strategies for Addressing Community Concerns .. 3.4**
 - City Hall 3.5*
 - Union Plaza District as an Entertainment District 3.10*
 - Downtown Pathway 3.13*
 - Convention Center 3.14*
 - San Jacinto Plaza 3.16*
 - Downtown Arena 3.19*
- Downtown Economic Analysis – Key Findings ... 3.20**
- Goals & Policies 3.22**
 - Downtown Streets 3.22*
 - Downtown Buildings 3.23*
 - Downtown Parking 3.23*
 - Downtown Public Facilities 3.24*

"CITIES HAVE THE CAPABILITY OF PROVIDING SOMETHING FOR EVERYBODY, ONLY BECAUSE, AND ONLY WHEN, THEY ARE CREATED BY EVERYBODY."

-JANE JACOBS

CURRENT CONDITIONS

DOWNTOWN

Within the Downtown, El Paso boasts a variety of urban open spaces. San Jacinto Plaza, Cleveland Square Park, and the Arts Festival Plaza are high-quality, high-profile spaces which continue to see an increasing amount of use. Neighborhood pocket parks like Armijo Park, Tula Irrobali Park, and the linear greens of 8th Avenue have continued to be the centers of the Segundo Barrio, South Central, and Chihuahuita neighborhoods.

The City is in the process of creating a pedestrian system of greens, plazas, comfortable streetscapes, and pedestrian passages connecting Union Plaza District, Civic Center, Pioneer Plaza, Plaza Theater, Art Museum, and San Jacinto Plaza within the Downtown core. These pathways will cater to visitors from both outside the city and residents by offering an interconnected network of destinations. However, the system is incomplete in segments where pedestrians face hostile environments.

Filling in the gaps of the pedestrian system in the Downtown has been part of a larger initiative to revitalize Downtown El Paso. Efforts have included establishing public and private sector partnerships to stimulate investment in mixed-use developments for vacant infill properties, and encouraging business owners to rehabilitate historic structures. Downtown-wide parking strategies to build structured parking are greatly helping to alleviate the parking need that once encouraged the tearing-down of buildings and destruction of squares.

While planning for the entire City, El Paso has focused attention on revitalizing the Downtown historic core. Both the *Downtown 2015 Plan* and *Connecting El Paso, Building Transit - Oriented Neighborhoods at Remcon Circle, Oregon Corridor, and Five Points and Redeveloping ASARCO* discuss prioritizing Downtown development and investments. This Downtown Element looks at some of the potential big ideas for Downtown that were explored during the comprehensive planning process to help revitalize Downtown El Paso.



San Jacinto Plaza is a versatile space surrounded by a showcase of landmark buildings.



Public spaces such as the space between Pioneer Plaza and the Arts Festival Plaza offer visitors a walkable environment with outdoor dining.



Despite success of specific areas like the Golden Horseshoe District, the vacancy rates in the Downtown remain high.

COMMUNITY CONCERNS

Nurture Downtown - El Paso's Most Important Neighborhood

El Paso's community character is not the result of piecemeal development; rather El Paso's character is found in its compact, connected, walkable historic neighborhoods. Downtown is the most important of these neighborhoods, as it is the central gathering place for the entire City. El Paso could improve its quality of life and gradually construct a better human habitat by growing a more complete Downtown.

To meet this challenge, El Paso must first strive to carefully restore and reuse Downtown's exquisite existing stock of historic buildings. Next, new development should follow careful study of El Paso's historic Downtown fabric, in order to grow in a way that is consistent with the City's identity. The revitalization of El Paso's built fabric must coincide with improvements to Downtown's network of public spaces.

Restore and Reuse Downtown's Historic Buildings

El Paso's Downtown is blessed with an extraordinary inventory of high quality historic buildings. The upper floors of these buildings, for various reasons, have remained largely vacant over the years. The first order of business for the revitalization of Downtown must be to implement the refurbishment and reuse of these historic structures. Priority should be placed on increasing the residential population in Downtown, thereby increasing vitality throughout the entire day.

Civic Spaces, the living Rooms of the Community

El Paso's founders had the foresight to plan great public civic spaces within the Downtown. These spaces, including San Jacinto Plaza, Cleveland Square Park, and Union Square have proud histories, but have lost elements of their landscape design and surrounding built edges over the decades. An emphasis should be made to revitalize these public civic spaces so they can fulfill the role the City's founders intended for them – serving as living rooms for the community. Restoring the civic spaces will require refurbishing the landscape elements such as plantings, paths, benches, and lighting. It will also require reestablishing lost building frontages at the perimeters of these spaces, as a public space is only as good as its edges. Once the City's historic public spaces have been cared for, opportunities may be found to introduce new public spaces within the Downtown.

Civic Building Opportunities

Downtown El Paso is home to a number of civic institutions, including City Hall, the public library, convention center, and several great museums. These civic institutions, while currently providing invaluable cultural anchors for the City, could also in many cases improve in their capacity to form and activate compelling pedestrian-friendly public spaces. Unfortunately some of these buildings currently sit amidst large fields of pedestrian-hostile parking lots, or face the public realm with large blank wall. A great opportunity exists for these community anchors to lead the way as demonstrations for how to transform fortified building façades and buildings set amidst placeless parking lots into exemplars of street-oriented pedestrian-friendly urban design.

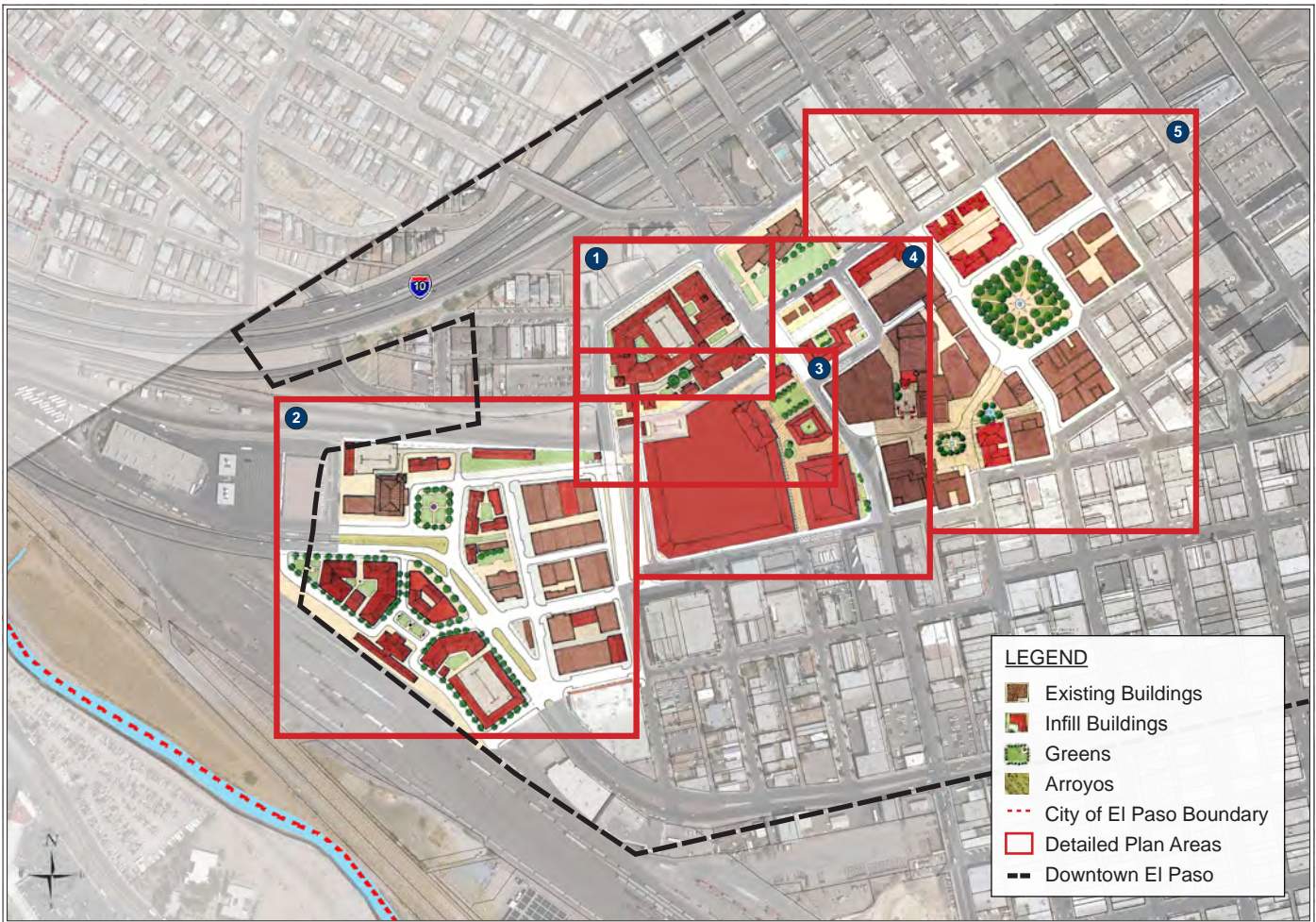
Diversify and Add Missing Uses

Downtown El Paso currently serves primarily as a shopping district, supplemented with civic uses and a budding entertainment area. In the future, as Downtown evolves into a 24 hour environment, it will be necessary to diversify uses and add elements that are currently missing. As residential units are added, a variety of supporting uses will be needed, including grocery stores, dry cleaners, daycare, hairdressers, and coffee shops. Increasing employment opportunities will allow many Downtown residents to live predominantly car-free. As the Downtown population grows, provisions for reopening nearby schools should also be examined.

Locate Parking On-street & Behind Buildings

El Paso's once connected and continuous walkable urban fabric has, over the decades, become frayed in many places. Sites that once featured street-oriented buildings have been razed and replaced with parking lots and parking garages that are exposed to the street, damaging the pedestrian experience. As El Paso moves forward, parking should be encouraged to be located on-street and behind buildings in mid-block parking lots or in parking garages that are lined with habitable space. These liner buildings should be street-oriented, facing the public space with ample doors and windows. This will enhance the public space of the street, making it friendlier for pedestrians and bicyclists, in addition to drivers.

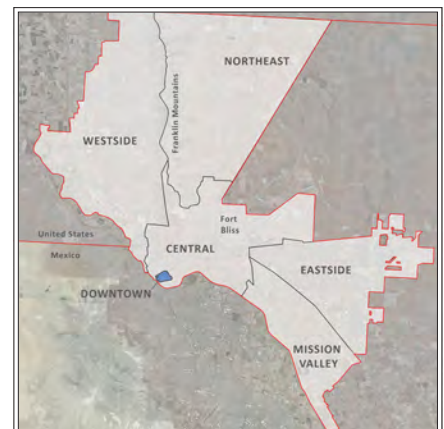
STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative plans demonstrate key community design and planning strategies for Downtown El Paso.

Illustrative Plans

- 1 City Hall - redevelopment and reintegration into a pattern of walkable blocks and streets. The high visibility of this site from I-10 could also make it attractive to other civic uses such as a downtown arena. See page 3.19.
- 2 Union Plaza District - development focused around a refurbished Union Square. Expanding the Union Plaza District into the existing railyards.
- 3 Downtown Pathway - providing quality pedestrian pathways throughout the Downtown.
- 4 Convention Center - strategies for potential adjustments to make the convention center better relate to the surrounding streets.
- 5 San Jacinto Plaza - revitalization of San Jacinto Plaza into a more unified signature civic space. Focusing on completing the shaping of the space by examining opportunities for new development.



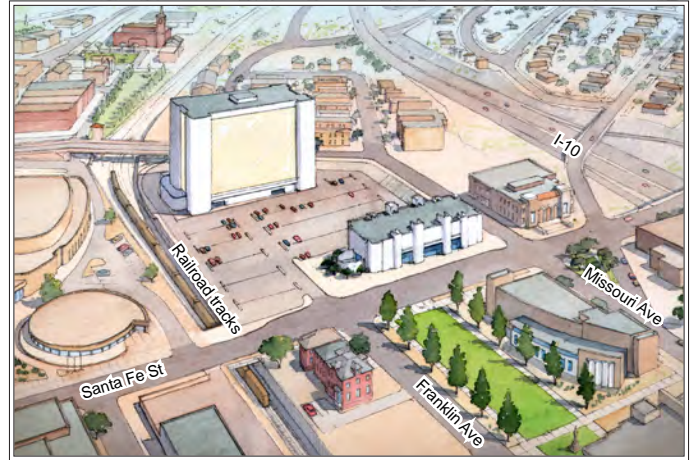
CITY HALL



Great Streets & Public Spaces

City Hall and its environs, as they exist today, do not physically project a civic presence. By reconfiguring City Hall’s site, this can be remedied by adding new buildings that use their mass to shape public spaces into well-defined streets and plazas. Key façades and focal architectural elements should be placed in honor-

ific locations, such as facing the historic Cleveland Square Park bounded by the El Paso Public Library and the El Paso Museum of History. New buildings should additionally be designed with adequate permeability, including ample windows and front doors providing “eyes on the street.”

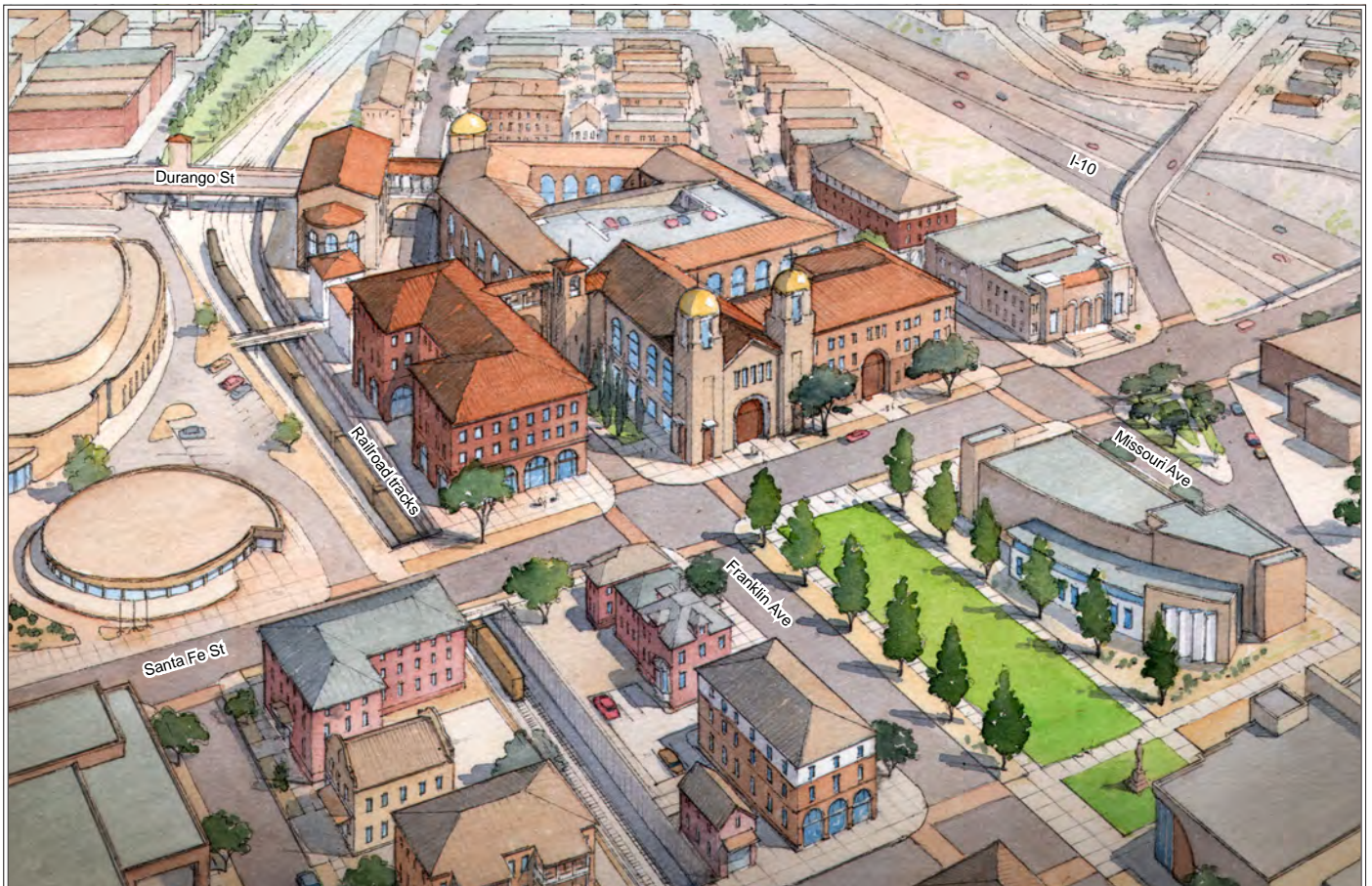


Existing City Hall site

The Value of Increased Connectivity

Valuable continuity of the street grid can be reestablished by reconnecting the long-severed Franklin Avenue across the site to Durango Street. This will greatly improve circulation from the Sunset Heights neighborhood into Downtown and will also help facilitate access to the growing entertainment area within the Union Plaza District. This reconnection offers the oppor-

tunity to construct a demonstration segment of a “complete street.” With common ownership of property on both sides of the street and control over thoroughfare details, it will be possible to optimize the design of this new segment of Franklin Avenue. The street can be turned into a showpiece of walkability which can help to catalyze additional high quality development on properties throughout the Downtown.



A new City Hall complex configured into walkable streets and blocks with civic presence.

CITY HALL

The existing City Hall building is in need of repairs and upgrades. An alternative to repairing the building would be to evaluate entire City Hall site and assess the best use of the land and building.

While El Paso’s City Hall is an important anchor for Downtown that draws many visitors throughout the day, the site is currently devoted to fairly impermeable buildings set within a large expanse of surface parking. Surrounding streets lack spatial definition either by shade trees or by building façades. They are therefore hot, dusty, and uninteresting for pedestrians. This present arrangement represents a valuable land bank.

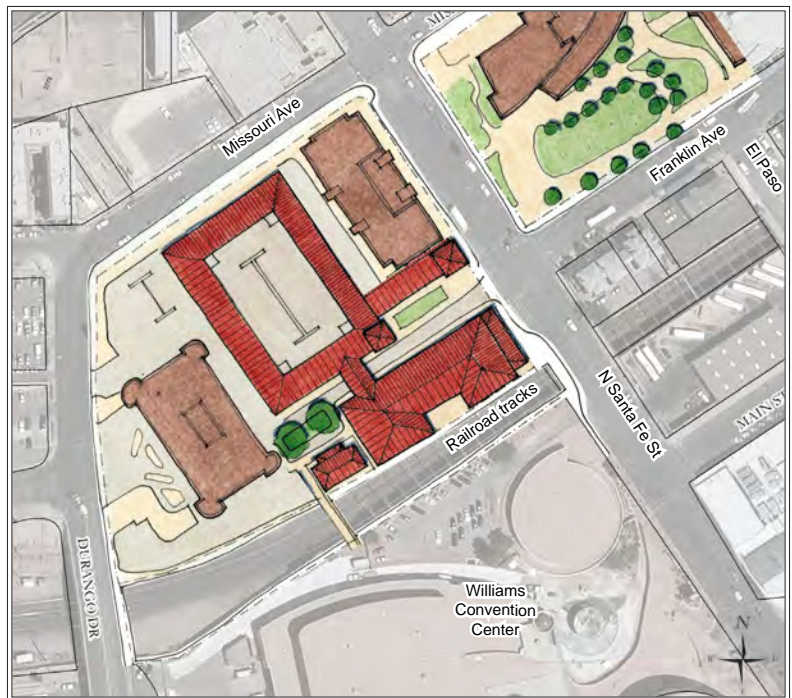
El Paso’s City Hall site possesses the opportunity to evolve incrementally over time into a great example of urban walkability and civic presence.





Existing City Hall site

Over time, as district-wide parking solutions are implemented, surface parking lots can be filled with new urban buildings configured into a cohesive network of blocks and streets.

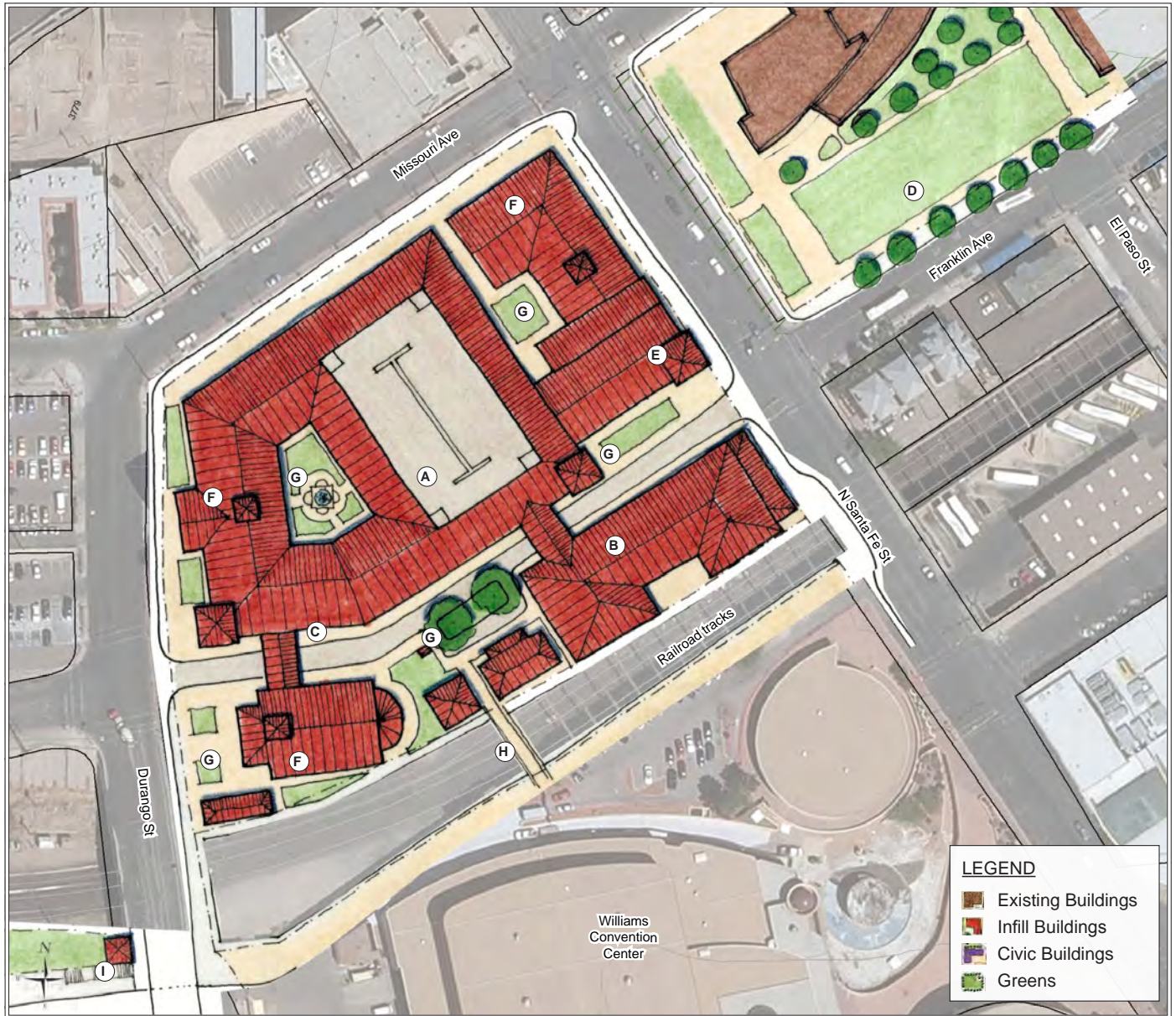
As new buildings are completed, the functions within the existing City Hall building can be moved into newer structures and the existing building can ultimately be replaced.



Proposed Phase 1 of City Hall redevelopment

LEGEND	
	Existing Buildings
	Infill Buildings
	Civic Buildings
	Greens

CITY HALL



Proposed Phase 2 of City Hall redevelopment

General Recommendations

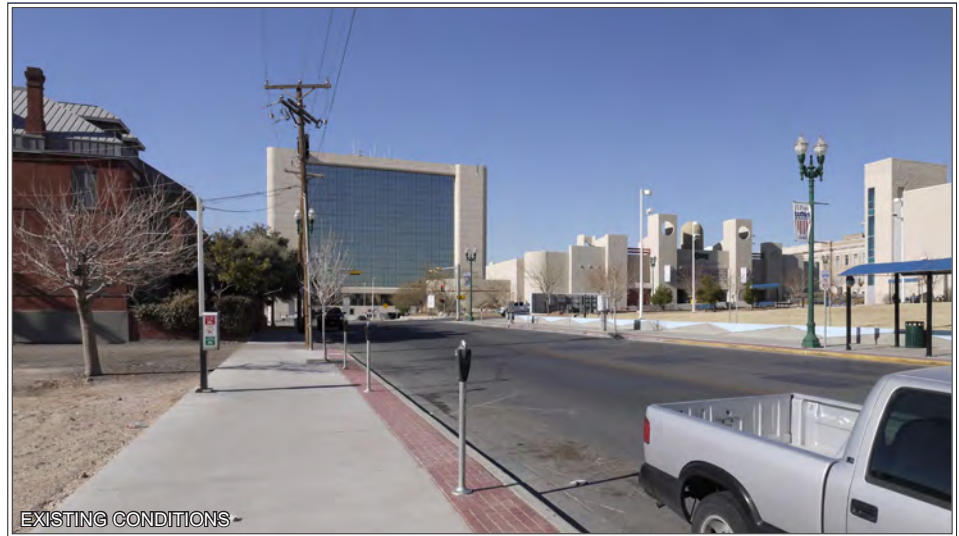
- A** New structured parking, wrapped and concealed by a habitable liner building, frees surface parking lots for new buildings.
- B** The first new buildings can be added while the existing City Hall and Science Museum are still in place.
- C** After the existing City Hall is eventually replaced, Franklin Avenue can be extended and connected across the site to Durango Street.
- D** The public square bounded by the El Paso History Museum and the El Paso Library is landscaped with formal shade trees.
- E** A focal building facade is placed facing Cleveland Square.
- F** Overtime, the site is built-out with new street-oriented buildings.
- G** A variety of landscaped outdoor open spaces and courtyards are located throughout the site.
- H** A pedestrian bridge connects across the railroad tracks to the convention center.
- I** Pedestrian stair to connect City Hall to the Union Plaza District.

CITY HALL



Change Over Time

EXISTING CONDITIONS: Today, the large glass and concrete mass of the existing City Hall interrupts the historic alignment of Franklin Avenue. Building fabric has been lost over time, so in many areas streets lack the proper shaping by the fronts of buildings. A lack of shade from buildings and trees leave pedestrians unprotected from the intense El Paso sun.



STEP 1: As the City Hall site redevelops, Franklin Avenue can be re-connected. A new focal façade with a tower becomes a dramatic anchor for the end of the public square fronted by the El Paso Library and History Museum while new shade trees contribute dramatically to pedestrian comfort.



STEP 2: New development on the City Hall site serves as a catalyst for infill development on surrounding blocks. As streets are better-shaped by infill buildings, they become more inviting to pedestrians and cyclists. The increase in walkability makes new businesses such as sidewalk cafés possible.



CITY HALL ARCHITECTURE

The new City Hall can fulfill its urbanistic requirements and still be finished in any variety of styles as illustrated by the concept designs on the right.

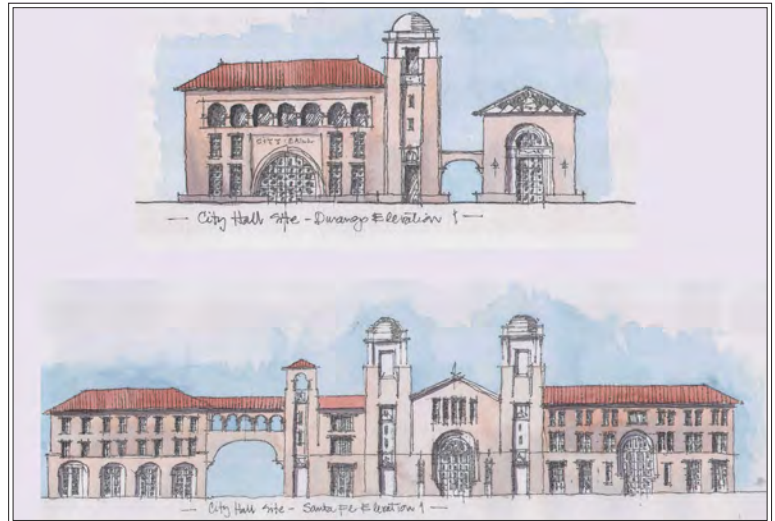
Urbanistically, the plan for City Hall must conceal its parking, reconnect Franklin Avenue, place a focal building facade facing Cleveland Square Park, and fill the edges of the block with street-oriented buildings.

The architecture of the building must offer windows along the length of surrounding streets to keep the streetscape interesting for pedestrians, provide the safety of “eyes on the street,” and offer multiple functional entries to keep each enfronting streetscape well-traveled by pedestrians. The architecture must have vertically proportioned windows, doorways, and bays to maintain harmony with other buildings in the Downtown. Materials should include textures comparable to the surrounding historic buildings. Colonnades, arcades and galleries could shade the perimeter sidewalks. Ideally, a pedestrian bridge would cross the railroad tracks linking City Hall to the Convention Center site.

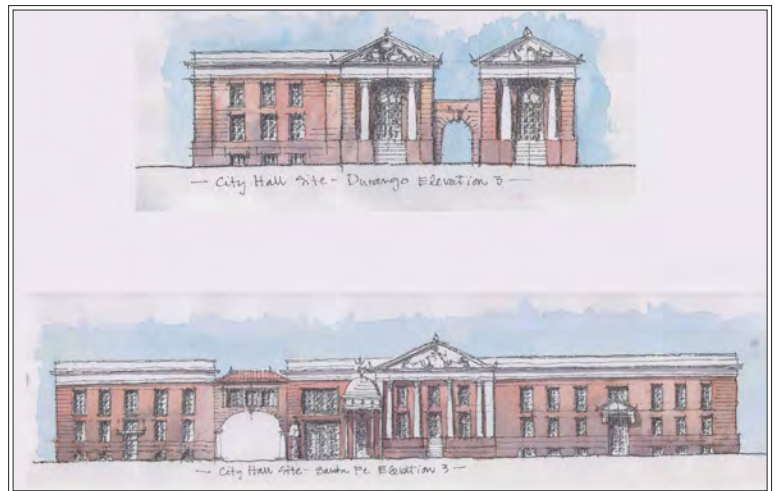
Each of the concept designs on the right shows an architectural elevation for Durango Street at the top and an elevation for Sante Fe Street below. Each of the concept designs utilizes existing design elements found in the architecture of El Paso to produce a structure with qualities in keeping with the historic, enduring sensibility of Downtown. The simplest way to achieve this effect is to employ a traditional or classical architectural vocabulary. The top image is inspired by El Paso’s Mission style, the middle image adapts the City’s Neo-Classical vocabulary, and the bottom image uses a Modern style but does so in a way in keeping with the Downtown context.

Each design places a primary emphasis on the Cleveland Square Park facade with secondary masses flanking the facade to achieve variety and complexity. In each case, the building is interesting but not confusing.

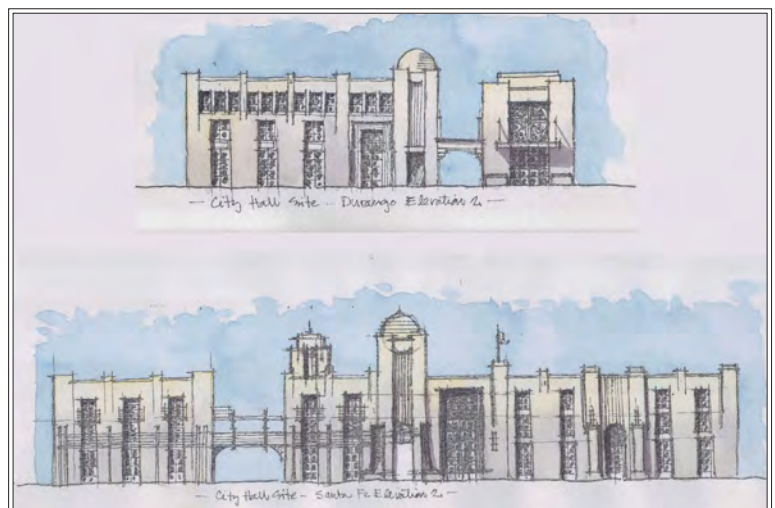
The beauty of the concept designs, regardless of style, is to be found in their simplicity, balance, order, proportional logic, and compositional harmony. The architect Christopher Wren said, “Architecture aims at eternity.” In this way a new City Hall should be stylistically capable of permanence. Even if the site for the City Hall changes these principles are still applicable.



City Hall - El Paso Mission style



City Hall - El Paso Neo-Classical style



City Hall - Modern style

UNION PLAZA DISTRICT AS AN ENTERTAINMENT DISTRICT



Historically, the Union Station served as a central depot for city trolleys and inter-city trains. The front portico provided a dramatic entrance to the City at a time when trains were the most common form of long distance transportation. Presently, this area is

the home of Sun Metro’s fixed-route administration, operations, and maintenance functions. The moving of Sun Metro’s entire operations to the Montana/Global Reach site will cause additional operating costs in serving the western side of El Paso. To prevent the increase in costs, it was planned for the Union Depot to serve at minimum as a satellite of operations.

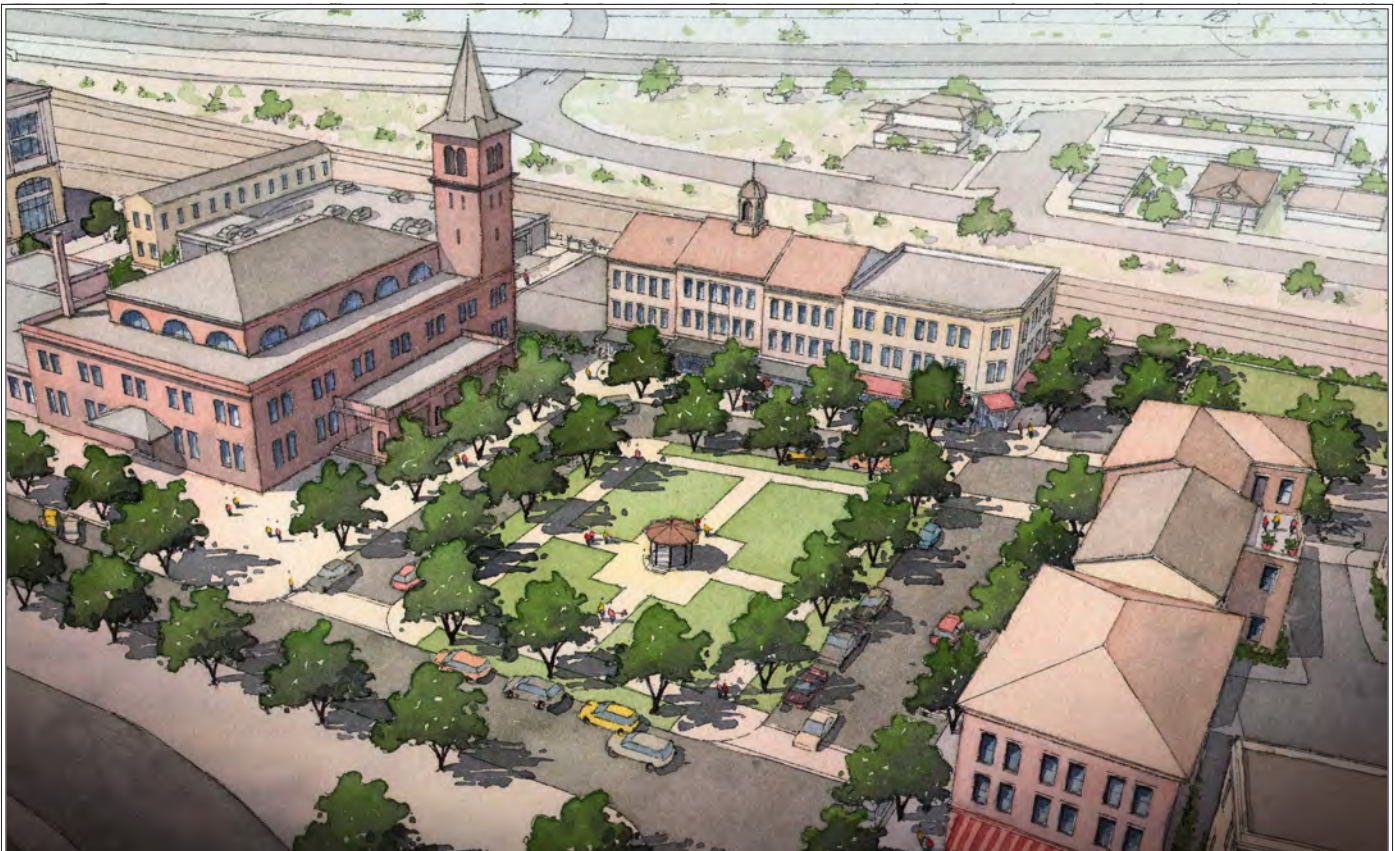
Union Depot is surrounded by surface parking lots that disconnect it from the surrounding area, which has recently seen a rebirth as a center for arts and entertainment. If configured thoughtfully, it would be possible to consolidate this parking into a structure, making it possible to reconstruct the historic public Union Square in the tradition of Hispanic urbanism with symmetry, order, and the grand gesture of a central gazebo. New, complete street walls enclosing Union Square would form

an “outdoor room” of activity. Streets surrounding the square would be pedestrian-friendly and traffic-calmed, with ample sidewalks, street trees, and on-street parking.

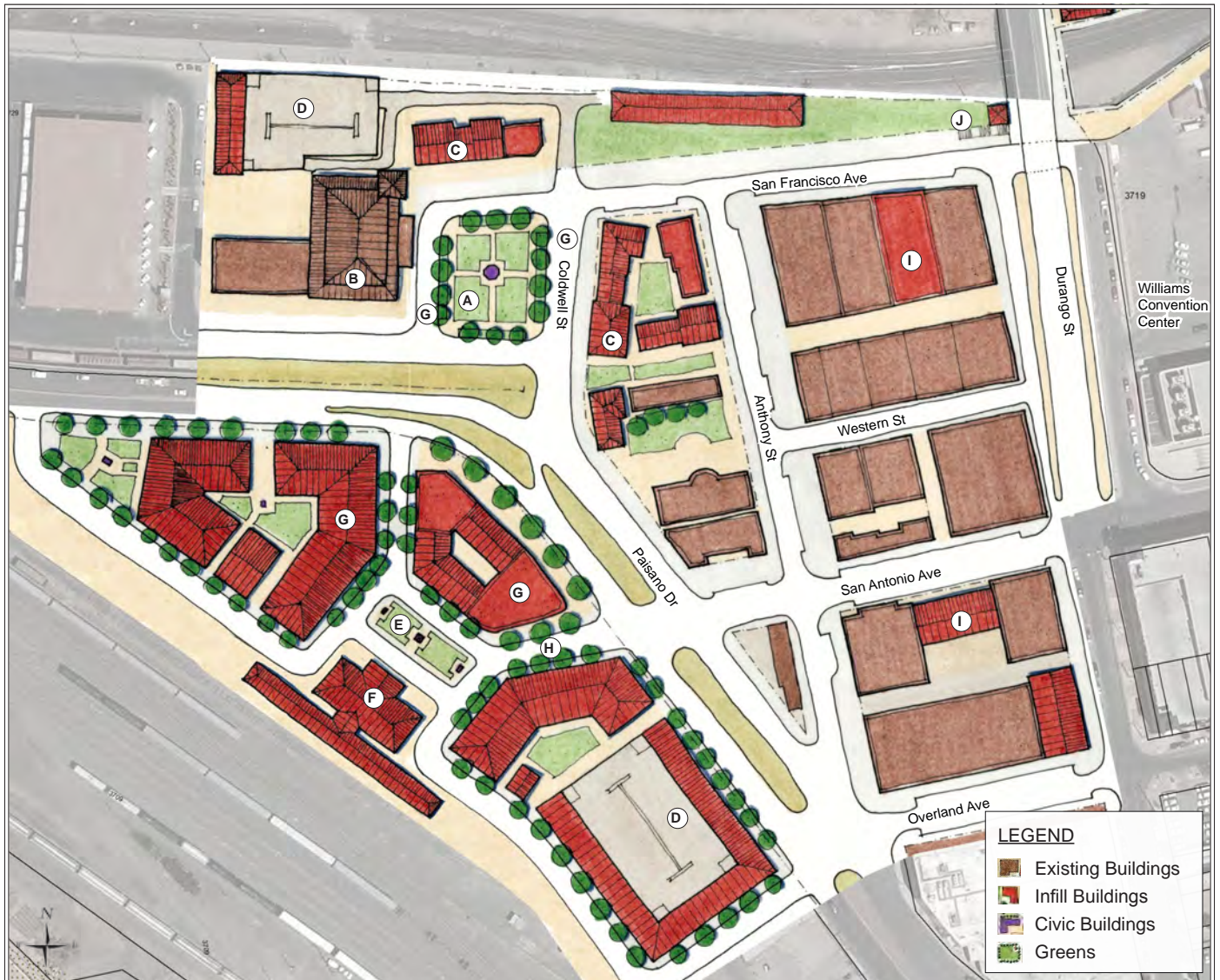
Union Square would be a place in which a visitor would be surrounded with quality urbanism and well-designed buildings in the El Paso mercantile tradition. One would know that they have arrived in El Paso and would leave the space with a lasting image of the City.

A reconstructed Union Square would lend tremendous value to other surrounding infill opportunity properties which are currently underutilized surface parking lots. These opportunity sites could be developed with a reestablished continuous urban fabric of multi-story, mixed-use buildings, forming a seamlessly connected network of pedestrian-friendly public spaces throughout the district.

Other uses or additional uses for the Union Depot building itself can be imagined including an academic campus or welcome center. The City must be diligent in providing adequate facilities for displaced agencies or functions.



UNION PLAZA DISTRICT AS AN ENTERTAINMENT DISTRICT



General Recommendations

- Ⓐ A new square, in front of Union Depot, replaces the existing surface parking lot and becomes the center of the neighborhood.
- Ⓑ Union Depot, designed by Daniel Burnham, is envisioned as a new welcome center to the city.
- Ⓒ New urban mixed-use buildings help shape the new square.
- Ⓓ Mid-block parking decks are part of a district-wide parking strategy.
- Ⓔ A small green creates an intimate urban space.
- Ⓕ A new train station for the eventual extension of high-speed rail service to El Paso.
- Ⓖ Transit-oriented development surrounds the new train station.
- Ⓗ Pedestrian-friendly, traffic calmed streets with ample sidewalks, street trees, and on-street parking connect throughout the Union Plaza District.
- Ⓘ Infill buildings maintain the style and scale of surrounding historic buildings.
- Ⓙ A pedestrian stair connects the Union Plaza District to Durango Street and over the railroad tracks for better pedestrian access from City Hall and the adjacent neighborhoods.

PLAN EL PASO

Strategies for Addressing Community Concerns

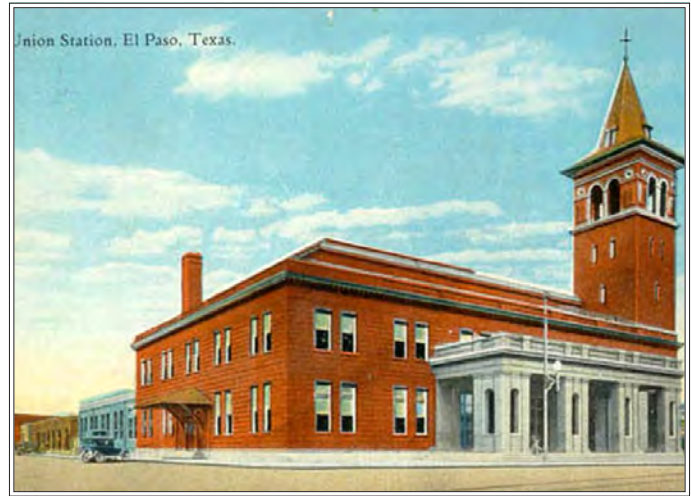
UNION PLAZA

The El Paso Union Depot was designed by architect Daniel Burnham, who also designed Washington D.C.'s Union Station. Historically, the Union Depot served as a depot for city trolleys and inter-city trains. Today Amtrak, a national service, still carries rail passengers through El Paso on the "Sunset Limited" which runs between Los Angeles and New Orleans. Union Depot was completed in 1906 and was added to the National Register of Historic Places in 1971.

Union Depot was built in a neo-classical style in red brick with a bell tower six stories high located on the building's northeast corner. Inside the depot, a gallery with a simple balustrade encircled the second floor space. Outside the gallery, a front portico faced the staging area for trolleys and trains and thus provided a quality "front door" to the City at a time when trains were the most common form of transportation.

The Union Depot area was once connected to the Downtown by San Francisco Street which was a major commercial and ceremonial street in the City. With the construction of the Convention Center in the 1970s San Francisco Street was closed and the area was cut off in many ways from the rest of the Downtown.

A square was once located outside of Union Depot just as Daniel Burnham had located Columbus Circle outside Washington Union Station. *Plan El Paso* calls for the restoration of that square and revitalization of the area around it. The restored square would be an ideal site for a neighborhood center or other uses, such as an academic quadrangle, if a school or university were to locate within the Union Plaza District.



Union Depot postcard (circa 1920)



Union Depot postcard showing the square which was once was located outside the front entrance.

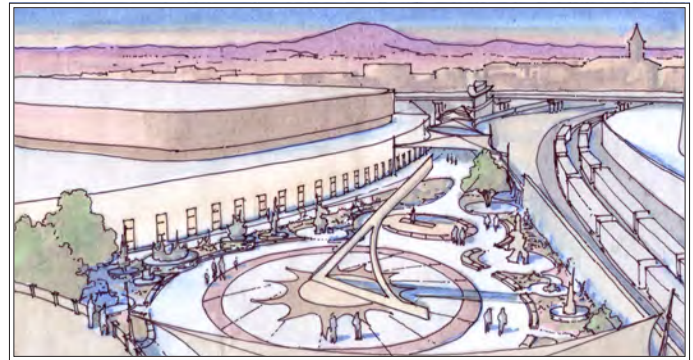


Union Station in Washington D.C. opened in 1908 and was designed by Daniel Burnham. The station retains its front square, Columbus Circle.

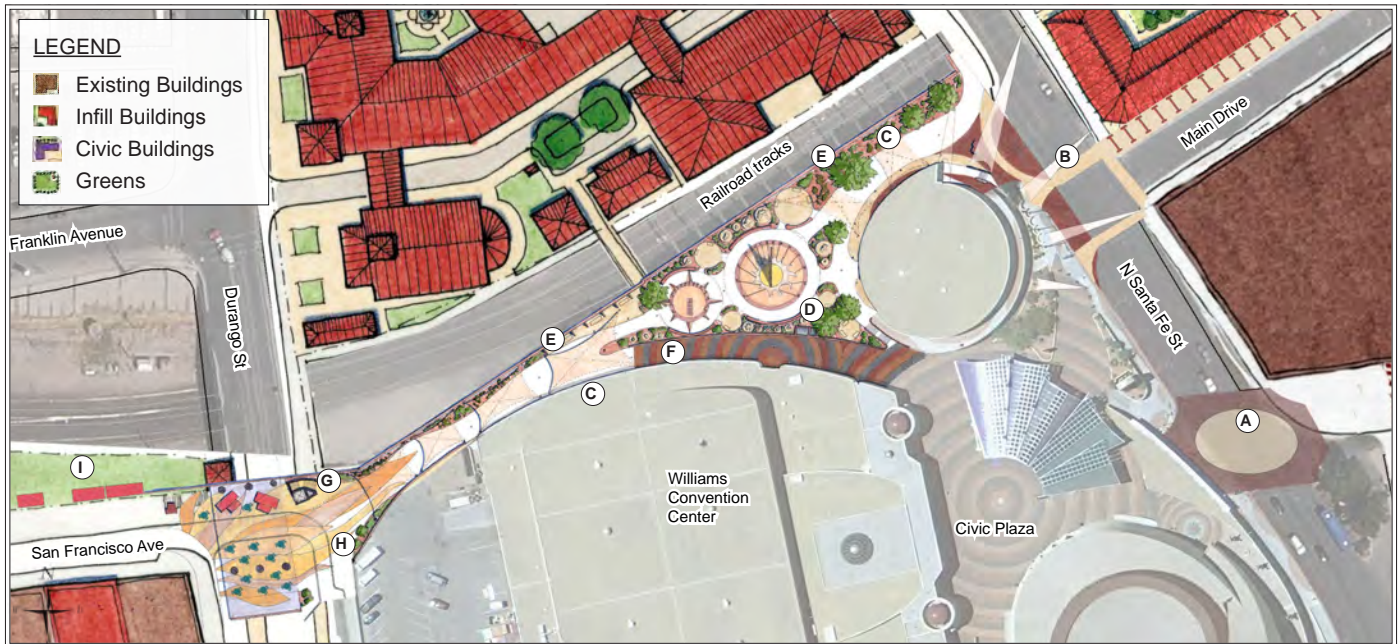
DOWNTOWN PATHWAY

The Convention Center currently separates two of Downtown’s main areas: the Cultural District with its civic buildings, museums, and the Plaza Theatre, and Union Plaza District which is becoming a popular dining and nightlife area. The creation of the pathway will significantly decrease the time it takes for pedestrians to walk from one area to another increasing the number of venues potentially visited in Downtown without the need to get in a car.

In addition to creating a valuable connection, the pathway will serve as a centerpiece for the arts community and will feature work by local artists. The pathway is designed to have a series of both permanent and flexible art display areas. Permanent installations include paving patterns, wayfinding signage, and lighting while flexible elements could include sculptures and murals.



The Sundial - One possible centerpiece for the new pathway could be a permanent art piece such as a sundial.



General Recommendations

- Ⓐ Santa Fe Street becomes safer for pedestrians with paving patterns at key intersections.
- Ⓑ Awnings span Santa Fe Street signaling the entrance to the art walk for pedestrians and signaling to drivers to be cautious.
- Ⓒ Canopies provide shade and relief from the sun.
- Ⓓ A permanent art piece, such as a sundial, becomes a focal piece in the park and could be surrounded by a sculpture garden.
- Ⓔ Changeable panels could cover the walls in a rotating art display.
- Ⓕ Paving pattern resembles the pattern of the new civic plaza.
- Ⓖ A staircase connects the Downtown pathway to the top of the Durango Street overpass and then on to City Hall and nearby public parking.
- Ⓗ Bright pavement patterns draw people under the Durango Street overpass and along the Downtown pathway.
- Ⓘ Refurbished trolley cars could be used as small restaurants along the elevated platform adjacent to the railroad tracks. This area can also be used as a viewing platform to watch trains go by.

CONVENTION CENTER

The current El Paso Convention Center offers convenient downtown facilities for a wide variety of events. Recently, the City has begun to realize that an expansion of the Convention Center’s square footage over time would provide the possibility for an even broader range of events, including more national and international conventions and exhibitions. Attraction of these larger events could provide a wide variety of benefits for El Paso’s Downtown economy.

Reconfiguration to increase the square footage of the Convention Center, if handled deftly, could also do much to remedy some of the urban design shortcomings of the present configuration. The current configuration of the El Paso Convention Center presents several obstacles to pedestrian comfort in the Downtown.

1. The current Convention Center complex features largely blank, fortified walls abutting surrounding streets. This results in a lack of natural surveillance or “eyes on the street.” These streets consequently feel less safe – and less interesting – for pedestrians.
2. The current Convention Center also features on-site public spaces that are lifted high above the surrounding streets and sidewalks. As a result, there is a lack of visual connection between these on-site public spaces and the rest of Downtown. During times when there is no event at the convention center, these on-site public spaces feel empty and look forlorn.
3. The relatively impermeable campus of the existing Convention Center forms an unwalkably large “superblock.” It is difficult to walk through the Convention Center campus, and prohibitively time consuming to walk around it. For this reason, the Convention Center unfortunately currently acts like a barricade impeding pedestrian and vehicular circulation.
4. The Convention Center does not have adequately sized ballroom space. The current configuration of the spaces limits the ability to reconfigure the convention spaces into smaller rooms. This limited configuration and lack of an official ballroom space reduces the ability of the convention center to book certain events.

The primary urban design goal of the reconfiguration of the Convention Center should be to reconnect the facility more seamlessly to the Downtown’s inventory of walkable streets. Several key concepts should be kept in mind during the design of an enlarged Convention Center in order to optimize its pedestrian-friendliness.

Blocks and Streets

Rather than thinking of the Convention Center as a single large building, this complex should instead be envisioned as a collection of buildings organized into a network of walkable blocks and streets. Circulation across the site should occur along a network of pedestrian-dominant street spaces that connect seamlessly with the surrounding network of City streets.

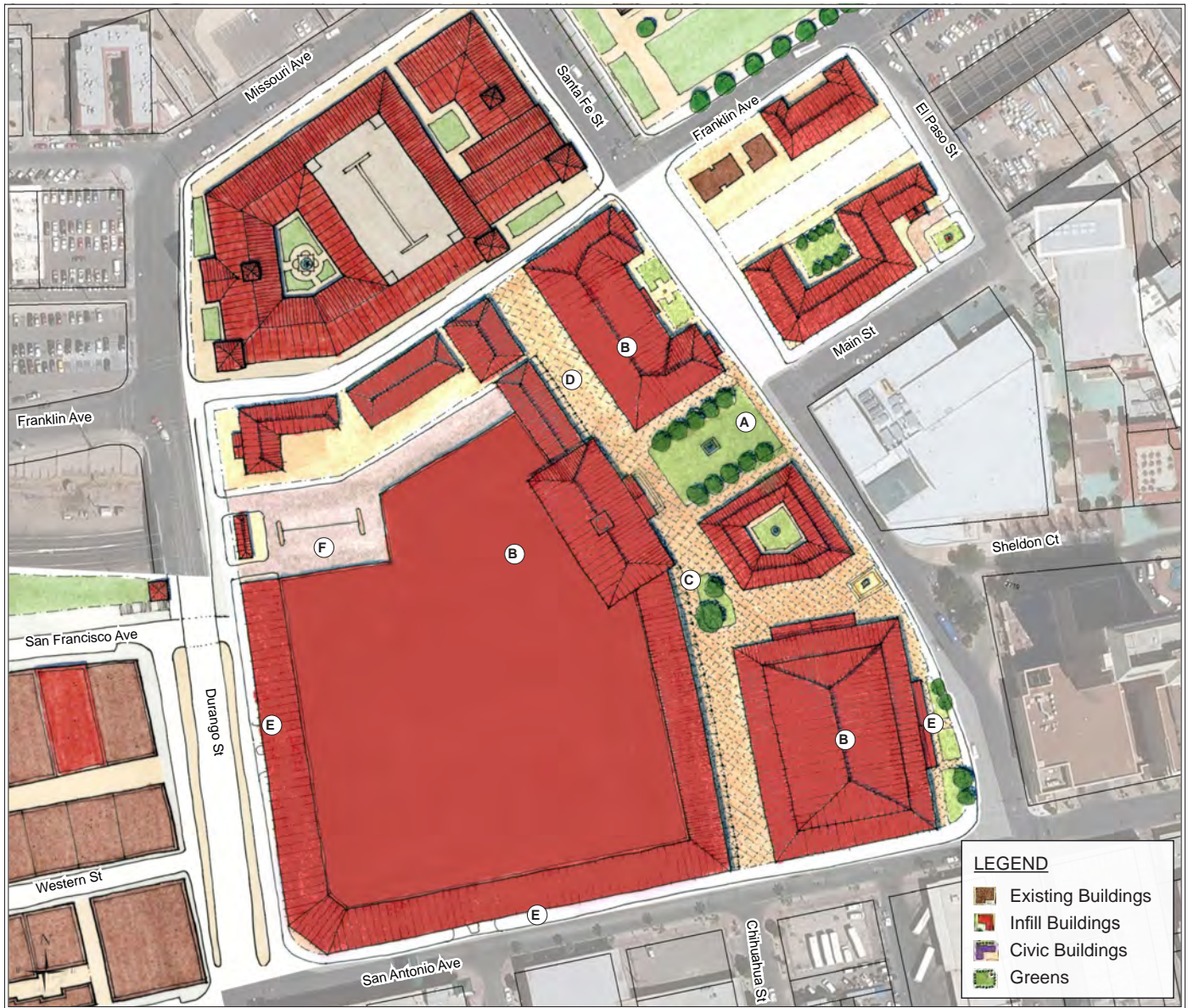
Mind the Edges

The way that the Convention Center’s buildings are configured along sidewalks is of vital importance to pedestrian comfort. Expanses of blank wall along a sidewalk are boring and result in dangerous unwatched street spaces that repel pedestrians. For pedestrians to feel comfortable, buildings *must* face sidewalks with ample windows and frequent doors.

A Primary Signature Public Space

An opportunity presents itself in the expansion of the Convention Center for rethinking the signature entrance sequence to the facility from Downtown. A grand new formal square located where Main Street terminates at the site would do much to help connect the Center seamlessly with the City. This new square would provide a grand arrival and gathering location for those attending conventions, concerts, and exhibitions. The square would also be a very useful venue for events such as opening galas and outdoor exhibitions.

CONVENTION CENTER



General Recommendations

- (A) Main Street leads to a grand new formal Convention Center entrance plaza.
- (B) The Convention Center site (like the City Hall site to the north) is shown reconfigured with street-oriented buildings grouped on walkable-sized blocks.
- (C) A series of pedestrian streets provide circulation throughout the reconfigured Convention Center site.
- (D) The submerged railroad tracks mid-block between Franklin Ave and Main St are bridged to provide a seamless connection between the Convention Center and the redeveloped City Hall site.
- (E) The Convention Center buildings are reconfigured to eliminate blank exterior walls. Streets and public spaces are lined with façades featuring ample doors and windows.
- (F) The Convention Center loading area is consolidated, allowing more of Durango Street to be faced with pedestrian-friendly building façades.

SAN JACINTO PLAZA



San Jacinto Plaza is the major historic plaza in Downtown El Paso. It has had a long history as the most important public space in the City. Comparison of the beautiful condition of the plaza in historic photos to its present grittiness makes clear what dramatic improvement is possible for this signature space.

torically cohesive, formal arrangement. A vehicular travel lane around the plaza should be reclaimed by the park providing space for restoring an outermost row of trees around the perimeter of the plaza. The currently fragmented terraces can be replaced with a series of radial bench-lined pathways leading to a fountain at the center of the plaza. The spaces between the pathways should be simply and elegantly landscaped, incorporating accessible green lawn areas. These landscaped areas could incorporate activities such as a children’s play area and recreational activities like bocce ball and shuffleboard courts. The topographical elevation change that occurs across the plaza can be used to create a subtly terraced seating area suitable for viewing outdoor performances.

A Gem in Need of Polishing

Over the last forty or fifty years, tree canopy has been lost, the ground surface has been divided up into fragmented and hard to use terraced levels, green areas have been awkwardly fenced off and made impossible to access, and unsightly mechanical equipment has been placed in the plaza. The streets around the plaza have been widened to make way for additional vehicular travel lanes, which consequently makes crossing to the plaza more difficult for pedestrians. Additionally, buildings fronting the plaza have been lost. A public space is only as good as its edges, and the loss of high quality buildings to surface parking lots has greatly eroded the important spatial enclosure of San Jacinto Plaza.

Private Investment in the Surrounding Properties

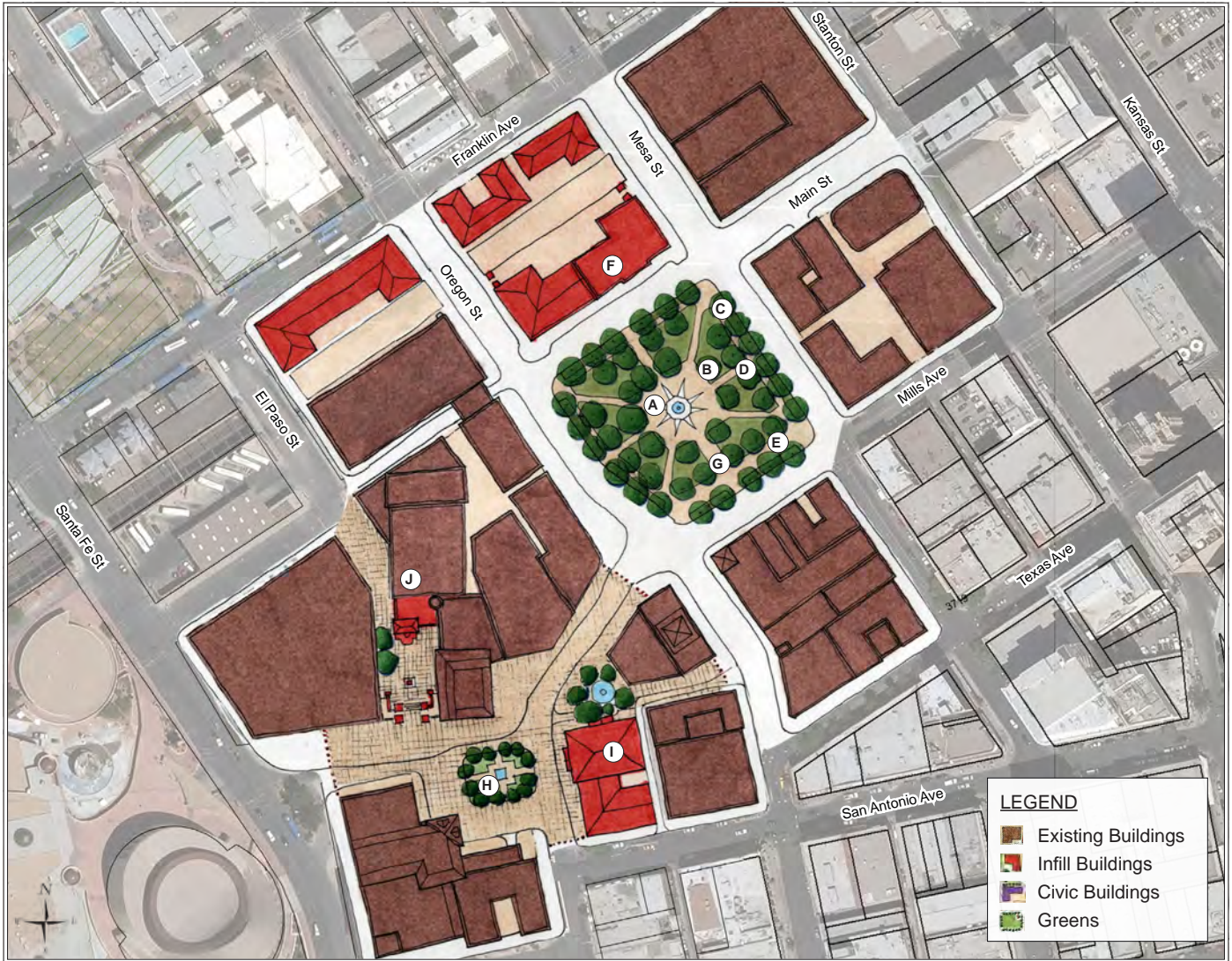
Over time, infill buildings should replace surface parking lots surrounding the plaza. These new buildings will help to complete the well-formed edges making San Jacinto Plaza a great “outdoor room” for community gatherings. The heights of these new buildings should take their cues from the existing buildings still fronting the plaza to ensure a historically appropriate scale and shaping of the space. New buildings should feature commercial or retail uses on their ground floors to help activate the space and restore its function as a lively heart of the City. For San Jacinto Plaza to fulfill its role as a signature public gathering space for the City of El Paso, it must be well-shaped and activated by vibrant adjacent uses.

Public Investment in the Plaza

The refurbishment plan for San Jacinto Plaza should focus on several elements. Trees should be added to restore the his-



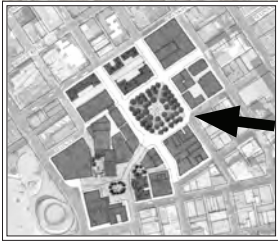
SAN JACINTO PLAZA



General Recommendations

- A** The fountain with alligator sculptures is maintained as the central focal element of the plaza.
- B** The paved areas around the central fountain are large enough to accommodate a variety of activities such as temporary festival tents and outdoor performance spaces.
- C** The perimeter of the plaza is enlarged through the removal of a travel lane, making room for a new outer row of street trees.
- D** The landscaping of the plaza is organized by radial paths leading to the central fountain area. The spaces between paths form a series of landscaped parterres. These landscaped parterres can be further designed to accommodate activities such as a children's play area or activities such as bocce ball or shuffleboard carts.
- E** A pavilion serving refreshments with café seating can be a great way to attract residents and office workers to the plaza.
- F** New infill buildings should replace the surface parking areas and empty lots currently seen around portions of the plaza's perimeter.
- G** A splash pad could be located in various places including at the base of the Los Lagartos statue.
- H** Redesign of the Camino Real Plaza to be usable as a recreational and social space.
- I** A new building adds frontage to the pedestrian plazas. Existing parking can be relocated underground. The Camino Real Plaza would then have four complete sides.
- J** An enclosed stage allows a greater variety of musical and theatrical performances outside.

SAN JACINTO PLAZA



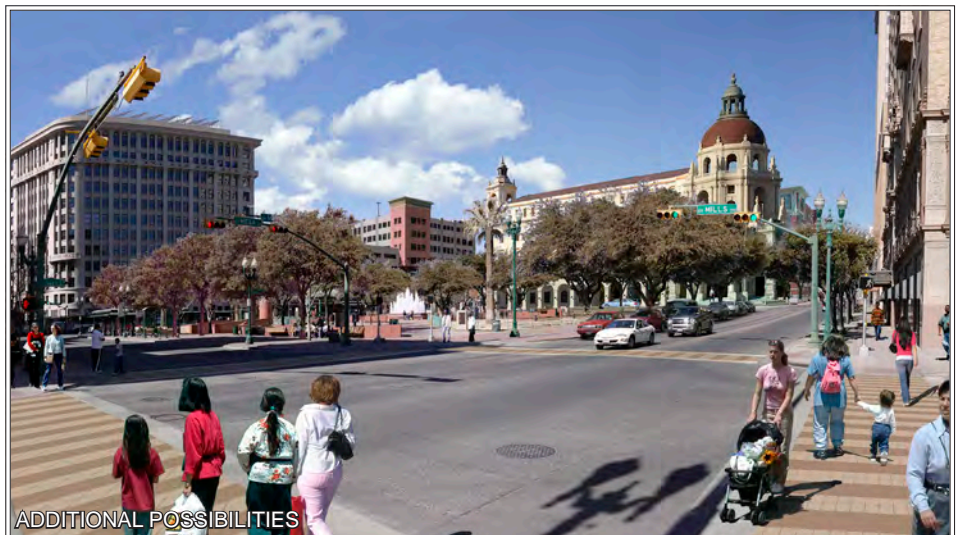
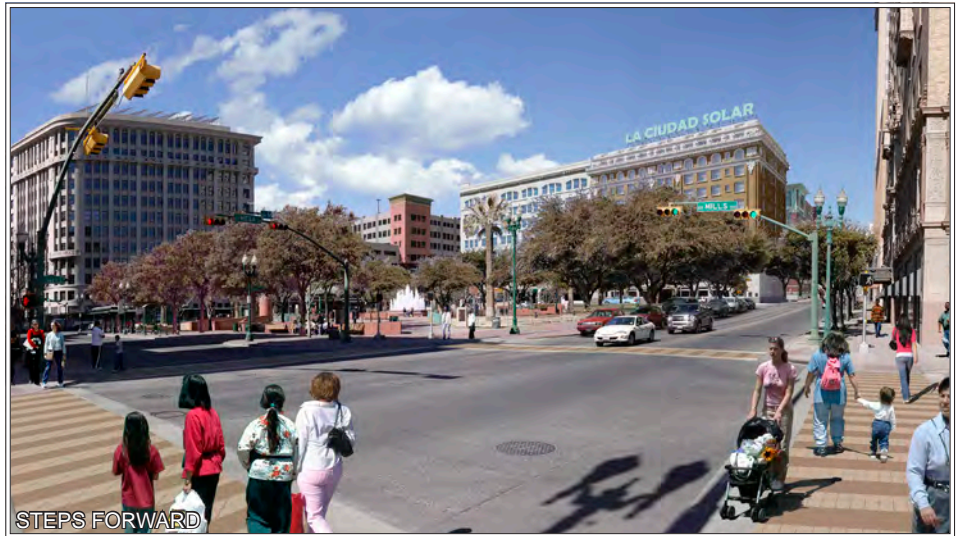
Change Over Time

EXISTING CONDITIONS: San Jacinto Plaza was once the proud plaza major of the City, however, over the past decades, it has become tarnished. Buildings that once formed edges to the public space of the plaza have been lost to surface parking lots. The plaza space feels overly large as it spatially leaks into scattered parking lots on its perimeter. The corner of San Jacinto Plaza at the intersection of North Mesa Street and East Main Street is one of the most auspicious addresses in the entire City of El Paso. It is the historic “main & main intersection.” The once elegant landscaping and paving of the plaza has eroded through various modern interventions, becoming disjointed and confusing. Access to San Jacinto Plaza is impeded by multiple lanes of traffic. Streets surrounding the plaza have been widened to make more room for cars, which has made the plaza harder to reach for pedestrians. Refurbishment of San Jacinto Plaza back into the great public space it is meant to be will require methodical and careful steps.

STEPS FORWARD: Public investment in the landscaping of the Plaza is the first step. The surfaces and levels of the plaza are simplified. Planting, lawn areas, and pathways are restored to their historic configurations. Fences around landscaped areas are removed and a vehicular travel lane around the entire perimeter of the plaza is removed, enlarging the plaza.

Private investment in properties surrounding the plaza follows. Infill development should take its physical cues, such as buildings heights, from the historic structures still remaining. Buildings should sit proudly at the fronts of their lots with front doors and windows facing the street around the plaza.

ADDITIONAL POSSIBILITIES: This corner at the intersection of East Main Street and North Mesa Street and would potentially also make a dramatic site for a substantial civic building.



DOWNTOWN ARENA

Downtown El Paso is home to a variety of recreation, education, and cultural centers including the El Paso Museum of Art, the El Paso Museum of History, the El Paso Public Library, and the El Paso Convention Center, among other facilities. While these institutions foster and promote a great deal of energy in the Downtown, the *El Paso Downtown 2015 Plan* identified the addition of a new downtown arena which would become a regional entertainment destination. It was envisioned to attract national and international events.

The 2015 Plan sees the arena as serving as an adjunct facility to the existing convention center and increasing the overall capacity of El Paso to attract major conventions. It anticipated an economic benefit to the City based on the spillover effect into downtown retail and the Union Plaza and Golden Horseshoe districts.

The arena itself would be flexible, containing 15,000 - 18,000 seats to accommodate local and regional sports teams, and offer conversion for large-scale cultural events and convention/exhibition uses.

The arena is intended to act as a catalyst for commercial opportunities downtown and draw larger entertainment acts to the City. However, funding remains a major hurdle. A variety of financing mechanisms should be considered to determine the true costs and benefits associated with an arena's construction.

Multiple sites have been considered for the location of the new arena:

Location #1: City Hall Site

The City Hall site has good access to Interstate 10, but is too small to accommodate the prototype arena footprint and ancillary development associated with the arena.

Location #2: Leon and Santa Fe Streets

This site is located in the recently enhanced Union Plaza Area where there has been substantial streetscape improvements and a new parking structure. The site is well-located near existing downtown retail and commercial areas and adjacent to the existing Convention Center and hotels but would remove several blocks of existing infrastructure and building fabric.

Location #3: Triangle below Paisano

This currently vacant site is adjacent to the BNSF railyard. While the site does accommodate the footprint of an arena, its triangular shape makes the incorporation of parking or other structures difficult. Access to the site is provided by Paisano Drive.

Location #4: West of Union Depot

The site west of Union Depot would be accessible from Paisano Drive and is large enough to accommodate the prototype arena footprint. However, it is slightly disconnected from the Downtown commercial and activity centers.



DOWNTOWN ECONOMIC ANALYSIS - KEY FINDINGS

OFFICE MARKET ANALYSIS

Existing Conditions

Downtown El Paso, with approximately 2 to 2.5 million square feet of private, multi-tenant office space, contains the largest single concentration of office space in the market. Tenants in Downtown's Class-A buildings include businesses serving corporate clientele as well as a substantial number of government agencies, non-profits, and other businesses serving household clientele.

Vacancy rates in Downtown El Paso generally range from 15-20 percent. Downtown lease rates range from \$13-\$15 per square foot on a gross basis, which represents a net-equivalent of roughly \$6-7 per square foot. Most of the multi-tenant office buildings Downtown were built over 40 years ago.

Competitive Context

Downtown's primary competition is suburban El Paso, where multi-tenant office buildings are primarily located in the "east" or "west" sub-markets. Each of these sub-markets contains roughly 800,000 to 1 million square feet of multi-tenant office space. Most of the space is contained in buildings with 20,000 to 80,000 square feet. The largest multi-tenant buildings in the El Paso suburban market are approximately 100,000 square feet. While suburban office tenants include a broad range of professional service providers, contact center operators comprise a significant share of large suburban tenancies.

Suburban office lease rates are competitive with Downtown rates; however, suburban office rent includes free parking. Suburban office vacancy rates are similar to Downtown's - 15 to 20 percent. As in Downtown, there has been very little recent office development activity in suburban locations.

Downtown's Competitive Constraints and Assets

Constraints:

1. Downtown's mix of uses and environment currently fails to generate significant rent premiums
2. Low rents make Downtown office development and/or renovation economically challenging
3. Downtown's perceived lack of convenient parking and parking costs are a competitive disadvantage

Assets:

1. Downtown courthouses and government-related operations generate office demand
2. Downtown's potential as a high-quality mixed-use center makes Downtown unique in the marketplace

Market Opportunities

Over the next ten years the El Paso market will likely support an additional 100,000 to 200,000 square feet of new Downtown

office space. These new office projects will serve existing tenants' demand for upgraded space and will accommodate new office tenants generated by metropolitan area growth.

New office development Downtown over the next ten years will most likely take one of two forms:

1. *New Small-Scale, Class-B Projects Located Outside the Existing Core Area.*

Such buildings will most likely occupy suburban-scale lots with sufficient space for surface parking lots. These buildings will likely be 20,000 – 50,000 square feet in size. These buildings should be configured in an urban manner in order to maximize premiums generated by a vibrant walkable pedestrian-friendly environment. Buildings should be close to the sidewalk, with ample doors and windows. Parking lots should be located behind buildings, screened from view and have a reduced number of required spaces.

2. *Existing Building Renovation.*

Such projects will update old and underutilized buildings Downtown. While such renovations will likely not constitute entire make-overs such as those undergone at the Mills and Central buildings, they may be able to profitably provide new marketable office space Downtown.

RETAIL MARKET ANALYSIS

Existing Conditions

There are three distinct retail and entertainment districts in Downtown El Paso: the Golden Horseshoe, the Central Business District, and Union Plaza District. The Golden Horseshoe district is a unique retail environment that primarily caters to the Mexican national market and discount shoppers. The Central Business District services the employee market, but it is challenged by vacant buildings and a lack of critical mass. The Union Plaza district is primarily a weekend entertainment destination with a small but important cluster of eating and drinking establishments. While it is the economic center of the Region, Downtown El Paso is not currently a place where most metropolitan area residents come to shop or dine on a regular basis.

The Golden Horseshoe district is an important economic engine supporting the City. The analysis of existing conditions suggests that Downtown retail, because it mostly caters to the Mexican national market, likely contributes a billion dollars in annual visitor retail sales to the City and region.

Eating and drinking sales Downtown are not as robust as retail sales. While Downtown appears to be growing successfully as an entertainment destination particularly for younger households, Downtown's capture of metropolitan area eating and drinking sales is currently well below its retail sales capture.

Competitive Context Conclusions

The area immediately surrounding the Downtown is densely populated, is not currently growing, and is relatively low income. Two major competitive retail nodes are within an easy 10-minute drive from the Downtown. Demographics and competitive shopping centers will make it difficult for the Downtown to compete for conventional shopper's goods tenants.

There is no specialty retail destination in the City. Specialty stores are those typically either selling one-of-a-kind merchandise (like art galleries) or occupying a very specific retail niche (like vintage clothing). Because they are unique, these stores tend to be destinations - patrons will pass by chain retail to go to the specialty shop. Given the absence of a competitive specialty shopping environment, Downtown may be well positioned to pursue this retail niche.

The only significant non-suburban eating and drinking cluster in El Paso is currently located on Cincinnati Street near the University of Texas El Paso. Downtown is well-positioned to increase its capture of resident eating and drinking expenditures.

Downtown's Competitive Strengths & Challenges

Strengths:

1. Downtown is an established super-regional shopping destination.
2. Downtown is well-located between the Juárez and the El Paso market areas.
3. Downtown is a government and professional office hub.
4. Downtown is the cultural and civic center of El Paso.
5. Downtown is emerging as an entertainment destination for young adults.
6. Downtown has attractive buildings, is pedestrian friendly and safe.

Challenges:

1. Downtown's retail is currently narrowly targeted to the Mexican national market, and discount shoppers.
2. The Mexican national market is on the decline.
3. Competitive suburban shopping centers are better located to capture a majority of current resident retail demand.
4. There is considerable vacancy in Downtown's central business district which deters shoppers and investors.
5. The lack of downtown housing limits the cycle of activity Downtown, particularly in the central business district.
6. There are very few quality restaurants in Downtown which are open during weekday nights.
7. Downtown's public spaces (sidewalks, parks, plazas) need to be refreshed.

MARKET OPPORTUNITIES

The El Paso metropolitan area is projected to grow over the next ten years. If there is limited growth in the Mexican market, new shopper's goods sales Downtown will be driven by Metropolitan Area residents. Under this scenario, there will be less net new shopper's goods sales potential. If the Mexican market grows and continues to support shopper's goods sales Downtown, shopper's goods sales in the metropolitan area will be higher. Depending upon the Mexican national market, the Downtown can support between 125,000 and 225,000 square feet of new shopper's goods stores over the next 10 years.

Sales estimates indicate that Downtown captures approximately 4% of metropolitan area's eating and drinking sales. Strong Downtowns can capture 6% to 10% of metropolitan area sales. Applying a 6% capture rate, the market can support an additional 63,000 square feet of eating and drinking space Downtown over the next 10 years.

Possible Market Niche Opportunities for Downtown

1. A shopping destination for the Mexican national market and the discount shopper:

Downtown El Paso's Golden Horseshoe area currently fulfills this role and contributes significantly to the City's economy. However, as increased security at the border and troubles in Juárez have demonstrated, this market is vulnerable to unforeseen market forces. Efforts need to be made to protect and fortify this unique market niche. Discount stores targeting the Mexican national market should generally be located in the Golden Horseshoe, not the Central Business District.

2. A specialty shopping destination for the metropolitan area and tourists:

There is no specialty retail destination in the El Paso metropolitan area. Specialty retail could be successful in Downtown because of its central location, access to the El Paso and Juárez markets, and mix of uses. Art dealers, artist studios and galleries, home accessories stores, and specialty stores that sell unique apparel, jewelry, and gifts are store-types that should be targeted for the Downtown. These stores should target the middle to upper-income households and younger households. Because Downtown El Paso is already a strong retail center, one challenge to developing an arts and specialty store cluster is Downtown's relatively high rent. The Central Business District (such as Texas Avenue) where rents are lower may be the appropriate location for such a cluster of stores.

3. An eating and drinking destination for the region:

Like specialty retail, restaurants and entertainment uses tend to cluster to create a "destination." Eating and drinking establishments would be best located in the Central Business District around San Jacinto Plaza or Texas Avenue and in the Union Plaza District.

GOALS & POLICIES

Overall Goal: Direct public funding and private development of exemplary design to the Downtown where it will have economic and social benefits shared by the entire City.

Downtown Streets

Goal 3.1: Improve Downtown's streets until they become El Paso's premiere public spaces.

Policy 3.1.1: The City should encourage the use of the illustrative plans and renderings in this Downtown Element as examples to encourage best practices in improving Downtown streets particularly for City projects.

Policy 3.1.2: Evaluate proposed Downtown street projects and development proposals according to the street design principles of policies 3.1.3 and 3.1.4.

Policy 3.1.3: Maintain and improve the Downtown street network by providing multiple routes and pathways for vehicular and pedestrian movement.

- a. Downtown streets are to be maintained first and foremost for pedestrians, transit vehicles, and deliveries. Private automobiles will be accommodated to the greatest extent possible consistent with this priority.
- b. Streets should not be permanently closed or dead-ended or converted to one-way traffic except in cases of overriding public necessity or to allow the creation of pedestrian-only public spaces.
- c. With the exception of closed streets that have become valuable public spaces, seek opportunities to reopen former streets to bring more economic vitality to surrounding properties.
- d. Convert one-way streets back to two-way streets to increase the economic viability of businesses and to make Downtown more intuitively navigable for residents and visitors.
- e. Maintain rear alleys for access to mid-block parking spaces, to provide an out-of-sight location for utilities equipment, and to allow the fronts of buildings to be free of driveways and parking garage entrances.

Policy 3.1.4: Improve Downtown streets to become more multimodal and appealing to pedestrians, with ample shaded sidewalks and on-street parking.

a. Improve safety and encourage pedestrians and transit users by managing vehicular speeds on Downtown streets, using measures such as:

- i. Narrower travel lanes;
- ii. Changes in paving;
- iii. Restoration of two-way vehicular travel;
- iv. Artfully designed traffic calming measures; and
- v. Timing of traffic signals to reward managed steady vehicular speeds.

b. Provide street trees on both sides of at least 50% of Downtown streets, with tree wells placed between the travel lanes and sidewalk at intervals averaging no more than 40 feet.

c. 50% of Downtown streets should have sidewalks at least 12' wide on retail or mixed-use streets and 8' feet wide on all other streets as part of street construction or walkability retrofit projects.

d. Provide on-street parking on at least 50% of both sides of all Downtown streets.

e. Redesign Downtown streets using pedestrian-friendly thoroughfare section assemblies from the City SmartCode (Title 21). Design arterials using guidance in the ITE recommended practice, *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*.

f. Coordinate traffic signals to reduce the number of red phases during weekends when long red wait times on empty streets discourage Downtown visitors.

g. Provide memorable visual terminations to streets where possible to make the street network more legible to residents and visitors.

Downtown Buildings

Goal 3.2: Strive for the widest variety of activities Downtown to create a healthy mix of housing, working, shopping, cultural, and civic uses. This concentration of diverse activities will reduce traffic impacts and infrastructure costs and re-use Downtown's existing buildings to their maximum potential.

Policy 3.2.1: When evaluating rezoning requests and also when designing public buildings, consider the principles under policies 3.2.2, 3.2.3, and 3.2.4 in addition to the building and site design principles in the Urban Design Element.

Policy 3.2.2: Additional expectations for Downtown buildings include:

- a. Nearly all Downtown buildings should be re-used or re-purposed instead of being replaced by a new building.
- b. Building façades that face sidewalks should not have more than 30% of their length or 30 feet, whichever is less, as blank walls (without doors and windows).
- c. Sidewalk-level retail, office, and service uses that face a public space should be designed to have clear glass on at least 60% of their façades between 3 and 8 feet above grade.
- d. Sidewalk-level retail, office, and service windows should be kept visible (unshuttered) at night.
- e. Sidewalk-level retail, office, service, and live-work spaces should comprise at least 60% of the street-level façade.
- f. Sidewalk-level dwelling units should be elevated at least 24 inches above the sidewalk.
- g. Design new Downtown buildings to have at least 70% of the total linear frontages of mixed-use and non-residential building façades within one foot of the sidewalk.
- h. Design new Downtown buildings which have ground floor dwelling units such that at least 50% of those units have an elevated finished floor no less than 24 inches above the sidewalk grade.

- i. All businesses and/or other community services on the ground floor should be accessible directly from sidewalks along a public space, such as a street, square, paseo, or plaza.

Policy 3.2.3: City policies and programs will encourage the rehabilitation of upper stories of existing Downtown buildings as office, retail, entertainment, and residential space. Financial incentives will be considered to encourage investment from the private sector.

Policy 3.2.4: Encourage a wide mix of residential housing types Downtown to encourage a diversity of ages and incomes and allow residents to trade up, downsize, or create multi-generational households without being forced to leave Downtown. Housing should include arrangements such as: studio units, 1-, 2-, and 3-bedroom units, townhouses, penthouses, and live-work spaces; and should include both rental apartments and units that can be owned by their occupants.

Downtown Parking

Goal 3.3: Accommodate private cars through careful placement of public and private parking facilities to supplement Downtown's status as the best transit-served area and the most convenient location in the region.

Policy 3.3.1: Create a downtown parking strategy plan that continues to utilize and improve upon the provision of on-street parking, public parking lots and garages, and shared private parking spaces, with clear signage to inform the public of all transportation options.

Policy 3.3.2: The City should not require any on-site parking for buildings Downtown and will encourage the sharing of private parking spaces between various uses to reduce the total number of parking spaces.

Policy 3.3.3: Locate parking lots and garages out of sight at the interior of blocks wherever practical. Parking garages should be lined with habitable or storefront space to provide a safe, interesting environment for pedestrians and to screen parking from the view from public spaces such as streets, squares, and plazas.

Downtown Public Facilities

Goal 3.4: As civic buildings are added, updated, or replaced, they will be integrated into El Paso's original street network and other land uses rather than being isolated in large complexes of civic buildings.

Policy 3.4.1: Civic buildings should be acts of civic art, embedded within the urban fabric of Downtown and sited memorably, when possible on high ground and at the terminal axis of streets to increase their visibility.

Policy 3.4.2: Important public facilities such as courthouses, post offices, museums, and administration buildings should not be moved from Downtown to outlying locations.

Policy 3.4.3: The illustrative plans in the Downtown Element demonstrate key community design and planning strategies for five areas within Downtown El Paso:

- a. City Hall;
- b. Union Plaza District;
- c. Downtown Pathway;
- d. Convention Center; and
- e. San Jacinto Plaza.

TRANSPORTATION 4

Overall Goal: The City of El Paso wishes to become the least car-dependent city in the Southwest through meaningful travel options and land use patterns that support walkability, livability, and sustainability. Over time, El Paso will join the ranks of the most walkable and transit-rich metropolitan areas in the country.

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"MAKE TRANSIT A MORE ACCESSIBLE, ATTRACTIVE, AND VIABLE TRAVEL OPTION AND MAKE EL PASO THE LEAST CAR-DEPENDENT CITY IN THE SOUTHWEST, THEREBY LEADING TO ECONOMIC DEVELOPMENT AND IMPROVING THE QUALITY OF LIFE FOR OUR COMMUNITY."

- EL PASO SUN METRO

CURRENT CONDITIONS

INTRODUCTION

A primary vision shaping *Plan El Paso* is El Paso's aspiration to become the most walkable and least car-dependent city in the Southwest. To do so, the transportation system must be reimagined from a conventional auto-only perspective towards providing people with many travel choices. This requires a change in priorities from moving as much traffic as quickly as possible – at the expense of other modes and adjacent land uses – to provide choices, balance, and connections between driving, transit, walking, and bicycling. Through this process, El Paso will become a community of lasting value, character, and sense of place.

Where is El Paso Now?

Like most cities across the country, El Paso's existing transportation network is geared toward fast and frequent auto travel as the primary – and only realistic way – for most people traveling around the City. A rapidly-expanding freeway network supplements an even larger network of wide high-speed four- and six-lane arterial streets. Arterial and even collector roads are designed almost exclusively for driving, with minimal, unsafe, or non-existent walking, bicycling, or transit facilities.

Transportation ultimately shapes the land use pattern it serves. El Paso's post-World War II development has been marked by low-density residential development radiating ever farther from the City's original core along spines of wide arterial roads lined with strip commercial development.

This development pattern and accompanying transportation network excludes most travel options as well as requiring access to an automobile, which creates more traffic because almost everyone has to drive for every trip. With homes, jobs, and shops increasingly farther apart, drivers are traveling farther, longer, and more often. This in turn magnifies traffic and congestion, dictating a cycle of expansion and construction of even more thoroughfares. The current transportation strategy will create even more low-density auto-dependent land use patterns that are simultaneously the cause and the symptom of the old transportation strategy.

There are other important implications of the relationship between transportation and land use:

- Constrained and unsafe mobility for those who choose not to, or cannot, drive or afford a car, such as children and the elderly.

- Significant personal and household expense to own, operate, and maintain one or many vehicles.
- Reliance on cheap oil/petroleum and gasoline for mobility.
- High rates of obesity, poor health, and sedentary lifestyles
- Devalued neighborhoods, property values, and economic activity from an adverse transportation environment.

In this framework, ubiquitous vehicular travel has been assumed, and higher speeds have been sought as the trade-off for more frequent and longer trips. Constantly increasing traffic and air pollution have been passively accepted, with most effort put into building more thoroughfares to ease high-speed travel. Not enough effort has been paid to reducing trip frequency, distance, or duration by adding travel choices or reducing the separation between land uses. A new transportation vision is clearly in order.

Where is El Paso Going?

Through its new transportation vision, the City of El Paso is charting a different future that emphasizes a balanced transportation network with meaningful travel choices: walking, bicycling, public transit, and driving.

The City and its Sun Metro public transit system are rapidly implementing a four-line Rapid Transit System (RTS) to improve mobility and travel choices, spur economic development, enhance Downtown revitalization, and invest in established neighborhoods. Through *Plan El Paso* and its companion effort *Connecting El Paso*, the City intends to reclaim major portions of the four RTS corridors as walkable “complete” streets, restoring their historic function as community main streets that serve revitalizing adjacent neighborhoods. The City is also investigating the re-introduction of a Downtown streetcar network. These actions set the stage for longer-term multimodal transportation investments that support the City's future land use vision, as described in the first three elements of *Plan El Paso*.

“THE (MESA RTS) HAS ALREADY CAPTURED THE IMAGINATION OF BOTH POLICY MAKERS AND PRIVATE INVESTORS WHO SEE TREMENDOUS POTENTIAL FOR NEW DEVELOPMENT ALONG THE MESA CORRIDOR.”

**-RAY LAHOOD, SECRETARY,
U.S. DEPARTMENT OF TRANSPORTATION**

REGIONAL TRANSPORTATION PLANNING

El Paso's transportation planning process is a partnership of several agencies, each with its own roles and requirements. This collaboration was established to ensure a coordinated and comprehensive transportation planning process.

In addition to the regional agencies described below, the City of El Paso itself is responsible for planning, funding, operating, and maintaining all non-state thoroughfares, including roads, highways, residential streets, collector streets, and arterial streets. El Paso County performs similar functions for county thoroughfares. Sun Metro, a part of City government, is the region's public transportation provider. The three regional agencies are profiled below.

El Paso Metropolitan Planning Organization (MPO)

The El Paso MPO is the federally-designated transportation planning agency for the El Paso region, which includes all of El Paso County and small portions of southern Doña Ana and Otero Counties in New Mexico. The MPO describes itself as the agency responsible for "working with residents, neighborhood groups, local, state, and federal agencies, along with transportation providers... to accomplish regional planning and programming under one voice..."

The MPO is responsible for short- and long-range programming of federal and state funds. The MPO's Transportation Policy Board (a decision-making board similar to a City Council) includes elected and appointed officials from the City, County, Texas Department of Transportation, adjacent communities, and state legislators. The MPO also has several advisory committees that advise the Transportation Policy Board.

The MPO must operate within a series of federal and state requirements. For example, the MPO develops and periodically updates a cost-feasible regional transportation plan (currently known as *Mission 2035 Metropolitan Transportation Plan*, or MTP) that identifies needed multimodal transportation investments over the next 25 years and how they will be funded. All regionally-significant (non-local) projects and other transportation plans must be consistent with the MPO's MTP.

All regionally-significant (non-local) projects and other transportation plans must be consistent with the MPO's MTP.

The MPO also produces several other plans and documents. One is the *Mission 2035 Transportation Conformity Report* which documents compliance with the federal Clean Air Act and state air quality implementation plans. Another is the Transportation Improvement Program which illustrates regionally-significant capital and non-capital surface transportation projects over a four-year period. The MPO also develops annual work programs, mode-specific transportation plans, and a congestion management program.

The MPO had initiated a major update to its 2035 MTP, known as the Horizon 2040 MTP, with completion anticipated by the end of 2012.

Camino Real Regional Mobility Authority (CRRMA)

The CRRMA was created by the El Paso City Council in 2007 as the designated Regional Mobility Authority. RMAs are political subdivisions of the state that have the authority to "study, evaluate, design, finance, acquire, construct, maintain, repair, and operate transportation projects." RMAs may issue bonds, acquire or condemn property, and implement and manage transportation projects.

The CRRMA is responsible for implementing several of the projects contained in the 2008 *Comprehensive Mobility Plan (CMP)*, a joint planning effort of the CRRMA, TxDOT, MPO, and City for regionally-significant transportation projects. CMP projects include the freeway buildout and extension of Loop 375, major new and enhanced interchanges, and the Rapid Transit System network.

The CRRMA is responsible for implementing five regionally-significant projects: the northeast extension of Loop 375 (to one mile west of US 54), Loop 375 interchange investments at Zaragoza Road/Montwood and at Interstate 10, and new managed toll lanes on Loop 375 from US 54 to South Zaragoza Road. These projects are programmed for construction within the next five years, with several beginning immediately.

Texas Department of Transportation (TxDOT)

TxDOT is responsible for planning, funding, operating, and maintaining federal and state thoroughfares across Texas. In El Paso, these include Interstate 10, Loop 375, and US 54, and also include several arterial streets that are actually state or federal highways. For example, all four RTS corridors (Montana Avenue, Alameda Avenue, Mesa Street, and Dyer Street) are state highways, as are many other major thoroughfares in El Paso.

TxDOT is also involved in planning for non-motorized transportation, rail, trucks, ports, and marinas.

In El Paso, TxDOT is planning and constructing several major projects:

- **Comprehensive Mobility Plan:** an overall mobility strategy affecting El Paso and the surrounding area.
- **I-10/Schuster Ramp:** Interchange and ramp improvements at I-10 westbound and Schuster Avenue.
- **Northeast Parkway:** a potential 21 mile highway connecting Loop 375 to I-10 in Anthony, New Mexico.
- **SPUR 601:** a 7.4 mile road connecting US 54 and Loop 375.
- **US 54:** the proposed widening of US 54 from Yandell Drive to Hondo Pass Drive.

In addition to these projects, TxDOT is also planning two projects that have been controversial with the City Council. The first is the proposed Southern Connector, an extension of Loop 375 from Interstate 10 at Sunland Park Drive to Loop 375 in Downtown El Paso. The second is the conversion of approximately three miles of the Transmountain portion of Loop 375 to a limited-access freeway from Interstate 10 east to Franklin Mountains State Park. The Southern Connector is undergoing the Environmental Impact Statement process, while the Transmountain freeway project is under construction based on agreements TxDOT reached with the City Council in fall of 2010.



The Comprehensive Mobility Plan is created through a partnership between the MPO, CRRMA, the City of El Paso, and TxDOT.

TRAFFIC CONGESTION

Both the City of El Paso and TxDOT count traffic on the region's street, highway, and freeway network. The City collects daily (24 hour) traffic counts on various segments and intersections throughout El Paso. These counts are somewhat outdated (primarily 2001-2006), though some counts are more recent (2008-2010).

The City also operates a Transportation Management Center that controls the signal timing and coordination for about 500 traffic signals, with the ability to expand the system for all signals within the City.

The City also has a Neighborhood Traffic Management Program that “targets solutions to residential traffic concerns while simultaneously providing opportunities to enhance neighborhood livability and aesthetics.” The program is intended to:

- Improve unsafe conditions.
- Incorporate community preferences into the design and operation of neighborhood streets.
- Provide protection and relief from disproportionate traffic increases.

TxDOT collects and publishes the following traffic counts for El Paso and statewide:

- *Annual Average Daily Traffic (AADT)*: These are daily (24 hour) traffic counts adjusted to account for truck traffic and seasonal variations to represent average traffic conditions throughout the year. These counts are available for 2007 through 2009 for select count station locations on the state highway system.
- *Urban Saturation*: These are average daily traffic (ADT) counts that are not seasonally adjusted. They are much more comprehensive than the AADT counts as they are shown for state, county, and City thoroughfares; however, they are compiled on a more limited basis (once every few years instead of annually). For El Paso, the urban saturation counts date to 2007.
- *Statewide Flowband*: These maps display the total traffic and truck volume on TxDOT-maintained thoroughfares. These counts are bi-directional and are based on AADT.

Additionally, Texas A&M University's Texas Transportation Institute has created a “Regional Mobility Information System” for the El Paso region that monitors and displays various traffic information in an online, “real-time” map (at www.eptraffic.com). Highway speeds, travel times, incident locations, and border-crossing wait times are displayed.

Congestion & Performance

Traffic counts tell half the story – how much traffic is on the thoroughfares – but not how they are actually performing given their capacity. Federal transportation regulations require large-city MPOs, including the El Paso MPO, to create and implement a congestion management system for that purpose.

El Paso-Area Traffic Counts Resources

City of El Paso (Dept. of Transportation, Traffic Engineering Div.)

- Searchable Database: www.elpasotexas.gov/transportation/traffic_form.asp
- Database List: www.elpasotexas.gov/transportation/traffic_count3.asp

Texas Department of Transportation (TxDOT):

- Traffic Maps: www.TxDOT.gov/travel/traffic_map.htm
- AADT (2009): www.TxDOT.gov/travel/traffic_map2009.htm
- Urban Saturation: www.TxDOT.gov/travel/traffic_maps/urban_saturation/default.htm
- Statewide Flowband (PDF files accessed from main website): www.TxDOT.gov/travel/traffic_map.htm

In 2008, the El Paso MPO developed and adopted a Congestion Management Process (CMP) to “measure multimodal transportation system performance, identify the cause of traffic congestion, assess alternative actions, implement cost-effective actions, and evaluate the effectiveness of implemented actions.”

Using the MPO's travel demand (traffic) model, the CMP illustrates 2007 baseline congested thoroughfare segments, shown at the end of this section. For comparison purposes, the CMP's 2035 congestion forecast is also illustrated (though the official source for 2035 data is the MPO's *Mission 2035 Metropolitan Transportation Plan*). Congested thoroughfares for both 2007 and 2035 are defined using a method that compares the ratio of traffic volume to capacity using the traffic model, known as a “v/c ratio” analysis. The CMP defines thoroughfares as being congested when v/c ratios – the ratio of traffic volume to its capacity – in the peak hour of traffic are equal to or greater than 85% for surface streets, 100% for state highways, and 125% for freeways.

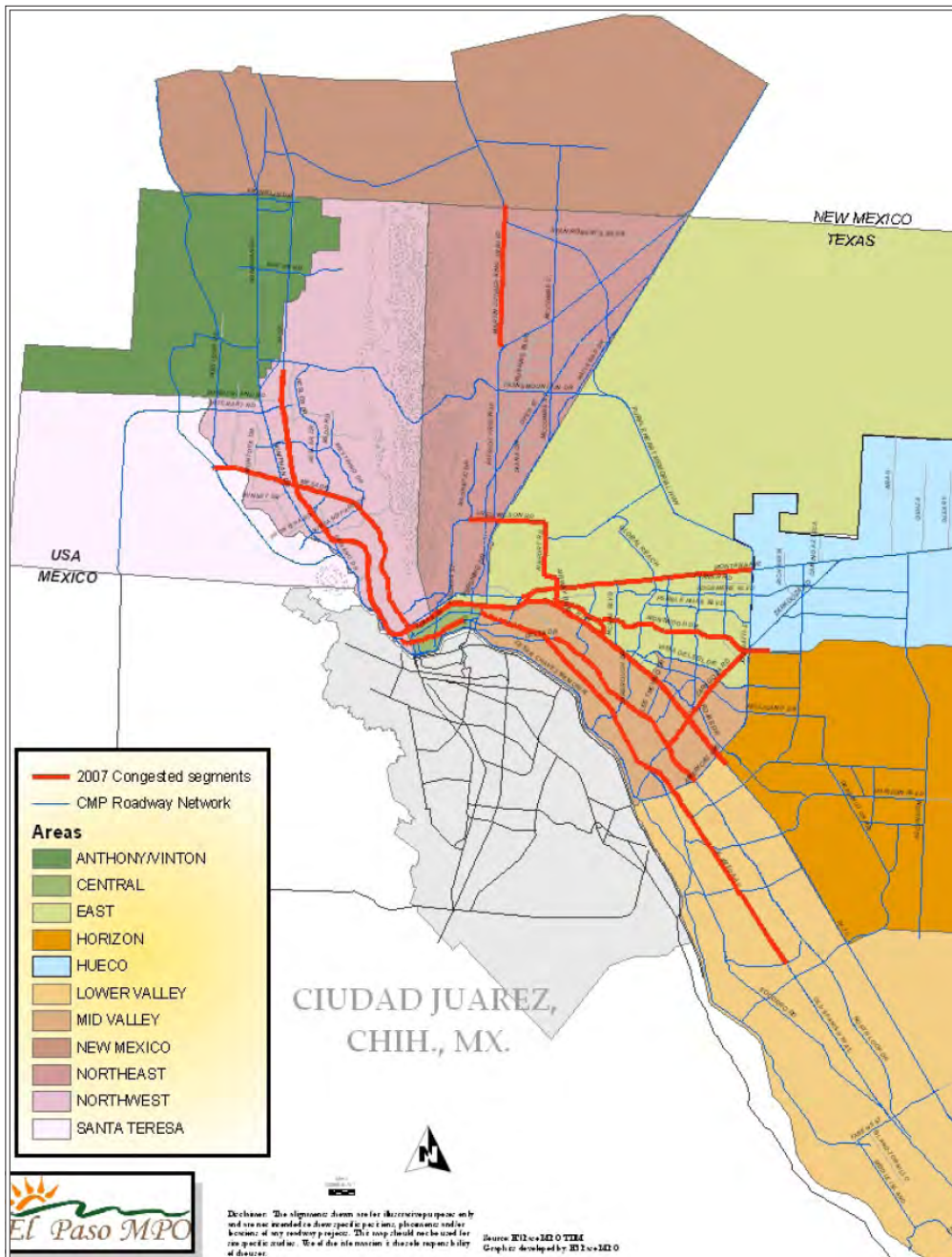
Using this method, the CMP indicates congestion in 2007 along the major cross-city corridors such as Interstate 10, Mesa Street, Alameda Avenue, and Montana Avenue. By 2035, the

CMP forecasts congestion on most road and freeway segments inside Loop 375. (The CMP does not make clear whether the 2035 congestion forecast is for the “improved” (cost-feasible) 2035 MTP network or for the “baseline” (existing) 2007 network.)

At a broader level, the CMP’s vision is to “maintain current congestion levels, and to the extent possible, manage the rate of congestion increase over time.” Along with assessing system performance, the CMP also identifies, evaluates, applies, and

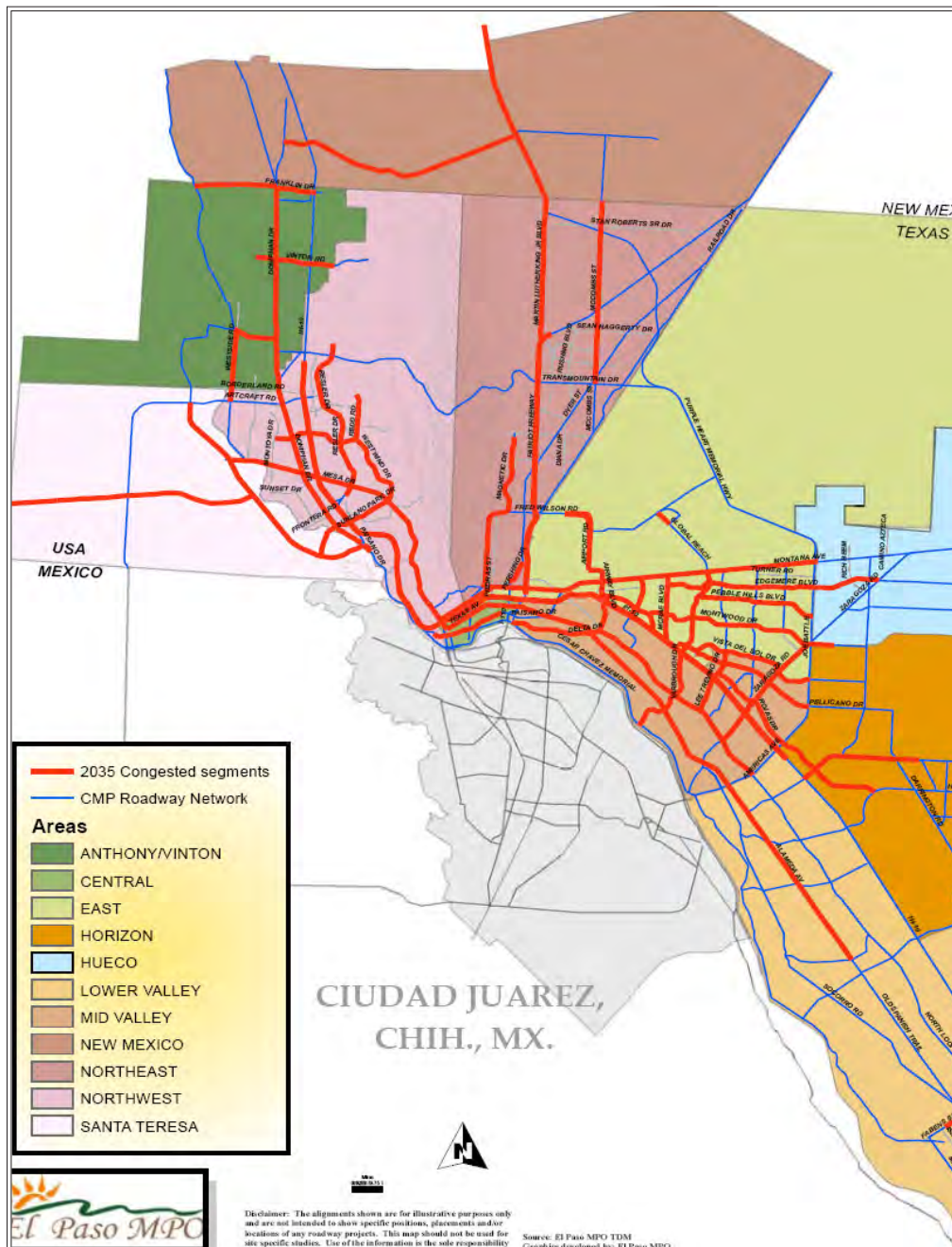
monitors the following strategies to address congestion within each study area:

- Traffic operations improvements
- Intelligent Transportation System (ITS) strategies
- Transit operations and capital improvements
- Bicycle and pedestrian strategies
- Congestion pricing
- Capacity expansion



CMP Congested Segments (2007)

Finally, the CMP conducted a scenario planning process to analyze network performance by year (2015 and 2035), and network buildout (full MTP network vs. only CMP strategies) and recommended specific projects and strategies by study area to address the 2035 congestion forecast. This information is included in the 2035 MTP.



CMP Congested Segments (2035)

AIR QUALITY

Air quality is a critical issue that fundamentally affects regional transportation planning. As El Paso’s 1999 Plan for El Paso noted, federal regulations, specifically the Clean Air Act Amendments of 1990, require the El Paso MPO to “demonstrate that projects, investments, and strategies implemented by the City of El Paso, as well as surrounding cities, are consistent with air quality objectives contained in the State Implementation Plan (SIP).” Proposed transportation projects for the entire region must be included in the Metropolitan Transportation Plan (MTP). To receive federal funding, the MPO must demonstrate that the MTP conforms to the SIP to improve air quality in El Paso.

The critical air quality questions affecting transportation planning are:

1. How well is the El Paso region currently performing in meeting existing air quality attainment standards?
2. Will future transportation plans and projects meet air quality attainment standards?

Existing Conditions

El Paso has historically struggled with air pollution because of topography, industry, dust, urban form, and proximity to industry in Mexico where pollution standards are less stringent. From a transportation perspective, the City’s 1999 Plan for El Paso emphasized the following, which is just as important today:

Although air quality in El Paso has improved significantly since the Environmental Protection Agency (EPA) designated this region as a non-attainment area in 1990, the area faces major air quality challenges as the population and vehicle miles traveled (VMT) continue to increase. The growing population leads to an increase in VMT, resulting in more vehicle emissions and air pollution. Increased trips by motor vehicles, increased travel time, and congestion at the ports-of-entry contribute to deteriorating the environmental quality of El Paso.

The Texas Commission on Environmental Quality (TCEQ) provides a snapshot of the region’s current air quality attainment status. As shown in the table on the next page, the El Paso area is currently in attainment for most pollutants, with some caveats about whether, how, and when federal standards are applied. TCEQ also notes: “Recent modeling studies show that El Paso could meet the NAAQS [National Ambient Air Quality Standards] if not for its proximity to Juárez.” However, the region is in non-attainment for Particulate Matter, leading to the conformity requirements that are placed on the MPO’s regional transportation planning process. The region is now in attainment for ozone as of June 2005. High ozone levels can make breathing difficult for the elderly, children, and people with respiratory problems. Ozone is particularly difficult for El Paso to manage

given that ozone is a pollutant formed by chemical reactions on hot sunny days and that regulations in Mexico are more lenient than in the United States.

Transportation Conformity

Transportation conformity is a determination that future transportation plans, projects, and other investments will meet air quality attainment standards. The El Paso MPO is required to demonstrate conformity for both its long-range *Mission 2035 Metropolitan Transportation Plan (MTP)* and its short-range *Mission 2011-2014 Transportation Improvement Program (TIP)*. It does so through a comprehensive analysis contained in its *Transportation Conformity Report* that addresses carbon monoxide (CO) and particulate matter (PM-10).

According to that report: “The analysis was obtained by projecting vehicle miles and hours traveled from the [MPO’s regional traffic model], calculating emissions of these vehicles using the MOBILE6 and AP-42 models [specialized modeling tools], and comparing the results to the Motor Vehicle Emissions Budgets for the County of El Paso, Texas.” The Report further explains that, given El Paso’s non-attainment status, the “MTP must be reviewed, updated, and approved by the TPB [MPO’s Transportation Policy Board] every four years. The TPB must review and develop a TIP every four years.” The MTB then approves both documents based on guidance provided by the Federal Highway Administration (FHWA), which has ultimate approval authority. Only after FHWA has approved the conformity determination (which lasts for four years) can MTP and TIP projects proceed through the programming process and be implemented.

This leads to the most important implication of transportation conformity: The conformity determination is based on a “package” of transportation projects, programs, and strategies contained in the MTP. Changes to that package outside of the formal MTP planning process could inadvertently nullify conformity approval and accompanying transportation funding.

This does not prevent the City from acting in its best interests regarding its transportation planning priorities. In fact, the City’s current top transportation priority – implementation of Sun Metro’s RTS – is already included in the MPO’s MTP, TIP, and in the *Comprehensive Mobility Plan*. Rather, it means that the City (and the MPO) must recognize that:

- The City has the ability and the authority to focus on non-regionally significant transportation investments, such as its non-state, local streets, land use patterns, multimodal travel, and many other transportation strategies that are compatible with the MTP and TIP.

- The City also has the ability and the authority to focus on regionally-significant transportation investments in a strategic and coordinated way with the MPO (and TxDOT) that respects the conformity process and requirements the MPO must operate within.
- The City's focus on transportation and land use strategies that prioritize walkability, travel choices, balanced transportation networks, and other policy objectives are key concepts that will help reduce air pollution.

Additionally, the City and the MPO need to continue working together to expand the MPO's ability to demonstrate air quality conformity for an increasingly-sophisticated range of smart growth-, sustainability-, and livability-based transportation and land use strategies that are not as easily modeled as capacity-based road (and transit) projects. The MPO's current conformity determination is primarily based on modeling the MTP's regionally-significant road and transit projects for several analysis years between 2010 and 2035.

There is a significant and rapidly-growing body of research and direct observation of the ability to reduce net external vehicle trip generation through smart growth-based land use and urban design strategies in highly walkable environments with good transit access and well-connected complete street grids. However, these elements are more difficult to accurately incorporate in a conventional four-step traffic modeling process, even with so-called "lifestyle models." However, state of the art transportation planning addresses all aspects of mobility – including air pollution – using both "demand" (travel behavior and travel choice) strategies as well as "supply" (road capacity) strategies.

Plan Consistency & Coordination

The final major element of transportation conformity noted earlier is the federal and state requirement for consistency and coordination between plans. In other words, it is not just that the MTP and TIP are the guiding documents for which conformity is determined and they therefore must be amended carefully and strategically, but also that plans must be consistent with their counterpart state plans. Specifically, the El Paso MPO's plans must be consistent with the Texas Statewide Transportation Improvement Program (STIP) and State Implementation Plans (SIPs) for various pollutants.

Together, these various elements provide a coordinated framework within which transportation planning is conducted for the El Paso region and for how transportation conformity is determined.

Pollutant	Primary NAAQS	Averaging Period	Designation	Counties	Attainment Deadline
Ozone (O3)*	0.075 ppm (2008 standard)	8-hour	(Governor Recommended Nonattainment)	El Paso	TBD
	0.08 ppm (1997 standard)	8-hour	Attainment (Maintenance)	El Paso	
Lead (Pb)	0.15 µg/m3 (2008 standard)	Rolling 3-Month Average	Attainment/Unclassifiable		
	1.5 µg/m3 (1978 standard)	Quarterly Average	Attainment/Unclassifiable		
Carbon Monoxide (CO)	9 ppm (10 mg/m3)	8-hour	Attainment (Maintenance)	Portion of City of El Paso	
	35 ppm (40 mg/m3)	1-hour	Attainment/Unclassifiable		
Nitrogen Dioxide (NO2)	0.053 ppm (100 µg/m3)	Annual	Attainment/Unclassifiable		
	100 ppb	1-hour	Pending		
Particulate Matter (PM10)	150 µg/m3	24-hour	Moderate Nonattainment	City of El Paso	December 31, 1994
Particulate Matter (PM2.5)	15.0 µg/m3	Annual (Arithmetic Mean)	Attainment/Unclassifiable		
	35 µg/m3	24-hour	Attainment/Unclassifiable		
Sulfur Dioxide (SO2)	0.03 ppm	Annual (Arithmetic Mean)	Standard Revoked August 23, 2010		
	0.14 ppm	24-hour	Standard Revoked August 23, 2010		
	75 ppb	1-hour	Pending		

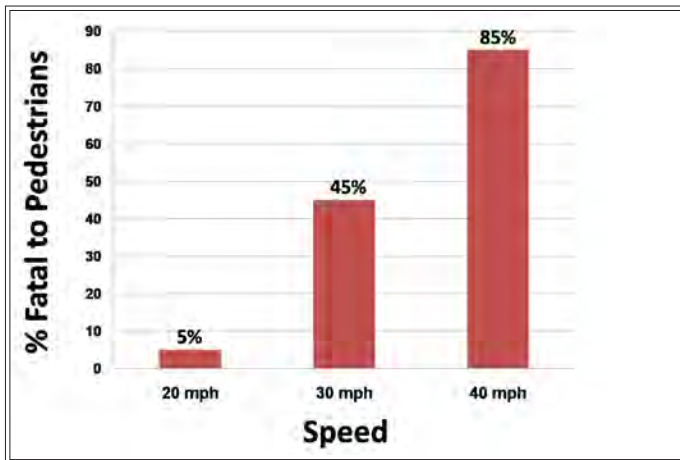
National Ambient Air Quality Standards - Compliance of El Paso - Area Counties. Attainment Status by Pollutant - April 2011 (Texas Commission on Environmental Quality) Source: TCEQ website www.tceq.texas.gov/air_quality/sip/elp/elp-status

WALKABILITY

Decreasing auto-dependence is a primary goal of the City of El Paso. The most effective way to achieve this goal is to improve walkability, which is the extent to which places are useful, inviting, and safe for pedestrians, cyclists, and transit users.

Walkable communities encourage the use of a mix of travel modes (pedestrian, bicycle, transit, and car). Walkable communities are created by a number of factors, such as a fine-grained network of connected streets; a mix of uses and amenities within walking distance; buildings fronting streets; narrow streets; streets with managed speeds; sidewalks; and on-street parking.

Vehicular speed plays a critical role in the walkability of an area due to its relationship with pedestrian fatalities. In a crash with a vehicle traveling greater than 30 mph, a pedestrian's odds of dying are better than 50%, increasing to 85% for a vehicle traveling 40 mph.



Percent of Crashes Fatal to Pedestrians, Related to Vehicle Speed
 Source: U.K. Department of Transportation, *Killing Speed and Saving Lives*, London, 1987

Although El Paso's newer thoroughfares have been designed to give vehicular travel the priority over other modes, there are important exceptions. El Paso's Downtown and historic neighborhoods were developed before automobiles became commonplace; their network patterns and street designs are often quite walkable. Many other neighborhoods have benefitted from efforts by the City and Sun Metro to build new sidewalks, eliminate sidewalk gaps, install bus stop pads, and improve accessibility for the disabled.

A walkability audit was performed for several areas while this plan was being prepared. Its purpose was to gain a general understanding of El Paso's walkability by measuring typical streets within the City. The aerial photographs on this page summarize the results.



Walkability Index Results for Stanton Street in Downtown. The solid chartreuse line signifies a grade of C, or Moderately Walkable. The solid green line signifies a grade of B, or Very Walkable.



Walkability Index Results for Alameda Avenue near Zaragoza Road. The solid chartreuse line signifies a grade of C, or Moderately Walkable. The dashed yellow line signifies a grade of D, or Basic Walkability.



Walkability Index Results for North Zaragoza Road north of Picasso Drive. The orange line signifies a grade of E, or Minimal Walkability.

The “walkability” of Stanton Street downtown, Alameda Street in the Ysleta area, and a portion of Zaragoza Road was measured to assess total mobility, using an analysis tool called the Walkability Index. These three locations were selected as representative of three typical conditions within the City: historic downtown, historic mission neighborhood, and auto-dominant suburban arterial.

Grading a location’s walking environment is basic to assessing its total mobility. Successfully applied in several cities, the Walkability Index achieves a block by block, pedestrian level of service score. This score is also closely related to bicycle and transit mobility potential for a given block. The Walkability Index serves as a useful multimodal counterbalance to the conventional, automobile-oriented level of service (LOS) grading system for thoroughfares.

In general, walkability conditions along Stanton Street were relatively good, due to a mix of land uses, narrow lanes, short blocks, and pedestrian features such as benches and shade trees. Some degradation to Stanton’s walkability has occurred over the last half century as changes were made to provide greater efficiency for vehicles as they entered the area.

Similar results were found for Alameda Avenue in Ysleta. Excellent block structure and thoroughfare design enhance walkability, but degraded buildings and narrow sidewalks affect the overall comfort of this area for pedestrians, cyclists, and transit users.

By contrast, Zaragoza Road operates as a vehicular thoroughfare and scored very low for walkability. As expected, the wide lanes, setback buildings, narrow sidewalks, and high motorist speeds make this corridor very uncomfortable to pedestrians, cyclists, and transit-users.

PARKING

Parking in El Paso, like most cities its size, is characterized predominantly by plentiful free off-street parking. Downtown, UTEP, and the area between them, particularly the Oregon corridor, have several parking garages (also known as structured parking), as well as time-managed on-street parking. These areas also have paid parking in various forms for both on-street and off-street parking, including meters, time-increment charges for garages, and parking passes and permits at UTEP.

The Downtown and UTEP areas are also where parking has been the most controversial in terms of whether, where, and how to locate parking supply in specific locations; if and how much to charge for it; and other elements of managing parking in such areas where demand is high and supply can be (or can seem to be) limited.

With a few exceptions, such as the El Paso International Airport or Cohen Stadium, parking in most other areas of the City is free, off-street, and in large surface lots as opposed to structured parking. For most retail areas, especially large shopping centers and malls, large off-street parking lots partially or completely surround the buildings. Residential parking is both on-street and in private driveways and lots.

The City manages off-street parking through Chapter 20 (Zoning Code), which sets minimum standards and requirements for parking by land use, and has provisions addressing shared-use parking, parking reductions, and bicycle parking.

How and where parking is provided has important, though sometimes not obvious, implications for travel behavior. The long-standing conventional practice in El Paso and across the country of surrounding retail centers with enormous free off-street surface parking isolates retail stores from the street, from public transit, and often from adjacent neighborhoods. This design discourages walking, bicycling, and transit use because the buildings are often unsafe and impractical to reach except by car. Moreover, because parking is almost always free, for those who have a car there is little reason not to drive.

Driving has become essentially a requirement, limiting personal mode choice and adding to regional trip-making and congestion. Safety becomes compromised because large parking lots concentrate traffic, congestion, and conflict points. These retail and employment areas, which are major transit destinations, become much more difficult to serve because providing a “front-door” bus stop means significant extra route time to deviate off the street and through the parking lot to reach the building. Walking and bicycling become almost infeasible and very unsafe for the reasons noted above, and because pulling buildings away from streets that instead are lined with parking lots creates non-walkable environments that are dominated by high-speed, high-volume vehicle traffic. Development costs increase while economic activity decreases through having to devote so much land to parking that is rarely fully used.

The strategies section of this Transportation Element provides a toolbox of strategies to design, locate, and manage parking in ways that increase personal mobility, community character, and economic activity. There are many ways to do so without constraining parking supply or making it more difficult to find and use, and especially without having to charge for parking as a first resort. There is a role for both free parking and paid parking, with the emphasis on optimizing demand, design, and management of the former before having to implement the latter.

PUBLIC TRANSIT

Sun Metro

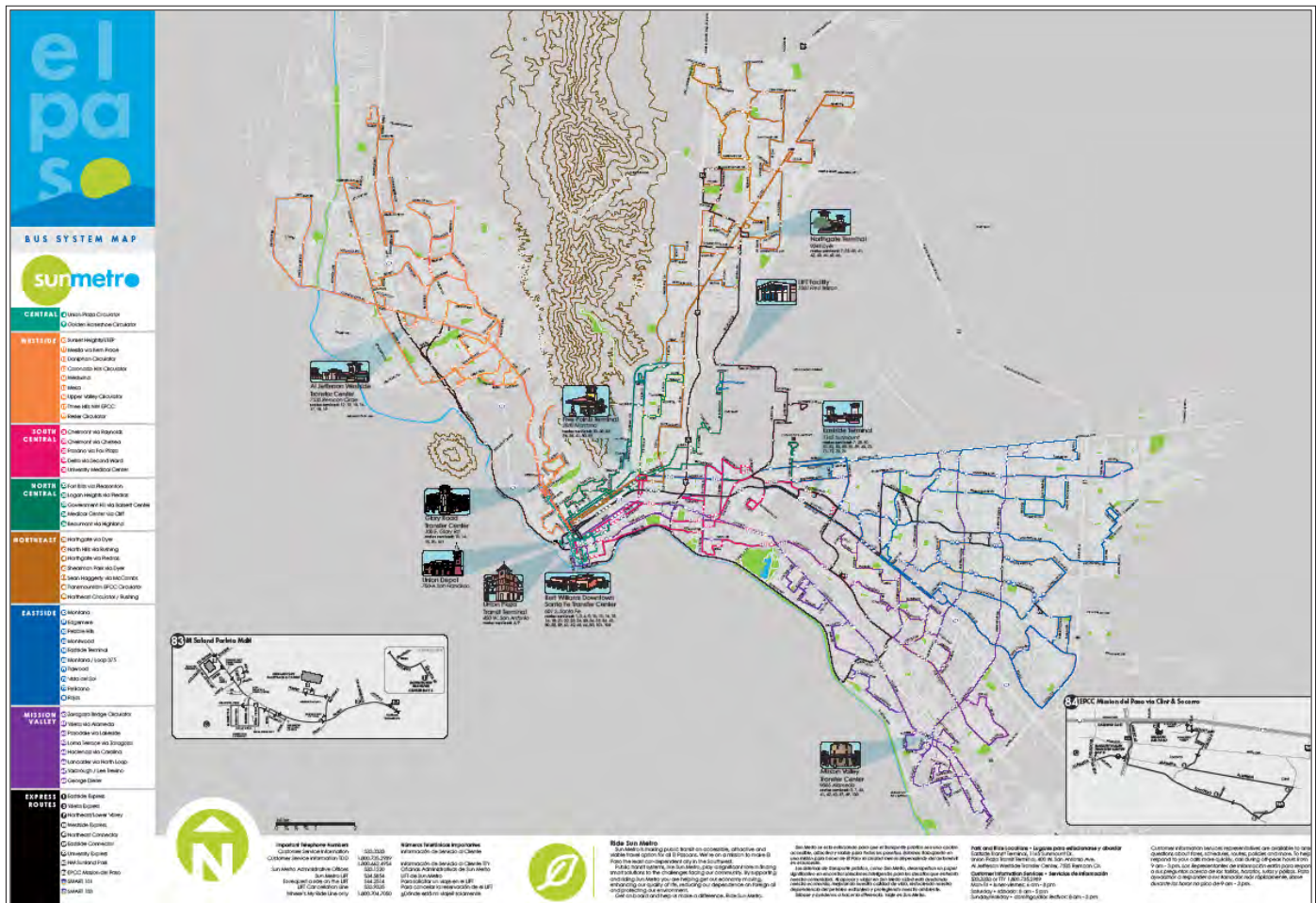
Sun Metro provides public transit service throughout El Paso and surrounding areas, including fixed route (local bus) service, demand response/paratransit service, and the future Rapid Transit System network. Sun Metro is formally known as the Mass Transit Department and is part of the City's municipal government.

Sun Metro operates 57 fixed routes in the City, one in the county, and one into Sunland Park, New Mexico. One intercity route between El Paso, Anthony, and Las Cruces is operated by the New Mexico DOT. Sun Metro's network reaches all sectors of El Paso, as shown on the system map below.

Included in this network is a "pre-RTS" route – SMART 204 – that provides fast frequent service to a limited network of strategically located stops along the Oregon and Alameda corridors. Other unique elements of Sun Metro's bus network include the free Golden Horseshoe Circulator and the Union Plaza Circulator serving Downtown El Paso.

Sun Metro is changing from a conventional "hub and spoke" system, with routes radiating from Downtown to a "node" system anchored around satellite transfer centers. Given the physical expanse of El Paso, this change will provide shorter routes and faster travel times throughout the City.

Four major transfer centers were completed in 2010: Downtown (Bert Williams), Westside (Al Jefferson), Mission Valley (Nestor A. Valencia), and Glory Road. These four supplement the existing terminals at Five Points, Union Plaza, Northgate, and Eastside. As part of RTS implementation, two more transfer centers will be built – replacing the Northgate terminal with a new Northeast Transfer Center on the old Northgate Mall property, and a new terminal on the far east side serving the Montana RTS corridor.



Sun Metro Bus System Map - <http://www.elpasotexas.gov/sunmetro/sunroute.asp>

These transfer centers share common characteristics:

- Context-sensitive architectural design, such as UTEP’s Bhutanese architecture for Glory Road and pueblo-themed architecture for Mission Valley.
- Enclosed waiting areas with real-time bus information displays and free wireless internet service.
- Ticket, vending, and change machines
- Restrooms and water fountains.

The convenience provided by these transfer centers will significantly increase ridership. Developers along transit corridors should coordinate with Sun Metro officials to understand what kind of transit facilities could be installed to take maximum advantage of public transit service along that corridor.

Sun Metro’s ridership increased 21.5% during the last five years, reaching 15.8 million riders and projecting 16.7 million in 2012. According to the American Public Transportation Association (APTA), ridership increase for systems similar in size to El Paso was 2% during that period. This continued increase in local ridership, as nation-wide ridership started to level off, reflects Sun Metro’s aggressive efforts to improve its service, particularly in terms of punctuality, quality of vehicles, new shelters, the significant investment in transit centers, and heightened community visibility. These efforts led to Sun Metro being named by APTA as the “Outstanding Transit System for 2011.”

Sun Metro’s tangible progress represented by the new transfer centers has generated very positive community awareness. Sun Metro has also made trip-planning and user access more convenient by improving its website and incorporating its system into Google Transit, a key strategy for reaching both discretionary and younger riders.

Sun Metro’s fleet includes 167 fixed-route buses operated by 323 drivers and 65 paratransit buses operated by 80 drivers. All fixed-route buses use compressed natural gas, which emit 50% less pollutants than a typical bus.

Sun Metro uses a variety of metrics to gauge route performance and operational efficiency. These include route-level average and ranked data for ridership, passengers per mile, and passengers per hour. Additionally, Sun Metro continuously monitors and refines its routes in response to several factors. For example, opening the new transfer centers led to several route realignments and some changes to bus stops. Other factors considered in service refinements include ridership levels and trends over time as well as operational issues – road traffic volumes, signal timings, new street connections, route directness, and others – that affect route timing, alignment, safety, and transfer opportunities.



A Sun Metro bus provides service to El Paso’s Far Eastside.



Sun Metro bus shelter

Rapid Transit System (RTS)

The City of El Paso and Sun Metro are aggressively implementing a Citywide, four-line Rapid Transit System (RTS) system over the next five years. The RTS will radiate from Downtown along four major corridors – Mesa Street to the westside, Dyer Street to the northeast, Montana Avenue to the eastside, and Alameda Avenue to Mission Valley.

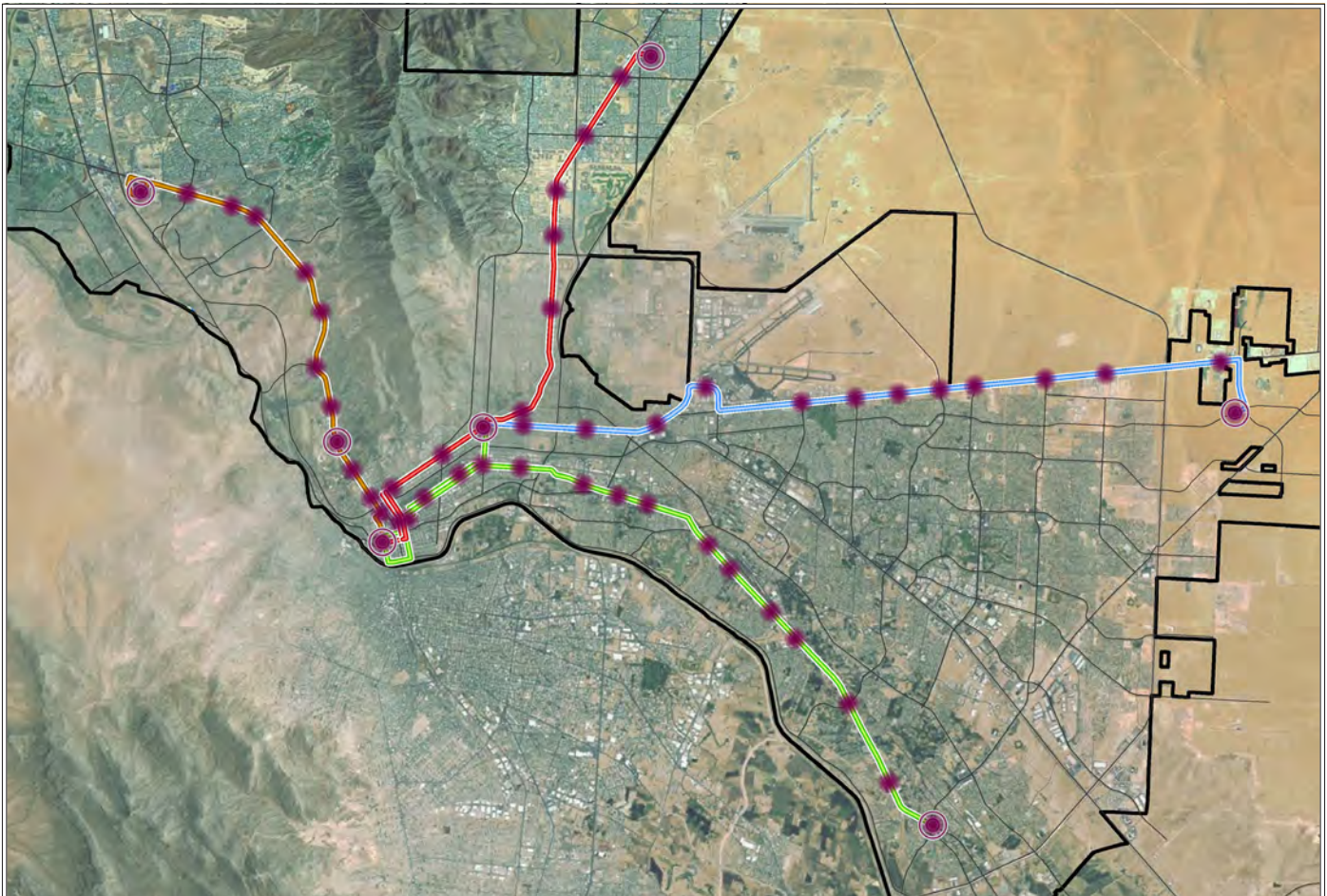
The Mesa RTS corridor is programmed to start service at the end of 2013. The Alameda RTS corridor will come in the beginning of 2014, with the Dyer RTS corridor and the Montana RTS corridor coming by 2016. Regional transfer centers are associated with each RTS line.

Three RTS lines will be federally funded through the Small Starts/Very Small Starts program, while the Alameda RTS corridor is being implemented entirely with local funds. The other RTS lines will include a local funding match to receive federal funds. The El Paso City Council committed local funding for all four RTS corridors in November 2010.

RTS Amenities

- Frequent service (10 to 15 minute frequency)
- Less frequent stops (stops located about 1 mile apart)
- Level boarding and alighting (step on or off the bus without contending with steps, ramps, or lifts)
- Branded vehicles and stations (uniquely painted buses and stations to easily identify service)
- Amenities at stops (such as real-time bus schedules)
- Signal prioritization (buses will have the ability to shorten red or lengthen green traffic signals)
- Fare prepayment (save time by paying fares before boarding)
- Local bus feeder network (circulators take passengers to RTS stops faster to reduce overall travel time)

Source: <http://www.elpasotexas.gov/sunmetro/btrcorridors.asp>



The City's proposed RTS includes branches to all four major areas of the City, with routes along the four major road corridors. Each RTS route will terminate in a distinctive Transfer Center.



Downtown Transfer Center



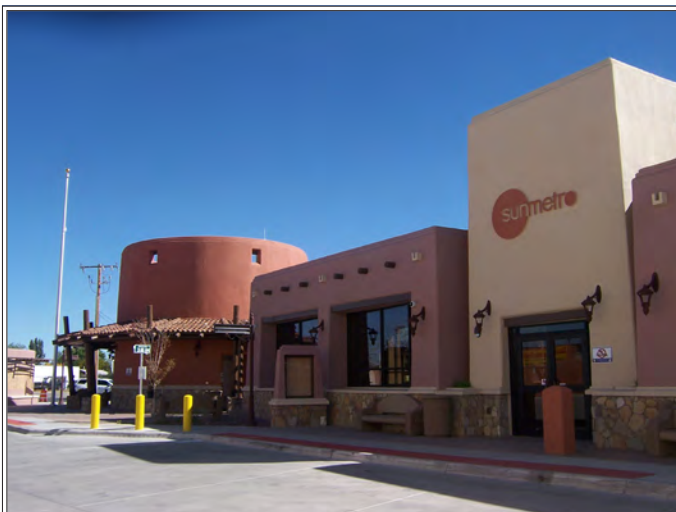
Westside Transfer Center



Five Points Transfer Center



The site of the future Northgate Transfer Center



Nestor A. Valencia Mission Valley Transfer Center



Potential site of the future Eastside Transfer Center

Every RTS line will share several operating characteristics generically known as “TSM,” or Transportation Systems Management. TSM refers to relatively low-cost and small-scale strategies to improve performance by optimizing transportation facilities and operations. For RTS, it primarily balances service performance and mobility benefits against investment costs. This means that the RTS service will primarily operate in mixed traffic (except for part of the Mesa line), as opposed to exclusive bus lanes (known as busways). This was a policy decision of the City and Sun Metro after technical analyses indicated most of the ridership and mobility benefits at significantly less expense. Other TSM characteristics include signal prioritization and queue jump lanes where feasible to maintain bus speeds and reduce delays.

Each RTS line is anticipated to operate at 10-minute frequencies in peak periods (6:00-9:00 AM and 3:00-6:00 PM) and at 15-minute off-peak frequencies (all other times between 6:00 AM-8:00 PM) Monday-Friday. Saturday service will be at 20-minute frequencies all day (7:00 AM-6:00 PM). No Sunday service is anticipated. Every RTS line will have curbside stations with level boarding (15-inch curbs), real-time arrival information, one fare for the entire system that is paid prior to boarding, and operation as an overlay – meaning in addition to – existing local bus service. The buses will be 60-foot articulated vehicles with a special color and branding scheme. The stations and shelters will be longer than normal bus stops, and will feature pedestal, cantilever, and/or other distinct design.

Ridership and Land Value

Investing in a system that will operate in mixed traffic instead of in exclusive lanes has raised questions about RTS’s effectiveness in attracting new transit ridership and its ability to help create transit-oriented development (TOD) around the stations. Sun Metro’s detailed engineering analysis (conducted by Jacobs En-

gineering, a national engineering consultant) concluded that RTS ridership is not dependent on service technology. As shown below, expected daily RTS ridership on all four lines for the mixed-traffic (TSM) option is almost identical to that expected for RTS service in a dedicated lane, leading to the conclusion that the mixed-traffic RTS can create as much of a potential economic market as dedicated-lane RTS.

Additionally, national research demonstrates that RTS service is effective at both increasing total transit ridership and attracting new discretionary riders. As one example, an FTA analysis found significant total and new ridership increases from several RTS systems around the country.

RTS OPTIONS - Daily Ridership Forecasts

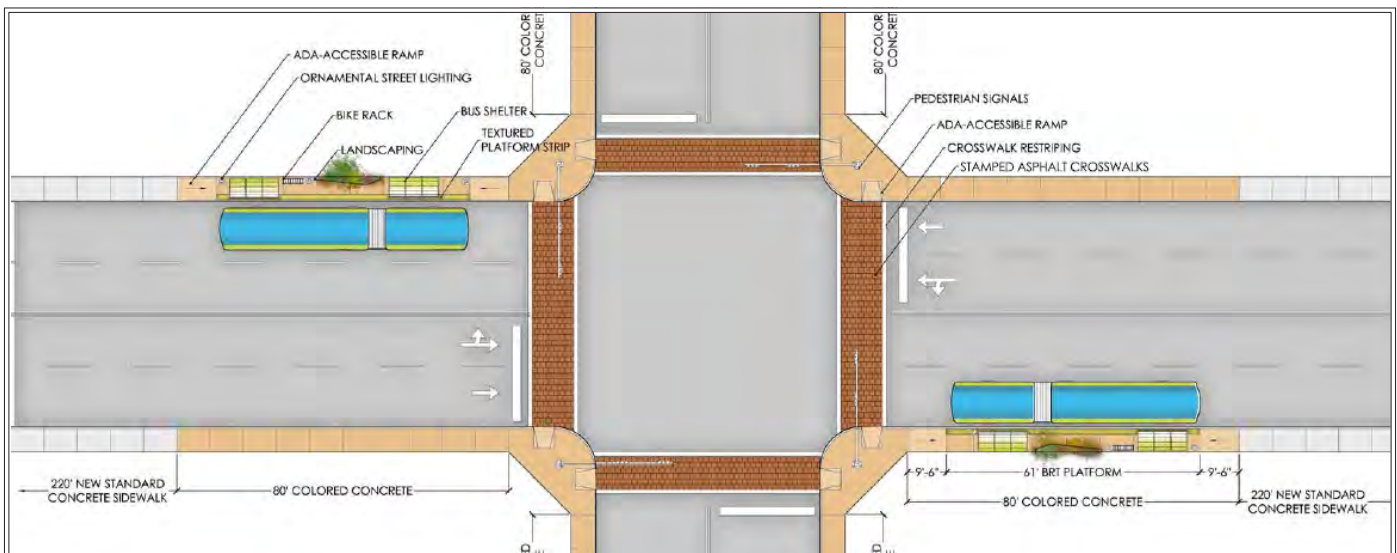
BRT Corridor	TSM	Full Dedicated	Partial Dedicated	Peak Dedicated
Alameda	3,450	3,470	3,450	3,470
Mesa	2,410	2,480	2,410	2,480
Dyer	3,400	3,385	3,405	3,385
Montana	2,200	2,310	2,220	2,310

RTS Options - Daily Forecasts

Source: Sun Metro RTS Alternatives Analysis, Jacobs Engineering

According to the National RTS Institute, “RTS has shown to attract choice ridership and increase total corridor ridership. As much as one-third of RTS riders have been shown to previously use private automobiles. Corridor ridership gains of 20% to 96% have also been recorded.”

Another concern raised by the private sector in comparing RTS with light rail or commuter rail is that TOD is more attractive and less risky around rail stations because of the permanence of the fixed rail investment as opposed to bus lines, which can



Planned Typical RTS Station Design

be more easily changed. There is less TOD history around RTS stations than rail because RTS is a much newer concept. However, TOD has been successful around RTS stations in Pittsburgh, Cleveland, Ottawa (Canada), Brisbane (Australia), and other systems.

City	Increase in Ridership through BRT Implementation
Los Angeles	+40% (3 years)
Miami	+80% (4 years)
Brisbane	+60% (18 months)
Vancouver	+25% (1 year, strike)
Boston Silver Line	+100% (15 months)
Leeds (UK)	+75% (5 years)
Sheffield (UK)	+50% (2 years)

Increased ridership by city

For El Paso, it is important to consider that, even with the TSM option, Sun Metro is making significant permanent investments for RTS through its transfer centers and RTS stations. Sun Metro and the City are prioritizing transformation of the RTS corridors into walkable urban streets to support RTS service.

In terms of land valuation, RTS (and other high-capacity transit) can contribute to increased property values in two ways:

Transit Agency and Corridor	Percent Increase in Ridership Levels	Percent Increase in Choice Riders
AC Transit – 72R	66	32
Los Angeles MTA Wilshire/Whittier	42	67
Ventura	27	67
Boston MBTA – Silver Line	84	
Las Vegas RTC – MAX	>35-40	24
Phoenix RAPID	N/A	33

The effect of RTS service on transit ridership

1. Many residential buyers are willing to pay a premium for enhanced accessibility, mobility, travel options, and convenience. Although up to 30% of the demand for housing is for TOD-style living environments, less than 2% of new housing starts are in this category (Reconnecting America, 2010).
2. Enhanced accessibility makes a property more attractive for development, increasing the likelihood that it can/will be developed to a more intense (and valuable) use.

There is a statistically significant, inverse relationship between the distance to a RTS station and property values. The housing market in particular places value premiums on properties within walking distance of RTS. For example, results from a study of Pittsburgh’s East Busway show that a property 1,000 feet away from a station is valued approximately \$9,745 less than a property 100 feet away, all other factors being constant.

Bogotá, Colombia’s Rapid Transit System (TransMilenio) is perhaps the most established and researched RTS in the world. Currently Bogotá has 114 RTS stations and 9 lines covering 54 miles. Results of past studies about land value in areas adjacent to this line have shown that:

- Apartment rental prices are higher near TransMilenio stations. Rent rates increase between 6.8% and 9.3% for every 5 minute reduction in walking time to a RTS station (Rodriguez and Targa, 2004).
- Properties within a 0 to 5 minute walk from RTS feeder lines are valued higher than those within a 5 to 10 minute walk (Munoz-Raskin, 2006).
- Property values increase between .12% and .38% for every 5 minute reduction in walk time to a RTS station (Mendieta and Perdomo 2007).

Isolating the effects of RTS on property values is inherently challenging due to difficulties identifying exactly comparable properties and changes in the housing market over time. Other important considerations in property value effects include:

- *Type of Land Use* – public investment in transportation has a different affect upon land value for commercial, multi-family, and single-family properties.
- *Timing* – the capitalization of benefits of RTS and other transportation investments can take time to occur.
- *Location* – different communities experience property value benefits differently. In some communities, transit options and accessibility play a larger role in housing prices than in others.



Bogotá’s RTS system features branded buses and distinctive bus stops and has improved land values in the areas that it serves.

In summary, accessibility enhancements from transit service are generally a more important factor in land development propensity than the specific type of transit (Deng and Nelson, 2010).

Alameda RTS

The Alameda RTS line, anticipated for opening in early 2014, will stretch approximately 15 miles and feature 18 stations between Downtown and the Nestor A. Valencia Mission Valley Transfer Center via Alameda Avenue. While its exact alignment east of Downtown is being finalized, it is likely to use the Texas and Myrtle corridors due to economic development and ridership potential. The RTS will also serve the Five Points Transfer Center via a short spur along Piedras Street. It will operate in mixed traffic along its entire length. The RTS's projected ridership (boardings) is over 3,400 per day (over 1.2 million annually). Capital costs are estimated at \$29.7 million (2010 dollars), while its annual operations and maintenance cost is currently estimated at \$4.5 million in 2014, its first full year of operation.

The planned stations for the Alameda RTS are:

- Downtown Transfer Center
- "Downtown Core" and Florence
- "Downtown Core" and Noble
- "Downtown Core" and Eucalyptus
- Piedras south of Alameda
- Five Points Transfer Center
- Alameda east of Piedras
- Alameda and Copia
- Alameda and Reynolds
- Alameda and Buena Vista
- Alameda and Clark
- Alameda and Flicker Way
- Alameda and Croom
- Alameda and Carolina
- Alameda and Vocational
- Alameda and Yarbrough
- Alameda and Davis
- Mission Valley Transfer Center

The Nestor A. Valencia Mission Valley Transfer Center, located at Alameda and Zaragoza, opened in November 2010.

Mesa RTS

The Mesa RTS line will connect the Downtown Transfer Center, the new Glory Road Transfer Center at UTEP, and the Al Jefferson Westside Transfer Center. This line is currently scheduled for opening in late 2013 and will replace the existing SMART 204 service. It will begin at the Downtown Transfer Center, travel up Santa Fe Street to Franklin Avenue to Oregon Street, then to the Glory Road Transfer Center. From there it will travel on Mesa Street to the Westside Transfer Center. It will operate in

dedicated lanes on Oregon Street between Interstate 10 and Schuster Avenue. At the Westside Transfer Center, it will travel "clockwise" on Remcon Circle from its east intersection with Mesa to its west intersection. It will then turn back onto Mesa towards Downtown.

The line will be approximately 8.5 miles long and will have the following 13 stations:

- Downtown Transfer Center
- Franklin Street (using the existing SMART 101 and local bus stops)
- Oregon Street and Rio Grande Avenue
- Oregon Street and Hague Street
- Glory Road Transfer Center
- Mesa Street and Mesita Street
- Mesa Street and Executive Center Boulevard
- Mesa Street and Argonaut Street
- Mesa Street and Festival Drive
- Mesa Street and Balboa Road
- Mesa Street and Camille Drive
- Mesa Street and Resler Drive
- Westside Transfer Center

Mesa RTS is projected to attract more than 2,400 daily riders, or over 800,000 annually. Its capital costs are estimated at \$21.1 million (2010 dollars), and \$3.4 million in annual operating and maintenance costs (2014 dollars). Capital funding for the Mesa RTS will consist of 50% federal (FTA) funds, 30% other federal/state funds, and 20% local funding from the City. The City has applied for FTA funding for the Mesa RTS.

Dyer RTS

The Dyer RTS line will connect Downtown, Five Points, and northeast El Paso with RTS service anticipated to start in 2016. Between the Downtown and Five Points Transfer Centers, it will operate in a shared alignment with the Montana RTS. The alignment in this area has not yet been finalized, but Montana Avenue is the likely option. From Five Points, it will travel on Pershing to Dyer. The total Dyer RTS will be approximately 12 miles with 12 stations, terminating at the yet-to-be built Northgate Transfer Center at Dyer and Diana. This transfer center will be part of the redevelopment of the Northgate Mall in northeast El Paso, as described in the Urban Design Element. The acquisition of 23 acres for the transfer center was finalized in November 2010.

The planned stations for the Dyer RTS are:

- Downtown Transfer Center
- "Downtown Core" and San Antonio
- "Downtown Core" and Ochoa
- "Downtown Core" and Cotton
- Five Points Transfer Center

- Pershing and Copia
- Dyer and Monroe/Van Buren
- Dyer and Broadus
- Dyer and Ellerthorpe
- Dyer and Hercules
- Dyer and Hondo Pass
- Northgate Transfer Center

Ridership is projected to be about 3,400 daily boardings, or 1.2 million annually, similar to the Alameda RTS. Capital costs are estimated at \$30.6 million (2015 dollars), and \$3.8 million in annual operating and maintenance costs (2016 dollars). Capital funding for the Dyer RTS will consist of 50% federal (FTA Section 5309) funds, 30% state (CMP) funds, and 20% local funding from the City.

Montana RTS

The Montana RTS, scheduled to open in 2016, is planned as 19 miles with 18 stations connecting Downtown, Five Points, and El Paso's Eastside. As with the Dyer RTS corridor, the Montana RTS's alignment east of the "Downtown Core" is being finalized, with the direct Montana Avenue routing preferred among the five parallel options being considered. The RTS line would then continue along Montana to the Five Points Transfer Center, El Paso International Airport and to the east all the way to a "return loop" using Rich Beem, Edgemere, and Loop 375 back to Montana. Included in this route would be a future Eastside Transfer Center whose location is yet to be determined. Sun Metro envisions about six local bus routes connecting at the transfer center, including a potential Zaragoza circulator and other local and express connections.



The Northgate Transit Center is planned to form the core of a transit oriented development that could become the center of Northwest El Paso.

The proposed stations for the Montana RTS are:

- Downtown Transfer Center
- “Downtown Core” and San Antonio
- “Downtown Core” and Ochoa
- “Downtown Core” and Cotton
- Five Points Transfer Center
- Montana and Copia
- Montana and Raynolds
- Montana and Geronimo
- El Paso International Airport Terminal
- Montana and Hawkins
- Montana and McRae
- Montana and Lorne
- Montana and Yarbrough
- Montana and Lee Trevino
- Montana and George Dieter
- Montana and Saul Kleinfeld
- Montana and JC Viramontes/Turf
- Eastside Transfer Center

Ridership is projected to be about 2,200 daily boardings in 2017, or about 800,000 annually, similar to the Mesa RTS. As the longest RTS line, the Montana RTS’s estimated capital costs are the most expensive at almost \$43 million (2016 dollars), while annual operating and maintenance costs are estimated at \$5.5 million (2017 dollars). Capital funding for the Montana RTS is similar to that for the Dyer RTS: 57% federal (FTA Section 5309) funds, 23% state (CMP) funds, and 20% local funding from the City.

Other High-Capacity Transit

Residents and participants in this planning process consistently prioritized long-term investment in transit, specifically in high-capacity transit, as a visionary and important element of El Paso’s future.

High-capacity transit refers to the array of transit technologies designed to carry large volumes of passengers while also having the ability to shape land use patterns through transit-oriented development. High-capacity transit includes rail-based transit such as streetcars and light rail and other forms of what are commonly called rapid transit such as El Paso’s proposed RTS system.

Streetcar

The City recently completed an initial streetcar feasibility study that showed both market potential and technical viability for a streetcar (tram) route between Downtown El Paso and UTEP within the Oregon-Stanton-Mesa corridor.

Streetcars are powered by electricity and run on tracks embedded in streets. Streetcars stop more frequently than light rail. El Paso once had an extensive system of streetcars. The earliest streetcars, beginning in 1882, were mule-drawn. Electric streetcars began running in 1902, and the first rubber-tired bus appeared in 1925. The last streetcar, an international route to Ciudad Juárez, ended service in 1974.

Light Rail

Many larger cities have “light rail” systems which provide fast and frequent all-day service. Stops are spaced more widely than streetcar stops, so light-rail service serves nodes of activity rather than linear corridors. Light rail vehicles are electric-powered and usually run on their own tracks (not shared with freight or commuter trains). El Paso has never had light rail service, but possible light rail lines are described later in this element.

High-capacity transit has great potential to improve the region’s transit network and help implement the City’s policies on walkability, travel choices, re-investing in Downtown first, and re-shaping El Paso’s urban form and economic development through public transit and transit-oriented development.

FREIGHT

Situated at the intersection of three states and two countries, the El Paso region is at the very center of east-west and north-south freight transport. El Paso is a significant entry point into the U.S. from Mexico and serves as a commercial air, truck, and rail hub for the region.

The movement of goods via all three of these modes is a major economic factor in El Paso. 15% to 20% of U.S. imports from Mexico pass through El Paso, as well as 15% to 20% of exports to Mexico (Texas Center for Border Economic and Enterprise Development, Border Trade Data).

It is estimated that combined rail and truck traffic between the U.S. and Mexico will increase nearly 50% by 2025. Congestion along rail lines is becoming a significant issue, with some of the highest growth being seen in Texas and New Mexico.

East-west Union Pacific train traffic through El Paso is expected to increase steadily through 2015. Traffic is projected to increase about 2% per year, from about seventy-seven trains/day today to eighty to eighty-five by 2016 and one hundred and thirty by 2035.

Rail is three to five times more efficient than trucks, moving a ton of freight 423 miles on a gallon of fuel. For distances over 1,000 miles, using trains rather than trucks reduces fuel consumption and greenhouse gas emissions by 65%.¹

Despite the efficiencies of rail hauling, trucks are more appropriate for shorter trips and for transporting lower weight, higher value, and time-sensitive cargo. During the first ten months of 2010, 282,052 commercial trucks crossed El Paso's international bridges, compared to 237,359 during the same time period in 2008 (El Paso International Bridges).

Trucks are currently restricted to the Bridge of the Americas (BOTA) and the Zaragoza Bridge. Inspection services are available from 6:00 AM to 6:00 PM at BOTA and from 6:00 AM to midnight at Zaragoza. Because the Bridge of the Americas closes earlier in the evening, commercial truck traffic flow shifts from the Bridge of the Americas to the Zaragoza Bridge, often causing traffic congestion after 6:00 PM.

¹ United States Environmental Protection Agency



El Paso serves as a major freight hub for goods passing across the United States and between the United States and Mexico.

PLAN EL PASO

Current Conditions

REGIONAL RAIL

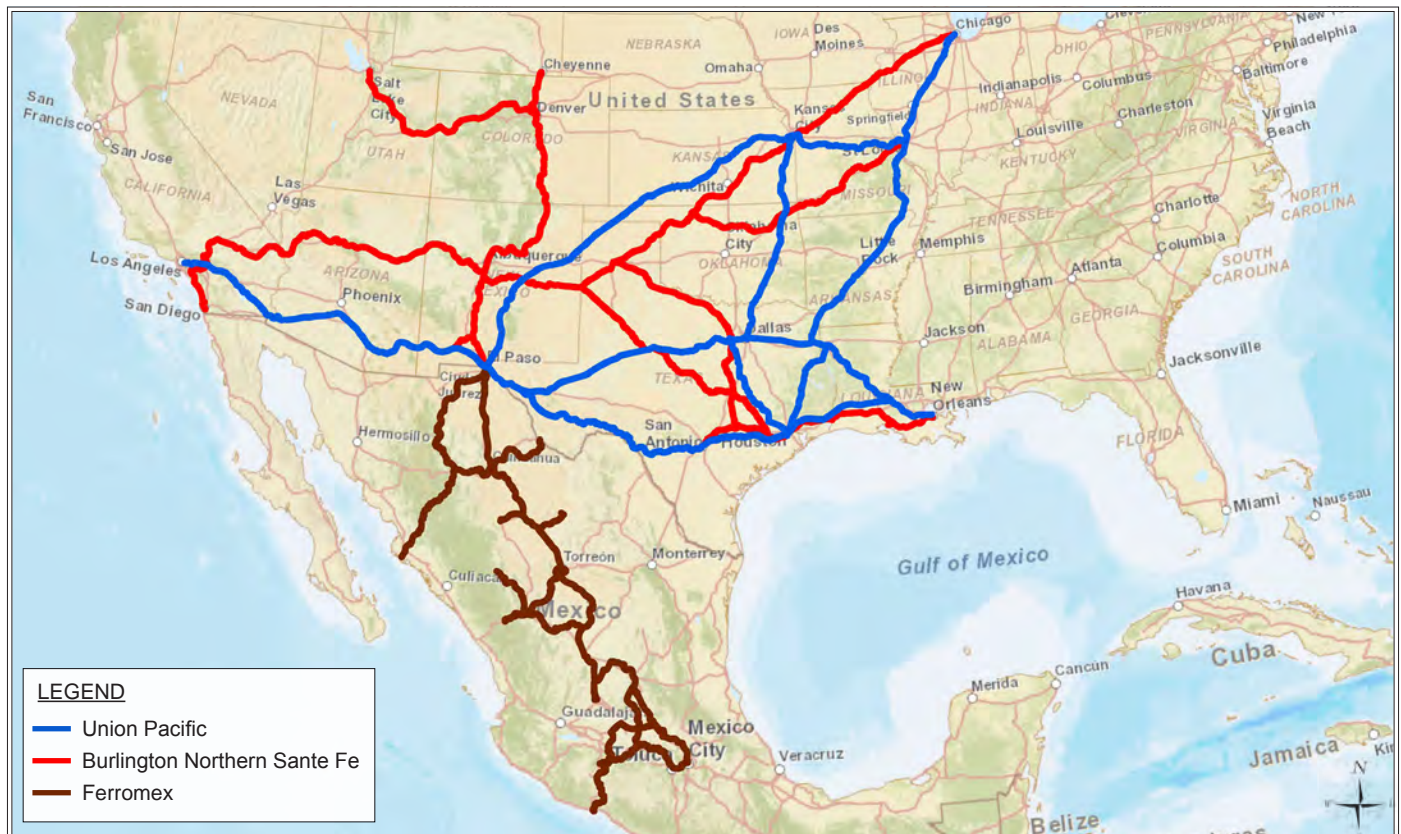
El Paso Railroad History

Long before the arrival of railroads, El Paso's location made it an international crossroads. A historic trail became the Camino Real, following the Rio Grande valley through "El Paso del Norte" on its route from Mexico City to Santa Fe. The Butterfield Trail connected Missouri to California through El Paso in 1858.

Railroad history in El Paso began in the 1870s and 1880s when work began on a southern transcontinental railroad. The Southern Pacific reached El Paso from the east in 1881 and connected to the west coast at the Pecos River in 1883. Four lines soon converged in El Paso, including the first trunk lines that added Mexican territory to the rail network. El Paso quickly changed from a frontier village to a thriving international city.

El Paso's central location on the rail network allowed its smelters to serve gold, silver, lead, and copper mines in northern Mexico and southwestern United States. A rail connection to Galveston's port further expanded the importance of El Paso smelters which could then process ore arriving by ship from South American mines. The completion of the transcontinental railroad reoriented the traditional north-south trade corridors onto an east-west axis, linking El Paso more closely to United States than to Mexican commerce.

Today's rail system was fully in place, as shown on this 1907 railroad map.



Freight Rail System

Current Railroad Operations in El Paso

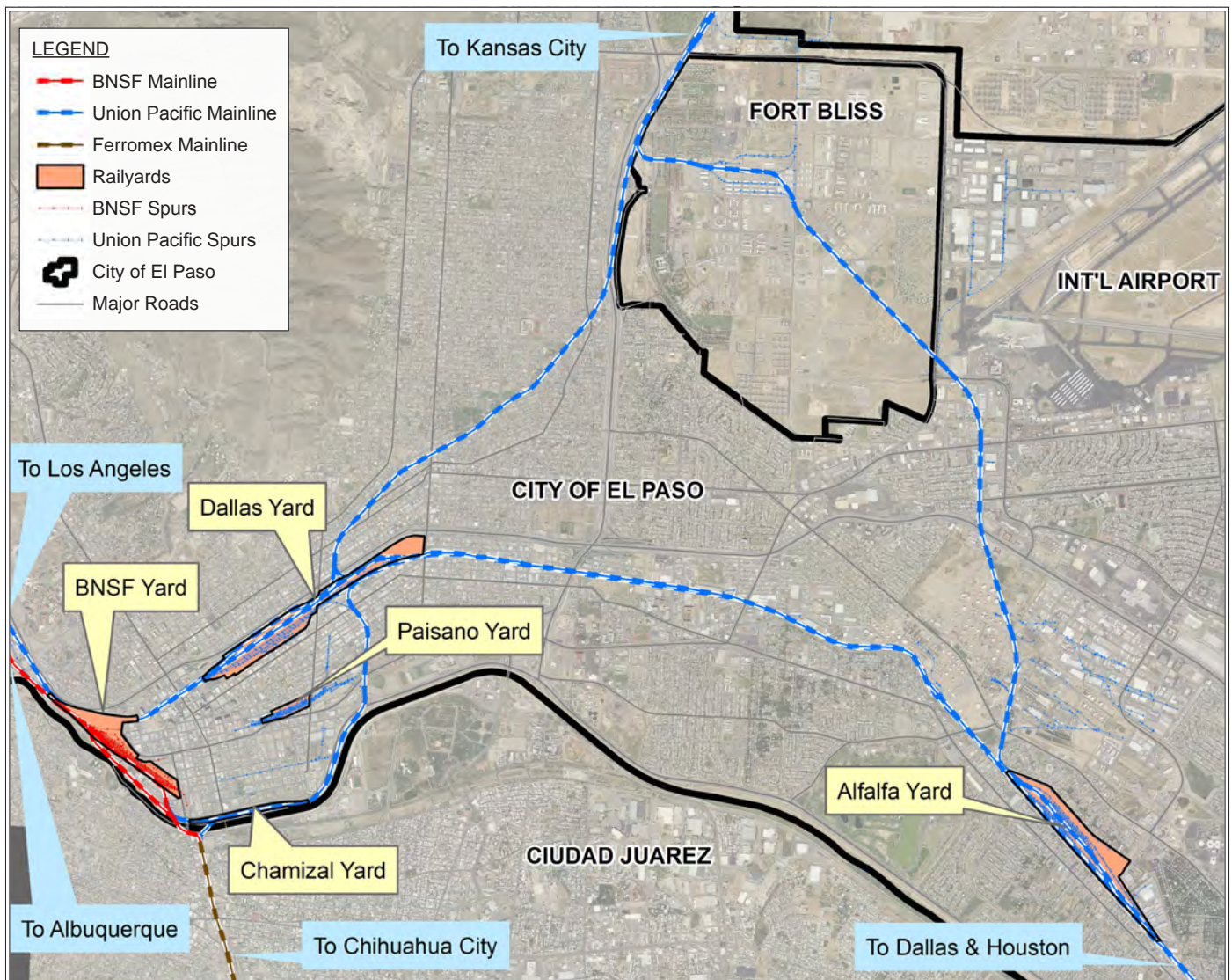
Due to corporate consolidation, three companies provide all rail service to El Paso today: Burlington Northern Santa Fe, Union Pacific, and Ferromex. In 2003, about 13% of the total value of goods transported by rail in the United States passed through El Paso. About half originated in California, much of which is Asian cargo arriving through the Ports of Los Angeles and Long Beach.

Burlington Northern Santa Fe (BNSF) is the second largest railroad in the United States. Its presence in El Paso is limited to a single line that terminates at its railyard in Downtown El Paso. BNSF trains connect in Albuquerque to one of BNSF's three transcontinental lines. Its El Paso terminal serves local customers and interchanges rail cars with Union Pacific and with Ferromex.

Union Pacific (UP) is the largest railroad in the United States and by far the dominant railroad in El Paso, with about 40 trains passing through each day. A fourth of these trains travel to the Midwest via Kansas City; the remainder travel through Texas to and from Dallas or Houston. UP operates four railyards in El Paso.

Ferromex is the largest railroad in Mexico. Its trains currently pass through Juárez into El Paso, where they are transferred just north of the border to either BNSF or UP railyards. Because of conflicts with traffic in downtown Juárez, Ferromex trains can pass through only between midnight and 6:00 AM.

El Paso has sixty-eight at-grade rail crossings, which cause serious traffic delays when long freight trains are passing.



Railroads and Railyards

Passenger Service

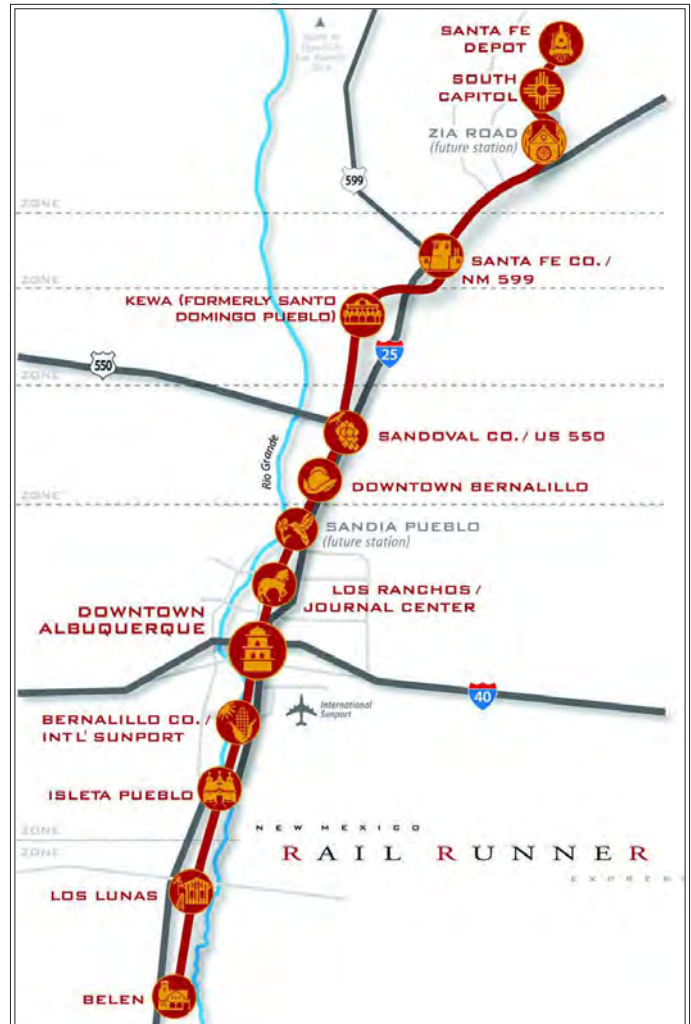
Passenger rail service has been declining for decades. El Paso’s Union Depot, completed in 1905, was once the only international train station in the United States and served as many as 30 passenger trains per day. At present, the only passenger rail service through El Paso runs three times per week along the Union Pacific tracks. The “Sunset Limited” runs between Los Angeles and New Orleans, with connections to Chicago from San Antonio. All Amtrak’s transcontinental services run east-west as shown on the map.

The nearest non-Amtrak passenger service is the New Mexico RailRunner Express, which runs 97 miles from Santa Fe to Albuquerque to Belen. This new diesel-powered service primarily serves commuters traveling to or from Albuquerque or Santa Fe. Much of this route uses rail right-of-way purchased by the State of New Mexico from BNSF, which continues to run freight trains when they won’t interfere with commuter trains. El Paso and Las Cruces have long advocated (and are studying the potential) for similar commuter rail service linking the two cities.

Two potential rail technologies exist to improve passenger service between El Paso and other parts of the southwest -- conventional intercity passenger rail, similar to Amtrak service, and high-speed rail. While the former is more realistic than the latter, the technology is not as important as the policy direction of pursuing all reasonable intercity rail opportunities. A potential focus of new intercity passenger rail service in the currently underserved but important corridor between El Paso, Albuquerque, Santa Fe, and Denver, as described later in this element.



East-West Amtrak Routes



Railrunner Express

AIRPORTS

The El Paso region’s airport system includes the El Paso International Airport, Biggs Army Airfield, Abraham Gonzales International Airport (in Ciudad Juárez), and several small airports (in Horizon, West Texas, Fabens, and Santa Teresa).

El Paso International Airport

El Paso International Airport is located six miles northeast of Downtown El Paso and just south of Fort Bliss. It serves much of west Texas, southern New Mexico, and the northern part of Chihuahua, Mexico. The airport covers 6,800 acres, has four runways, and serves one and a half million commercial passengers per year. It is the country’s seventy-first largest airport by enplanements, and is designated as a small hub by the Federal Aviation Administration.

Passenger enplanements and deplanements have held steady over the past ten years, generally mirroring overall economic conditions. The airport’s terminal and concourses have excess capacity; no significant increases in passenger traffic are foreseen.

Seven airlines offer fifty-nine daily non-stop flights to fourteen airports in twelve cities, including eight of the country’s ten major air hubs. Major destinations include Houston, Dallas, Denver, Phoenix, Las Vegas, Los Angeles, Atlanta, and Chicago. Southwest Airlines accounts for approximately half of all flights and passenger traffic. Passenger traffic itself is only about 40% of total airport operations; other activities include air taxi, military, and general aviation operations.

Transit Service

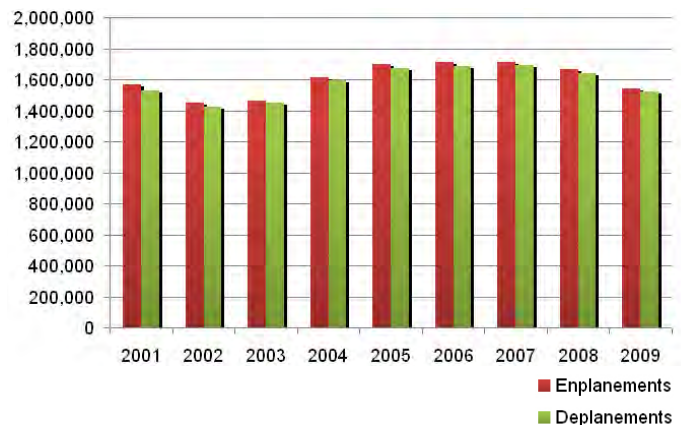
Sun Metro provides transit service to and from the airport via routes 33 and 50.

Other Facilities

In addition to the terminal building and concourses, the airport also has within its 7,000 acres an air cargo facility, Butterfield Trail Golf Club, a foreign trade zone (#68), and three major industrial parks.

The airport offers air cargo services at the Butterfield Trail Air Cargo Center, accommodating DB Schenker, DHL, FedEx, and United Parcel Services. The cargo center has easy access to U.S. Highway 54, Interstate 10, and Mexico via Loop 375.

The airport is also home to the International Trade Processing Center, the first one-stop international trade hub of its kind on the U.S./Mexico Border. The facility has the capability to meet demand forecasts for at least the next ten years.



El Paso International Airport Passengers (2001 - 2009)
Source: El Paso International Airport Data

Growth and Redevelopment

The airport is currently targeting two areas of airport property for significant growth or redevelopment:

- 1. Global Reach Science and Technology Park:** This area is over a thousand acres east of Global Reach Drive and north of Montana Avenue and bordered by Fort Bliss on the east. New development is targeted to complement existing industrial development and nearby cargo facilities with new industrial capacity and commercial/retail uses, in part to serve the Fort Bliss expansion. This area could also include a new lease-based retiree residential community around the Butterfield Trail Golf Club and potentially a new hospital, community college branch and resort hotel. Access and connectivity issues are very important because this tract is undeveloped, separate from the existing urban fabric, and is currently accessible only by access-limited highways. The airport has already obtained rezoning for this tract using the El Paso SmartCode. This tract is identified as suitable for urban expansion (O-7 sector) on the Future Land Use Map.
- 2. “Gateway Area.”** The Montana RTS corridor and the terminal’s “gateway” location at Montana Avenue and Airway Boulevard provide strategic redevelopment and transit-oriented development (TOD) opportunities. Over time, the airport desires to re-locate the existing car rental facility, demolish the Cargo I building, create a new access road for truck traffic, and implement a TOD in phases around the Montana RTS airport station. A pedestrian-friendly concept for the airport gateway is presented in the Urban Design Element.

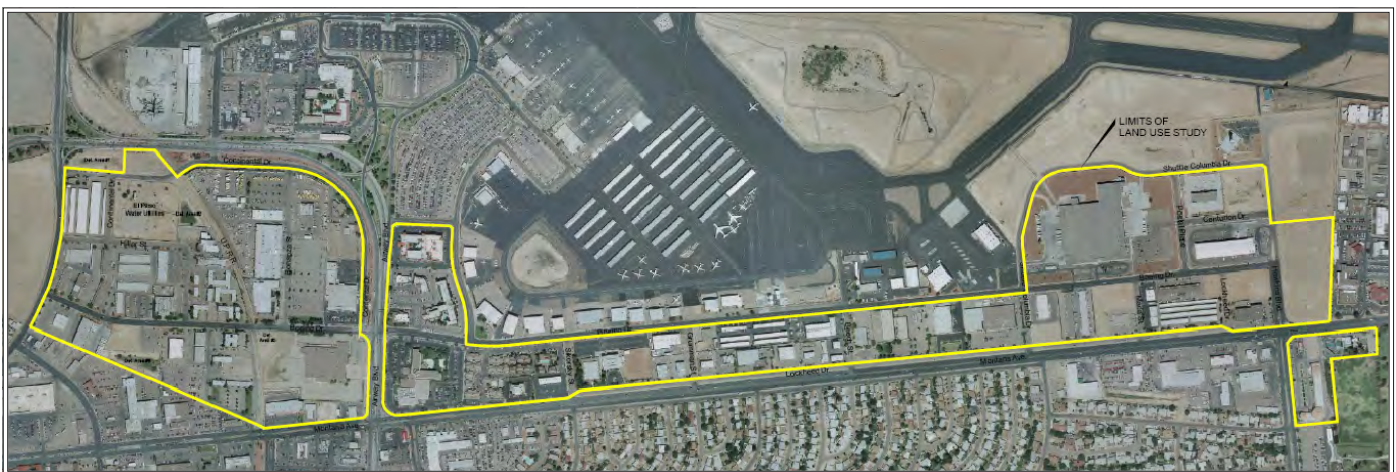
Current Conditions

Access and connectivity to and from the airport terminal and adjacent areas are also critical; Airway Boulevard provides the only direct terminal and parking access. Accordingly, traffic funnels onto Airway Boulevard, there are currently over 40,000 vehicles each day on both Airway and on Montana at Airway. Airport Road does provide secondary access to Airway Boulevard, with 35,000 daily vehicles on Airport Road just north of Airway.

2. Without increased connectivity and access – perhaps even with it – design opportunities are very constrained for Montana and Airway. These roads are wide and not conducive to a pedestrian-friendly environment; they carry so much traffic in a limited right-of-way that alternative road designs may not be feasible.
3. Because of this situation, it becomes even more important that redevelopment and TOD integrate fully and seamlessly with RTS and other future transit investment to maximize transportation linkages without harming mobility.

These proposals have important implications for future redevelopment:

- I. Increased transportation network connectivity and airport access is needed. For example, there may be a possibility to create a new north/south connection between the terminal loop access road and Montana Avenue east of Airway Boulevard.



El Paso International Airport 2008 Land Use Plan Study Area



El Paso International Airport 2008 Proposed Land Use Map

Airport Improvements

The airport has recently completed several upgrades to improve passenger and freight service, including:

- The complete reconstruction of approximately 8,900 linear feet of Taxiway “J” and “M” pavement in 2009.
- Renovation of the U.S. Customs and Border Protection General Aviation Facility in 2009.
- Terminal renovation and a 20,000 square-foot expansion to improve customer service in 2009.
- The extension of Runway 8R-26-L.
- Landscaping of Global Reach Drive and Cottonwoods Drive.
- Infrastructure development for the Global Reach Science and Technology Park

The City’s 1999 *Plan for El Paso* focused on improving access to and from the international airport and Biggs Airfield (especially to and from the adjacent Butterfield Industrial Park), ensuring compatible adjacent land uses, and developing intermodal infrastructure.

El Paso International Airport Master Plan

The City’s 2005 *Airport Master Plan Update* set out to accomplish several goals:

- Ensure that the region’s future demand for aviation activity can be accommodated.
- Develop a plan for long-term expansion of the terminal.
- Provide strategies to ensure accessibility to/from the airport.
- Maximize the airport’s potential as a generator of regional economic activity.

Alternatives were developed under four key areas – airfield development, terminal development, land side development and aviation support development – to create an overall Airport Development Plan (ADP). The ADP includes three phases for implementation over time.

Airport Land Use Plan

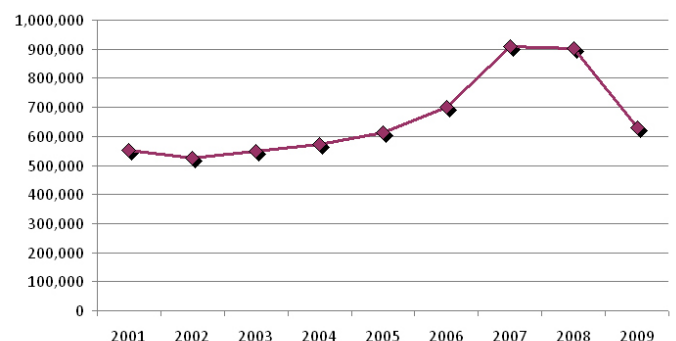
In 2008, El Paso International Airport developed a land use plan for the non-aviation airport property in the study area.

The Plan is designed to guide future development and redevelopment in the study area and inform land-use-related decision-making. As shown in the recommended Plan, all land uses will be non-residential in nature. Hotel and restaurant uses will be concentrated at the intersection of Airway Boulevard and Montana Avenue to take advantage of the area’s high traffic and visibility. An internal, pedestrian-oriented area is planned between Boeing and Continental Drive, with secondary retail near Montana and Hawkins. Industrial uses would be concentrated on the current U.S. Postal Service tract.

Abraham Gonzalez International Airport

Abraham Gonzalez International Airport is located in the southeastern section of Ciudad Juárez. The airport served over 630,000 passengers in 2009 with four airlines providing service to seven major destinations in Mexico: Mexico City, Chihuahua, Guadalajara, Tijuana, Monterrey, Hermosillo, and Torreon. The airport also offers cargo services.

This airport is operated by OMA, a private company that operates the airport as a concessionaire. It is Mexico’s sixteenth largest airport. Unlike its northern neighbor, Abraham Gonzalez International Airport’s traffic has fluctuated more significantly over the past ten years. A steady increase through 2007 has now declined significantly, likely reflecting economic conditions and the City’s continuing violence and instability.



Abraham Gonzalez International Airport Passengers (2001 - 2009)

PORTS OF ENTRY

El Paso has within its city limits four international border ports of entry with Ciudad Juárez, Mexico, in addition to the El Paso International Airport. There are also nearby ports of entry in Tornillo, Texas, and Santa Teresa, New Mexico. Bridge ports of entry within El Paso are:

1. Bridge of the Americas – Bridge of the Americas is located at the Border Highway (375) just west of US 54. This crossing includes four separate bridges: two two-lane bridges for commercial trucks and two four-lane bridges for passenger vehicles. The crossing also includes sidewalks for pedestrians. Reconstruction of all four bridges at this crossing was completed in 1998. It is the only toll-free bridge connecting El Paso and Juárez.

2. Zaragoza Bridge – The Zaragoza Bridge was originally built in 1938 as part of the U.S. – Mexico River Rectification Project, then rebuilt in 1955 and 1990. This crossing consists of two separate bridges – a four-lane bridge dedicated to commercial vehicles and a four-lane bridge for passenger vehicles. The second crossing also has sidewalks joining an elevated pedestrian bridge.

3. Santa Fe Street Bridge (Paso del Norte Bridge) – The Santa Fe Street Bridge is a four-lane facility used only for northbound, noncommercial passenger vehicles. It was rebuilt in 1967 as part of the Chamizal Treaty. Many pedestrians use this bridge to access bus stations near the port of entry.

4. Stanton Street Bridge – Also known as the Good Neighbor Bridge, this five-lane facility is dedicated solely to noncommercial traffic. Four lanes are dedicated to southbound traffic, with a fifth northbound commuter lane reserved for frequent border crossers who have passed a background check and inspection.

The Immigration and Customs Enforcement, the Drug Enforcement Administration, and the Customs and Border Protection Agency all operate in El Paso to regulate traffic and goods through the ports of entry.

Fewer people and vehicles crossed the border with Juárez in 2010 than in previous years. Overall economic conditions, shifting populations, U.S. State Department travel advisories, and general safety concerns contributed to this decline. An estimated 100,000 to 250,000 Juárez residents are reported to have moved to El Paso, other U.S. regions, Mexico's interior, or another country in 2010.

Although overall border crossings were down, changes in the number of vehicles and pedestrians varied considerably by port. The number of northbound vehicles at the Bridge of the Americas and Santa Fe Street Bridge fell by 50% and 41%, respectively, between December 2006 and 2010. At the Stanton Street

Bridge, southbound vehicle and pedestrian crossings decreased 16% and 25%, respectively, between April 2009 and 2010, while the City reported a 7% increase in southbound pedestrian traffic at the Santa Fe Street Bridge (data is from the City of El Paso and the Customs and Border Protection Agency).

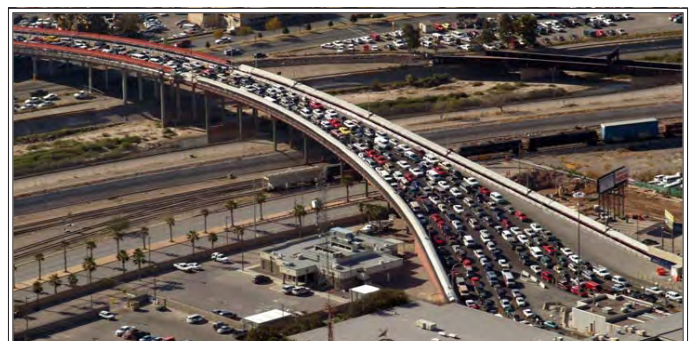
Current Planning Efforts

The City of El Paso and Texas Department of Transportation (TxDOT) are currently developing the *El Paso Regional Ports of Entry Operations Plan*. A study evaluating the potential need for a new border crossing within the El Paso City limits was proposed and then suspended in the spring of 2010. The current plan is focused on how to best utilize existing border crossings in the El Paso-Juárez metropolitan area to facilitate international travel and trade. Additional goals of the study include:

- Reducing border crossing wait times and air pollution.
- Facilitating opportunities for cross-border commerce and tourism.
- Enhancing economic development near border crossings.
- Understanding how the traffic associated with border crossings affects adjacent communities.

This planning process included the following components:

- An inventory, assessment, and valuation of transportation infrastructure and the functionality of existing ports of entry.
- Development of a model to simulate potential effects of alternatives on traffic operations. Alternatives focused on operational improvement strategies such as special lanes, congestion pricing and altered traffic flow configurations.
- A public process component including public polling, focus groups, and an issues forums to guide the development and testing of alternatives, targeting local businesses, neighborhoods, manufacturers, and shipping interests.
- Screening and evaluation of alternatives.



Santa Fe Street Bridge

COMMUNITY CONCERNS

Local residents and stakeholders provided numerous comments and input on transportation-related topics while *Plan El Paso* was being prepared. All comments and input were analyzed to develop the following community-based major concerns and priorities.

Expand Transportation Choices & Options

The over-arching transportation theme connecting almost all input was to expand and increase personal mobility choices and options. Residents and stakeholders emphasized the desire to have greater access to convenient and safe walking, bicycling, and transit opportunities. Many residents grew up in El Paso walking and riding bicycles and noted that this is no longer true. Instead, almost everyone must drive (usually alone) for most trips, at great distance and expense. Driving will continue to be important but residents wanted to be able to choose how they travel in the future.

Invest in Transit

A specific element of expanding travel choices is broad support for investing both near-term and long-term in public transportation and high-capacity transit (RTS and rail). Sun Metro's ongoing investment in its local bus service, attractive regional transfer centers, and especially RTS service were strongly supported for increasing personal mobility and for their revitalization potential along key corridors. Many Mission Valley residents and stakeholders are excited at the new Mission Valley Transfer Center and the potential for revitalization of the Alameda corridor.

Residents similarly emphasized longer-term investment in streetcars, light rail, and commuter rail to connect and integrate El Paso and its adjacent cities and communities. Many spoke passionately about the lack of travel choices, the frustration of having to drive everywhere, worsening congestion, and the need to be visionary in working long-term towards a regional (and perhaps bi-national) rail system. El Paso and Las Cruces have long advocated for a commuter rail line linking the two cities, similar to New Mexico's Rail Runner connecting Albuquerque and Santa Fe. A potential light rail transit (LRT) network was frequently mentioned by the community to connect the various quadrants of the City together as well as surrounding communities. Many comments suggested converting existing rail track for LRT use, or perhaps to transition the RTS to LRT long-term.

Expand Safe Walking & Bicycling Environments

As with transit, residents strongly supported expanded walking and bicycling for both utilitarian and recreational use. Non-motorized transportation is highly valued in El Paso, whether for kids walking to school, safe walking and bicycling on major arterials, access to transit, or hiking along arroyos. Residents indicated a sense of missed or lost opportunity in terms of the region's culture, identity, and history towards walking and bicycling, with these activities having become less common and possible over time. Many residents advocated, often passionately, for more walkable streets and communities and for El Paso to become more pedestrian-friendly overall to take advantage of the exceptional climate and natural beauty. Residents and stakeholders recognized that safe, convenient, and attractive walking (and bicycling) environments are also key to successful transit, as most transit passengers are "pedestrians on buses."

Create Safe & Complete Streets

Most of El Paso's major arterials are designed only for high-speed vehicular traffic. Walking, bicycling, or using transit are often unsafe or even impossible. Residents advocated for streets and highways that included all of these travel modes. Specific investments suggested include crosswalks, more and wider sidewalks, and "share the road" signage, especially along major arterials like Montana, Zaragoza, and Alameda. Residents and stakeholders challenged the idea of streets as only pass-through corridors for maximum high-speed vehicle throughput. Instead, the community focused on neighborhoods, place-making, safety, personal mobility, and the potential for streets to add value to their surroundings rather than as a means to more quickly get somewhere else.

Revitalize Major Corridors, Especially Alameda

It is already the City's priority to leverage RTS investment within the system's four major corridors – Alameda, Mesa, Dyer, and Montana – to promote transit-oriented development and street design along each corridor over time. These efforts in turn are focused on locally-appropriate economic development, neighborhood revitalization, community character, and increased transit access. Residents endorsed enhancing the look and function of these corridors to become more multimodal, safe, and accessible. However, the community connects with these corridors on a deeper level, particularly Alameda, viewing them as community main streets that once were and should again be vibrant anchors of community life. Residents spoke of these corridors as unique places that reflect community identity and character. The new Mission Valley Transfer Center exemplifies this concept of community identity and place-making with its architecture and location in Mission Valley's historic core.

Address Congestion & Traffic Flow

Both residents and stakeholders wrestled with balancing multimodal street design and investment with significant traffic volume and congestion, particularly the complicated issue of how many and how wide major streets and roads should be. Some advocated for wider streets and more roads, particularly alternatives to Interstate 10, in order to “keep up with growth.” This view acknowledges that, when trip origins and destinations (homes and jobs) are located far apart, driving is the only option. More drivers traveling more often over longer distances exacerbate congestion, especially when traffic is funneled to a limited network of major streets. In contrast, others argued passionately to reclaim streets for all modes of travel, to minimize their noise and pollution effects on surrounding neighborhoods, and for greater street connectivity – fewer culs-de-sac at the local level and alternatives to Interstate 10 at the regional level – to provide more options.

Another important element of this issue is how to address difficult intersections – those with both high traffic and complicated geometry. Several Zaragoza Road intersections were cited as examples. These included, Rojas, Pebble Hills, and at Montwood/Loop 375, as well as the Paisano/Alameda interchange and Paisano at Montana. Roundabouts and alternate routes were frequently mentioned as potential solutions.

Make Reinvestment & Smart Growth the Priority

Residents expressed frustration that El Paso’s growth continues sprawling outward at the fringes while many developed areas are vacant, underused, or otherwise exhibit disinvestment. Residents want growth to “stop sprawling,” and, as one resident noted, “Outward expansion has no connection to the existing community.” Instead, revitalizing Downtown, investing in and redeveloping major corridors, and addressing vacant houses in existing neighborhoods should take priority over new fringe growth. Similarly, residents prioritized a “fix it first” strategy of repairing and maintaining streets in existing neighborhoods and developed areas before expanding into new areas. Finally, the community felt strongly that new growth should incorporate adequate facilities, infrastructure, and water resources to mitigate its effects. In other words, new growth should “pay for itself” as much as feasible and minimize new effects on the existing community.

Invest in the Airport Area as a Major Gateway

The El Paso International Airport is a major gateway to El Paso as well as being adjacent to Fort Bliss, Montana Avenue, and other regional destinations. Like most airport districts in the country, the area surrounding El Paso’s airport is an uncoordinated assortment of parking lots, hotels, commercial strips, and industry. Both residents and stakeholders prioritized transforming this area into a redeveloped, revitalized, and attractive regional gateway, particularly with the Montana RTS line to begin service in 2016. Airport and City officials have already begun developing plans to redevelop areas west, south, and east of the terminal.

Recognize El Paso’s Auto Orientation

Residents and members of *Plan El Paso’s* Comprehensive Plan Advisory Committee noted that the City must be selective in its retrofit of streets for multiple modes and increased pedestrianism especially when such changes reduce the level of service and thus the speed and efficiency of streets to handle automobile traffic. El Pasoans do not want to see the time of commutes lengthened or the transport of goods slowed. Any priority shifts involving systems people rely on should be done incrementally, after much study of effects, and with great restraint.

STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS

BETTER LAND USE AS A TRANSPORTATION STRATEGY

Like most North American cities, El Paso has historically addressed traffic congestion primarily by widening existing and building new thoroughfares, including streets, roads, highways, and freeways. This is a “supply-side” approach of providing as much traffic capacity as possible, hoping to solve current congestion and to offset expected congestion before it occurs.

This approach does not attempt to address the demand for travel, nor the factors influencing such demand: travel mode and trip distance, frequency, and duration. Widely spaced single-use development patterns require excessive thoroughfare construction because the distance between origins and destinations (such as home and work) is too far to walk or bicycle and transit service is difficult to provide. These development patterns force driving, and lots of it, as the only viable travel option.

In contrast, vibrant mixed-use communities such as El Paso’s older neighborhoods encourage transportation choices that expand personal and regional travel opportunities. El Paso now has the powerful and exciting opportunity to improve its more recent land-use patterns in a way that also improves its transportation system.

Urban places with greater safety, capacity, and economic viability require pedestrians, bicycles, and public transit as part of the mobility mix. Patterns for future development have been specified first, early in this comprehensive planning process, so that transportation plans for balanced mobility could then be crafted, giving walkability a renewed focus.

Thoroughfares designed for greater walkability usually yield only small reductions in vehicle capacity, although top vehicle speeds may be lower. Providing a finer network of thoroughfares actually relieves peak-hour congestion for drivers because a traffic crash or traffic signal failure won’t block the only available route.

The core elements of better land use – location, compactness, mix (diversity), and design (character) – significantly affect the amount, mode, and distance of travel. Research demonstrates that smart growth development, also known as traditional neighborhood design, can reduce motor vehicle trips by 20% to 40%. This is accomplished through a mix of strategies:

- *Shorter Trips:* Many trips in mixed-use neighborhoods occur entirely within the neighborhood and never require use of the external road network. Live/work units, walking to the corner store, or even driving to a local restaurant or school are all examples of more compact travel.

- *Transit Service:* Frequent and convenient transit service reduces vehicular trips. Local non-RTS service can confer this benefit if it has frequent (every 10-20 minutes) convenient service. New neighborhoods that don’t have direct RTS service will still benefit from good local transit service and other trip-reduction strategies.
- *Walking/Bicycling:* Traditional town planning facilitates safe and convenient walking and bicycling. People will walk or bike when thoroughfares are designed for their comfort and safety. Much of the trip reduction attributable to traditional neighborhoods, old or new, is due to increased walking and bicycling within the neighborhood and beyond.
- *Street Connectivity:* Traditional development patterns provide a fine-grained network of interconnected streets. Connectivity has a critical bearing on trip distribution, and pedestrians are much more comfortable in finer networks that provide multiple paths for efficient and interesting walking.

How El Paso grows over time will shape, if not dictate, how its residents will travel. Much of El Paso’s recent growth has been occurring on the far east side, increasingly at its edges. This growth has been characterized by single-use suburban development that places additional strain on El Paso’s urban services and infrastructure, especially its thoroughfares. The region’s primary transportation investments have been in new and wider streets, roads, freeways, and intersections.

A hidden cost of this investment is thoroughfare and bridge maintenance. New facilities must be maintained over time, in addition to existing ones, leading to difficult outcomes for the City and other transportation providers such as El Paso County and TxDOT:

- Keeping up with life-cycle maintenance costs is very difficult because maintenance backlogs grow as new capacity is added to the road network.
- Existing infrastructure, whose construction has already long since been paid for, can become underused as growth shifts outward – yet roads must still be maintained.

The result is a constantly worsening cycle of trying to keep up with new growth at the edges while maintaining what has already been built, with the unfortunate reality that the City can never completely do both.

The following transportation strategies and policies provide the City of El Paso with a roadmap to improving the quality of life through diversified transportation options.

THE HIERARCHY: ARTERIALS / COLLECTORS / LOCALS

The physical layout of modern America is overwhelmingly influenced by its transportation system, yet little thought was given to the layout that would result when today’s thoroughfare design standards were being established.

For instance, highways designated as “arterials” change little as they approach developed areas. In transportation engineering terms, the surrounding context changes, but thoroughfare designs change very little. Speeds generally drop from 55 to 45/35 mph, but on-street parking is rarely allowed in emerging areas and is often removed from older areas. In recent decades, arterial streets are excluding most intersections with side streets, leading to longer block sizes (600 to 1,000 feet and longer) and higher speeds, which both cause difficulties for pedestrians. Without context-sensitive designs, roads can overwhelm the communities they should be designed to serve.

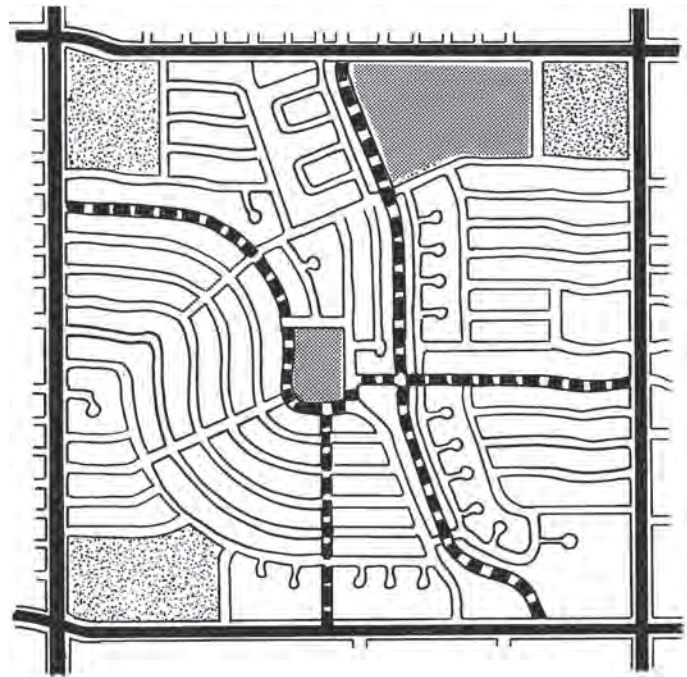
The “arterial” term appeared in 1919 in the “American Highway Engineers’ Handbook.” The arterial function described there clearly anticipated that 60-foot-wide commercial streets would be more successful than those 80 or 100 feet wide. The early planners never intended arterial streets to have “access to adjoining land” limited by future design manuals. As recently as 1990, the diagram to the right showed traditional arterials that were well-connected to the local street network. The early planners observed that finer-grained street networks are better for serving urban peak travel demand, with multiple streets serving varying means of travel.

Arterials, Collectors and Local Streets

Conventional traffic engineering assigns all thoroughfares into a “functional classification” hierarchy that defines a thoroughfare’s role in the overall network. This hierarchy is based on the desired operation of the thoroughfare, which then governs certain design criteria such as design speed, travel lane width, and amount of access from adjoining land.

El Paso’s post-WW II transportation network is comprised mostly of these three types, as defined in *A Policy on the Geometric Design of Highways and Streets* (the “Green Book” by AASHTO, 2004):

- **Arterials** are intended to provide the highest level of service at suburban speeds for the longest uninterrupted distance with some degree of access control. Arterials, therefore, provide higher levels of vehicle mobility and lower levels of land access.
- **Collectors** provide a less highly developed level of service at a lower speed for shorter distances than arterials, by collecting traffic from local roads and connecting them with arterials. Collectors specifically balance vehicle mobility and land access.



Classic “Green Book” Illustration of Functional Classification Hierarchy

LEGEND

- Arterial
- - Collector
- Local Road

- **Local roads** primarily provide access to land, with little or no through movement.

“Urban” and “Rural” Area Types

To supplement this functional classification system, there are two “area types” where thoroughfares are expected to have fundamentally different characteristics: Urban and Rural.

Urban areas are defined in Federal-aid highway law to mean urbanized areas as designated by the Census Bureau. Rural areas comprise everything outside the boundaries of urban areas.

The Urban/Rural distinction is essential for designing thoroughfares, yet it suffers from a fundamental oversight. The Census Bureau’s “Urban” designation is simply so broad that it encompasses vastly different types of land development – different physical contexts that must be respected when thoroughfares are designed or redesigned.

In the same manner that the Urban/Rural distinction is critical, *Plan El Paso* establishes a distinction between two distinct types of urban areas, described below as “Compact Urban” and “Driveable Suburban.”

COMPACT URBAN. DRIVABLE SUBURBAN

Augmenting the Functional Classification System

The following assumptions are implicit in the conventional automobile-dependent functional classification system:

- Meaningful trips are made by car or truck.
- Pedestrian travel and bicycling are inconsequential.
- The only “area types” that matter are Urban and Rural.
- Urban means Suburban.
- Vehicular speed is important; physical context is not.

To remedy these shortcomings, the functional classification system is being augmented in *Plan El Paso* by designating a third “area type” which will be called “Compact Urban” – to distinguish it from the remainder of the urban area which will now be called “Drivable Suburban.” The Rural area type will remain unchanged.

This new “area type” designation will implement the land-use vision in *Plan El Paso*, which is presented spatially on the Future Land Use Map in the Regional Land Use Patterns Element.

In Compact Urban areas, multimodal transportation design will become the norm. Character and function will be more important than capacity; the street network will be sized to yield smaller blocks with greater “people moving” capacity.

Three groups of neighborhoods are being assigned as “Compact Urban,” based on designations from the Future Land Use Map:

• **Existing Walkable Neighborhoods**

The first group includes neighborhoods where the original development pattern was laid out in eras when walking was commonplace or during the streetcar era when public transit was more common than private automobiles. These neighborhoods are designated as G-1 “Downtown” and G-2 “Traditional Neighborhood” on the Future Land Use Map. These areas are well-suited for continued evolution with a mix of uses and transportation options. Some of these locations are expected to redevelop because their

existing walkable neighborhoods have already attracted residents who are comfortable with walking and transit. Others have become economically depressed and need re-investment to thrive.

• **Planned walkable communities**

The City of El Paso owns large tracts of developable land that are within the city limits and are being master-planned for potential urban expansion using Smart Growth principles. One tract adjoins the El Paso International Airport and two others are on land managed by the Public Service Board on opposite sides of the Franklin Mountains. Although development is not imminent on these tracts, they are situated and being planned for urban expansion during the next 20 years. They should be served with walkable streets to match the planned character of the development. These tracts are designated as O-7 “Urban Expansion” on the Future Land Use Map.

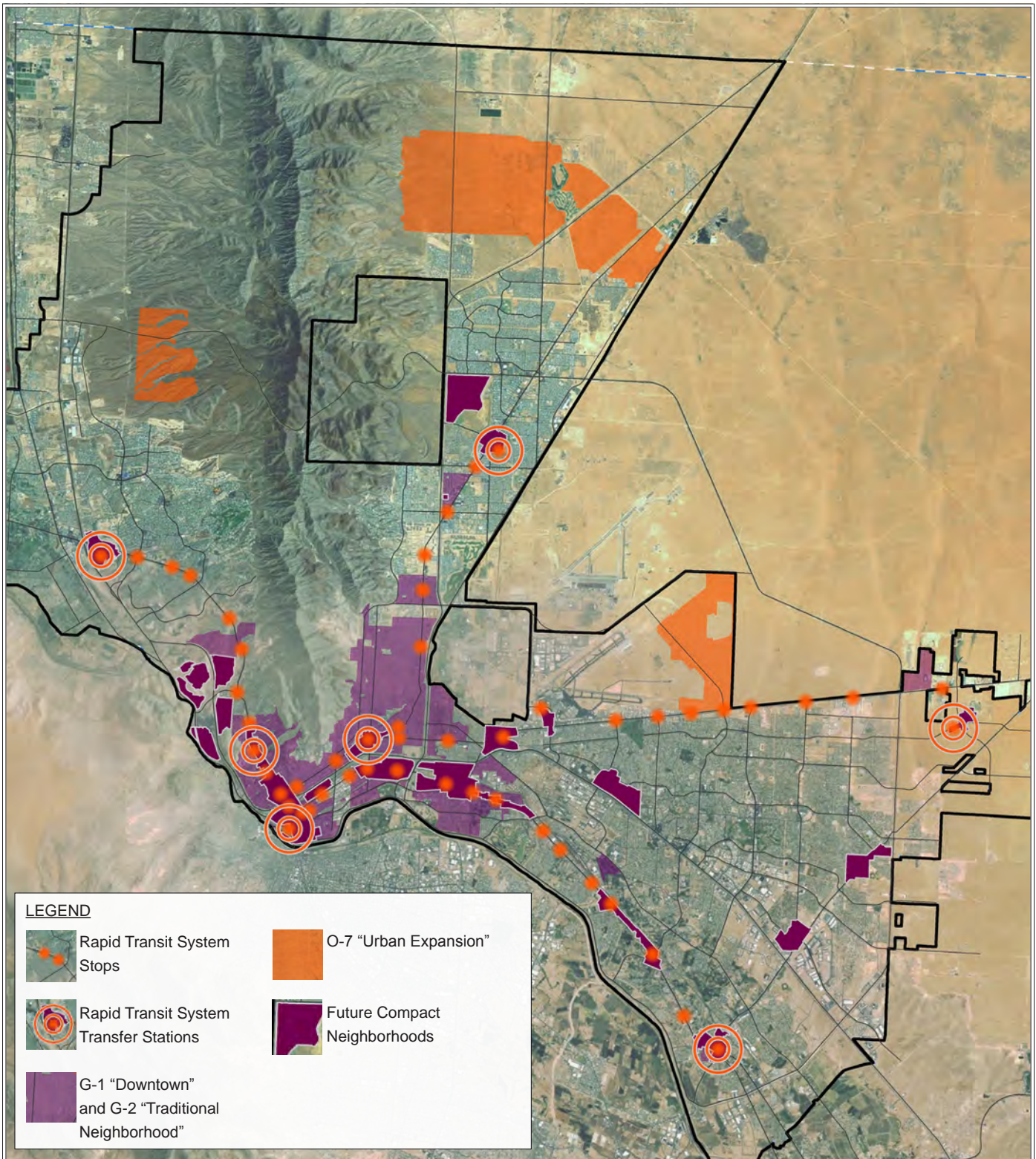
• **Future redeveloped and infill neighborhoods**

Plan El Paso has identified numerous other areas in El Paso with strong potential for infill development and for redevelopment, including land near RTS stops and Sun Metro transfer stations. Other elements of *Plan El Paso* provide conceptual physical designs for many of these areas. They are identified as overlays on the Future Land Use Map: “Local Transfer Centers,” “RTS Stops,” and “Future Compact Neighborhoods.”

The table below correlates the Future Land Use Map designations to the augmented “area types” that will now be used for transportation planning.

The map on the following page identifies all the areas that are included in the new “Compact Urban” area type.

		Area Types		
		Compact Urban	Drivable Suburban	Rural
Future Land Use Map	G-1 – Downtown		G-3 – Post-War	O-1 – Preserve
	G-2 – Traditional Neighborhood		G-4 – Suburban	O-2 – Natural
	O-7 – Urban Expansion			O-3 – Agriculture
	Local Transfer Centers (overlay)			O-4 – Military Reserve
	RTS Stops (overlay)			O-5 – Remote
	Future Compact Neighborhood (overlay)			O-6 – Potential Annexation



Excerpt from Future Land Use Map highlighting Compact Urban Areas

Plan El Paso's designation of Compact Urban areas should greatly facilitate communication between the City, TxDOT, and the Federal Highway Administration by officially designating areas where walkable urban thoroughfares should be constructed. Many past debates about thoroughfare design details such as lane widths and curb radii will be resolved by this delineation of Compact Urban areas.

Drivable Suburban

Other sectors of El Paso that are now classified as Urban will likely remain more suburban in nature, maintaining a predominately automobile-dependent development pattern. These sectors are designated on the Future Land Use Map as G-3 "Post-War" and G-4 "Suburban."

In concert with established FHWA policy on encouraging walking and biking, TxDOT currently designs arterials in urban areas with sidewalks and bike lanes. TxDOT policies toward complete streets and implementation of sidewalks and bike lanes should continue to be applied, making walking and biking more comfortable and convenient. Additional walkable elements in Drivable Suburban areas would include:

- Target speed of 30-35 mph.
- Narrowing of travel lane widths to 11 feet.
- Introduction of the safety strip/flush median.
- Widened, tree-lined sidewalks.

Some streetside features, such as widened sidewalks and street trees, may require easements from property owners who witness the redevelopment occurring in other parts of the City and see the benefits of more pedestrian and transit traffic.

Areas assigned to the "Drivable Suburban" area type need not remain that way. Citizens and City officials can use the following guidelines to analyze these neighborhoods for potential conversion to Compact Urban:

- Do they have an intersection/network density of more than 150 intersections per square mile?
- Do they have a mix of uses, or a likelihood of obtaining a mix of uses in the future?
- Is there a neighborhood or community plan with a vision for increased walking and bicycling?

Positive answers to these questions would help identify Compact Urban areas that have not already been so identified in *Plan El Paso*.

Factors that Support Walkability

There are specific factors that contribute to an excellent pedestrian experience in cities. Careful observations of human behavior have identified the following characteristics:

- Narrow streets
- Street trees
- Less traffic
- Sidewalks
- Interconnected streets
- On-street parking
- Lower traffic speeds
- A variety of land uses
- Buildings near the street
- Small blocks

When a majority of these factors are combined in one location, people happily become pedestrians.

A starred walkability rating system can describe the degree to which these characteristics need to be applied to achieve walkable streets:

- ★ (one star) – The fewest walkable factors tend to be found in the most suburban places.
- ★★ (two stars) – Transportation-only factors can be added to achieve some walkability even in a drivable setting.
- ★★★ (three stars) – A moderate number of these factors will create an oasis of walkability even in a drivable setting.
- ★★★★ (four stars) – When many of these factors are present, a very favorable pedestrian environment has been provided.
- ★★★★★ (five stars) – When all of these factors are present, an ideal pedestrian environment has been provided. Local residents and tourists are drawn to these areas. Land values are at their highest.

One- or two-star walkability requires the fewest factors to support minimal walkability. These factors can take place within the public right-of-way and are "transportation-only" solutions. They result in a "D," "E," or "F" score (basic walkability, minimal walkability, and hazardous for walking, respectively) on the Walkability Index described earlier in this element.

Three- to five-star walkability requires a sophisticated application of land-use and transportation planning to encourage the highest degrees of walkability. These factors affect the built environment inside and outside of the public right-of-way. They result in an "A," "B," or "C" score (moderately, very, and highly walkable, respectively) on the Walkability Index.

DESIGNING WALKABLE URBAN STREETS

Context Sensitive Solutions

Despite extensive popular support, new walkable streets have been the exception rather than the norm even in El Paso’s Compact Urban areas. A major stumbling block has been the conflicting design guidance from transportation agencies at the federal, state, and local levels. These agencies have previously been charged with designing roads primarily for higher speed vehicular traffic.

In recent years, a new paradigm has emerged that insists that road designs respond to both the road’s intended function and its surrounding physical context, referred to as “context sensitive solutions” (CSS). A milestone was the 2010 publication of the Institute of Transportation Engineer’s Recommended Practice, *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach* (ITE Practice).

TxDOT has adopted the ITE Practice as accepted thoroughfare design guidance for the state and it has been added to TxDOT’s Project Development Process Manual. The City of El Paso adopted the ITE Practice in May 2011 as a guideline for designing and redesigning new and existing thoroughfares.

The ITE Practice uses “context zones” as a primary consideration in selecting road design parameters. Context zones help refine the overly simple “Urban” and “Rural” area types discussed earlier; context zones describe the physical form and characteristic of a place, interpreted on a block-by-block basis for thoroughfare design.

The techniques in the ITE Practice can be applied where community objectives support new urbanism and smart growth: walkable, connected neighborhoods, mixed land uses, and easy access for pedestrians and bicyclists. For El Paso, these are the same areas that are now being identified as “Compact Urban.”

ITE’s context zones can be summarized as follows:

Urban Core Context Zone (C-6):

- Highest-intensity areas in the region.
- Attached buildings create a sense of enclosure
- Buildings placed at front property line.
- Best transit service and sidewalks in the region.

Urban Center Context Zone (C-5):

- Housing mixed with stores, workplaces, civic activities.
- Mostly attached buildings.
- Buildings placed at front property line.
- Good transit service; pedestrians are comfortable.

General Urban Context Zone (C-4):

- Mix of housing types; some commercial & civic activities.
- Mostly detached buildings.
- Buildings placed fairly close to front property line.
- Moderate transit service; pedestrians are comfortable.

Suburban Context Zone (C-3):

- Single-family homes with occasional shopping centers
- Nearly all buildings are detached.
- Varying front and side setbacks.
- Limited transit service; pedestrians are infrequent.

For a clearer understanding of differing terminology, the table below compares the augmented functional classification area types, the designations on El Paso’s Future Land Use Map, and ITE’s context zones. ITE context zones have not been mapped in El Paso, so the Future Land Use Map designations listed below will be used when applying the ITE Practice in El Paso.

		Area Types		
		Compact Urban	Drivable Suburban	Rural
Future Land Use Map	G-1 – Downtown	G-3 – Post-War G-4 – Suburban		O-1 – Preserve
	G-2 – Traditional Neighborhood			O-2 – Natural
O-7 – Urban Expansion	O-3 – Agriculture			
Local Transfer Centers (overlay)	O-4 – Military Reserve			
RTS Stops (overlay)	O-5 – Remote			
Future Compact Neighborhood (overlay)	O-6 – Potential Annexation			
ITE Context Zones	C-6 – Urban Core	C-3 – Suburban		– N/A –
	C-5 – Urban Center			
	C-4 – General Urban			
	C-3 – Suburban			

Designing Urban Thoroughfares

The City of El Paso currently has several sets of adopted thoroughfare design standards:

- *Design Standards for Construction* (DSC), which is referenced in Title 19 (the City’s subdivision regulations). The DSC manual contains conventional suburban cross-sections and some walkable cross-sections. (In 2011 the City Council directed that the DSC be revised to include the ITE Practice standards.)
- *Thoroughfare Assemblies* (part of SmartCode), which are in Title 21 of the City’s land development regulations.
- *Design Parameters for Walkable Urban Thoroughfares*, which are contained in the ITE Practice.

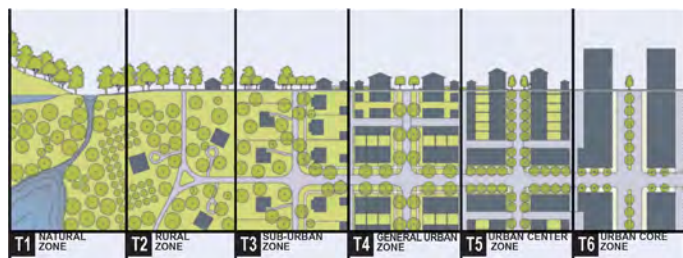
In Compact Urban areas, the ITE Practice’s design parameters for walkable urban thoroughfares can be applied, as can the thoroughfare assemblies in the El Paso SmartCode. Both are intended for both automobile and pedestrian efficiency, with narrower lane widths, lower target speeds, on-street parking, and shorter curb radii. Existing streets can usually be retrofit within their curb lines to reduce reconstruction costs.

In Drivable Suburban areas, the DSC manual can be applied as it is at present. Over time, the DSC manual should be expanded to include cross-sections for Compact Urban areas.

The table below summarizes where each set of standards should be applied when using the augmented functional classification system described above. This table will assist the City and land developers in applying the correct design standards, which will

now be based on the physical context the thoroughfare is passing through in addition to its role in the larger network. An added benefit of the Compact Urban designation is reducing the legal liability for thoroughfare designers by no longer requiring design exceptions to build walkable urban streets.

El Paso can also use transect zones, which are similar but more finely grained than the ITE context zones. El Paso’s SmartCode uses transect zones to organize the development of compact new communities and redevelopment areas. Transect zones also lend themselves for use as zoning districts within which mixed land uses of varying intensities can be matched to corresponding thoroughfare types. Transect zones T3 through T6 are suitable for Compact Urban areas; they are generally not suitable for Drivable Suburban areas.



The table on the next page is an excerpt from the design parameters in the ITE Practice showing how walkable urban thoroughfares can be constructed to complement the surrounding context when it is already urban or will be developed or redeveloped in an urban manner.

	Area Types		
	Compact Urban		Drivable Suburban
	ITE Practice	SmartCode (Title 21)	DSC (Title 19)
Arterial	Commercial Boulevard Residential Boulevard Commercial Avenue Residential Avenue Commercial Street Residential Street	Boulevard: BV-135-53; BV-135-33; BV-125-43; BV-115-33 Avenue: AV-90-56; AV-75-40 Commercial Street CS-100-64; AV-80-54; AV-80-44; CS-60-34; CS-55-29; CS-50-22	Major Arterial 6 lanes (98’) Major arterial with Bike/Hike 6 lanes (108’) Minor Arterial 4 lanes (76’) Minor Arterial with Bike/Hike 4 lanes (86’) Boulevard (96’)
Collector	Commercial Avenue Residential Avenue Commercial Street Residential Street	Avenue: AV-90-56; AV-75-40 Commercial Street CS-100-64; AV-80-54; AV-80-44; CS-60-34; CS-55-29; CS-50-22 Street: ST-60-34; ST-50-30; ST-50-28; ST-50-26; ST-40-19 Road: RD-50-24	Non-Residential Collector (68’) Non-Residential Collector with Bike lanes (80’) Non-Residential 4 lane Collector (64’) Non-Residential 4 lane Collector with Bike lanes (72’) Residential Collector (54’) Residential Collector 2 lanes (54’)
Local	Commercial Street Residential Street	Street: ST-60-34; ST-50-30; ST-50-28; ST-50-26; ST-40-19 Road: RD-50-24 Rear Alley: RA-24-24 Rear Lane: RL-24-12	Multi-family & Commercial/Industrial Local Street 1 (62’) Multi-family & Commercial/Industrial Local Street 2 (54’) 36’ Local Residential (54’); 28’ Local Residential 2 (46’) 32’ Local Residential 3 (50’); Residential Ln No Parking (38’) Divided Mountain Residential Street (ROW varies) Mountain Residential Street 2 lanes only on M.D.A. (23’) Alley with Lane (14’); Alley 2 Lanes (20’); Alley No Parking (16’) 16’ Alley Single-family Residential (16’) 28’ Alley Commercial/Industrial/Multi-family (28’) Cul-de-sac; “T” Cul-de-sac; “Y” Cul-de-sac; Stub Street

Excerpt from Table 6.4 -- Design Parameters for Walkable Urban Thoroughfares

		General Urban (C-4)						Urban Center/Core (C-5 / 6)					
		Residential			Commercial			Residential			Commercial		
		Boulevard	Avenue	Street	Boulevard	Avenue	Street	Boulevard	Avenue	Street	Boulevard	Avenue	Street
Building Entrance	front	front	front	front	front	front	front	front	front	front	front	front	front
Off-Street Parking Location	rear	rear, side	rear, side	rear, side	rear, side	rear, side	rear	rear	rear, side	rear	rear	rear, side	rear, side
Minimum Sidewalk Width	8 ft.	6 ft.	6 ft.	8 ft.	6 ft.	6 ft.	10 ft.	9 ft.	9 ft.	10 ft.	10 ft.	9 ft.	6 ft.
Street Trees	8 ft. planting strip	8 ft. planting strip	6 ft. planting strip	7 ft. tree well	6 ft. tree well	6 ft. tree well	7 ft. tree well	6 ft. tree well	6 ft. tree well	7 ft. tree well	6 ft. tree well	6 ft. tree well	6 ft. tree well
Target Speed (mph)	25 – 35	25 – 30	25	25 – 35	25 – 30	25	25 – 35	25 – 30	25	25 – 35	25 – 30	25	25
Number of Through Lanes	4 – 6 lanes	2 – 4 lanes	2 lanes	4 – 6 lanes	2 – 4 lanes	2 – 4 lanes	4 – 6 lanes	2 – 4 lanes	2 – 4 lanes	4 – 6 lanes	2 – 4 lanes	2 – 4 lanes	2 – 4 lanes
Lane Width	10–11 ft.	10–11 ft.	10–11 ft.	10–12 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.	10–11 ft.
On-Street Parking Width	7 ft.	7 ft.	7 ft.	8'	7–8 ft.	7–8 ft.	7 ft.	7 ft.	7 ft.	8 ft.	8 ft.	8 ft.	7–8 ft.
Medians	4 – 18 ft.	Optional 4 – 16 ft.	None	4 – 18 ft.	Optional 4 – 18 ft.	None	4 – 18 ft.	Optional 4 – 16 ft.	None	4 – 18 ft.	Optional 4 – 18 ft.	None	None
Access Management	Moderate	Low	Low	High	Low – Moderate	Low – Moderate	Moderate	Low – Moderate	Low – Moderate	High	Low – Moderate	Low – Moderate	Low – Moderate
Typical Traffic Volume (ADT)	10,000 – 35,000	1,500 – 20,000	500 – 5,000	15,000 – 50,000	1,500 – 30,000	1,000 – 15,000	15,000 – 30,000	1,500 – 20,000	500 – 5,000	15,000 – 40,000	1,500 – 30,000	1,500 – 30,000	1,000 – 15,000

MULTIWAY BOULEVARDS - ZARAGOZA ROAD

Zaragoza Road is currently a four-lane road with a two-way left-turn lane within a paved cross-section of 68 feet. Buildings are placed in mega-blocks, often set back from the street over 300 feet, with some outparcel buildings set back 80 feet.

High free-flow speeds are common along Zaragoza Road, often in excess of the posted speed of 45 mph. These speeds are due in great part to the wide travel lanes and lack of enclosure by buildings, sidewalks, or street trees. These conditions serve cars and trucks but create an incredibly uncomfortable environment for bicyclists, pedestrians, and transit patrons.

Corridors like Zaragoza Road can be converted into “multiway boulevards” to manage vehicular speeds while achieving high multimodal capacity. Traffic flow can be streamlined and possibly even improved by providing new side access lanes and limiting driveway connections. Public transit would be added.

General Description of Multiway Boulevards

The multiway boulevard is an innovative design to carry significant regional traffic plus local traffic in separate access lanes, creating a landscaped multimodal complete street. Several examples exist across the country, with many more planned and proposed, all of which are major arterials, parkways, freeway replacements, or other grand boulevards. They all carry significant regional traffic volumes in a context-sensitive manner that complements and enhances the surrounding neighborhoods.

The primary characteristics and elements of multiway boulevards include:

- Multiple center/through lanes for regional/commuter traffic and public transit (two or three lanes in each direction).
- An optional landscaped central median.
- Two landscaped side medians, typically with street trees and bus stops/shelters.
- Two one-way, one-lane parallel access lanes for local traffic and local business access, each with:
 - On-street parallel parking.
 - Wide sidewalks.
 - Planting strips that separate the sidewalks from on-street parking.

An example of a new multiway boulevard is San Francisco’s Octavia Boulevard, perhaps the country’s most famous new multiway boulevard.



Zaragoza Road Existing Conditions

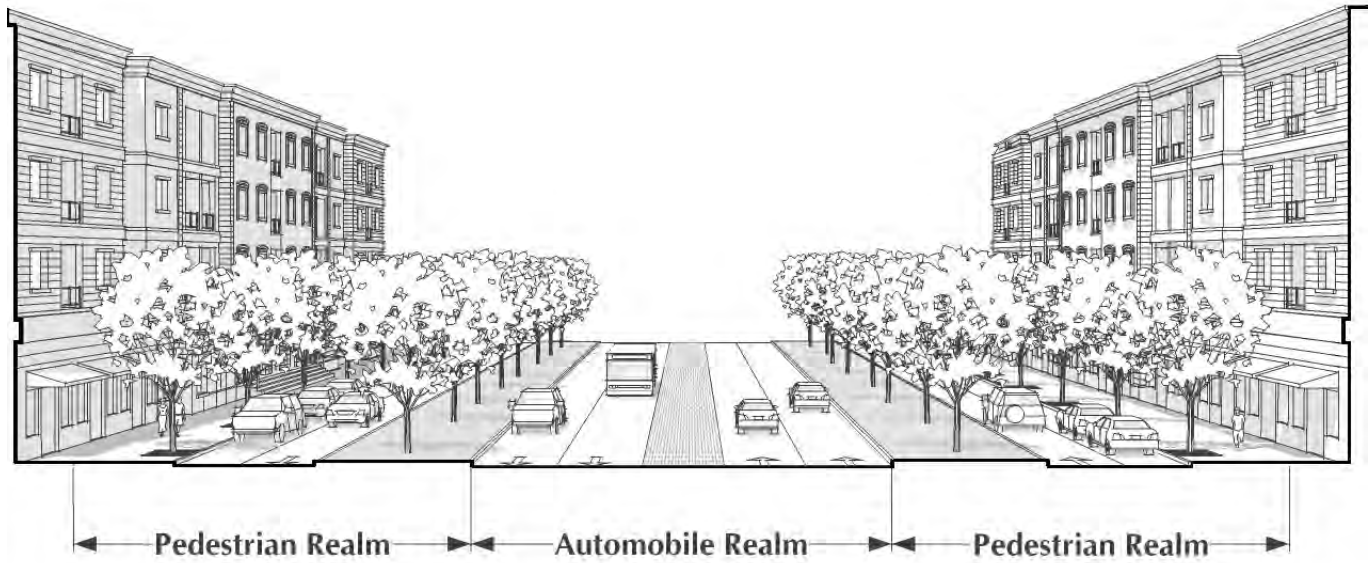


Zaragoza Road Proposed Multiway Boulevard Condition

Most multiway boulevards are applied in one of three situations:

- As a retrofit of an existing multi-lane road.
- When widening is proposed of an existing road (i.e. from four to six lanes).
- When a major new road that requires high vehicular capacity must pass through compact urban conditions.

Multiway boulevards are uniquely able to handle large volume of through traffic and transit service without imposing on surrounding land uses. By eliminating driveways and parking conflicts from the main travel lanes, multiway boulevards can increase traffic capacity while also enhancing opportunities for walking, bicycling, and transit. Safety is improved for all travel modes.



General Multiway Boulevard Cross-Section (buildings would exhibit varied heights, styles, and setbacks)

Native landscaping in medians and planting strips help create a parkway feel that enhances neighborhood character, supports quality development, raises adjacent property values, and increases economic development and tax revenue. The presence of the landscaped medians, access lanes, and on-street parking all help to separate pedestrians and adjacent land uses from the higher speed, higher volume traffic in the center/through lanes. Multiway boulevards create more urban environments, with storefronts built to the right-of-way line, wider sidewalks, and pedestrian furnishings.

The concept and operating characteristics of multiway boulevards are described most fully by Allen Jacobs, Elizabeth McDonald and Yodan Rofè in *The Boulevard Book*, as well as in the ITE Practice *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*.

Multiway boulevards are not a theoretical or conceptual thoroughfare design. Many examples were built at the end of the 19th century in New York City, and new multiway boulevards exist in San Francisco and other locations.

The following pages describe their general design and function and explain how a multiway boulevard could function as part of the Zaragoza Road corridor. Careful staging could transform portions of Zaragoza Road into a full multiway boulevard in the future.

The Automobile Realm and the Pedestrian Realm

A generic multiway boulevard is shown above. The center of a multiway boulevard is usually 4 or 6 lanes. These lanes serve the traditional function of an arterial street – to move automobiles as efficiently and safely as possible through an area. These center lanes are considered the “automobile realm” where design considerations place the automobile first, just as with contemporary arterial design. The only concession to pedestrians is that speeds are managed in the 30-35 mph range.

On both sides of the center lanes are wide park-like medians with a shared-use path. Further away from the centerline there is a one-way access lane and one lane of parallel parking. Some variations have parking on both sides of the one-way travel lane, depending on the need for parking. At the edge of the right-of-way there is a wide sidewalk that promotes street-front development.

The one-way access lane is designed for speeds of 15-20 mph. The access lane is included in the “pedestrian realm” which is the area from the inner edge of the side median to the front of the buildings. Within the pedestrian realm, design considerations place the pedestrian first. Walkability is the primary design goal.

Not shown above but illustrated in the perspective view on the previous page is the network of thoroughfares behind the buildings that provides local circulation. This is a town center street network that is important to the healthy operation of a multiway boulevard.



Multiway Boulevard Cross-Section with Typical Dimensions (buildings would exhibit varied heights, styles, and setbacks)

Details of Multiway Boulevards

Each element of a multiway boulevard is illustrated above and its function is described below.

- **Center Through (Travel) Lanes:** Allows transit vehicles and large volumes of traffic to pass through the area and also brings motorists within viewing distance of stores.
- **Wide Park-like Median (Planting Strip):** Marks the beginning of the pedestrian realm. Planted rows of trees provide enclosure, helping manage the center thoroughfare speeds while providing shade and protection for pedestrians and a place for transit stops. The shared-use path allows bicycling, roller-blading, and stroller-pushing, with ample benches and pedestrian amenities. The median is a centerpiece of the town center design, much as a park or square would be in a traditional town design such as Savannah, Georgia.
- **One-way Access Lanes:** The one-way access lanes provide access to parallel parking and intersecting local streets. Access lanes serve the following functions:
 - Provide a quiet thoroughfare for storefronts, offices, and apartments facing the multiway boulevard.
 - Provide vital on-street parking and pedestrian connections between blocks.
- **Wide Sidewalk:** Wide sidewalks allow pedestrians to circulate easily between intersecting streets, stores, and parallel parking spaces. The sidewalks encourage pedestrian shopping while leaving room for sidewalk café tables, sidewalk sale displays, and street trees.
- **Storefronts:** A sad story of small towns all over the United States is the four-laning of main street. On-street parking goes away as speeds are increased to 40 or 45 mph, destroying the viability of main street shops. New development located far from the thoroughfare requires massive amounts of parking and infrastructure, often beyond the means of local businesses. Storefronts along multiway boulevards are provided with the best of both worlds – direct access to large amounts of pass-by traffic and a quiet walkable thoroughfare front that functions like a traditional main street.
- Allow locally circulating traffic to make easy right-hand turns while circling the block, looking for parking, and window shopping

Zaragoza Road as a Multiway Boulevard

A photo of existing conditions along Zaragoza Road is presented here along with a visual simulation of the same location if Zaragoza were reconfigured as a multiway boulevard with compatible buildings along wide sidewalks.

Zaragoza Road would still have the four through-travel lanes it has today, but it would also have a pair of one-way access lanes with on-street parking, wide sidewalks, rows of street trees, and traditional mixed-use buildings. These changes would maintain the through capacity of Zaragoza Road but would reduce vehicular speeds and improve walkability and business conditions.

Zaragoza Road’s proposed reconfiguration was rated using the Walkability Index, which can be compared to the “existing condition” grade which is as low as “0” in some segments as described earlier. The reconfiguration could be conducted in the two phases described below, so each phase was rated separately.

Phase I: Public Improvements Within the Right-of-Way

Phase I includes public improvements within the right-of-way only, intended to transform the adjoining context to the C-4 and C-5 context zones described earlier. Phase I improvements would include:

- Managing of vehicular travel speed to 35 mph on the center through-lanes and 15-20 mph on the new side access lanes.
- Addition of on-street parking on the access lanes.

- Addition of street trees on all medians.
- Addition of 12’ sidewalks with pedestrian features such as benches, trash cans, and bicycle racks.

With just these public improvements, Zaragoza Road’s walkability score would increase from a 0-23 to a 72 or “B,” for very walkable.

Phase II: Long-Term Urban Design Changes/Redevelopment

Phase II includes longer-term land-use and urban design changes, such as buildings set closer to the street, more intense land uses, and improved façade design.

With those changes in addition to the public improvements in Phase I, Zaragoza Road’s walkability would increase to a grade of 96 or “A” for high walkability.



Zaragoza Road Existing Conditions



Zaragoza Road, Recfigured as a Multiway Boulevard

EVOLUTION OF THE THOROUGHFARE PLAN

The City's Thoroughfare Plan has been a vital component of the El Paso's 1999 Plan for El Paso because it maps the existing and proposed road network in most of El Paso County. This map shapes El Paso's transportation network and travel patterns, which affects the patterns of growth.

Comprehensive plans in Texas are generally "advisory" in terms of legal status, but the City's Thoroughfare Plan (often referred to as the Major Thoroughfare Plan or MTP) has become "regulatory" (legally enforceable) by being referenced in Title 19 of El Paso's land development regulations as the official Thoroughfare Plan. The MTP is the basis for requiring new development to connect to and help build the future road network to offset the traffic impacts of new development.

The MTP is a map that illustrates the location and characteristics of existing and proposed thoroughfares, from collectors to freeways. It shows their approximate location, alignment, and functional classification and it includes the entire City of El Paso and all of the surrounding areas for which the City has joint planning jurisdiction with El Paso County (known as the extra-territorial jurisdiction or ETJ).

The MTP provides the City a strong tool to preserve corridors for future roads. Yet there are significant barriers that also affect these corridors, including topographical and environmental conditions, existing development, and vested development rights.

Background & Context

The City has used an MTP since the mid-1980s. The 1999 *Plan for El Paso* included this map in its Map Atlas, labeled as "Proposed Thoroughfare System." This map has since been modified 29 times through comprehensive plan amendments and is currently maintained as a computer-based map on the City's Geographic Information System (GIS).

It is important to understand the MTP's potential overlap with, and important differences from, the other regional transportation plans. The El Paso MPO has a similarly abbreviated MTP (its *Mission 2035 Metropolitan Transportation Plan*). Other regional transportation plans include TxDOT's STIP (*Statewide Transportation Improvement Program*) and the CRRMA's 2008 CMP (*Comprehensive Mobility Plan*). All of these other plans are lists of specific projects, costs, and funding to be implemented within a specific timeframe.

In contrast, the City's MTP is a conceptual geographic road network, with considerably less detail about individual road segments. The City's MTP shows the future road network at "buildout" but does not identify specific road improvement projects or financial details about how the network will be completed over time.

This conceptual approach for the City's MTP minimizes conflict with the MPO's MTP. The latter is the region's official projects-based transportation plan for purposes of receiving state and federal transportation funding and for demonstrating regional air quality conformity. Additionally, the MPO's MTP is the plan TxDOT uses to prioritize and fund road improvements. The MPO's MTP addresses regionally-significant transportation facilities, while the City's MTP incorporates some minor streets and subdivision accesses as well as long-term corridor protection for roads not needed within the planning timeframe.

The City's MTP is somewhat different than those used in other communities, which are often go beyond the road network's location, alignment, and functional classification to also specify other characteristics such as the number of lanes and the amount of right-of-way that will be needed. The City's existing MTP, shown on the following page, is being readopted into *Plan El Paso* on an interim basis, but El Paso intends to evolve and expand the MTP as described below.

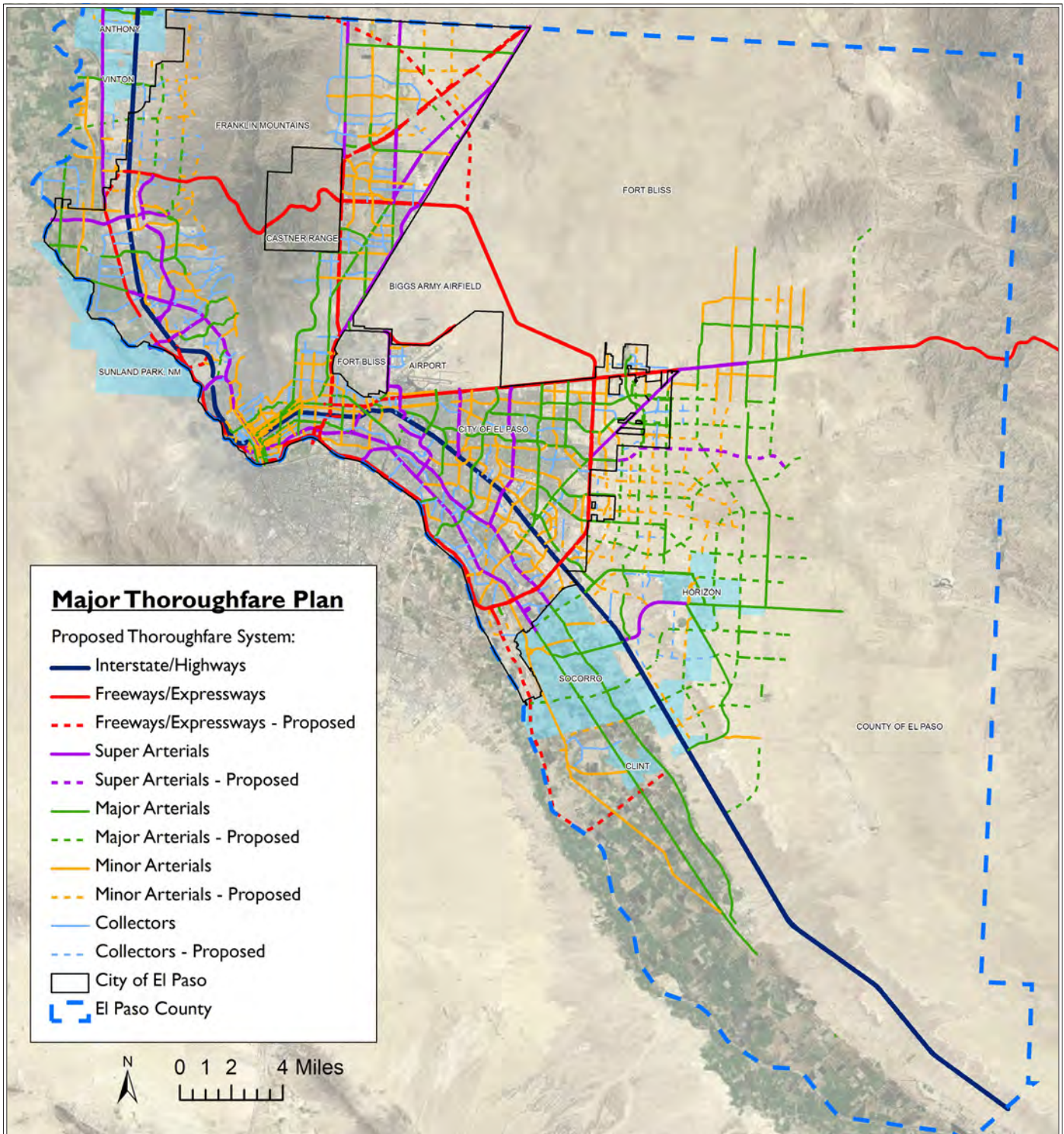
MTP Update – A Sustainable Mobility Plan

Near-term objectives to evolve the City's MTP include:

- Broaden and refine the MTP to include a multimodal transportation network to supplement the road network now shown.
- Review and update the current MTP network to reflect the growth forecasts and other policies in *Plan El Paso*.
- Refine the MTP's thoroughfare classification system to reflect the concepts in this Transportation Element.
- Update thoroughfare cross-sections to reflect the concepts in this Transportation Element.
- Use today's best practices for network design principles.

Each of these objectives is explained below.

- *Broaden and Refine MTP to Include a Multimodal Network*
To carry out *Plan El Paso's* overall vision, the City will broaden its MTP to include major multimodal facilities, particularly the RTS network. The multimodal network will also include aviation and port-of-entry facilities and may include other transit, bicycle, and pedestrian facilities. With new development now in place and improved GIS technology, the multimodal network can be refined particularly as to alignment of proposed facilities. To reflect this broader approach and reduce confusion with the MPO's plan, the City's MTP will be renamed the Sustainable Mobility Plan.
- *Update Network to Reflect Latest Growth Forecasts*
The current MTP network was nominally for the year 2025 but would accommodate growth in a vastly larger area. The updated network should reflect anticipated growth to 2035 plus additional corridor protection in other municipalities and in unincorporated El Paso County where the City does not control growth patterns. This task should modify the



Major Thoroughfare Plan, as amended through Ordinance 17599

MTP network to reflect the proposed location and character of future growth with appropriate road size, road spacing, and regional connectivity. Expanding the MTP network beyond the sectors designated on the Future Land Use Map for growth and expansion is a complex issue because doing so may encourage the fringe development the City is trying to contain. Yet, should that development take place because of inexpensive land or vested rights, a robust MTP network would improve the travel patterns resulting from that growth.

- Refine MTP Functional Classification

The MTP's functional classification categories should be consistent with those used by the MPO and TxDOT for purposes of obtaining state and federal funding and still be consistent with the new "area types" described earlier in this element. The matrix below compares the City's previous MTP classifications, the current MPO classifications, and the new *Plan El Paso* classifications. The objective is to maximize regional and state funding while serving the City's objectives of integrating land use character, thoroughfare design, and expanded transit opportunities. Compact Urban areas should be served by walkable complete streets, while Drivable Suburban and Rural areas will be served by upgraded versions of conventional road designs.

- Update Thoroughfare Cross-Sections

The City of El Paso currently has three sets of thoroughfare design standards: Design Standards for Construction in Title 19, Thoroughfare Assemblies in Title 21, and the ITE Practice described earlier. The cross-sections in these standards need to be updated and organized using the new "area types" described earlier.

- Use Today's Best Practices for Network Design Principles

Best practices are listed under Goal 4.4 of this element.

The new Sustainable Mobility Plan will become an integral part of *Plan El Paso* through the plan amendment process. It should be a compelling and fully developed plan and toolkit, not just a map like the current MTP.

Transportation Master Plan (TMP)

In addition to the near-term objectives just described, the City should take the lead in establishing a regional, multimodal project-based transportation and land-use planning "compact."

Rather than separate agencies planning and implementing travel improvements, the City would collaborate with its regional transportation partners – MPO, TxDOT, CRRMA, El Paso County, and others to create a Transportation Master Plan (TMP).

The TMP would be similar in some aspects with the MPO's *Mission 2035 Metropolitan Transportation Plan*, but the two efforts would coexist as the MPO's MTP and CRRMA's CMP have. Because the MPO is in the process of updating its MTP during 2012, the two efforts could be integrated. The TMP would provide project, location, design, and implementation clarity for complete street networks, RTS and other high-capacity transit corridors, walkable streets, and pedestrian and bicycle corridors and facilities.

The City has the authority to focus on regionally-significant transportation improvements that respect the conformity process and other requirements the MPO must operate within. The City also has the authority to focus on non-regionally significant transportation such as streets it maintains and multimodal travel options that prioritize walkability, person-based travel choices, and balanced transportation networks; these key concepts improve quality of life and help reduce air pollution.

Many municipalities have separate Comprehensive Plans and Transportation Master Plans, with the former providing the policy foundation and the latter containing the technical analysis and project lists. These plans are integrated but the TMP is more flexible so that the Comprehensive Plan doesn't have to be amended every time a project detail changes.

Functional Classification Relationships

El Paso MTP (previous)	El Paso MPO (Urban or Rural)	Plan El Paso (Compact Urban, Drivable Suburban, or Rural)
Interstate Highway Freeway/Expressway	Interstate Freeway/Expressway	
Super Arterial Major Arterial	Principal Arterials	Arterial
Minor Arterial	Minor Arterials	

PLANNING FOR BICYCLING

Bicycle planning is about giving a community a viable transportation option that complements the existing network—an option that encourages lively streetscapes, a healthy population, and a more livable and sustainable human habitat.

More specifically, bicycle planning is the process of assessing and addressing the needs of a community in the area of bicycle infrastructure, programs, and policies. It involves taking an inventory of the community's existing bicycle resources, and identifying strategies to build upon those resources. Bicycle planning means consulting with the citizens of the community to facilitate their vision for future transportation improvements—understanding their concerns, addressing their needs, and crafting a strategy for making a more bicycle-friendly community. It also means assessing the strengths and weaknesses of bicycle resources through on-the-ground observations and public outreach, and finding ways to capitalize on the community's strengths while minimizing weaknesses.

Bicycle Planning in El Paso

Compared to many North American communities, bicycle planning has a relatively long history in El Paso. The El Paso Metropolitan Planning Organization (MPO) created the *Comprehensive Bikeways Plan* in 1982, the region's first bicycle master plan. While consisting of little more than aspiring policy language, it affirmed the importance of re-integrating bicycling as a viable and important mode of transportation.

Following this effort, the El Paso MPO, working with CSA Consulting Engineers, completed the *1997 Regional Bikeways Plan*. As a comprehensive study, the Plan includes the following elements:

- Introduction and Historical Background
- Overview of Bicyclist Types and Needs
- Bikeway Standards (Class I, II, III Bikeways)
- Bicycle Travel Patterns/Trip Generators
- Recommended Bikeway Plan
- Implementation Plan (funding, phasing, bicycle parking, transit integration, education, enforcement)
- Recommendations and Conclusions (goals and objectives)

The 1997 Plan is representative of best practices in the landmark era of the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA), when the Federal Government began requiring Metropolitan Planning Organizations (MPOs) to include bicycle and pedestrian facilities in their comprehensive plans.

The Plan's highlights include recognizing various bicyclist types and their preferences, the need to change subdivision design regulations to be more bicycle-friendly, a proposed network of

bikeways with detailed segment descriptions, bicycle parking recommendations, improving bicycle-transit integration, hiring a bicycle coordinator, and detailed funding and cost estimates.

Since the completion of El Paso's 1982 plan and the more substantial plan of 1997, the discipline of bicycle planning has advanced rapidly in the United States. Today's advancements are largely a response to increased public demand, increased funding at the federal, state, and local levels, and an increased awareness of the many techniques used in the world's most bicycle-friendly cities. Indeed, numerous facility design and countermeasure treatment types, as well as education, encouragement, and evaluation techniques, are in use today that were not common or even in existence when the 1997 plan was adopted.

Additionally, the 1997 Plan employed Bicycle Level of Service (BLOS) as a way to rank the safety and experiential quality of all existing and proposed bikeways. BLOS, however, is a blunt tool that uses highly quantitative data to measure what is truly a qualitative experience. BLOS does not take land use/urban design characteristics into account, and it prioritizes wider vehicular travel lanes over those that are narrow and traffic-calmed. Thus, it should be of some concern that this measurement tool forms the basis of the City's existing Bikeways Plan.

In order to support the *Plan El Paso* vision of "right-sizing" corridors and providing a built environment that is truly inviting to people walking and bicycling, El Paso's next bicycle master plan should consider a different approach to determining what types of bikeways are consistent with the City's transportation and land use goals.

Following the adoption of the *1997 Regional Bikeways Plan*, the *1999 Plan for El Paso* included broad policy language referencing and supporting the *1997 Regional Bikeways Plan*. It is clear that some of the objectives put forth in the *Bikeways Plan* and the *Plan for El Paso* have been met. These include the following accomplishments:

- The addition of 42.6 miles of bikeway facilities
- Amended zoning to require bicycle parking for numerous land use types (Title 20 – Zoning, Chapter 20.14)
- Installed bicycle parking at key locations (City Hall, schools, transit hubs, etc.)
- The addition of bicycle racks to all Sun Metro buses
- Established an El Paso Police Department Bicycle Patrol in Downtown El Paso
- The promotion of bicycling and healthy living practices through the City's Open Streets program, entitled Scenic Sundays

However, a few of the Plan’s most crucial objectives have yet to be met. These include:

- Establishing a full-time bicycle coordinator to oversee the implementation of the bicycle master plan and other related bicycle planning efforts.
- Establishing an El Paso Bicycle Action Committee comprised of representatives from various City departments, stakeholders, and bicycle advocates, which would meet on a regular basis.
- The aggressive pursuit of federal funding to expand and improve bicycle facilities.
- Developing and distributing a regional map of bikeways, facilities and services.
- Enforce bicycle and pedestrian-friendly design in the City’s land use and subdivision design regulations.

Evaluating Existing Conditions: The Handlebar Survey

In advance of preparing this new Comprehensive plan, the planning team bicycled large portions of the City of El Paso while undertaking what is known as a “Handlebar Survey” so that existing bicycling opportunities and challenges could be understood – beyond what may be ascertained by reviewing existing maps and plans.

Information gathered included current existing bicycle facility use, street width/street types, network gaps, wayfinding, street conditions, posted and actual vehicular speeds, land use and urban quality, open space connections, bicycle parking supply and demand, bicycle trip generators, and existing bikeway infrastructure types/quality.



1982 Comprehensive Bikeways Plan and 1997 Regional Bikeways Plan



Evaluation process: planners experience El Paso’s bicycle environment first-hand through the Handlebar Survey.



One part of the Handlebar Survey involves recording vehicular speeds to determine the safety of streets for bicycling.

EXISTING BICYCLE NETWORK

There are more than 90 miles of bikeway facilities in the City of El Paso, including more than 50 miles of mountain bike trails. Approximately half of the extant network was implemented following the El Paso MPO's 1997 *Regional Bikeways Plan*.

The current bikeway network is comprised of four types of bikeways:

- Signed Bike Routes
- Conventional Bicycle Lanes
- Off-street Shared Use Paths
- Off-street Mountain Bike Trails

At present, the bicycle network lacks connectivity and does not yet appeal to the majority of people who are interested in bicycling. Indeed, the majority of the City's existing bikeway miles consist of bicycle lanes located along high-speed arterial thoroughfares that intimidate even the most experienced urban bicyclist.

Like many American cities, El Paso's regulatory practice of separating land uses by function (e.g. commercial, residential, industrial, etc.) has directed commercial and employment districts to locate along busy streets, away from residential neighborhoods. Such land use patterns, in combination with the development of an increasingly disconnected street network, isolate rather than knit together the City's neighborhoods. Furthermore, the normative arterial/collector/local thoroughfare network pattern forces high volumes of motor vehicles onto an increasingly limited number of streets. As a result, reaching daily destinations by means other than a car is very challenging, if not intimidating.

The Pat O'Rourke Bike Trail on El Paso's Westside offers an off-street shared use path for walking, running, and recreational cycling behind a buffer of native landscaping. More trails of this kind could connect the neighborhoods of El Paso.



Many of El Paso's existing bike lanes are located on busy arterials.



The existing street environment is typically hostile to bicyclists.



Storm grates and rumble strips are a major concern for cyclists.



Suburban land use and high speed road design are common.



Traffic calming measures such as this traffic circle in Manhattan Heights can help create neighborhood Bicycle Boulevards.



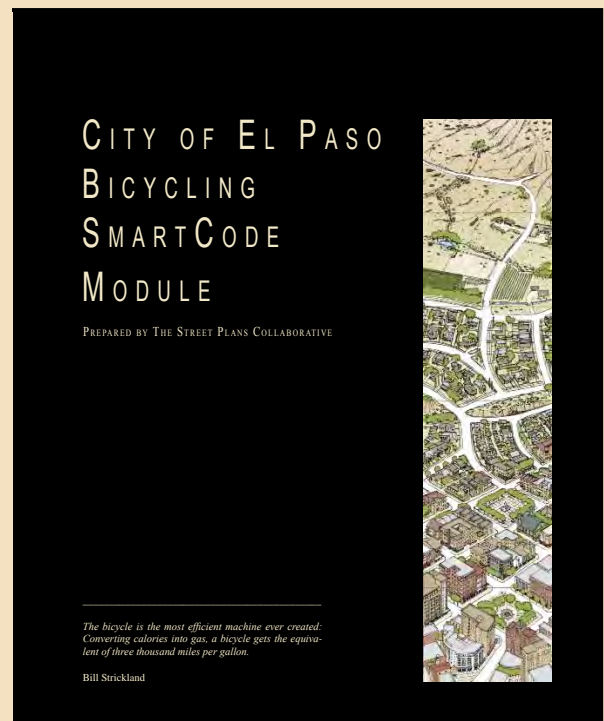
Signed routes are a common facility type throughout the City.



The Pat O'Rourke Bike Trail is a popular "hike/bike" trail of 2.2 miles.

SmartCode Bicycle Module

Reforming zoning regulations is an important step in strengthening the policies that encourage and facilitate investments in bicycle infrastructure. As part of the *Plan El Paso* Comprehensive Plan effort, the City is implementing the SmartCode Bicycle Module, to add important bicycle policies and regulations to the adopted El Paso SmartCode.



EXPANDING THE BICYCLE NETWORK

A blueprint for an expanded network of bikeways is presented here. This network would better link El Paso's existing bikeways and would build from the recommendations of the 1997 *Regional Bikeways Plan*. This proposed network is an interim blueprint from which the City may work to implement a full network of connected, safe, and attractive bikeways.

While individual links within the proposed bikeway network should be detailed in an update to the bicycle master plan, the integration of the following bikeway and countermeasure types may be used, where contextually appropriate, to further the visibility and function of the bikeway network:

- Signed Bike Routes
- Shared Use Markings (Sharrow)
- Bicycle Boulevards (Neighborhood Greenways)
- Buffered Bicycle Lanes
- Advisory Bicycle Lanes
- Physically-Separated Bicycle Lanes (Cycle Tracks)

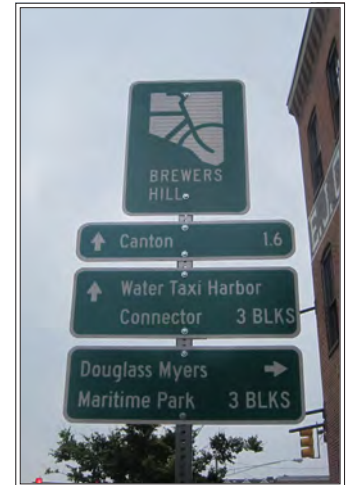
Additionally, numerous design countermeasures may be applied to increase the visibility and safety of existing and proposed bikeways. These include bicycle boxes, peg-a-tracking, bicycle detection and signal heads, wayfinding and informational signs, and bicycle refuge islands.

Designing and implementing a contextually appropriate bikeway network should be strongly correlated to existing land use characteristics and with the desired development or preservation goals for each neighborhood in the City.

On the following pages are maps of existing bicycle facilities and the new El Paso Bicycle Atlas, a vision of a complete bicycle network that builds on the work of the 1997 plan and takes current and planned land use patterns into account. This network should be fine-tuned at the block scale through a bicycle master plan update that incorporates this effort and the latest advancements in bicycle planning.



Signed bike routes



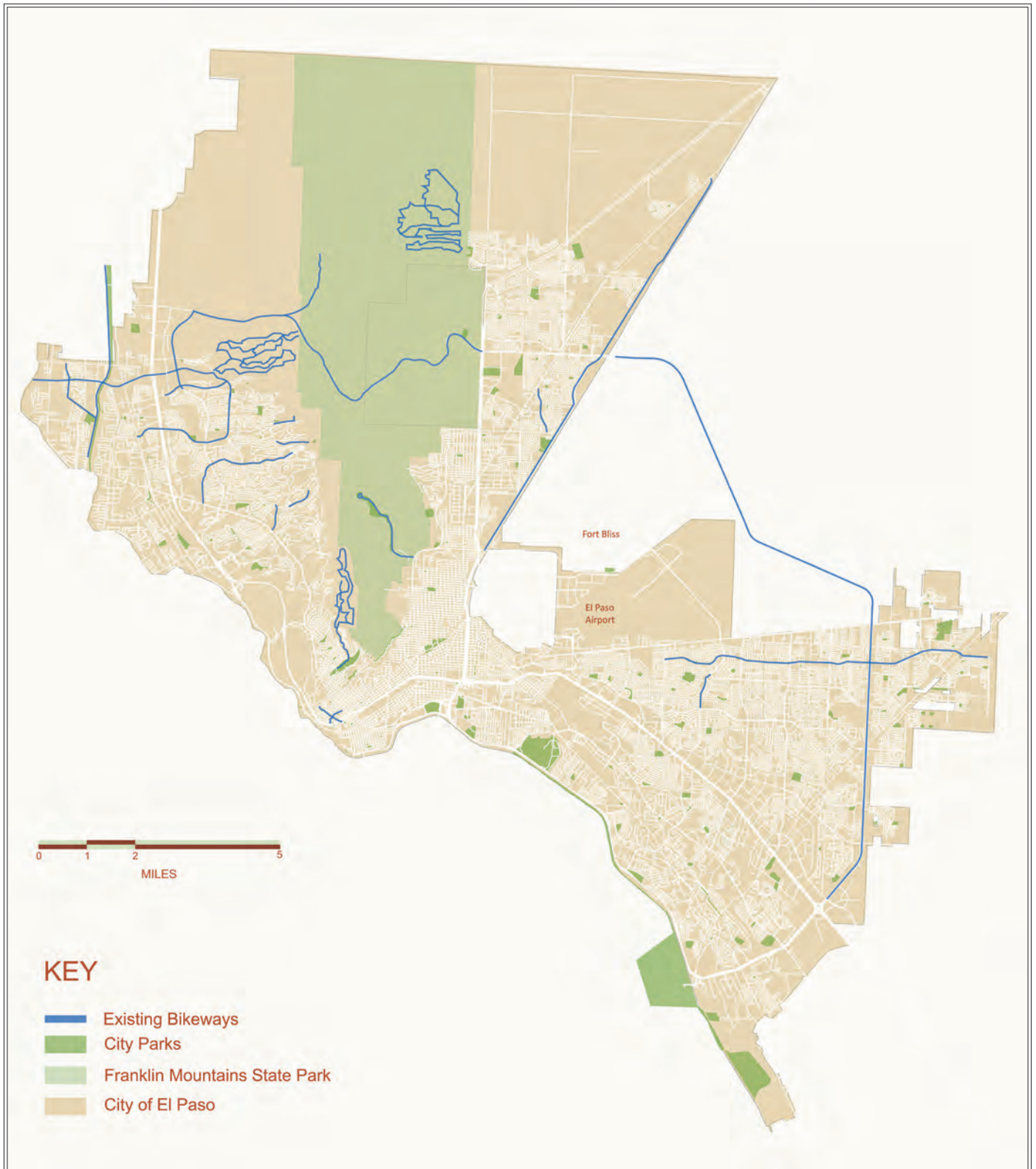
Shared use markings (sharrow)



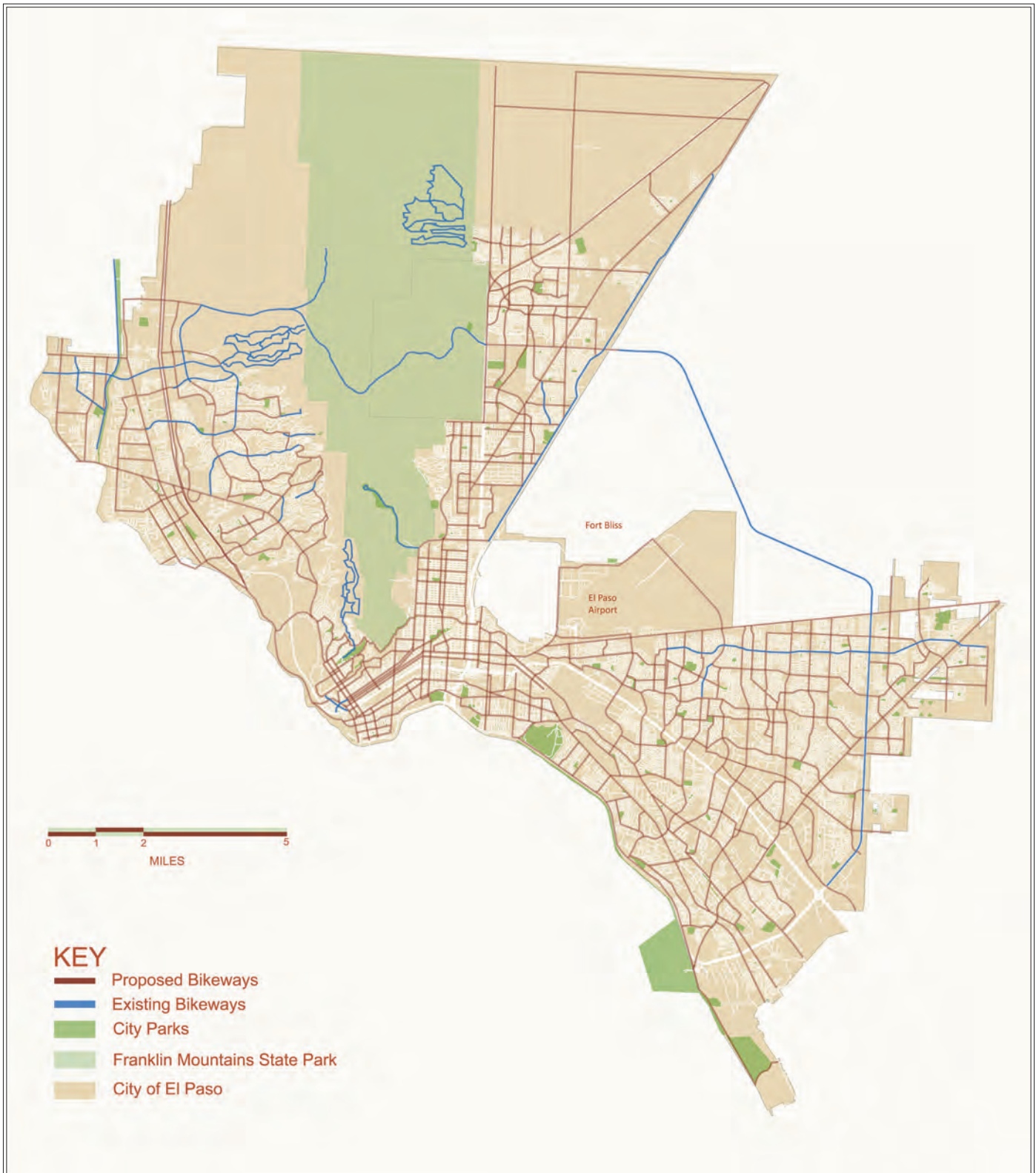
Protected bike lane



Physically-separated bicycle lanes (cycle track)



Existing Bicycle Facilities



BICYCLES & TRANSIT

A generally accepted benchmark assumes that the average person will walk a quarter mile comfortably and up to half a mile to a transit stop if the environment is safe, convenient, and interesting. A quarter-mile radius (a five-minute walk) is often referred to as a typical “pedestrian shed.” At distances beyond a half mile (a ten-minute walk), it is assumed that the ability to attract transit ridership decreases. The maps to the right show ½-mile radius transit pedestrian sheds around each Sun Metro transfer center.

The average bicyclist can travel three times faster than the average pedestrian, so the formulation of nuanced “bicycle sheds” can greatly expand transit station catchment areas while also improving the extent and utility of the regional bikeway network. Indeed, just as a 5- or 10-minute walk should be convenient and enjoyable for the pedestrian, so too should it be for the average bicyclist, who is able to cover much more ground with an equal outlay of time and energy. The top map adds one-mile-radius bicycle sheds; the bottom map adds three-mile-radius bicycle sheds for stronger bicyclists.

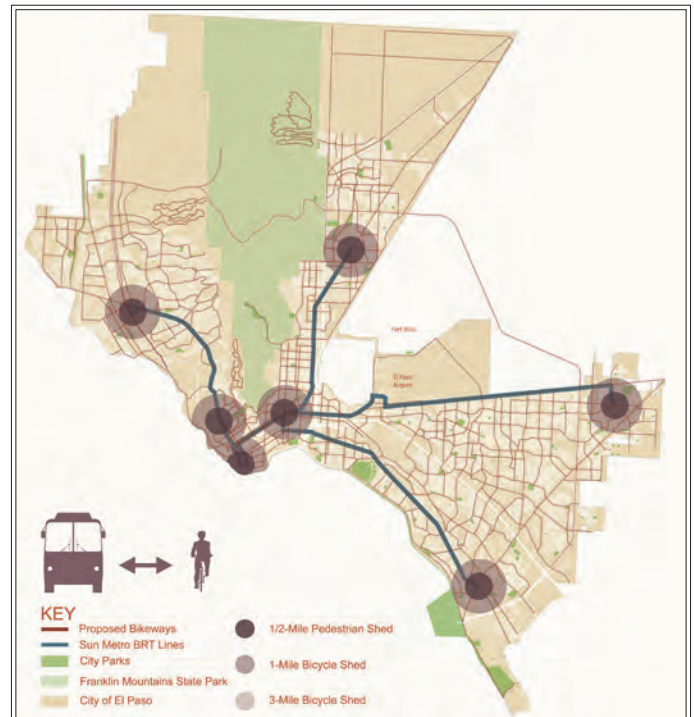
While the bicycle shed is an important conceptual planning tool, it is meaningless without the physical development of bicycle infrastructure that further supports bicycling. Each “bicycle shed” should not be conceived in isolation, but as part of a regional bikeway network. This network should be designed to connect people to important destinations—schools, neighborhood and regional employment centers, open space, and of course, local and regional transit systems.

While the bicycle shed is an important conceptual planning tool, its usefulness requires the physical development of infrastructure that supports bicycling.

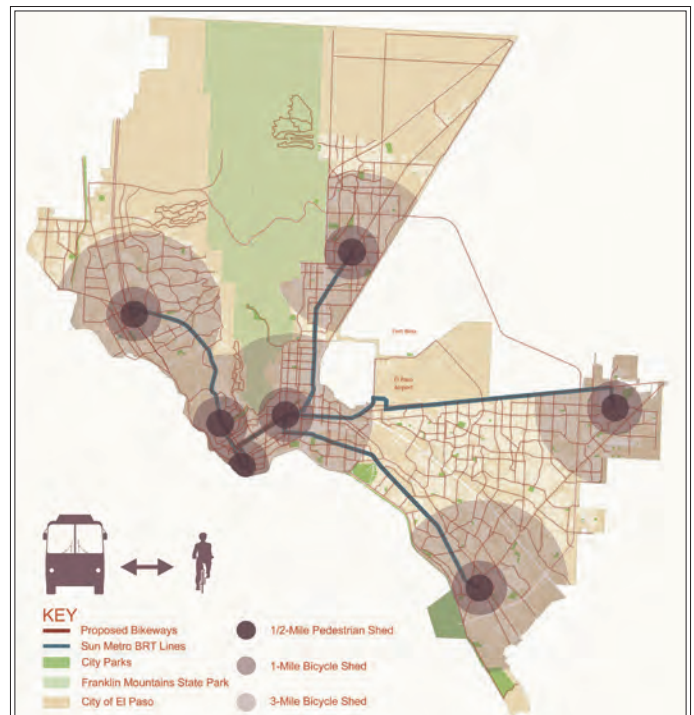
Each “bicycle shed” should be conceived not in isolation but as part of a regional bikeway network. This network should be designed to connect people to important destinations—schools, neighborhood and regional employment centers, open space, and of course, public transit stops.

Station Area Plans

In order to leverage existing and future transit investments with better cyclist connections, the following pages detail station area networks within the one-mile-radius bicycle shed. These diagrams are not meant as exhaustive maps of investments, but are meant to prioritize investments and better guide infrastructure projects based on the desired level of investment and expected return. Routes are color coded based on road width, volume, and speed, and the corresponding range of appropriate bicycle facility.

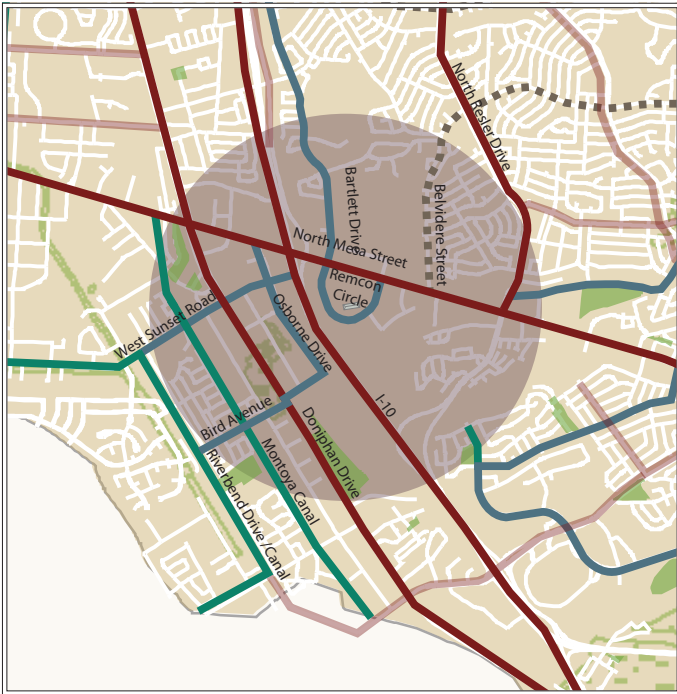


1-mile RTS/Bicycle Shed

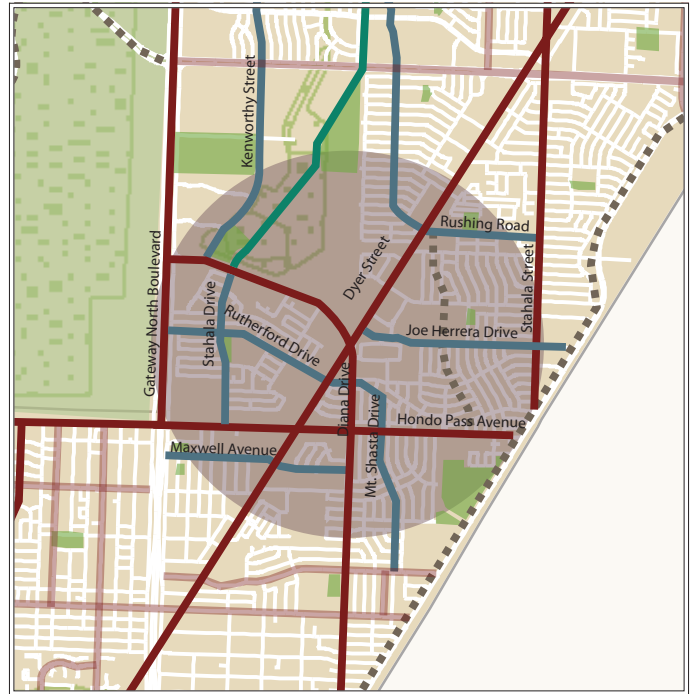


3-mile RTS/Bicycle Shed

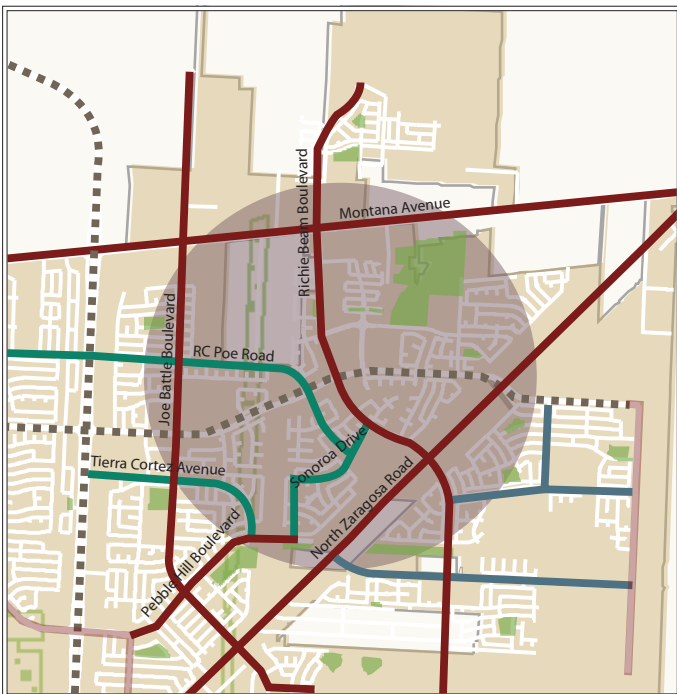
- █ CLASS 1 : Cycle Track, Buffered Bike Lane, Conventional Bike Lane, Wide Shoulder
- █ CLASS 2 : Buffered Bike Lane, Conventional Bike Lane, Sharrow
- █ CLASS 3 : Conventional Bike Lane, Bike Boulevard, Signed Route, Shared-use Path, Sharrow



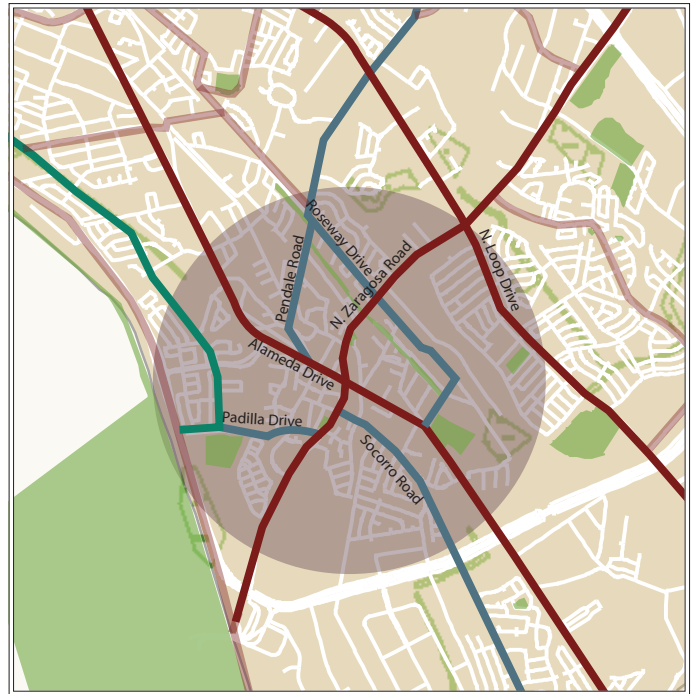
Station Area Plan: Remcon Circle



Station Area Plan: Northgate Terminal

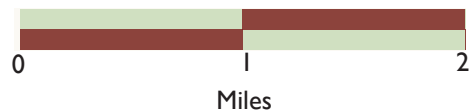


Station Area Plan: Eastside



Station Area Plan: Mission Valley

- CLASS 1: Cycle Track, Buffered Bike Lane, Conventional Bike Lane, Wide Shoulder
- CLASS 2 : Buffered Bike Lane, Conventional Bike Lane, Sharrow
- CLASS 3 : Conventional Bike Lane, Bike Boulevard, Signed Route, Shared-use Path, Sharrow
- Existing Facilities





Station Area Plan: Central Valley and Downtown

Central El Paso and Downtown

Central El Paso’s historic neighborhoods – Downtown, Segundo Barrio, Sunset Heights, and Manhattan Heights – and the Oregon corridor provide a more balanced and integrated land use and transportation network than in other parts of the city. Such neighborhoods provide the best framework from which to increase bicycling as an immediately viable mode of transportation.

A concern for cyclists trying to commute between residential neighborhoods in the Upper Valley and employment centers in Central and Downtown El Paso is the reliance on Mesa as one of the only east/west routes available. The North Mesa corridor was repeatedly mentioned as ‘challenging,’ and ‘dangerous.’ There are few alternatives to Mesa Boulevard, a wide, high-speed arterial featuring numerous conflict points and no amenities for cyclists.



North Mesa is one of the main routes between the Upper Valley and Central /Downtown El Paso.

BUILDING A BICYCLE-FRIENDLY COMMUNITY

With strategic policy changes and infrastructure investments, El Paso has the potential to become one of the premier bicycling destinations in the United States. There are abundant opportunities to capitalize on the City’s natural beauty, excellent weather, and network of streets connecting Downtown, UTEP, Sunset Heights, El Segundo Barrio, Chamizal, and other highly frequented destinations. Despite these favorable conditions, many residents, commuters, and visitors are hesitant to take up bicycling because El Paso’s street and land use patterns are otherwise scaled and designed with auto-mobility as their priority.

The League of American Bicyclists has identified “6 E’s,” an evaluation system used to rank the bicycle-friendliness of a given city. They include:

- Engineering
- Evaluation and Planning
- Education
- Encouragement
- Enforcement
- Equity

These 6 E’s are behind the recommendations regarding the creation of a bicycle-friendly city. Whether for recreational mountain or road biking, commuting to work, or simply reaching daily destinations, it is clear that the citizens of El Paso resoundingly support the creation of a more bicycle-friendly city. However, it is also clear that in order to increase bicycle mode share, the City will have to help its citizens overcome the primary reason they do not currently cycle: fear.

In general, most citizens who do not already bicycle regularly are particularly interested in physically separated bikeways, or off-street paths. These are facilities they can use comfortably without mixing with high-speed traffic. But beyond the fear of mixing with motor vehicle traffic, citizens repeatedly bemoan the lack of connected bikeway infrastructure and the lack of respect for those who do currently bicycle.

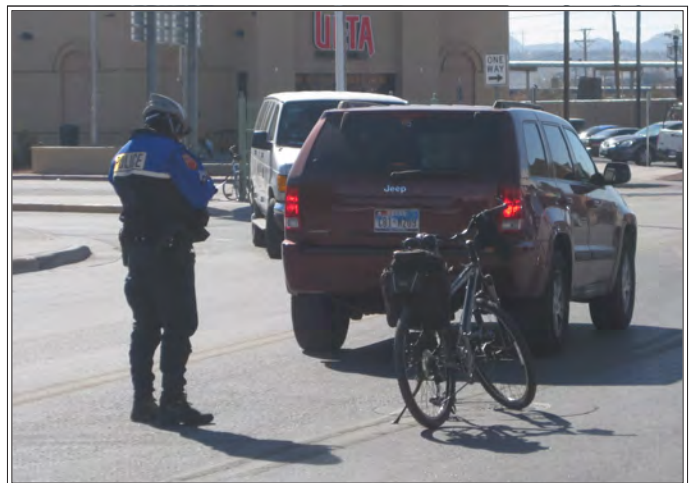
One major concern is the challenge presented by the City’s topography, which is a deterrent to less advanced cyclists. Overcoming this challenge will partially require bikeway facilities that make novice users comfortable riding more frequently so that topography previously deemed too challenging becomes manageable as physical fitness improves. Others may choose to bicycle downhill, while taking transit uphill wherever possible. Pavement surface quality, stormwater drain grates, and train tracks are also a constant concern for those who ride frequently. In particular, storm grates in Central El Paso were singled out as ‘treacherous,’ because they catch even thick bicycle wheels. Finally, mountain bike advocates voiced concern that the City’s extensive network of trails are constantly threatened by sprawling development patterns that not only destroy the place in which they bicycle, but further exacerbate the myriad of other issues related to the City’s outward expansion.



El Paso Bike Club.



Poor pavement quality is a major safety concern.



City of El Paso Bicycle Patrol officer issuing a ticket to a driver.

Education, Encouragement and Enforcement

The City has relatively few education, encouragement, and enforcement initiatives for cycling. Yet, those that have been implemented are highly visible and have been effective, such as El Paso's Scenic Sundays open streets initiative, which takes place seasonally on a car-free Scenic Drive. This initiative provides a safe and inviting place for people of all ages and abilities to not just bicycle, but to walk, skate, and commune within a beautiful setting.

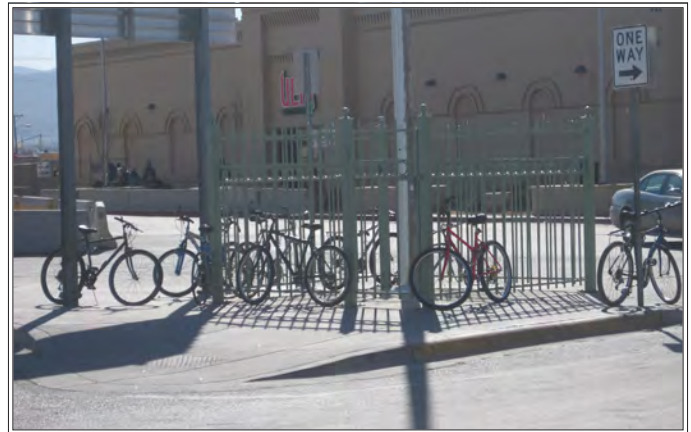
The City has also established a bicycle patrol in Downtown El Paso. This visible police presence not only connects officers directly with street activity, but sensitizes them to safety concerns affecting people who choose to walk and bicycle. It demonstrates that the El Paso Police Department values bicycling an important and effective mode of transportation in El Paso's historic center.

Bicycle Parking

Bicycle parking facilities are found across El Paso, especially at schools, civic buildings, and some commercial shopping areas. However, the quality of these end-of-trip facilities varies greatly, and the quantity provided often needs calibration—some locations have too little bike parking while others have too much. There exists a need to “right-size” the City's approach to bicycle parking, and ensure that types and locations are standardized to provide the highest level of quality and service.

This will require bicycle parking regulations that recognize the two basic types of bicycle parking facilities, short-term and long-term, and the different land uses to which they should be allocated. This distinction has not been made in the City's bicycle parking regulations, which is detrimental to meeting the needs of various types of cyclists and the multiplicity of trip types (commuting, errands, recreational etc.)

Bicycle parking should not be tied to automobile parking requirements because supply and demand for that mode are not an adequate indicator of actual bicycle parking need. Furthermore, if a municipality adopts automobile parking maximums, or later reduces such parking requirements, the amount of bicycle parking would also be reduced when the opposite may be necessary. Therefore, bicycle parking ratios should be based on uses on the property (e.g., a gym needs more bicycle parking than a lumberyard) and quantifiable indicators like unit count, employee count, or building square footage.



Bicycle parking located at the U.S. Mexico border.



If used as intended, the improper installation of this U-rack bicycle rack places the bicycle within the vehicular right-of-way.

Improved bicycle parking standards should also include graphic examples depicting acceptable and unacceptable rack types, locations, and placement. As currently written, the description can easily lead to misinterpretation. For those who manually install bicycle parking facilities, physical guidance will prevent the poor location and configuration of otherwise acceptable bicycle parking types. An update to the City's bicycle master plan should include detailed, graphic bicycle parking standards, regulations for the use of custom bike racks, and bicycle parking ratios that may be more closely calibrated to land use, urban form, and transportation hubs.

ON-ROAD BICYCLE FACILITIES - EAST YANDELL

As with other infrastructure projects, when it comes to bicycle facilities, one size does not fit all. The illustrations below show how one road can be calibrated to any number of bicycle facility types, depending on context, existing and future bicycle connections, and overall community goals.



Existing conditions on East Yandell include a one-way traffic pattern and parking on both sides. The street is over-designed for current traffic volumes.



Step 1: A low cost and immediate improvement for the corridor would be the addition of Shared Use Lane Markings or "Sharrows" to indicate that this is a preferred bicycle route.



Step 2: Another intervention in the design of East Yandell envisions the installation of a buffered bike lane that would be achieved by eliminating one travel lane.



Step 3: The addition of a parking protected cycle track and bicycle box would attract a greater number of cyclists and would be appropriate on major routes.



Step 4: A future East Yandell that envisions a cycle track, covered transit stop, and bicycle box.

ONE-WAY STREETS

Bicycle Circulation

One-way streets present greater difficulties for cyclists than almost any other user group. A bicyclist provides his or her own power and typically tries to conserve that power by choosing the shortest path between destinations. Ideally, this path should also be safe and legal. One-way streets make all of these criteria more difficult to achieve. If bicyclists ride legally and safely on the street, one-way routing forces more circuitous paths to a destination, just as for buses and automobiles. The additional time and effort involved in this type of routing discourages bicycling as a transportation mode.

One-way streets encourage wrong-way riding to provide the most direct bicycle route to a destination. This is a common cause of bicycle crashes; a safe bicycling system should discourage this type of riding. Converting one-way streets to two-way operation will essentially double the available routing options along a given thoroughfare and cut in half the distance required to reach many destinations by bicycle.

Transit Circulation

Buses face two dilemmas with one-way streets. First, the circuitous routing required to reach a destination means that passengers must often be dropped off on one street and picked up on another, which presents a challenge to increasing transit ridership. Second, because buses have doors on only one side, buses are not able to access some locations, requiring unnecessary street crossings to reach a destination.

Pedestrian Circulation

One-way streets may appear, at first glance, to be of little concern for pedestrian circulation. Pedestrians, after all, walk on the sidewalks, and sidewalks still go in both directions even on a one-way street. However, there are several circulation issues associated with one-way streets and pedestrians:

- ***Sign Placement and Navigation:*** In many cases, street signs and traffic signals on one-way streets are oriented for the convenience of drivers and are not even visible to pedestrians walking toward traffic. The antique pole-mounted signals on many of the downtown intersections are equally visible from all directions; mast arms do not have this quality and care must be taken to sign the mast arm signals correctly on one-way streets.
- ***Choice of Facing Toward or Away From Traffic:*** Depending on the situation, pedestrians may find it safer to walk facing traffic, rather than away from traffic. At night, for instance, pedestrians may feel safer walking toward their destination on the side of the street facing traffic, or they may prefer to walk with traffic to avoid the glare of oncoming traffic. One-way streets limit this option. The difference is subtle, but it affects how pedestrians perceive safety and

convenience on a street and is just one of the factors that contribute to greater walkability.

- ***Vehicle Speed:*** Traffic engineering handbooks estimate that one-way streets provide a 10-20% increase in vehicle capacity. This is accomplished, in part, by allowing higher vehicle speeds (as well as the additional lane capacity in the case of a two-lane one-way street). Reduced side friction, fewer potential intersection conflicts, simplified signage, and in some cases synchronized traffic signals all allow higher vehicle speeds. As shown above, vehicle speed through an intersection has serious consequences for pedestrian safety. Signal synchronization can be used on one-way streets, as on two-way streets, to encourage lower traffic speeds. The danger of this approach, however, is that with synchronized speeds of 30 mph or less, some drivers learn to “double” the signal – i.e., synchronization at 25 mph is also synchronization at 50 mph. Therefore, this plan should consider any means available to manage and reduce vehicle speed, including elimination of one-way operation.
- ***Intersection Safety:*** At first glance, intersections of one-way streets may appear safer for pedestrians because of a reduction in turning conflicts. This may be important for higher speed highway operation, where a driver’s attention is spread thin, speeds are high, and decisions must be made quickly. Operations on a low-speed, walkable street, however, are expected to be more complex due to the greater interaction and activity of the urban context. Complexity at an intersection is actually preferable, because it requires drivers to focus on their environment (including any pedestrians in the intersection). In situations where higher speed street design (such as 12’ travel lanes and large radius curb returns) is combined with pedestrian travel, safety and conflicts can become an issue. In low-speed street design, however, such as that recommended for El Paso’s compact urban areas, with narrower travel lanes and very short curb return radii, the complexity of the intersection is in itself a safety feature.

Walker, Kulash, and McHugh in “Downtown Streets: Are We Strangling Ourselves on One-Way Street Networks?” point out that a one-way street system presents a more varied set of intersection conflicts than a two-way street system. Consider that a pedestrian approaching an intersection of two two-lane streets, operating as two-way streets, walking in the direction of traffic, has the following sequence of potential conflicts:

- I. Cars approaching from behind may turn right across the crosswalk, so the pedestrian must be aware of a conflict from the rear left.

2. Cars traveling on the cross street may run a stop sign or signal, so the pedestrian must look both ways before crossing the street (standard instructions for anyone old enough to walk).
3. Cars turning left from the approaching direction may cut across the crosswalk, so the pedestrian must look ahead and to the left.
4. Cars turning right from the cross street may cut across the pedestrian's path so the pedestrian must look ahead (where the pedestrian is already looking, and the "look in both directions rule" really addresses this conflict as well).

Pedestrians will experience these four conflicts, in this sequence. The sequences will be exactly the same at every two-way intersection, except reversed for pedestrians traveling the opposite direction. Once a pedestrian has learned to beware of these conflicts, all two-way intersections can be traversed safely, and the pedestrian has a very high level of understanding of potential conflicts and how to address them.

Under a one-way street system, however, there are 16 different conflict sequences that a pedestrian may encounter. Some of the sequences are, indeed, individually simpler than a two-way street intersection, with only one or two conflicts, but the sequence varies according to the direction the pedestrian approaches the street. The pedestrian has to know the directions of the one-way streets, prior to reaching the intersection, in order to know where the conflicts may occur. Without that knowledge, the pedestrian has to perform essentially the same scan and conflict avoidance protocol as for a two-way intersection.

Pedestrians who do not scan an intersection for conflicts are going to have conflicts, regardless, no matter the intersection type. Pedestrians who are intoxicated, for instance, cannot be expected to behave rationally at any intersection type, nor can children. The safest street design choice for these types of pedestrians is to manage traffic speeds to the lowest possible level, through two-way street operation, on-street parking, narrower travel lanes, safety strips, and whatever other means are available and appropriate. One-way streets are not an appropriate solution, as they are designed to increase traffic volumes and speeds.

The one-way street system is primarily an advantage to drivers, although even then drivers unfamiliar with the area will experience some level of difficulty figuring out the operations of the various one-way intersection types.

Conversion to Two-Way Operations

An extensive conversion of El Paso's one-way streets should be undertaken to ensure the safest operation for all users of the network: pedestrians, cyclists, and transit patrons included.

Converting to two-way operations would:

- Be helpful in compact urban areas.
- Help keep travel speeds to a pedestrian-comfortable 25 mph.
- Improve bicycle, transit, and pedestrian circulation.
- Decrease Vehicle Miles Traveled (VMT) by 40% due to drivers circling to reach destination.
- Reduce confusion for visitors.

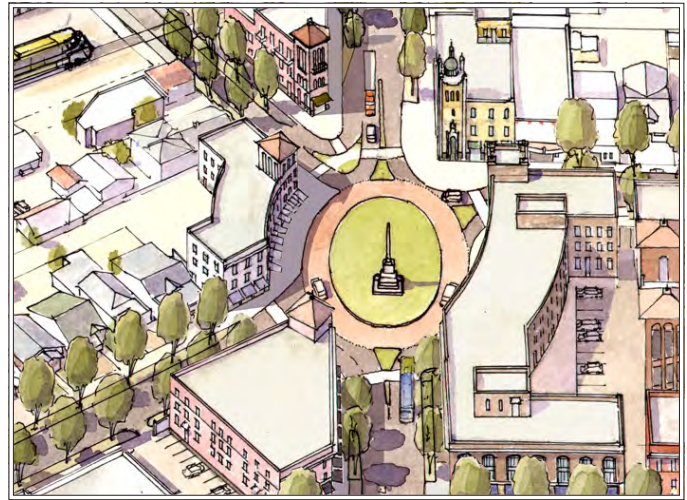
ROUNDBOUTS

Modern roundabouts at key intersections in El Paso could benefit drivers, pedestrians, and bicyclists. A modern roundabout accommodates traffic flow and capacity while creating a greater sense of place and allowing safer conditions for drivers and pedestrians.

A modern roundabout is not the same as the large traffic circles common in the northeastern United States. Traffic circles are much larger so that vehicles can move through them at fairly high speeds; they do not contain many of the pedestrian-friendly elements of roundabouts.

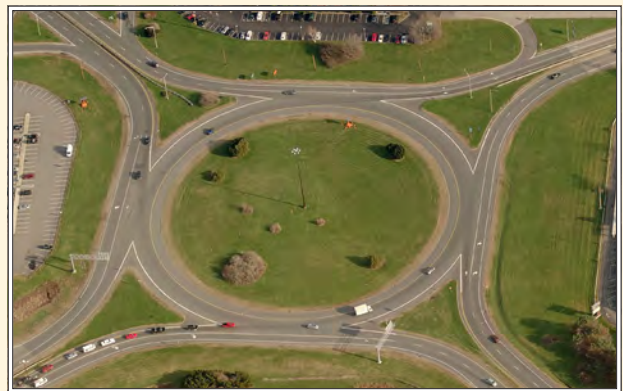
Walkability at a roundabout is increased because traffic speeds are lower as vehicles approach and exit the roundabout and because pedestrians have fewer lanes of traffic to cross at one time. Roundabouts provide a greater sense of place because of their distinctive design and greater opportunities for urban design. Statuary, fountains, or landscaping can be placed in the center of a roundabout.

Roundabouts are designed to achieve a consistent moderate vehicle speed (15 to 25 mph) to minimize crash potential. When traffic volumes are light, many gaps are available for pedestrian crossing.



A conceptual roundabout design for Five Points

TRAFFIC CIRCLES VS. ROUNDBOUTS



Traffic Circle

Traffic Circles

- Large (300' to 800' diameter)
- Fast (30 to 50 mph)
- Scary
- High speed merge
- Dangerous (many more crashes)

Roundabouts

- Smaller (110' to 180')
- Slower (15 to 25 mph)
- Friendly
- Yield at entry
- Safer



Roundabout

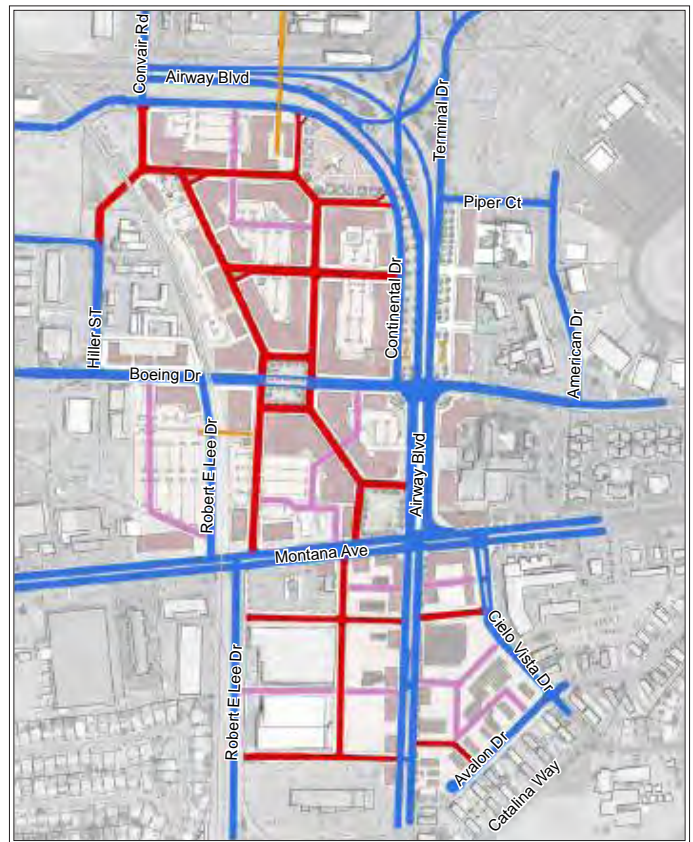
ADDING LOCAL STREETS

Throughout *Plan El Paso*, illustrative site plans are presented showing how land should be developed and redeveloped at specific locations. Common themes of those plans include expansions of the current street network.

The diagrams on this page highlight the expanded network for two of the illustrative plans. The first is for the airport gateway area where an RTS line will provide high-quality transit service to the airport terminal. The second is for the area around a transfer station where the Montana RTS line will terminate.

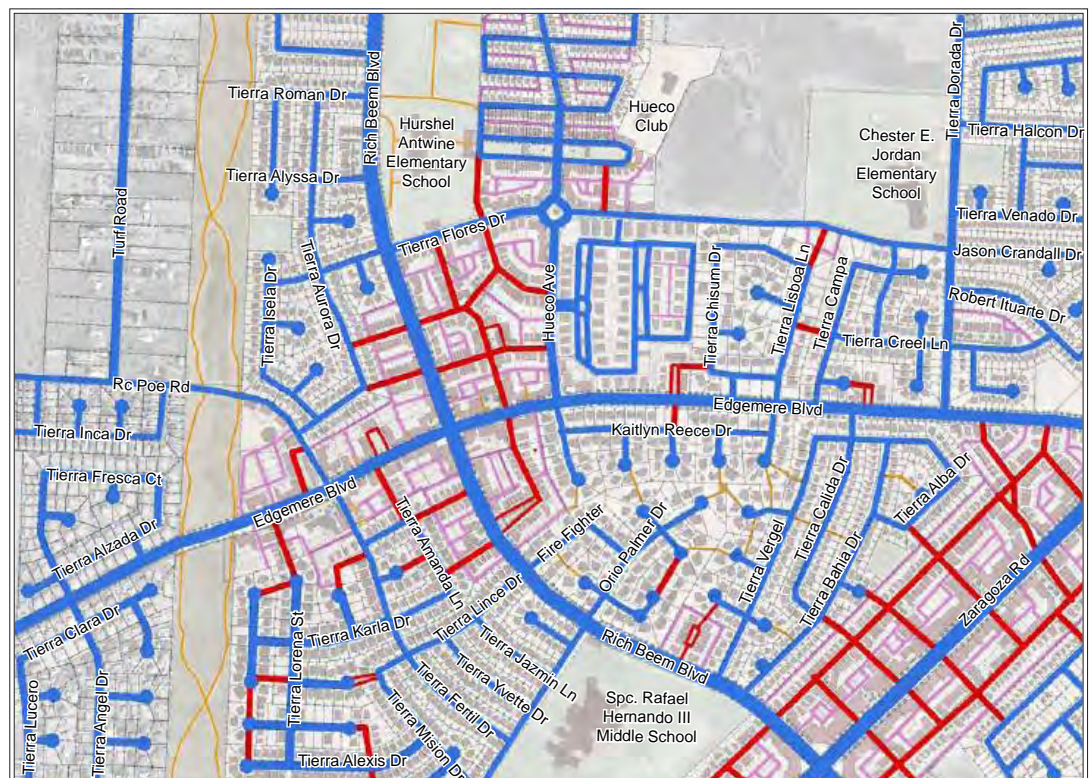
The existing street network is shown in blue. Potential new streets that should be created as those parcels redevelop are shown in red. Potential alleys are shown in purple. Some of these new connections occur in existing parking lots.

These expanded street networks would disperse traffic and provide rear access to buildings, allowing for driveway closure and preventing drivers from having to access main arterials to make local trips. These new connections also shorten block lengths, increasing comfort for pedestrians.



Right: Airport Transfer Center, Existing and New Street Network

Below: Eastside Transfer Center, Existing and New Street Network



LEGEND

- Existing Streets
- Proposed Streets
- Alleys
- Pedestrian Paths

MOBILITY NEEDS FOR SENIORS

Meeting the mobility needs of seniors will be a challenge for El Paso, Sun Metro, and community organizations. An ideal community has transportation options that meet a range of diverse needs of non-drivers and of drivers who are limiting their driving or who prefer not to drive.

Continued mobility has a direct effect on the quality of life for seniors and can either enable or prevent seniors from remaining independent and in their own homes longer as they age. The lack of transportation options hurts the ability of some older adults to participate in the life of their communities.

According to the American Association of Retired Persons, changes in transportation options to better accommodate senior transportation needs can be supported by a three-fold, multi-faceted approach: structural changes in the built environment; changes to facilitate access to transportation services; and programmatic and public policy changes that diminish or eliminate barriers to mobility, as described below.

Structural Changes:

- Communities should embrace a Complete Streets policy to guide the design of all roadways to be accessible to all users of the transportation system regardless of age and ability.
- Communities should have land-use plans that encourage walkable communities.
- New communities should be designed to be more walkable.
- Communities should improve existing sidewalks to ensure adequate width, curb cuts, and lighting as well as eliminate discontinuous and disjointed walking routes.

- Communities should give special attention to the design of intersections to ensure safe crossing by persons on foot.
- Communities should provide sufficient numbers of appropriately designed places along sidewalks for pedestrians to rest.

Changes to Facilitate Access:

- Providers of both public and senior transportation need to extend service in the evenings.
- Public transportation providers should explore innovative services such as neighborhood bridge routes and route deviation service.
- Transportation providers (especially medical transportation) should improve the quality and reliability of their services.

Program and Public Initiatives:

- Cities, counties, and private nonprofit organizations should be pro-active in addressing the future transportation needs of older adults, particularly those with lower incomes or living in rural areas.
- State and local governments in partnership with nonprofit organizations should design and implement educational campaigns to improve pedestrian and driver safety.
- State and local governments should facilitate integrated land-use and transportation planning to ensure that the design and layout of new communities and their transportation networks are accessible to all residents.



New communities that have adequate sidewalks, daily needs within walking distance, ample parks and walking trails, and that are connected to the Downtown by transit could provide unique havens for aging El Pasoans.

COMMON ELEMENTS IN WALKABLE STREETS

The following elements are often employed to make streets more walkable and contribute to the local economy.

Safety Strip

A “safety strip” can help to manage vehicular speed on narrow streets while providing flexibility for atypical vehicle movements such as passing a stalled vehicle or aiding emergency vehicles.

Safety strips are made of a cobbled texture with vertical offsets of ¼-inch to 1-inch. This surface makes it possible, but uncomfortable, to drive on for extended distances. Safety strips are placed between lanes with travel in opposite directions; they can also function as an informal left-turn lane. Safety strips may also be used for temporary deliveries to adjacent businesses without stopping the flow of traffic.

On-Street Parking

Each parking space in front of a business can yield significant sales to that business. Bob Gibbs, a leading American urban retail planner, estimates that each parallel parking space can yield \$125,000-250,000 in gross annual sales for adjacent businesses, depending on the number of daily turnovers. On-street parallel parking provides great economic opportunities for local businesses in El Paso.

Street Trees

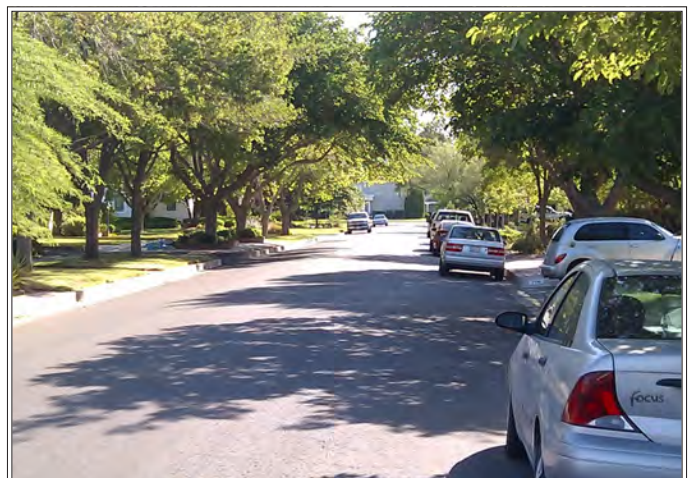
Rows of street trees are typically planted in landscaped planting strips that separate parking or travel lanes from sidewalks. In commercial areas, street trees can be planted in occasional tree wells in the parking lane or in the sidewalk. Street trees should be drought-tolerant to minimize the need for irrigation.



Safety Strip on Main Street, Columbia, SC



Safety Strip on Main Street, Columbia, SC



On-street parking and tree lined street in El Paso

PARKING

Parking practices in El Paso will need to change as the City implements the Rapid Transit System (RTS), revitalizes Downtown, and transforms highways to walkable urban thoroughfares. The past practice of plentiful free parking that separates buildings from each other and from the street has contributed to auto-dependent sprawl, low property values and tax revenues, economic and neighborhood disinvestment, and inhospitable conditions for walking, bicycling, and transit use.

There are significant opportunities to thoughtfully and strategically manage parking to support the City’s smart growth and sustainable transportation policies. Its amount, form, location, pricing, and other factors can influence travel behavior, boost economic activity, and improve community character.

Strategies to more effectively manage parking demand include increasing the shared parking supply, improving access to alternative transportation modes, and increasing parking turnover in high-demand areas such as business districts and commercial corridors by charging for parking. Paid parking is always controversial; the recommendations presented here are designed to maximize other strategies before considering paid parking.

Increasing parking supply can occur by either building more spaces or by increasing the “effective supply” by lowering the demand for parking. Lowering parking demand tends to be more cost-effective than building new parking and can contribute to other City goals such as improving the pedestrian environment. There are four main strategies available to help decrease parking demand:

1. **Increase enforcement:** For time restrictions to work effectively, users must have the perception that they will be fined for violations.
2. **Shift modes:** Improve alternative mode access by making transit, biking, and walking more convenient and attractive.
3. **Increase turnover:** Expand time restrictions or implement paid parking to allow for high-value spaces to be used many times over the course of each day.
4. **Encourage shared parking:** Ensure that existing parking spaces are utilized to their maximum potential throughout the day and evening.

I. Increase Enforcement

Often in Downtown areas, much of the current storefront parking supply is consumed by employees and other parkers who evade enforcement. Better enforcement leads to higher turnover rates, effectively creating new parking supply, benefiting Downtown businesses. The increased enforcement should be done without creating a parking environment that is hostile to visitors and new residents. There are four specific strategies El Paso should consider:

i. Increase Probability of Time-Limit Offenders Receiving Tickets
Employee parking is a poor use of Downtown storefront parking spaces because it underutilizes highly valued parking spaces. Employee cars sit all day without generating additional pedestrian activity or additional shopping. Employees and employers parking in front of their businesses impede the access of customers to their stores, making Downtown shopping less attractive.

ii. Eliminate Parking Shuffle
Experience has shown that some employees and other long-term parkers avoid parking tickets by shuffling their cars throughout the day. Increased enforcement efforts will decrease the likelihood of such parkers shuffling their cars.

iii. Establish Fines For Repeat Offenders
In areas where parking is scarce, some drivers may be willing to risk receiving a parking ticket as a “cost of business” because an occasional fine is worth the convenience of not moving the car during the day. Although fines increase for multiple violations in one day, the fines do not increase for multiple offenses over time. Increasing fines for repeat offenders is an important part of enforcement.

Advances in parking technology can make parking enforcement officers more effective. Handheld computers record the parking history of each vehicle. This allows enforcement agents to keep track of first time offenders, repeat offenders, and vehicles being shuffled around during the day. Some handheld units provide digital recognition of license plates. Agents become more efficient because they spend less time entering license plate numbers and more time enforcing.

iv. Maintain a Customer-Friendly Environment
Parking violation enforcement should be predictable, courteous, and adequate to maintain a high level of compliance. Special care must be taken to ensure the right balance of leniency and enforcement.

2. Shift Modes

Ensuring adequate bicycle parking is an important component of making cycling a more attractive and feasible mode choice. Bicycle parking could be required in connection with off-street auto parking requirements at a ratio of one space per every five auto spaces. Because many people live too far from their jobs to commute solely by bicycle on a regular basis, non-motorized connections to El Paso’s transit system are key.

In the future, El Paso may want to consider implementing an “eco-pass” type program that provides employees with access to free passes (paid for by the employer). Research and experience have shown that employees are more likely to use transit to get to work if they have a free pass. If parking is restricted

at the employment location, providing transit passes to employees is almost always less expensive than building or leasing new spaces. A recent study in downtown Boulder, Colorado, found that it was five times less expensive to provide free annual transit passes to all employees in downtown Boulder than it was to build replacement parking for those who switch to driving without a pass.

3. Increase Turnover

One of the most aggressive strategies to increasing available parking supply in environments such as Downtown El Paso and other high-demand areas is through paid parking. As noted above, this is a controversial step that should be considered only after the other strategies described above have been implemented.

While controversial, paid parking in Downtown districts has consistently proven to be successful. Benefits of paid on-street spaces include:

- Employees will be discouraged from using high-value spaces close to business storefronts.
- Prices can be set high enough that there will always be available spots, but low enough to not discourage their use (approximately 85% utilization).
- Money generated can be used to improve the Downtown district, such as by placing utilities underground, street sweeping, and beautification. This direct demonstration of the benefits of paid parking makes it more palatable for businesses to support and drivers to use.
- The less convenient parking areas can remain free, subsidized by the paid, more convenient on-street spaces.

Paid parking should be considered as a solution in areas with an inadequate parking supply. Appropriately priced parking ensures availability and eliminates cruising or circling for a space – a significant source of congestion – while reducing the need to devote land and resources to additional parking spaces.

Paid parking is particularly appropriate where:

- Land values and parking facility costs are high.
- Traffic congestion or vehicle pollution are significant problems.
- Mixed land uses, infill development and reduced pavement area is desirable.
- Administrative and enforcement resources exist.

Parking prices can be set to achieve transportation and parking management objectives using the following guidelines:

- Set Performance-Based Prices To Achieve an Average Parking Space Occupancy Rate of 85%.
- Use Time and Location-Variable Rates:
 - At more convenient locations, prices should be higher, time increments smaller, and rates may increase over time (e.g., \$1 for the first hour, \$2 for the second hour and \$3 for each subsequent hour) to encourage turnover.
 - Prices should be higher during peak periods and lower during off-peak periods.
 - Price the most convenient parking spaces for customers and clients, with minute or hourly rates.
 - Less convenient locations can have lower rates and long-term discounts to attract commuters and other longer-term parkers.
- Use Parking Pricing To Encourage Mode Shifting. Integrate pricing with other strategies that support transportation alternatives.
- Payment Systems Should Be Convenient. They should accept coins, bills, and credit cards, and in the case of structured parking, allow motorists to pay for just the amount of parking they will use (rather than requiring prepayment based on expected parking duration).

It is important to use revenue from paid parking to fund additional public services in the immediate vicinity, such as pedestrian and bicycle facility improvements or, increased police protection. The affected community should have an opportunity to provide input on which programs or projects will be funded by the parking revenue. The promise of these public improvements will encourage merchants, residents, and other stakeholders to support pricing programs.

4. Encourage Shared Parking

Often the peak parking demand of adjacent land uses occurs at different times of the day. For example, a bank and an adjacent movie theater could share spaces as their parking demand peaks at different times. Shared parking decreases the need for off-street parking spaces with all of the corresponding benefits mentioned above. Shared parking is particularly relevant for mixed-use districts. Benefits to implementing shared parking include:

- Reduction of land devoted to parking
- Reduction of development costs
- Concentration of access points
- Potential to redevelop areas where on-site parking is not feasible

Parking Management:

Effective management of existing parking supply is less expensive than creating additional surface parking lots or parking garages. Parking management in El Paso should include setting appropriate time limits for storefront parking, overseeing directional signage to parking facilities, creating and managing new employee parking facilities, creating and managing neighborhood permit programs, and in the future considering paid parking.

Neighborhood Parking Permit: Policies that increase turnover of Downtown spaces, such as increased enforcement and paid parking, could shift parking demand into adjacent neighborhoods. Some Downtown visitors wishing to avoid paying for parking will adjust their transportation behavior to park in the nearest free spot.

For changes in parking policy to work practically and politically, it is essential to offset the risk of spillover parking into surrounding neighborhoods. Most commonly, this is achieved through a neighborhood Parking Permit Program (PPP). A PPP manages parking spillover into residential areas by restricting the number of vehicles allowed to park on streets adjacent to commercial areas.

The first step to developing a PPP is to create maps identifying the extent of each the PPP zones. Multiple zones aid in managing the number of permits issued. Often zones are color-coded for easy distinction. Once the zones are established, signs are erected on each block restricting parking for all except those with a valid permit for that zone.

Residents who live within one of the zones can apply for a permit, paying a small annual fee for the parking permit to cover administrative costs of issuing the permits. Each person receiving a parking permit should also receive several temporary parking passes that friends and visitors to their home can use to park on the street.

Parking District: A parking district would be responsible for Downtown enforcement, parking finance, the neighborhood permit program, marketing, and public outreach. This includes removing the responsibility of parking enforcement from the police force to a special parking district.

Development-Related Policies

The following parking policies are important in the context of new development and redevelopment.

- a. *Ensure On-Street Parking:* On-street parking is the most valuable type of parking for several reasons. First, it creates physical and psychological separation between pedestrians on the sidewalks and moving traffic. Second, it presents the best access to the front doors of retail, residential, and commercial destinations. Third, it limits the need for off-street parking facilities. An off-site parking facility uses valuable land, requires additional curb cuts through the pedestrian realm for access, and presents challenges to creating good urban design. Additionally, in urban areas, off-street parking facilities can be extremely expensive. Fourth, on a per-space basis, on-street parking takes up less space than other forms of parking.
- b. *Place Parking Behind Buildings:* Fronting streets with buildings improves the pedestrian environment. Placing parking behind buildings also allows for the access points (driveways or alleys) to come from lower volume side streets where presumably there will be fewer pedestrians. This allows for a more continuous pedestrian frontage and creates fewer pedestrian-motor vehicle conflicts. It also eliminates mid-block left-hand turning movements on the higher-volume street, a leading cause of mid-block congestion.
- c. *Minimize Supply:* Parking is often oversupplied, creating a litany of design challenges. A 2003 study of 42 parking lots during the holiday season found that the average occupancy was less than half.¹ Everyone is familiar with retail shopping centers with massive parking facilities that are rarely (if ever) full. The problem is that the minimum required parking for residential and commercial development is often set at the annual maximum expected demand, leaving excess parking for most of the year. An innovative approach taking hold across the country is to regulate parking through specifying the maximum allowable supply, rather than the minimum.
- d. *Ensure Delivery Parking:* Although unglamorous, providing delivery parking is a critical element to vibrant retail and restaurant activity. Alleys are ideal places for temporary truck parking, allowing for back door delivery access away from customer parking and entrances. Another approach is to designate special loading zones.

¹ Gould. "Parking: When Less is More." Transportation Planning, Vol.28, No.1. Transportation Planning Division, APA. Winter 2003.

All three categories of parking strategies outlined above are appropriate for El Paso in some form. It should be emphasized that the categories should be implemented sequentially, starting with the least costly and aggressive (enforcement) and working up to more aggressive (increasing turnover) as needed. The objective of parking management should be to maximize efficient use of existing supply, incentivize use of alternate travel modes (by discouraging unnecessary vehicle trips), and not create undue barriers or burdens for residents, employees, or visitors. It should also be noted that other strategies such as park-and-ride lots depend on implementing these strategies. Implementing the recommended parking strategy categories sequentially has the additional benefit of not creating false choices between doing nothing and only implementing paid parking.



On-street parking. *Glenwood Park, Atlanta, GA*



A mid-block parking court allows the street frontages to be free of garage doors and curb cuts, increasing pedestrian comfort and safety. Bioswales treat run-off with native plants and trees. Multiple windows and balconies increase natural surveillance. *Glenwood Park, Atlanta, GA*.

HIGH-CAPACITY TRANSIT

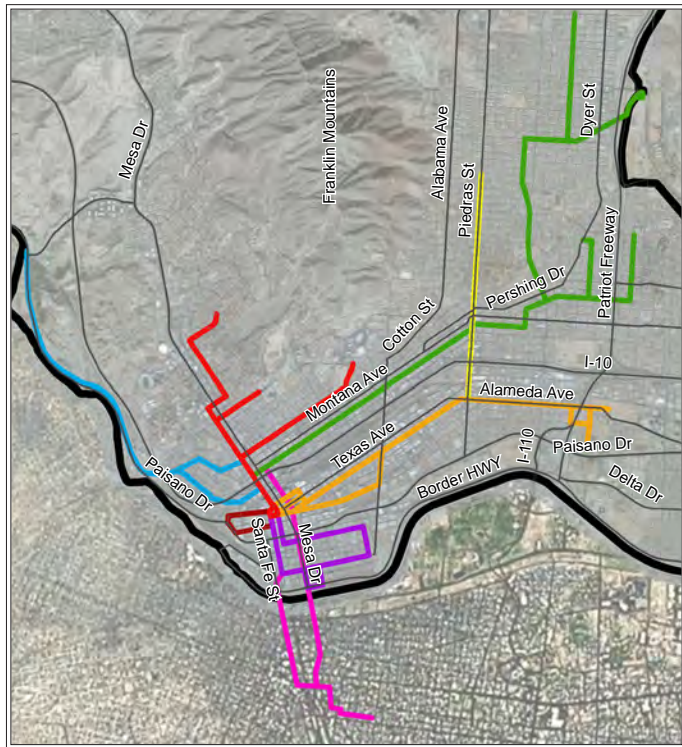
Participants in this planning process consistently prioritized long-term investment in high-capacity transit as a visionary and important element of El Paso’s future.

High-capacity transit is a general term for an array of transit technologies that can carry a large enough number of passengers to shape land-use patterns, for instance through transit-oriented development. These technologies include rail transit (streetcars, light rail, commuter rail, and intercity rail); bus rapid transit; and other forms of what are commonly called rapid transit. El Paso’s expanded and improved bus system is referred to as a “Rapid Transit System” (RTS) because it has many but not all the attributes of bus rapid transit.

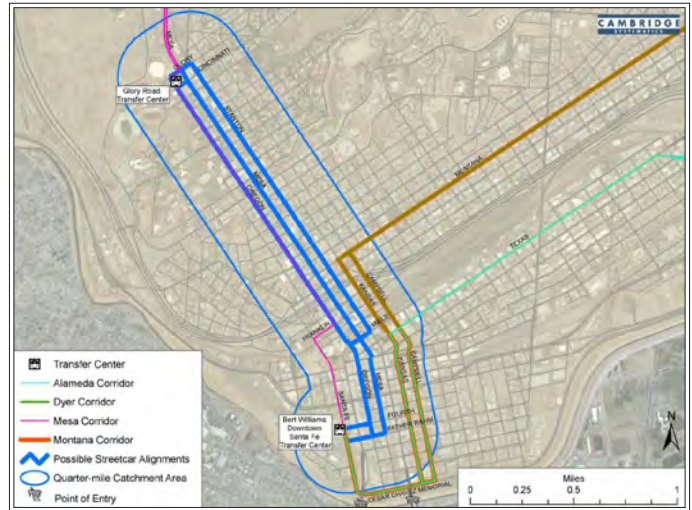
As discussed earlier, El Paso has prioritized RTS as a new foundation for its expanded public transportation system. City and Sun Metro officials are working so quickly to implement RTS that the entire four-line network should be operating by 2016. The following discussion suggests other high-capacity investments that should be considered during the next two decades.

Streetcars

Streetcars are powered by electricity and run on tracks embedded in streets. El Paso once had an extensive system of streetcars, as shown on the map below.



Maximum Extent of the historic El Paso / Juárez Streetcar Network



Possible El Paso Streetcar Alignments Shown in Blue

Streetcars stop frequently and provide a service more similar to buses than modern “light-rail” service, which travels faster but makes fewer stops.

TxDOT recently completed an initial streetcar feasibility study that showed both market potential and technical viability for a new streetcar route between Downtown El Paso and UTEP within the Oregon-Stanton-Mesa corridor, as shown on the map above.

A streetcar would have its largest appeal for local trips because streetcars are designed for convenience rather than speed. The border-crossing market has strong potential on this route because many pedestrians enter El Paso each day to make local trips for work and shopping purposes.

The streetcar could serve as a catalyst to encourage greater residential development downtown. Other key markets for the streetcar would be the entertainment districts and service as a shuttle from remote parking for special events Downtown or at the Sun Bowl and Don Haskins Center.

This streetcar route would be a critical element of “re-investing in Downtown first,” itself a foundational policy of *Plan El Paso*. Over time, there may be opportunities to extend this route or add additional streetcar routes to other major destinations, in a sense recapturing El Paso’s historic streetcar network.

As that historic streetcar system once did, reestablishing transit connections to Juárez was emphasized by the community throughout this comprehensive planning process. While the transit technology and timing is uncertain, this transformative vision should be carried forward in future transit and Port of Entry planning efforts.

Light Rail Transit

Many larger cities have electric-powered “light rail” systems which provide fast and frequent all-day service. Light rail stops are spaced more widely than streetcar stops, so light rail serves nodes of activity rather than linear corridors. El Paso has never had light rail service, but several possibilities exist.

One would be converting parts of the new RTS network to light rail. By its nature, RTS stops will serve nodes of activity in the same manner as light rail stops. Light rail service would provide more capacity than RTS, although it might interfere with traffic more than RTS vehicles which travel on asphalt pavement that can be shared with other vehicles. Light rail service would also require a large capital investment that might not be justified given the original RTS investment

There may be opportunities to implement light rail in other areas not served by the initial RTS network. For example, existing freight rail corridors can be used for passenger service if they connect places that passengers want to go and if the rail corridor is either no longer needed for freight trains or can be made compatible with passenger service.

Light rail vehicles usually run on their own tracks, although there are several exceptions including parts of the San Diego Trolley where freight trains formerly shared the tracks but now use them only at night when passenger service is not provided. The only tracks in El Paso where this arrangement could work at present would be the lightly-used tracks along the border that are already limited to night-time operation because of restrictions on trains in downtown Juárez.

However, when a freight rail line is no longer needed, the corridor can sometimes be acquired or leased. The existing freight rail systems in El Paso and Ciudad Juárez offer potential opportunities for international light rail service that could connect the UTEP, the downtowns of El Paso and Juárez, and the El Paso and Juárez airports. This concept is described immediately after the following discussion of regional freight rail issues, which would have to be modified to make this light rail concept feasible.



San Diego Trolley in Mission Valley

Intercity and Commuter Rail Service

Existing rail corridors can often be used for expanded passenger service. The simplest situation is where passenger trains simply share the rails with freight trains. Amtrak intercity trains operate in this manner; they are heavily built and pulled by locomotives similar to those used by freight trains so they meet federal safety standards for sharing freight tracks. Freight trains usually retain priority but Amtrak trains are infrequent enough that they can coexist.

If Amtrak or other conventional intercity service could be provided between the currently unserved corridor between El Paso, Albuquerque, Santa Fe, and Denver, or to Tucson and Phoenix, it could use the existing BNSF tracks and terminate at the Downtown transfer center on Santa Fe Street or at Union Depot.

Another rail technology for intercity service is high-speed rail, which runs on special tracks that avoid road crossings and other impediments to high-speed travel. High-speed service is already common in Europe and Asia and has been introduced in this country on the Boston–New York–Philadelphia–Washington D.C. corridor. While conventional intercity service to El Paso is more likely than high-speed rail, the technology is not as important as the goal of pursuing all reasonable intercity rail opportunities.

Commuter rail service is similar to intercity rail but covers shorter distances with more frequent service. The nearest example is the New Mexico RailRunner Express, which runs from Santa Fe to Albuquerque to Belen, primarily serving commuters to or from Albuquerque and Santa Fe.

El Paso and Las Cruces have long advocated (and are studying the potential) for similar commuter rail service linking the two cities. This service would provide an important opportunity to strengthen regional travel and economic development in a way that complements the City’s planned RTS network, proposed streetcar, and other HCT opportunities described in this section.



New Mexico RailRunner Express at Santa Fe Depot

FREIGHT RAIL

Previous Rail Alternatives

Most of El Paso's railroad network was in place very early in the twentieth century. The City has grown up around these railroads. The *1925 City Plan*, while noting the importance of the railroads to El Paso's growth, frequently recited the problems caused by busy railroads in the midst of a thriving city and outlined potential solutions, essentially to remove freight railroads from the heart of the City, especially those that separated Downtown from land immediately to the north.

Twenty-five years passed before a solution was in operation. In 1927, the railroads submitted a plan for street underpasses which the City found unacceptable. The Great Depression hampered further progress, but in 1937 the City Plan Commission concluded that the railroad tracks should be depressed as they pass near Downtown, instead of a building bridges at major streets. In 1951, the depressed Bataan Memorial Trainway was finally completed, allowing traffic to flow overhead on short bridges that eliminate the previous obstructions and dangerous conditions.



In recent years, many other ideas have been examined to improve rail opportunities or solve problems caused by railroads passing so densely through a large city.

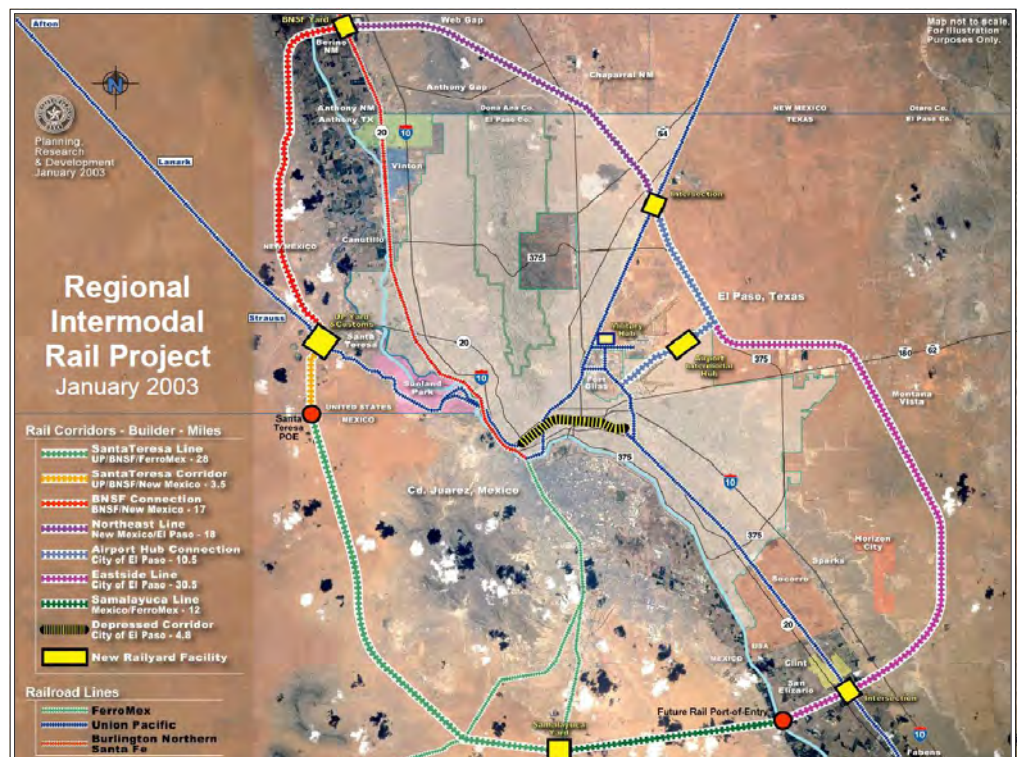
In 1999, the El Paso Metropolitan Planning Organization (MPO) considered the potential for a new intermodal hub. "Intermodal" means freight that is transported in standardized shipping containers by two or more travel modes, such as rail, trucking, and aircraft. Five sites were evaluated:

- Santa Teresa (New Mexico)
- Clint
- San Elizario (near Herring Road)
- Fort Bliss / Biggs Army Airfield
- East of El Paso International Airport

At present, intermodal operations serving commerce in Juárez and El Paso occur only at the BNSF yard and at Union Pacific's Alfalfa Yard. The study recommended a new facility at a combination of the Fort Bliss and EPIA sites because of the potential to spur development in that area. Officials and developers in New Mexico continued to support a Santa Teresa location for similar reasons.

Three years later, Juárez officials began considering the potential for a depressed trainway to eliminate the traffic problems caused by freight trains which run at ground level through downtown Juárez. The railroads companies, however, were concerned about how a depressed trainway would affect their operations. This discussion was merged with considerations about a new intermodal hub which, if located outside El Paso and Juárez, might be better served by moving the Juárez rail line around the City instead of depressing the existing tracks Downtown.

One result of this flurry of planning was a regional concept championed by Mayor Ray Caballero and supported by the El Paso MPO and the Doña Ana County Board of Commissioners. This concept would create a rail loop around both Juárez and El Paso. This loop would allow most freight trains to bypass urban portions of Juárez and El Paso entirely. Tracks would remain in place to serve businesses in both cities; the Union Pacific tracks through central El Paso would be depressed. A new intermodal facility would be built near the airport as proposed in the previous MPO study. The map below illustrates a version of this concept.



Regional Intermodal Rail Project - January 2003

Moffatt & Nichol Engineers, a firm with extensive experience with railroads, was retained to evaluate the feasibility, cost, and benefits of various components of this plan, plus an additional component, a Northeast Parkway freeway running northwest from Fort Bliss into New Mexico and through the Web Gap to I-10.

The Moffatt & Nichol report from October 2003 contained the following analyses and conclusions:

New International Rail Crossing at Santa Teresa

Because New Mexico has no major border crossing and thus has missed most international trade opportunities, there has been considerable support from New Mexico officials to expand the Santa Teresa border crossing. Adding a new rail crossing along with new railyards for both Union Pacific and BNSF would greatly enhance these economic development plans. Other benefits would be provided by eliminating the rail line through downtown Juárez and permitting the closure of two railyards closest to Downtown El Paso, the BNSF railyard on Santa Fe Street and Union Pacific's Chamizal Yard along the Rio Grande. Moffatt & Nichol rated this improvement as a high priority for the region.

Relocate and Redevelop Existing Rail Facilities in El Paso

El Paso has three other railyards, all operated by Union Pacific. The major opportunity for redevelopment is the western portion of the Dallas Yard. Although six mainline tracks still pass through, most of the other tracks west of Cotton Street have already been removed (although east of Cotton Street this yard is still heavily used). By moving the mainline tracks close to I-10, about 50 acres of contiguous land could be made available for redevelopment and/or public purposes such as parks or drainage. This was rated as a high priority for the region; see a more recent proposal for this site in the Urban Design Element of this comprehensive plan. Another part of the 2002 plan called for extending the Downtown rail trench eastward to Clark Street. Due to extremely high costs, the study concluded that the only feasible rail trench would run from Copia Street to Clark Street, which would reduce intersections with rail near the Medical Center of the Americas but at a very high cost for the benefits achieved.

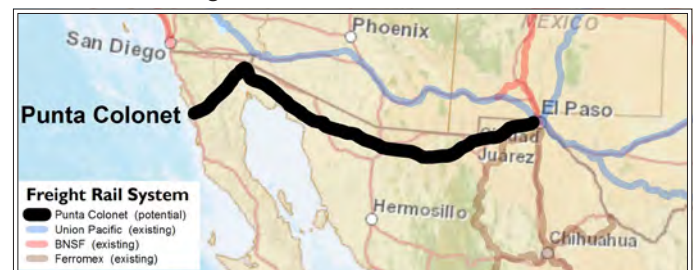
New Rail Connection and Intermodal Facility at EPIA

A small portion of the outer rail loop would be needed to initially connect a new intermodal facility at the airport to Union Pacific's rail line at its intersection with Loop 375. Other segments of the outer rail loop would provide additional connections. The primary purpose of this facility would be to attract manufacturing and distribution businesses that would benefit from proximity to rail, road, and air services. Moffatt & Nichol rated this improvement as a high priority for the region.

The Moffatt & Nichol report was favorable on some aspects of the regional intermodal rail plan and cautious or negative on others. In part due to a turnover in the mayor's office in 2003, no further official action was taken on any of the plan's recommendations.

Many changes have occurred since 2003 that would affect the railroad situation in El Paso and Juárez:

- In 2011, Union Pacific broke ground on a new intermodal yard, fueling station, and headquarters in Santa Teresa, New Mexico. UP is investing \$400 million in this facility, which is at the same location studied by Moffatt & Nichol in 2003. Many railroad functions that now occur in El Paso will be moved to this new facility, such as breaking down trains from California ports into separate trains headed for Kansas City, Dallas, or Houston. Because trains will no longer use El Paso railyards for this function, it would be practical for eastbound trains to bypass El Paso entirely, if an alternate route were available.
- The Mexican government plans to construct a new container port on the Pacific Ocean at Punta Colonet, about 200 miles south of the border. This port would be as large as the existing ports at Los Angeles and Long Beach combined; both of those ports are heavily congested and cannot expand further. A new rail line would be constructed from Punta Colonet to as far east as Santa Teresa, where it would enter the United States and connect to the new Union Pacific yard (and potentially to the BNSF line in El Paso). This rail line would greatly increase the number of transcontinental freight trains that will move through or around El Paso.



- Since 2003, the price of fuel has skyrocketed. Trucks and trains are both powered by diesel fuel, but the efficiency advantages of trains are magnified when the cost of fuel rises. The cost of diesel fuel is now 260% of its 2003 cost, which has spurred investment and innovation in the freight rail industry. Despite recent recessionary years, American railroads move more freight now than ever.
- The Mexican government plans to construct a new road eastward from the Pan-American Highway to allow traffic to bypass Juárez and cross to and from the United States at a new Tornillo-Guadalupe bridge. This road closely parallels the proposed rail loop discussed earlier.

Taken together, these trends and developments justify a fresh examination of the potential for re-routing transcontinental freight trains around central El Paso and Juárez. This could be with a complete rail loop as envisioned in 2003, or just a southerly loop through Mexico, or just a northerly loop through the Anthony or Web Gap. Surplus trackage and railyards in both cities could then serve other pressing needs.

CIVIC SPACES / INTERNATIONAL RAIL / DRAINAGE

Civic Spaces

The El Paso public has expressed a desire for a grand new public open space that is large enough to serve as a central park for the entire City. This plan's Urban Design Element proposes such a park on a portion of Union Pacific's Dallas Yard west of Cotton Street.

This site is large enough for a variety of functions, including play fields, pavilions, gardens, and grand civic structures. The surrounding street network would be extended into the park. The park can also provide large areas for drainage improvements, as discussed on the following pages.



El Paso Central Park bounded by interstate 10 (on left) and an extended East Mills Avenue (on right).

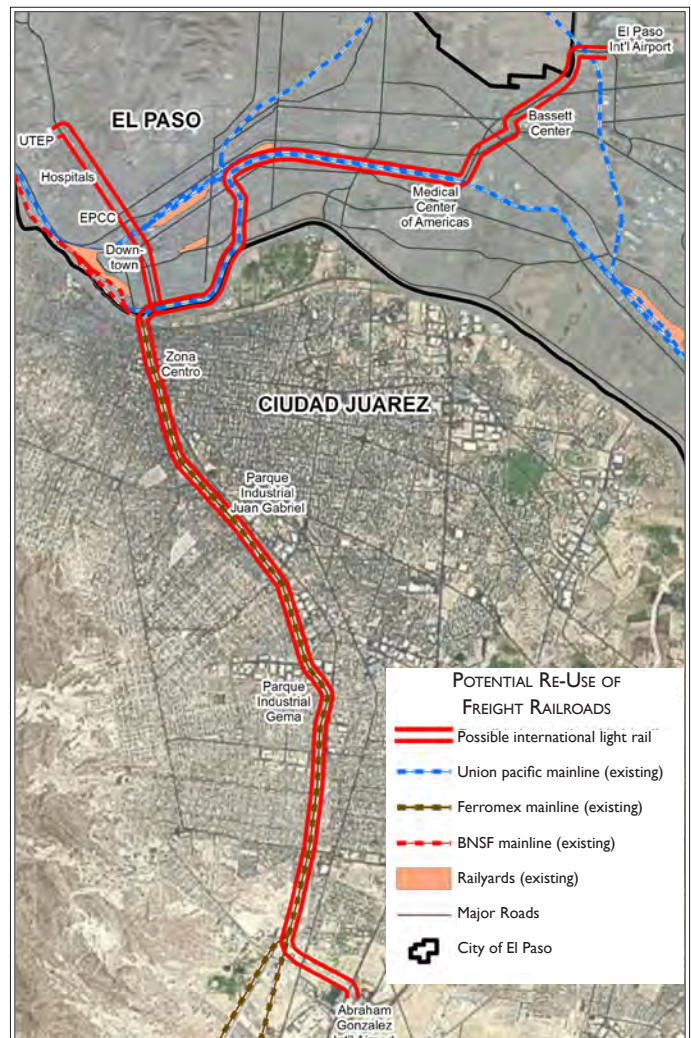
International Light Rail

When a freight rail line is no longer needed, the corridor can sometimes be acquired or leased for multiple public purposes such as exclusive light rail service, walking or biking trails, and drainage improvements. Often only parts of the corridor are useful for light rail service because many rail corridors do not connect destinations that would make light rail viable. For this reason, light rail service is often placed partly or entirely on new tracks, a much more expensive proposition.

The existing freight rail systems in El Paso and Ciudad Juárez offers significant opportunities for light rail service. One would be resumption of international service between the two cities. If a southern freight rail loop were to be constructed to Santa Teresa, the existing freight line within Juárez would be largely superfluous and could become the Mexican side of a fast and convenient international light rail line. The existing tracks run from the border through downtown Juárez and then parallel to Vial Juan Gabriel past maquilas and densely populated neighborhoods. This service could begin at Abraham González International Airport and would be immensely useful within Juárez and, if border security issues can be resolved, for those traveling across the border.

There are several options on the El Paso side of the border. One would be for the light rail vehicles to run like streetcars north to downtown and then to UTEP. Another would be to continue as light rail along the existing freight rail lines that run eastward along the border and then northward to the Medical Center for the Americas complex. An extension of this line could run to Bassett Center Mall and then to the El Paso International Airport, as shown here, or to Mission Valley destinations.

This concept is dependent on the relocation of freight rail service away from the central cities. If that were to occur, the existing freight rail systems in El Paso and Juárez would provide the opportunity for international light rail service that could connect the University of Texas at El Paso, the downtowns of El Paso and Ciudad Juárez, and the El Paso and Juárez airports.



Potential re-use of freight railroads

Drainage Improvements & Linear Parks

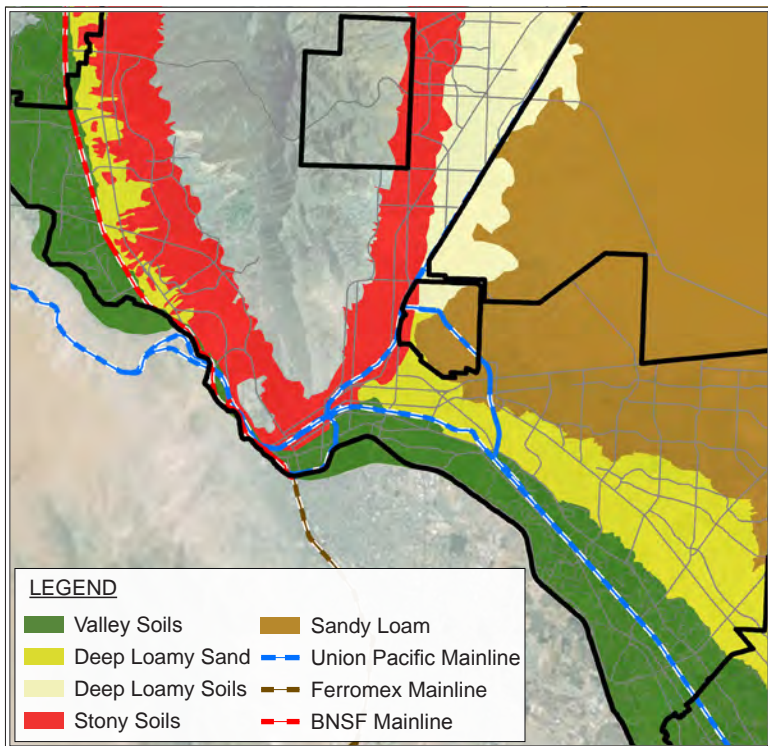
The reconfiguration of railroad and railyards would present opportunities to address persistent flooding in El Paso. The maps on this page show the railroads superimposed on maps of natural features. The first map shows soil types, generalized from Soil Conservation Service maps. The second shows contour lines that indicate ground elevations in 20-foot increments, with reds showing the highest elevations and greens the lowest.

The soils map shows five general soil types:

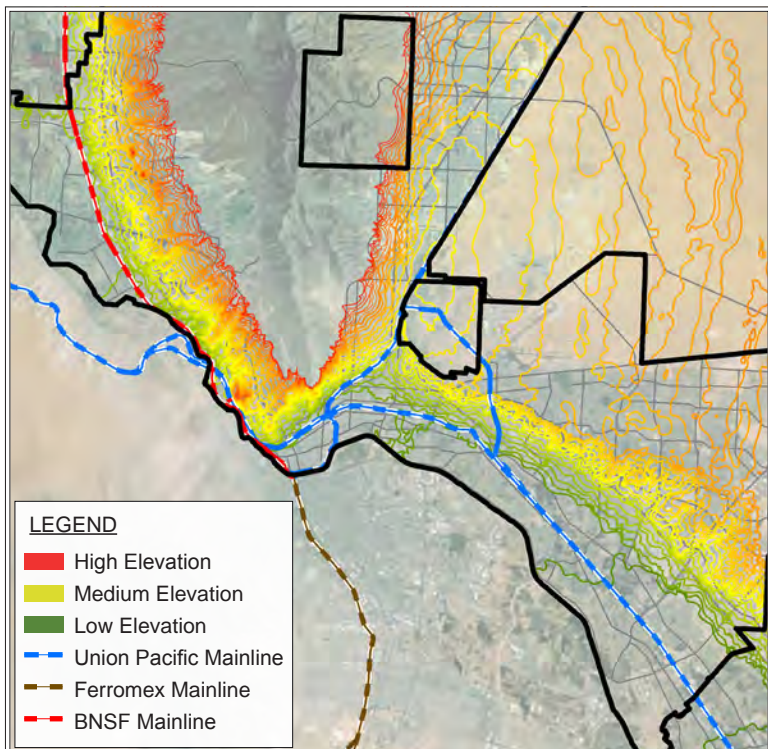
- *Valley soils*, in green, emerged from Rio Grande sediments. Valley soils vary in character but are extremely flat, as shown on the contour map, and are very prone to flooding after heavy rains.
- *Deep loamy sand*, in dark yellow, is found in the escarpment zone that rises from the valley floor. These soils are accompanied by gravelly sand in the arroyos west of the Franklin Mountains. Because of the natural slopes, flooding occurs on the escarpments only where stormwater spills out of arroyos and drainage channels that are carrying water from higher ground.
- *Deep loamy soils*, in light yellow, are found just east of the eastern foothills of the Franklin Mountains. Because these flat soils are at the low point between the Franklin and Hueco Mountains, serious flooding can occur there.
- *Stony soils*, in red, characterize the Franklin Mountains. Flooding occurs near arroyos which can quickly fill with sediment and debris.
- *Sandy loam*, in brown, is found in the high mesa of the Hueco Basin where it covers a hard layer of caliche. Flooding occurs in low areas due to the soil's flatness and the impermeability of caliche.

Railroads require a very flat grade for efficient operation. The BNSF line was built along the upper Rio Grande valley northward to Albuquerque. Likewise, the Union Pacific line to Dallas and Houston was built through the lower valley, avoiding the need to climb the escarpment. The Union Pacific line to Kansas City follows the natural opening in the escarpment just west of Fort Bliss and then heads straight across the desert to Alamogordo.

The placement of rail beds at the foot of natural escarpments can interfere with natural drainage patterns; the addition of I-10 in El Paso worsened this situation. Reconfiguration of these rail beds can help drainage by removing blockages in drainage patterns, by creating linear ponding areas that detain stormwater after heavy storms, and by carrying stormwater parallel to the Rio Grande and distributing it to logical discharge points downstream.



Soil Types - Soil Conservation Service map



Elevation - 20' Contours

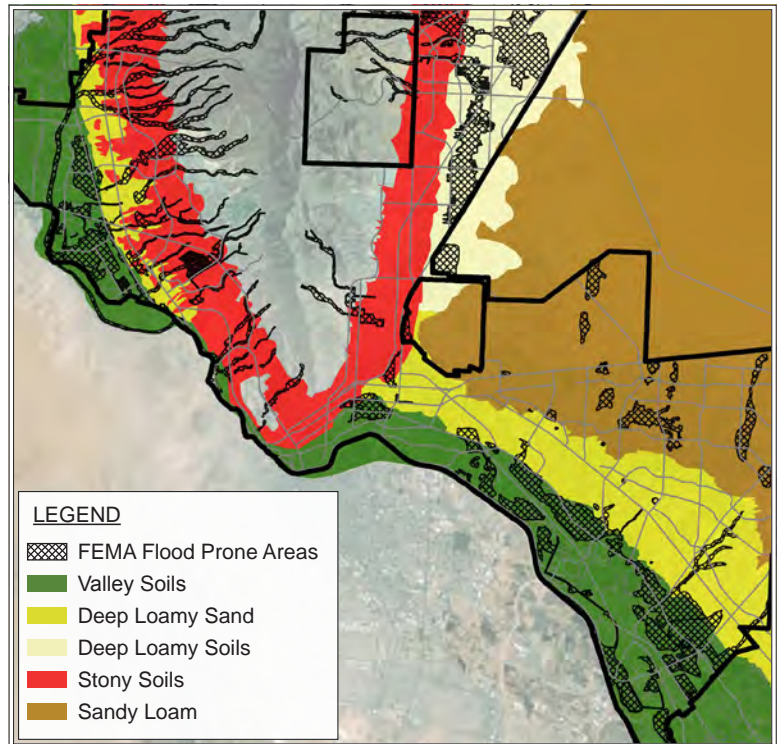
Despite El Paso's arid climate with only eight inches of rain each year, flooding occurs after heavy summer rains. Flood-prone areas have been identified by the federal government on FEMA floodplain maps,

as shown with black cross-hatching on the adjacent map.

The heaviest rain and worst flooding on record occurred during the summer of 2006. Severe flooding occurred Citywide, with damage most notable on the west and northeast sides. Flooding was not limited to the flood-prone areas identified by FEMA.

To protect against such severe flooding in the future, City officials have completed many actions:

- *Created a Stormwater Utility*, funded by all landowners and operated by El Paso Water Utilities, to maintain the drainage system and carry out the Stormwater Master Plan. By City Ordinance, 10% of stormwater fees are earmarked for green projects, which include infrastructure improvements and land acquisition with the dual purpose of stormwater management and preservation of the City's open spaces.
- *Prepared a Stormwater Master Plan* that identified high flood risks in already-developed areas and proposed capital improvements to reduce those risks.
- *Adopted a Drainage Design Manual* to keep new development from increasing flood risk.

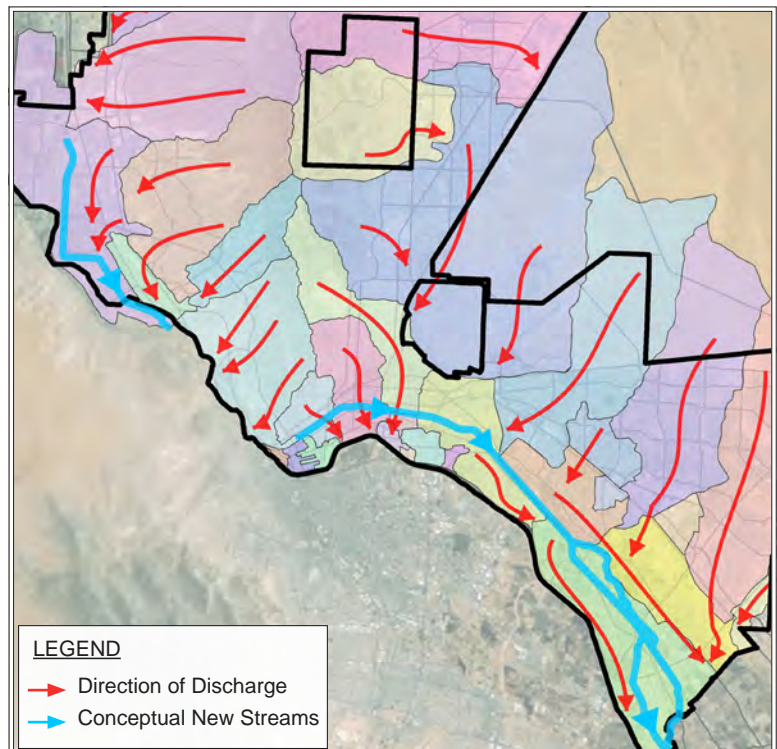


FEMA Flood Areas on Soil Map

Completion of the drainage improvements in the Stormwater Master Plan will significantly reduce future flooding throughout El Paso. Much work remains to be done however to integrate drainage with other community goals.

An advisory committee that guided the stormwater plan recommended using natural arroyos wherever possible and using natural materials in drainage improvements. The final master plan document supported these ideas, however, many of the improvements, particularly in established and vested areas of the City, continue the use of engineered basins, concrete-lined channels, and pumped discharges. Increased use of low-impact, green design of these improvements is necessary in newer development and in existing areas where the opportunity allows. The EPWU-PSB is actively pursuing the acquisition of open space along the Franklin Mountains slopes, underused agricultural drains, and other parcels that offer strategic natural flood control.

Many proposed improvements maintain most existing stormwater discharge routes rather than looking for potential opportunities to create new streams and bosques. These new streams could run through linear parks, re-routing typical stormwater flows parallel to the Rio Grande instead of disposing it by speeding or pumping it along the flat valley floor into the border channel.



Existing Stormwater Basin

The lower map shows the existing stormwater basins in various colors, with red arrows pointing to their discharge points. Conceptual alternatives for new streams

parallel to the Rio Grande are shown in blue. These streams could form the backbone of an urban park system with extensive hiking/cycling/equestrian trails and other civic spaces.

GOALS & POLICIES

Overall Goal: The City of El Paso wishes to become the least car-dependent city in the Southwest through meaningful travel options and land-use patterns that support walkability, livability, and sustainability. Over time, El Paso will join the ranks of the most walkable and transit-rich metropolitan areas in the country.

Compact Urban

Goal 4.1: New and modified thoroughfares will match the existing or proposed character of land along their paths as well as serving their essential functions in the regional road network.

Policy 4.1.1: Conventional engineering practice supplements the functional classification of thoroughfares by identifying two “area types” that affect the design of thoroughfares: Urban and Rural. The City of El Paso is augmenting this system by subdividing the “Urban” area type into two parts: Compact Urban and Drivable Suburban.

Policy 4.1.2: Compact Urban areas include the following land as identified on the Future Land Use Map:

- a. *Existing walkable neighborhoods*, identified as land in the G-1 “Downtown” and G-2 “Traditional Neighborhood” sectors.
- b. *Planned walkable communities*, identified as land in the O-7 “Urban Expansion” sector.
- c. *Future redeveloped and infill neighborhoods*, identified with these overlays: “Local Transfer Centers,” “RTS Stops,” and “Future Compact Neighborhoods.”

Policy 4.1.3: Drivable Suburban areas include land on the Future Land Use map identified as the G-3 “Post-War” and G-4 “Suburban” sectors.

Policy 4.1.4: The designation of the Rural area type is not affected by El Paso’s subdivision of the Urban area type.

Policy 4.1.5: In Compact Urban areas, multimodal transportation design will become the norm to enhance neighborhood character, safety, and walkability. Character and function will be more important than capacity, and the street network will be sized to yield smaller blocks with greater “people moving” capacity.

Policy 4.1.6: Drivable Suburban areas are likely to maintain a predominately automobile-dependent development pattern. Thoroughfares will have sidewalks and bike lanes will be provided where travel speeds are higher.

Policy 4.1.7: The City of El Paso maintains a design manual in Title 19 of its subdivision regulations entitled Design Standards for Construction. That manual should be updated to add appropriate cross-sections for thoroughfares in Compact Urban areas. In the interim, thoroughfares in Compact Urban areas should be designed using the following standards:

- a. *Design Parameters for Walkable Urban Thoroughfares*, which are contained in the ITE Recommended Practice, *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*, using design parameters for the C-3, C-4, C-5, and C-6 context zones.
- b. *Thoroughfare Assemblies*, which are in the SmartCode, Title 21 of the City’s land development regulations.

Complete Streets

Goal 4.2: El Paso’s thoroughfares will form a well-connected network of complete streets that support driving, walking, bicycling, and public transit.

Policy 4.2.1: Street design standards should provide safe, accessible, and meaningful travel choices – driving, walking, bicycling, and public transit. Separate policies for bicycling and public transit are provided under Goals 4.8, 4.9, and 4.11.

Policy 4.2.2: The City will strengthen its standards for connectivity of local streets by amending Title 19 as described under Goal 2.3 of the Urban Design Element.

Policy 4.2.3: Where optimal street connectivity cannot be or has not been provided, non-motorized connections should be added to reduce walking and bicycling trip lengths.

Policy 4.2.4: In Compact Urban areas, walkability will be prioritized with wide sidewalks, shade, alleys, and street-facing access to adjacent land uses.

- a. Widen sidewalks where appropriate and feasible.
- b. Plant regularly spaced drought-tolerant trees along streets.
- c. Provide streetlights that improve safety for drivers, cyclists, and pedestrians while maintaining a dark sky.
- d. Curb and gutter construction should be used to

prevent flooding on streets and sidewalks where appropriate.

e. Curb radii should be small to discourage drivers from turning corners quickly.

f. Alleys should be included in most blocks so that buildings may be serviced from the rear, driveways and curb cuts can be minimized, and parking can be consolidated at mid-block locations.

g. Provide safe and convenient crosswalks at intersections, and at mid-block crossings where feasible and needed.

Policy 4.2.5: In Compact Urban areas, most new streets should have on-street parking in order to increase access to properties while calming traffic. Except on multiway boulevards, medians should be limited to short segments so that vehicular access to properties is not overly restricted.

Policy 4.2.6: New streets and redesigned streets should be two-way (unless they are designed as a narrow, slow speed, one-way streets).

Policy 4.2.7: The City wishes to achieve high levels of landscaping and other aesthetic improvements on all thoroughfares including those maintained by the county and state.

Policy 4.2.8: Continually update the City-wide plan that establishes priority locations for sidewalks, sidewalk repairs, and sidewalk improvements, prioritizing areas near schools, parks, transit stops, mixed residential and commercial districts, and other areas with high or potentially high levels of pedestrian activity.

Policy 4.2.9: The City will make safety a priority for all travel modes and users, especially for the most vulnerable users (pedestrians, children, and those who are physically impaired).

Street Conversions

Goal 4.3: The City of El Paso will improve its thoroughfares over time as opportunities are found to increase transit service and improve connectivity, walkability, bikability, and economic benefits to surrounding areas.

Policy 4.3.1: The City will incrementally improve its net-

work of wide arterial roads into a lattice that connects humane, safe, and functional neighborhood centers by managing vehicular speeds, constructing pedestrian facilities, improving public transit, and encouraging a vibrant mix of land uses.

Policy 4.3.2: The City will consider multiway boulevards for major travel corridors to balance regional through traffic, local traffic, other travel modes, and access to adjoining land. Examples are provided in *Plan El Paso* for conversions of Zaragoza Road and the west end of Transmountain Road to multiway boulevards.

Policy 4.3.3: The City will study the conversion of Downtown's one-way street couplets to two-way operation.

Policy 4.3.4: The City will consider the use of roundabouts at intersections to calm traffic, increase safety, eliminate traffic lights, and create sites for public art and monuments.

Policy 4.3.5: The City will incorporate "green infrastructure design" and similar light-imprint and low-impact principles for stormwater management and landscaping in streets that it builds and requires others to build.

Policy 4.3.6: The City will use universal design techniques to accommodate pedestrians of all ages and abilities and ensure compliance with the Americans with Disabilities Act (e.g. avoid clear path zone obstruction, provide truncated domes on curb ramps, etc.).

Sustainable Mobility Plan

Goal 4.4: Transform the Major Thoroughfare Plan (MTP) into a Sustainable Mobility Plan (SMP) that integrates all major travel modes and carries out the goals and policies of *Plan El Paso*.

Policy 4.4.1: The City of El Paso will continue to use the MTP that appears in *Plan El Paso* as the City's official Thoroughfare Plan until the following policies have been implemented.

Policy 4.4.2: The City of El Paso intends to update and refine the MTP and then readopt it into *Plan El Paso* as the City's new SMP.

Policy 4.4.3: The SMP will include the following refinements to the MTP:

a. Broaden and refine the MTP to include a multi-

modal transportation network to supplement the road network now shown.

b. Review and update the current MTP road network to reflect the growth forecasts and other policies in *Plan El Paso*.

c. Refine the MTP's thoroughfare classification system to reflect the concepts in this Transportation Element while maintaining compatibility with the MPO's federally mandated system.

d. Update thoroughfare cross-sections to reflect the concepts in this Transportation Element.

e. Use today's best practices for network design principles as described under Goal 4.4.

Network Principles

Goal 4.5: El Paso's network of major thoroughfares will become the "Great Streets" of tomorrow. They will be integral parts of the communities that surround them, allowing easy movement and providing physical space for social, civic, and commercial activities.

Policy 4.5.1: El Paso's future transportation network will shape the City and its inhabitants. The network must meld all viable modes of transportation and carry out the goals of *Plan El Paso*.

Policy 4.5.2: Capacity and redundancy should be created by a densely interconnected network rather than by achieving high capacities on individual arterial streets.

Policy 4.5.3: More narrow thoroughfares are better than fewer wide ones. When major thoroughfares are spaced too far apart, these consequences are unavoidable:

a. The remaining major thoroughfares must be too wide, eroding their placemaking capacity and making them inhospitable to pedestrians and bicyclists.

b. Motorized traffic may encroach on neighborhood streets designed for lighter traffic volumes.

c. Transit routes along the remaining thoroughfares become inefficient to provide and unpleasant to use.

d. Intersections with other wide roads will inevitably restrict the theoretical capacity of wide roads.

This restriction cannot be solved with grade-separated intersections because they are too expensive to construct and maintain and too damaging to surrounding land uses.

Policy 4.5.4: Economically vital cities require multiple transportation modes and cannot hope to maintain free flowing traffic during all peak periods.

Policy 4.5.5: The character of each thoroughfare should be based on the physical context the thoroughfare is passing through in addition to its role in the larger network.

Policy 4.5.6: Limited-access freeways disrupt the healthy functioning of cities and should be the thoroughfare type of last resort when planning an urban network.

Policy 4.5.7: When essential freeways or railroads will present insurmountable barriers to cross movement, they should be depressed rather than elevated in order to minimize the disruption to surrounding communities and to avoid the excessive costs of building and replacing long bridges.

Policy 4.5.8: The regional transportation network must respect the human and natural environment and minimize or eliminate negative impacts such as bisecting or isolating communities, inducing suburban sprawl, or interfering with arroyos and other natural systems.

Policy 4.5.9: The regional transportation network is larger than El Paso County, including New Mexico, Chihuahua and beyond. The potential relocation of regional freight rail lines around the El Paso / Ciudad Juárez metropolitan area offers opportunities for better traffic flow and critical drainage improvements in El Paso, safer communities on both sides of the border, fewer interruptions for transcontinental freight trains, and an international light rail corridor.

Transportation Master Plan

Goal 4.6: Coordinate the region's planning for thoroughfares, public transit, freight, aviation, and border crossing through better collaboration with regional transportation planning partners.

Policy 4.6.1: The City of El Paso will take the lead in establishing a regional, multimodal project-based transportation and land-use planning compact. The policies of *Plan El Paso* and the updated road network in the Sustainability Mobility Plan can be the basis for a regional Transporta-

tion Master Plan (TMP) that implements *Plan El Paso* using a multimodal approach.

Policy 4.6.2: The TMP would be an integrated, project-based multimodal transportation plan that becomes a regional transportation planning, project, and priority compact, similar to the role served by the 2008 *Comprehensive Mobility Plan*.

Policy 4.6.3: *Plan El Paso* and its Sustainable Mobility Plan would provide the policy foundation for the TMP's technical analyses, project lists, and funding proposals. The TMP would provide project, location, design, and implementation clarity for complete street networks, RTS and other high-capacity transit corridors, walkable streets, pedestrian and bicycle corridors and facilities, and other travel modes.

Policy 4.6.4: The City will explore the use of alternative funding sources to continue to support transportation options throughout the City.

Air Quality

Goal 4.7: Improve the region's air quality through more sustainable and energy-efficient transportation and land use practices.

Policy 4.7.1: Encourage compact land uses and urban design patterns that increase travel choices, reduce reliance on single-occupant vehicle travel, and reduce the overall number of vehicle-miles traveled.

Policy 4.7.2: Invest in bus service, rapid transit service, and high-capacity transit to reduce pollution and greenhouse gas (GHG) emissions while better serving the traveling public.

Policy 4.7.3: Take steps that can reduce the travel frequency, distance, and duration of single-occupant vehicle trips.

Policy 4.7.4: Implement intelligent transportation systems (ITS) to reduce congestion and facilitate cross-border travel.

Bicycle Network Facilities

Goal 4.8: Vigorously expand bicycle facilities throughout El Paso County to create a full network of connected, safe, and attractive bikeways and supporting facilities for both transportation and recreation.

Policy 4.8.1: Update the 1997 *Regional Bikeways Plan* using the Bicycle Atlas in this Element as a guide to network connectivity.

Policy 4.8.2: Continue developing and maintaining a system of bicycle lanes, bicycle routes, and multi-use pathways in accordance with the City's most recent bicycle master plan and the *Bicycle Facilities Design Manual*.

Policy 4.8.3: Coordinate planning, design, and implementation of bicycle improvements within the City, surrounding municipalities, El Paso County, and surrounding areas in order to effectively promote regional connectivity.

Policy 4.8.4: Utilize the principles described in *Plan El Paso* to guide planning, design, and implementation of bicycle infrastructure in conjunction with other City plans and projects.

Policy 4.8.5: Investigate the possibility of a local bicycle share program in the City that places bicycles for rent at automated stations at key areas beginning with the Downtown and university areas.

Policy 4.8.6: Routinely include bicycle facilities in the City's capital projects, and coordinate with El Paso County, the other municipalities, and the MPO to ensure bicycle infrastructure is included in their capital improvement plans.

Policy 4.8.7: Fund a bicycle and pedestrian coordinator position to be the steward of the bicycle master plan and all of its individual components.

Policy 4.8.8: Use best practices in physical design (i.e. bikeway width, type, signing, and advanced bicycle facility types) to create safer bikeways. Train select City staff to design bikeways.

Policy 4.8.9: Enhance the safety and visibility of the bicycle network through the implementation of safety and wayfinding signing improvements along all current and future bikeways.

Policy 4.8.10: Implement a regular street sweeping program, with priority given to bicycle lanes and primary bicycle routes.

Policy 4.8.11: Increase the availability and quality of bicycle parking and support facilities (i.e., showers and lockers) through measures such as:

a. Update bicycle parking requirements to include short- and long-term parking facilities and standards through a City-wide bicycle parking and facilities plan.

b. Provide an adequate amount of secure properly positioned bicycle parking at key trip attractors and generators throughout the community. Design should be in accordance with the *Bicycle Facilities Design Manual*.

c. Update bicycle parking requirements with refined bicycle parking ratios and graphic standards that depict bicycle parking type, placement, and location standards.

Bicycle Outreach

Goal 4.9: Encourage increased bicycling by promoting health, recreation, transportation, tourism opportunities, and environmental benefits.

Policy 4.9.1: Develop a strategy to acquire designation as a Bicycle-Friendly Community by the League of American Bicyclists by 2015.

Policy 4.9.2: Make El Paso a safer city for bicycle riders through measures such as:

a. Work with the El Paso Police Department to address bicycle-vehicle safety measures through increased awareness of bicycle-related traffic laws and enforcement of existing and new laws.

b. Provide on-going training for City of El Paso police officers regarding bicycle safety laws and issues.

c. Maintain the number of bicycle patrol officers and consider expanding the force.

Policy 4.9.3: Create and distribute print and online versions of the El Paso Bikeways Map on an annually updated basis, to include wayfinding, safety, and facility type information.

Policy 4.9.4: Develop an El Paso bicycle programs website to store and disseminate all bicycle-related information, including bicycle traffic statistics.

Policy 4.9.5: Identify the most common conflicts between bicycle and motor vehicle users and create strategies to educate all roadway users.

Policy 4.9.6: Increase awareness of bicycle options and safety through trainings, public events, public service announcements, educational materials, and partnerships.

Policy 4.9.7: Promote bicycling for commuting, running errands and other short trips and socializing through social media/web-based communication tools and traditional communication outlets to position bicycling as a viable option for people who are interested in bicycling, but concerned about safety.

Policy 4.9.8: Create and implement a partnership with the Safe Routes to School program.

Policy 4.9.9: Continue to support, fund, and expand Scenic Sundays.

Policy 4.9.10: Develop bicycle policies and programs that address geographic, racial, ethnic, economic, environmental, and public health disparities.

Policy 4.9.11: Utilize small-scale incremental interventions to instigate conversation about positive change in the built environment. tactical, temporary, repurposing of streets like El Paso's *ciclovia* which converts vehicular streets to pedestrian uses, and the El Paso Transnational Trolley project art exhibit which furthered discussion concerning the reestablishing of the trolley between Ciudad Juárez and El Paso are two examples.

Parking

Goal 4.10: The City will strategically manage the amount, location, and physical form of on-street and off-street parking to help achieve the Transportation and Regional Land Use Patterns goals of *Plan El Paso*.

Policy 4.10.1: The effective supply of parking can be increased by building more spaces or by reducing demand.

a. Where parking supply needs to be increased on valuable land, parking garages may be constructed provided they are lined with habitable or storefront space to shield the garage from view and to provide a safe interesting environment for pedestrians.

b. As part of a long-term strategy, land devoted to surface parking lots in existing developed areas should be reduced through shared parking strategies, reduction in parking demand, and infill development on unneeded parking lots.

Policy 4.10.2: In most cases, effective management of the existing parking supply is preferred over the creation of additional parking spaces. If management strategies cause spillover parking in adjoining neighborhoods, neighborhood parking permits can give parking priority to residents over visitors.

Policy 4.10.3: As part of the development and redevelopment process, the following policies should be followed:

- a. Shared on-street parking spaces are preferred to separate parking lots for each user.
- b. New parking lots should be placed behind or on the side of buildings instead of between buildings and the street.
- c. Do not provide more parking than is likely to be needed.
- d. Provide suitable loading zones for deliveries.

Public Transportation

Goal 4.11: El Paso will have a safe, convenient, and economically viable public transit system that optimizes personal mobility, strengthens community character and economic vitality, and seamlessly integrates with other travel modes. The existing bus network will evolve into a multi-faceted regional transit network with frequent service on four Rapid Transit System (RTS) lines and, over time, other forms of high-capacity transit service.

Policy 4.11.1: All bus stops and transit stations should be safe, comfortable, and attractive. Non-motorized connections such as sidewalks and bicycle routes/trails will be the most important connections to stops and stations.

Policy 4.11.2: The City should require major commercial and residential developments to provide adequate sidewalks and suitable areas for bus stops with bicycle storage.

Policy 4.11.3: The City and Sun Metro will continue optimizing the public transit network to serve neighborhoods, commercial and employment centers, and major travel corridors. Prompt convenient connections are critical to other routes, to RTS service, and to future high-capacity transit.

Policy 4.11.4: The City and Sun Metro will continue to prioritize implementation of its RTS network and will support complete-streets retrofits to RTS corridors.

Policy 4.11.5: Sun Metro will consider new bus routes to Fort Bliss from the eastside and northeast El Paso. Upon completion of the RTS system, the City will work with Fort Bliss to connect the Dyer and Montana RTS corridors with a circulator route that connects to Fort Bliss' major transit generators.

Policy 4.11.6: The City will make transit-oriented development a priority along RTS and other high-capacity transit corridors to leverage transit investment to create mixed-use and income walkable livable communities.

Policy 4.11.7: The City will continue to evolve the public transportation by assessing the feasibility of, and planning for, the following high-capacity transit systems:

- a. The City should continue to explore implementation of a modern streetcar and other local circulator networks through Downtown El Paso to expand mobility and catalyze economic revitalization. The initial line could be expanded to other destinations in El Paso or Ciudad Juárez that would benefit from reliable frequent service with closely spaced stops.
- b. The City should consider converting parts of the RTS network to light rail transit over time.
- c. If the freight rail lines that bisect El Paso and Ciudad Juárez can be relocated around the metropolitan area, the City should take the lead in evaluating international rail service that could connect the University of Texas at El Paso, the downtowns of El Paso and Ciudad Juárez, and the El Paso and Juárez airports.
- d. The City should explore all opportunities for intercity passenger rail to other southwestern metropolitan areas such as Albuquerque, Santa Fe, Denver, Tucson, and Phoenix.
- e. The City should work with Las Cruces interests to establish commuter rail service between the two cities.

Policy 4.11.8: The City, the El Paso MPO, and TxDOT should continually evaluate these and other high-capacity transit opportunities and consider how to be preserve the ability to implement them over time, particularly considering corridor and right-of-way preservation.

Policy 4.11.9: Public and private transportation demand management strategies such as car- and van-pooling, telecommuting, and transportation allowances, should be implemented as part of an integrated approach to managing travel demand.

Railroads & Freight

Goal 4.12: Although its location at an international railroad junction caused El Paso to thrive, the continual movement of freight trains through a major city creates safety and congestion problems that are still worsening. The City wishes to capitalize on the advantages of its crossroads location while minimizing the problems and conflicts created by the current alignment of freight lines.

Policy 4.12.1: The City encourages the expanded use of railroads for regional and international shipment of goods due to the fuel-efficiency of rail transport and the heavy burden that trucks place on I-10 through El Paso.

Policy 4.12.2: The relocation of major railyards away from intensely developed areas could allow that land to be reclaimed for redevelopment, drainage improvements, parks, and civic spaces. If this relocation were coupled with a peripheral rail loop that would allow freight trains to bypass central El Paso and Ciudad Juárez, transcontinental freight trains would have fewer interruptions, both communities would be significantly safer, and the existing rail corridors could accommodate an international light rail system that would unite the two cities.

Policy 4.12.3: The relocation of railyards and freight tracks around the El Paso / Ciudad Juárez metropolitan area would be a massive undertaking requiring public / private partnerships, international cooperation, planning across several disciplines, and funding from multiple sources, including:

- a. Funding for the new intermodal yard and fueling station for transcontinental trains in Santa Teresa, New Mexico, is being provided by Union Pacific.
- b. Funding for regional drainage improvements and flood prevention along I-10 should be sought from the Army Corps of Engineers.
- c. Funding for relocating freight tracks should be sought from the U.S. government which relies on safe and reliable transport to and from Fort Bliss.
- d. Funding for environmental remediation of contaminated property should be sought from the rail companies and environmental agencies.

Policy 4.12.4: Preserve the ability and opportunity to transform any abandoned and underused railroad rights-of-way for other valuable uses.

Aviation

Goal 4.13: The El Paso International Airport will increase its role as a welcoming gateway for passengers, as an intermodal hub for incoming and outgoing goods, and as a center for related economic activities that serve the City and the region.

Policy 4.13.1: Take maximum advantage of proposed RTS service to the terminal and the City's other multimodal strategies to improve passenger access to the airport and maximize the value of airport property for related purposes.

Policy 4.13.2: The City supports new mixed-use development and redevelopment on and around airport land.

Policy 4.13.3: The El Paso International Airport is being designated in the following manner on the City's Future Land Use Map:

- a. *0-7 Urban Expansion:* The easterly portion of EPIA property that has been master-planned for potential urban expansion using Smart Growth principles.
- b. *G-7 Industrial:* The remainder of EPIA property including the terminal, airfield, and land leased for industrial and commercial purposes.

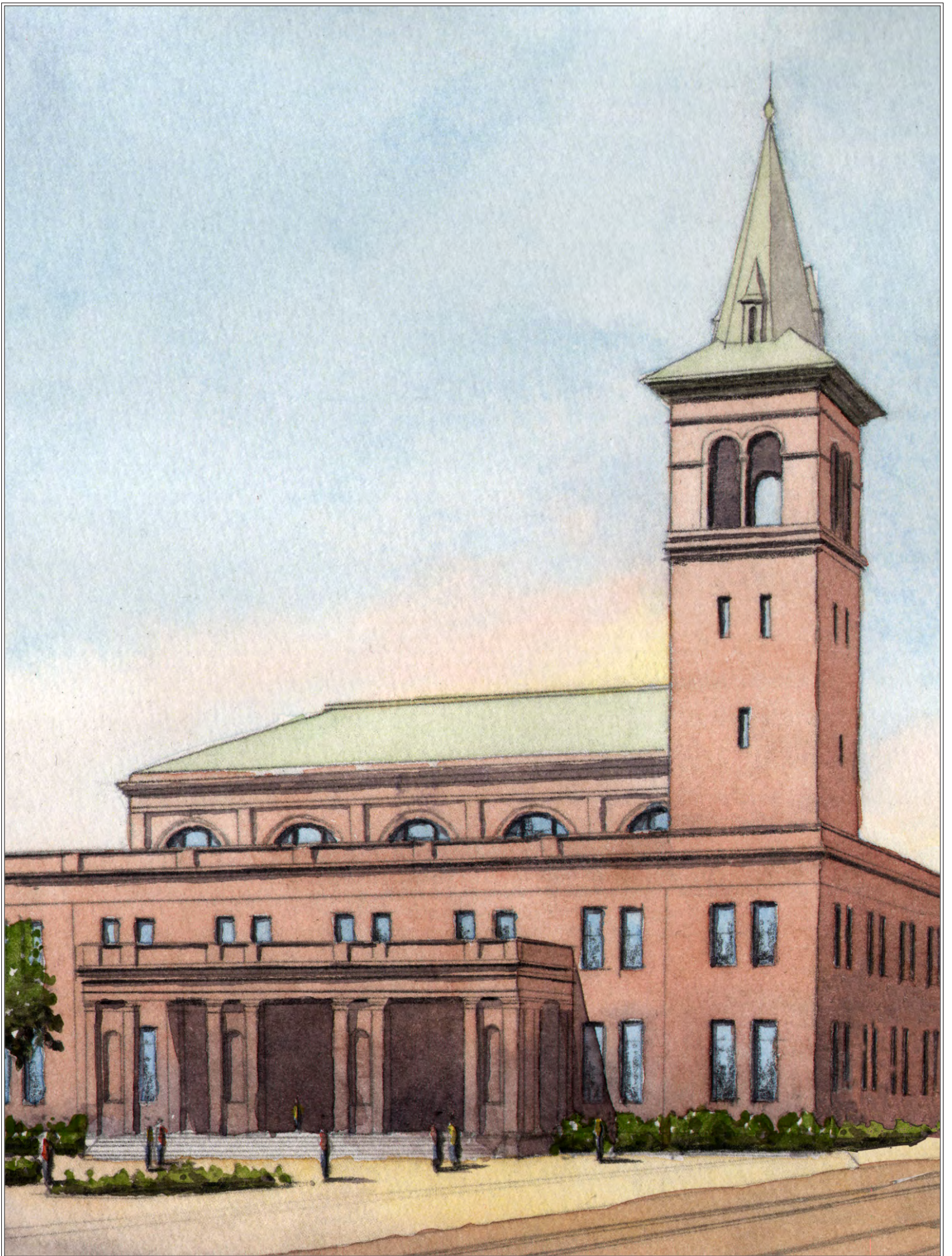
Ports of Entry

Goal 4.14: Strengthen multimodal connections with Juárez for binational mobility, commerce, economic development, familial bonds, tourism, and convenient routine travel between the two cities and countries.

Policy 4.14.1: Continue to manage the Ports of Entry as an integrated network to balance traffic flow and travel needs (employment, commerce, and tourism) while minimizing traffic in surrounding areas.

Policy 4.14.2: Provide meaningful alternatives to single-occupant vehicles at all at all Ports of Entry, including pedestrians, bicyclists, and restoration of public transit.

Policy 4.14.3: Assess the feasibility of and strive to implement a new non-vehicle (pedestrian) border crossing in conjunction with redevelopment of the ASARCO area. Waterfront parks and public spaces on both sides of the river could become a unique binational park and meeting place, as proposed in *Connecting El Paso* (2010).



PUBLIC FACILITIES

5

Overall Goal: Provide community services and facilities that meet the physical, educational, and recreational needs of all segments of the City's community.

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"CIVIC BUILDINGS, ARENAS, TEMPLES, THEATRES, SHRINES, LIBRARIES, CHURCHES, SPIRES, FOUNTAINS, MUSEUMS, THERMAE, MEMORIALS, TERMINALS, AND BRIDGES ARE THE TRUE SYMBOLIC AND PUBLIC ELEMENTS IN A CITY."

- LEON KRIER

INTRODUCTION

The City of El Paso provides a wide range of public facilities and services to its citizens and businesses. Public facilities are those buildings, structures, and/or lands that are owned and managed by the public. Public services are those that provide the overall population with safety, health, and general welfare. These facilities and services are included in comprehensive plans because they affect quality of life. A comprehensive approach should be taken to manage and maximize public services regardless of the entity that administers a particular program.

The City of El Paso provides facilities such as municipal buildings, libraries, and parks, as well as services such as police, fire, and emergency medical response. Many City departments manage both public facilities and services that affect our quality of life.

Citizens of El Paso also enjoy public facilities and services that are not managed by the City of El Paso; however, they are critical to the success of the community and play a vital role in our lives. These services include public and private schools, utilities, and hospitals. Even though different organizations manage various elements of public facilities and services, they affect one another in their ability to serve the needs of the entire community.

Quality of life is affected by the location, quantity, design, and service excellence provided with each facility and the service rendered. Managing growth in the City through the assurance of adequate and timely public facilities to serve the current and future population is an on-going challenge.



Madeline Park is a well-loved park that serves as the center of the Kern neighborhood, adding value to the surrounding properties and providing an amenity for residents.

CURRENT CONDITIONS

WATER

Potable Water

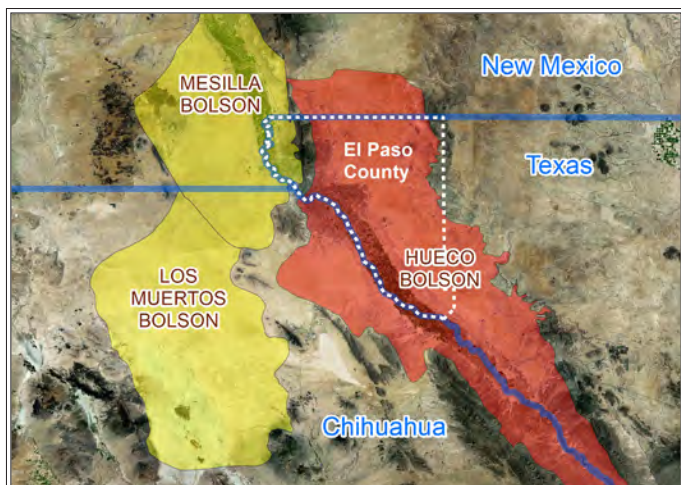
Whether it flows in rivers or percolates through the ground, water sustains life and thus is our most important natural resource. In El Paso's Chihuahuan desert environment, evaporation far exceeds rainfall. Careful planning is required to efficiently manage limited water supplies.

For its municipal water supply, El Paso County relies on surface water from the Rio Grande plus water from underground sources. El Paso Water Utilities and Public Service Board (EPWU-PSB) currently supplies over 90% of all municipal water in El Paso County, half from the Rio Grande.

Rio Grande water is shared between three U.S. states and Mexico through a complex system of compacts, treaties, and projects that are managed by international, federal, state, and local agencies. Water in the Rio Grande is supplied by snow melt in southern Colorado and northern New Mexico. Spring runoff is stored in the Elephant Butte Reservoir in southern New Mexico before being released for irrigation and municipal use. EPWU-PSB obtains water from the irrigation district (El Paso County Water Improvement District No. 1) through ownership of water rights land and by leasing water rights from agricultural water rights holders.

Wells near Canutillo supply groundwater from the Mesilla Bolson to the Westside; while wells in northeast El Paso and near the airport supply the Eastside from the Hueco Bolson. These underwater basins underlie portions of New Mexico, Texas, and Chihuahua. The Rio Grande plays an important role in the recharge and discharge of both basins.

Pumping from the valuable Hueco Bolson peaked in 1989 due to concerns over the sustainability of high pumping levels. Underground water levels had been declining and water quality



Location of bolson aquifers in and around El Paso County

had been decreasing as brackish water replaced the higher quality water being pumped out.

Five management strategies have been followed since that time:

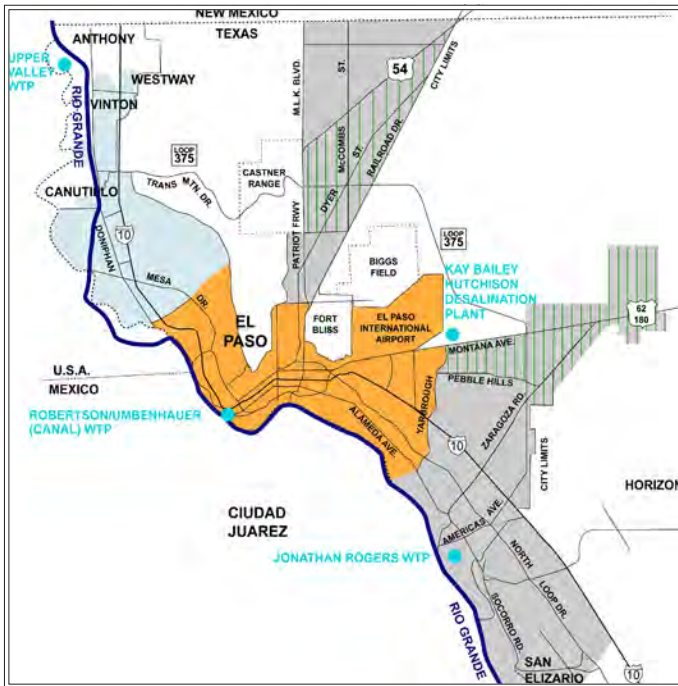
1. Increase the use of Rio Grande water when it is available.
2. Decrease groundwater pumping except when Rio Grande water is limited.
3. Increase the per-gallon cost of water for high users as a conservation incentive.
4. Encourage desert plants that require little or no irrigation.
5. Expand the reuse of reclaimed water.

Per-capita water demand has been declining since the late 1990s. Demand has been reduced from about 225 gallons per person per day in the 1970s to about 134 gallons per person in 2007.

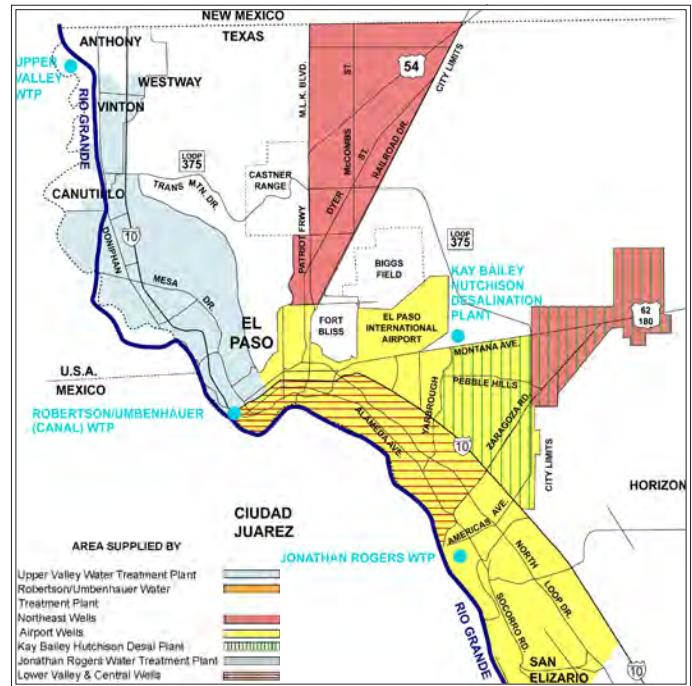
EPWU-PSB supplies potable water from seven distinct sources:

- **Upper Valley water treatment plant** obtains water from 34 wells near Canutillo. These wells are pumped throughout the year.
- **Robertson/Umbenhauer (Canal Street) water treatment plant** treats water from the Rio Grande during the months when water is available (typically March through September).
- **Northeast wellfields** provide water from 37 wells drilled into the Hueco Bolson. These wells operate primarily from October through February, replacing water that is no longer available from the Rio Grande.
- **Airport wellfields** provide water from 28 wells drilled into the Hueco Bolson. These wells also operate primarily from October through February.
- **Kay Bailey Hutchison desalination plant** intercepts brackish water from 32 wells near the airport and on Fort Bliss before that water reaches freshwater wells. These brackish wells are pumped throughout the year. This plant is the world's largest inland desalination plant.
- **Jonathan Rogers water treatment plant** treats water from the Rio Grande during the months when water is available (typically March through September).
- **Lower Valley and Central wellfields** provide water from 23 wells drilled into the Hueco Bolson. Some of these wells are pumped throughout the year.

These seven water sources are interconnected in the distribution system; water from one source can be distributed to different parts of the City. Typically, the distribution of these sources is as indicated on the distribution maps on the following page, which show the distinct seasonal changes that occur when Rio Grande water is available.



Typical Water Distribution Pattern, March – September



Typical Water Distribution Pattern, October – February

Irrigation Water

Irrigation water from the Rio Grande is allocated through treaties and compacts. Since 1980, El Paso County Water Improvement District No.1 (EPCWID) has received this allocation and distributed it to 3,000 irrigation water users. While a majority of these users have small tracts (less than 2 acres), the remainder are farms that grow cotton, pecans, alfalfa, and other crops.

A diversion dam on the Rio Grande near the border of Texas, New Mexico, and Mexico supplies most water to EPCWID. Seven major irrigation canals and dozens of smaller laterals distribute this water. Nine major drainage canals and related laterals receive excess irrigation water.

Wastewater & Reclaimed Water

EPWU-PSB also operates the City’s wastewater (sanitary sewer) system, which also serves Fort Bliss. EPWU-PSB operates four treatment plants with a combined treatment capacity of 94.2 million gallons per day (MGD):

- The **Northwest** wastewater treatment plant can treat 17.5 MGD from residential and industrial sources in the west and northwest parts of the City.
- The original **Haskell Street** wastewater plant serves central El Paso with a treatment capacity of 27.7 MGD. The plant can discharge effluent to either the Rio Grande or the American Canal where it provides irrigation water to farmers in the Lower Valley. In exchange for this irrigation water, EPWU-PSB obtains water credits for surface water

that is treated to provide drinking water, thus reducing El Paso’s dependence on groundwater. This plant also provides reclaimed water to local parks, schools, industries, and a golf course.

- The **Roberto Bustamante** wastewater plant serves the east, southeast, and Lower Valley parts of the City with a treatment capacity of 39 MGD.
- The **Fred Hervey** water reclamation plant is located in northeast El Paso. It produces reclaimed water at drinking quality levels. The reclaimed water is returned to the Hueco Bolson through a series of injection wells to replenish the aquifer; it is also sold to the El Paso Electric Company for their cooling towers and sold to golf courses and other customers for irrigation.

El Paso has nearly 40 miles of reclaimed water lines (purple pipe) in all areas of the City. The reclaimed water supply is expected to increase from 5,000 acre-feet per year in 2000 to over 23,000 acre-feet per year by 2060.

Reclaimed water is fairly expensive to produce, costing over \$2.00 per 1,000 gallons. By comparison, desalination costs about \$1.65; surface water costs about \$1.00, and freshwater from aquifers costs about \$.50. If groundwater from the Hueco and Mesilla bolsons were unlimited in quantity, it would be the City’s major source of potable water. Because groundwater is so limited, as is surface water, more expensive sources must also be used. Reclaimed water is sold below cost to encourage its use, thus saving higher quality water for domestic use.

Stormwater

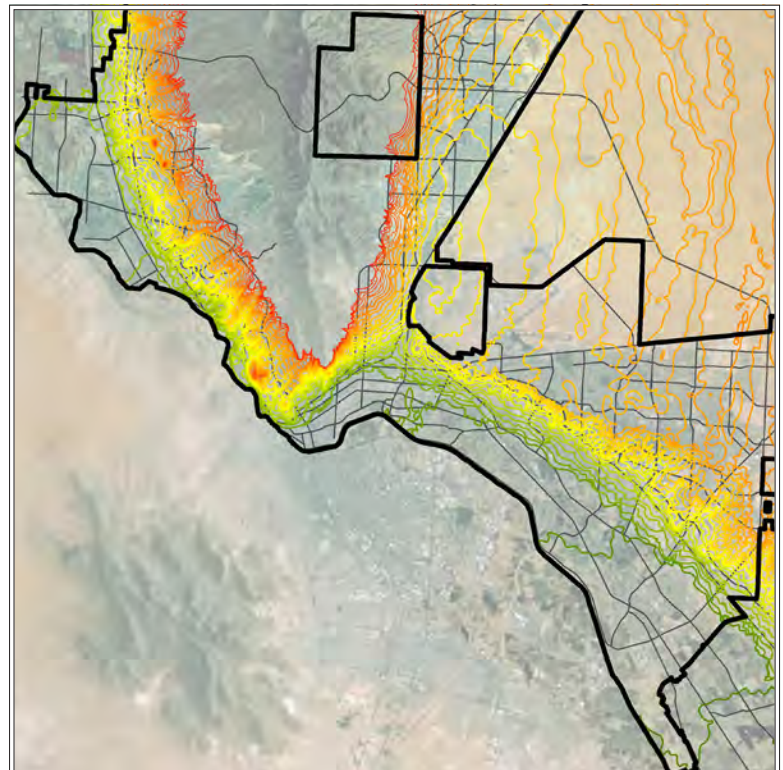
Despite El Paso's arid climate with only 8 inches of rain each year, flooding occurs after heavy summer rains. Flood-prone areas have been identified by the federal government on FEMA floodplain maps (see the Transportation Element).

The maps on this page identify key natural features that affect how stormwater flows through El Paso.

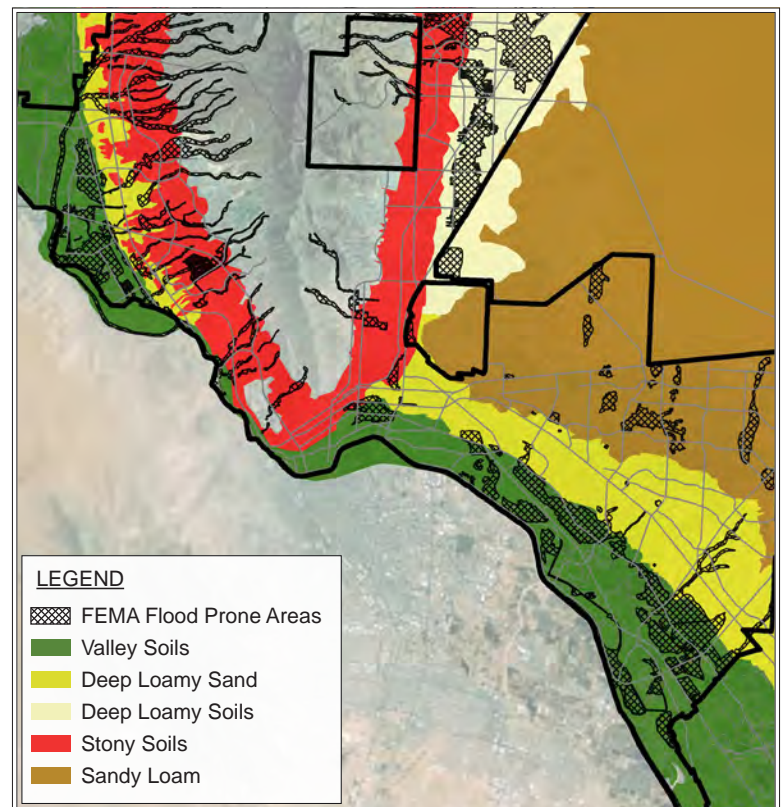
The top map shows contour lines that indicate ground elevation changes in 20-foot increments, with reds showing the highest elevations and greens the lowest. Where contour lines are close together, land is noticeably sloped. Flooding occurs on slopes when rushing floodwater exceeds the capacity of its conveyance, which might be a pipe, culvert, ditch, or roadside gutter. Additionally, flooding runoff is exacerbated with the bulking of sediment transported down slopes and creating blockages in the system. Flooding on flatter land occurs when there is no practical outlet for excess water.

The bottom map shows soil types, generalized from Soil Conservation Service maps into five general soil types:

- **Valley soils**, in green, emerged from Rio Grande sediments. Valley soils vary in character but are extremely flat, as shown on the contour map, and are very prone to flooding after heavy rains.
- **Deep loamy sand**, in dark yellow, is found in the escarpment zone that rises from the valley floor. These soils are accompanied by gravelly sand in the arroyos west of the Franklin Mountains. Because of the natural slopes, flooding occurs on the escarpments only where stormwater spills out of arroyos and drainage channels that are carrying water from higher ground.
- **Deep loamy soils**, in light yellow, are found just east of the eastern foothills of the Franklin Mountains. Because these flat soils are at the low point between the Franklin and Hueco Mountains, serious flooding can occur there.
- **Stony soils**, in red, characterize the Franklin Mountains. Flooding occurs near arroyos which can quickly fill with sediment and debris.
- **Sandy loam**, in brown, is found in the high mesa of the Hueco Basin where it covers a hard layer of caliche. Flooding occurs in low areas due to the soil's flatness and the impermeability of caliche.



Changes in ground elevation in 20-foot increments



FEMA Flood Areas on Soil Map

The heaviest rain and worst flooding on record in El Paso occurred during the summer of 2006. Severe flooding occurred Citywide, with damage most notable on the west and northeast sides. Property damage has been estimated at \$250 million. Flooding was not limited to the flood-prone areas identified by FEMA.

To protect against such severe flooding in the future, City officials have completed many actions since 2006:

- Created a stormwater utility, funded by all landowners and operated by EPWU-PSB, to maintain the drainage system and carry out the Stormwater Master Plan. By City Ordinance, 10% of stormwater fees are earmarked for green projects, which include infrastructure improvements and land acquisition with the dual purpose of stormwater management and preservation of the City's open spaces.
- Prepared a Stormwater Master Plan that identified high flood risks in already-developed areas and proposed capital improvements to reduce those risks.
- Adopted a Drainage Design Manual to keep new development from increasing flood risk.

ENERGY

Electricity

El Paso Electric Company (EPE) generates and distributes electricity to about 380,000 customers in west Texas and southern New Mexico. El Paso Electric operates 3 local power generating facilities, with capacities measured in megawatts (MW):

- Newman power station in northeast El Paso (288 MW)
- Copper power station in east El Paso (63 MW)
- Rio Grande power station in Sunland Park (246 MW)

El Paso Electric also owns a share of 2 very large power plants:

- Palo Verde nuclear plant in Wintersburg, Arizona (4,000 MW total capacity, 15.8% owned by EPE)
- Four Corners coal-fired power station near Farmington, New Mexico (2,040 MW total capacity, 7% owned by EPE)

El Paso Electric is an investor-owned utility that operates under a non-exclusive franchise from the City of El Paso. The current franchise was issued in 2005 and is valid through 2030. This franchise required El Paso Electric to increase its payments to the City from the previous 2.0% to 3.25% of gross receipts (raised to 4.0% as part of a 2010 rate case settlement). Within City limits, rates for electricity are regulated by the City of El Paso; outside City limits, rates are regulated by the Texas Public Utility Commission.

Natural Gas

El Paso Natural Gas Company provides wholesale natural gas to the region as well as to many other parts of the United States.

Texas Gas Service, a division of ONEOK Inc., owns and maintains the distribution lines to natural gas customers in El Paso. Texas Gas serves approximately 600,000 residential, commercial, and industrial customers in Texas; the company's largest service areas other than El Paso are Austin and the Rio Grande Valley.

Texas Gas is an investor-owned utility that operates locally under a non-exclusive franchise from the City of El Paso. The current franchise was issued in 2010 and is valid through 2028; this franchise required Texas Gas to increase its payments to the City from the previous 2.5% to 4.0% of gross receipts. Within City limits, the price of providing natural gas service is regulated by the City of El Paso; outside City limits, the price of service is regulated by the Texas Railroad Commission. The wholesale price of raw natural gas is passed on to customers without separate markup.

SOLID WASTE

The El Paso Environmental Services Department collects solid waste from residents and businesses within the City. All residential waste is hauled to the Clint Landfill, owned and operated by the City. The Clint Landfill also accepts waste from private haulers that collect waste from neighboring communities and residents of unincorporated areas.

The older portions of the Clint Landfill received solid waste from 1983 to 2007. These areas have been capped with multiple soil layers and a vegetative covering of native plants, a system designed to minimize infiltration of stormwater into underlying waste. This cover system is one of the first of its kind in Texas.

The newer portions of the Clint Landfill began receiving solid waste in 2005. About 1,500 tons of solid waste are deposited each day. A state-of-the-art liner system made up of multiple impermeable barriers (clay liners and synthetic membrane liners) is installed below all cells receiving solid waste. These liners contain the waste and prevent it from affecting the surrounding environment.

Any liquids leaching from the solid waste are collected and disposed of in an on-site leachate evaporation pond. Groundwater is located 370 feet below ground level; groundwater monitoring wells are installed around the landfill perimeter and monitored semi-annually to ensure groundwater protection.

Commercial waste haulers may collect non-residential waste, with most being transported to the Camino Real Landfill in Sunland Park, New Mexico. El Paso officials are attempting to end this arrangement and require that all solid waste be disposed in City-owned facilities.

The City owns a second landfill located in northeast El Paso, the McCombs Landfill. The McCombs Landfill has been nearly inactive since 2005 but the landfill permit is being modified in preparation to expand operations when the Clint landfill is full.

PARKS & RECREATION

Inventory

The City of El Paso currently owns and manages 277 parks that include 2,446 acres of turf. Within the community there are 10 skate parks, 16 recreational centers, 15 pools, 9 senior centers, and 2 sports centers. Athletic practice facilities are in high demand, however, El Paso provides 28 softball fields, 33 baseball fields, and 46 tennis courts. There are also other park and recreation facilities owned by other entities that can be accessed by El Paso residents. The City's 2011 budget allocation for Parks is approximately \$11.8 million and includes 271 staff positions.

The Parks and Recreation Department also administers many recreational programs for El Paso's youth, adults, and senior communities. In 2009, approximately 7,485 youth players participated in basketball, baseball, and football programs. Approximately 15,628 adults participated in the City's adult basketball, volleyball, and softball programs. The summer swim program also hosted more than 1,300 participants.

Previous Parks Planning

The City's parks system changed tremendously after the 2000 Quality of Life bond program that allocated more than \$75 million towards parks improvements. The public overwhelmingly approved the bond package and authorized an additional \$5 million in 2004. Combined, this funding has resulted in improvements to over 50% of the parks in the system, along with the construction of major new sports complexes, pools, and 3 indoor recreation centers. As a result of the new funding source, El Paso's parks system has nearly tripled in acreage since 1995. Despite the tremendous growth of the parks system in recent years, the system is still significantly under-funded. In 2006, per capita spending on parks was well below almost every other one of the 50 largest cities in the United States.

The City adopted an updated Parks Plan in 2006 that performed an in-depth analysis of facility needs. An overall recommendation from that plan is that the department must change its role and offer programs and services that more closely reflect the unique concerns and issues of 21st century El Paso. As with all governmental entities today, the emphasis is on essentials rather than embellishments. The adopted plan identified the following guiding principles and goals of the El Paso Parks System that are still valid today:

- I. The parks system will be accessible.
 - a. The parks system will provide adequate parks.
 - b. Facilities will be well distributed to provide equitable access.
 - c. In newly developing parts of the City, adequate park lands will be allocated from the beginning of the development, so that the target levels of service of the parks and recreation master plan are met.
 - d. A balanced parks system will be provided.

2. The system will be well funded, and will actively pursue partnership opportunities.
 - a. The parks system will be adequately funded.
 - b. The parks system will use all available land resources.
 - c. School parks must be a vital part of the parks system.
3. The system will identify and focus first on “core” services.
 - a. The department will focus on providing basic services that serve a significant portion of the population. These will be measured against five outcomes:
 - i. Livability of the community
 - ii. Health
 - iii. Youth
 - iv. Revenue
 - v. Outdoors
4. Parks in El Paso will be extraordinary and timeless.
 - a. The parks of El Paso will express the natural beauty and cultural diversity of El Paso.
 - b. Create extraordinary parks.
 - c. Express the character of El Paso.
 - d. Use materials that fit in.
 - e. Native materials.
 - f. Strong, distinctive appearance for park buildings.
5. Parks will be community focal points.
 - a. Parks as focal points of the community.
 - b. Think of parks as mini-oasis.
6. The City will focus on connectivity and linkage.
 - a. Trails and linear parks will equally focus on connectivity and leisure uses.
 - b. Trails and linear parks will be a vital part of the parks system.
7. The City will value and preserve open space.
 - a. Preserve open spaces.
 - b. Preserve arroyos.
 - c. Use drainage as opportunities to “create” open space.
8. Detention and drainage will be used as a green opportunity.
 - a. Treat drainage ponds and detention basins as mini parks or green areas.
 - b. Avoid deep detention unless critical.
9. The system will focus on sustainability.
 - a. Convert portions of existing parks to more drought-tolerant designs.
 - b. Incorporate energy and sustainable features into all buildings and parks in the future.
10. The system will focus on reducing maintenance.
 - a. Use cost effective maintenance techniques.
 - b. Design facilities to reduce maintenance.

The implementation time frame of the parks and recreation master plan is 2006-2016. Adequate operational funding was a key recommendation in the plan. To maintain the status quo in 2006-2007, an estimated budget of \$22.6 million was recommended (\$36.00 per capita at an estimated 634,000 population). Future budget requirements projected an operating fund of \$27 million (\$38.00 per capita assuming 700,000).

In March 2007, the City of El Paso adopted an Open Space Master Plan that provided a detailed analysis of open space opportunities throughout the City including specific recommendations to implement the plan. In addition to regulatory changes, the plan identified multiple funding strategies to proactively acquire and preserve open space. Initial funding for implementation was reallocated to respond to emergency flooding issues. The Open Space Advisory Board has been very active in overseeing the implementation of the plan and attempting to reinstate the original funding for the program.

Current Initiatives

Recent capital projects of the Parks and Recreation Department include the opening of the Central Recreation Center on Montana Avenue, previously owned by the YMCA. The new Center was recently renamed the Pat O'Rourke Center after late County Judge Pat O'Rourke. The City invested in a \$4.9 million dollar makeover that included the renovation of the existing swimming pool, meeting rooms, showers, restrooms, and entrances to the building. Capital projects also include the construction of new parks as well as improvements to various parks throughout the City including renovating perimeter lighting, irrigation, sidewalks, handball courts, and upgrading playground equipment.

The Westside Community Dog Park is another major Parks and Recreation project. Funded through a Texas Parks and Wildlife Grant, the 2.8 acre off-leash dog park is the newest addition to the Westside Community Park and Recreation Center on Highridge. The new park includes grassy areas, benches, lighting, landscaping, irrigation, and perimeter fencing.



City of El Paso Trail System

Zoological Park

The El Paso Zoological Park contains 35-acres and houses approximately 240 species of animals. Visitors can see approximately 500 mammals, reptiles, amphibians, and birds, 100 fish, and 250 invertebrates living in their natural habitats. Exhibits include a Reptile House, South American Pavilion, Americas Aviary, Cisneros Paraje, Birds of Prey, Forest Atrium, Asian Grasslands, and an Elephant Complex. The El Paso Zoo is a member of the Association of Zoos and Aquariums (AZA). With its more than 200 accredited members, AZA is a leader in global wildlife conservation. The 2011 budget allocates \$6.2 million for 102 positions for zoo operations. In 2010 there were over 333,000 visitors to the zoo.

Zoological Park Initiatives

As part of the capital improvement program \$896,735 will be used towards the Africa expansion of the zoo which includes the addition of 10 acres to the El Paso Zoo and is expected to be completed in fiscal year 2011.

MUSEUMS & CULTURAL AFFAIRS

Mission

According to the City's Department of Museums and Cultural Affairs Department (MCAD), its mission "is to assist in developing a world-class arts community in El Paso." In order to accomplish this goal, MCAD has established two primary divisions, Museums and Cultural Affairs.

The Museums Division is comprised of the El Paso Museum of Art, the El Paso Museum of Archaeology, and the El Paso Museum of History. Each museum is dedicated to providing exhibitions and educational activities that recognize the region's multi-cultural heritage and contributors.

The Cultural Affairs Division is responsible for implementing funding programs, public art programs, cultural tourism initiatives, and performing/visual arts events. The purpose for providing such opportunities is to engage the public in arts and cultural activities that enliven and celebrate the City of El Paso and the region.

The Museums and Cultural Affairs Department is focused on the continued development of the City's arts industry, providing quality programs that are representative of the City's diverse cultures, and maximizing available resources in order to enhance the City's cultural vitality.

Inventory

Museum operations are overseen by 57 positions that are authorized in the City's 2011 budget with a budget allocation of \$3.8 million.

LIBRARIES

Inventory

The El Paso Public Library system serves the City's residents and visitors through information access, cultural enrichment, and life-long learning. According to the City's 2009 annual report there were over 2.2 million visitors to El Paso's 14 different libraries. The system is operated by 175 budgeted positions with an \$8.8 million budget according to the City's 2011 budget document.

Current Initiatives

The City recently completed the relocation and construction of the Cielo Vista Branch Library, totaling approximately \$700,000. Located on Hawkins Boulevard at Darlina Drive, the Cielo Vista Branch Library is the City's first LEED-certified building. The City has shown a strong commitment to sustainable building practices through its Green Building Grant Program and its adoption of LEED building practices in City buildings.

The library system is also working to improve access to its facilities. Transit improvements such as the proposed Rapid Transit System (RTS) will increase access to library facilities within walking distance of major RTS stops and transfer centers. For example, the RTS line along the Oregon Street Corridor will improve access to the Main Library.



El Paso Zoological Park



El Paso Museum of History

SCHOOLS

El Paso is currently served by 4 public independent school districts (ISD); El Paso ISD, Ysleta ISD, Canutillo ISD, and Socorro ISD. The community is also served by several colleges and 2 major universities; El Paso Community College, New Mexico State University, Park College, University of Phoenix, University of Texas at El Paso, and Webster University.

Current Budget Concerns

Throughout the state of Texas, school districts are facing a growing financial crisis in the wake of the state’s \$27 billion budget shortfall. One of the main causes of the current school finance crisis is the 2006 legislation that has proven to fall short of properly funding Texas public schools. The state cut property taxes by one third and did not establish a new stream of revenue to make up the difference. School funding shortcomings continued in 2007 and 2009, jeopardizing the quality of education for all Texas students. School districts in El Paso and throughout the state are preparing 2011-2012 budgets with more students and reducing their overall budget by more than 10% across the board. For the largest school district in El Paso, the El Paso ISD, this represents an overall budget reduction of \$47.8 million since 2006 with additional cuts of approximately \$61 million planned for the 2011-2012 school year.

In an effort to reduce its operating budget, El Paso ISD is considering closing schools that have experienced a reduction in student enrollment. In 2010, Houston Elementary School in central El Paso was closed for this reason and repurposed as the district’s dropout recovery high school. The El Paso ISD is contemplating closing Zavala Elementary School in central El Paso and Schuster Elementary School in northeast El Paso for similar reasons.

School Design Trends in El Paso

Historically schools were a major asset and the heart of a sustainable neighborhoods by being prominently located and accessible by foot or bike. El Paso has a rich history in building schools that inspire community pride like El Paso High School, which is prominently located and designed as an impressive architectural monument in its own right. In the historic in-town areas of El Paso, schools were embedded within the neighborhood fabric and function as activity centers during and after school hours. Today many newly constructed schools are suburban in character, located at the edges of neighborhoods or are physically inaccessible to pedestrians through the use of fencing and gates, large detention areas, topography changes, and isolated site planning.

The redevelopment of Aoy Elementary School in Segundo Barrio is a recent example of a more urban-format, walkable school that functions as the heart of a neighborhood. The school is built within close proximity to other amenities such as Armijo

Park, the Boys and Girls Club, and the Armijo branch of the El Paso library and is easily accessible by foot, bicycle, or transit.

El Paso Independent School District

The El Paso Independent School District is the largest district in El Paso. With more than 63,000 students in 94 campuses, El Paso ISD is also the tenth-largest district in Texas and the sixty-first largest district in the United States. It is El Paso’s largest employer with nearly 9,000 employees and has an annual operating budget of \$475 million. The system operates 60 elementary campuses, 17 middle schools, and 13 high schools. Organized in 1883, the El Paso ISD is not only a large district, but also one rich in history. The average age of buildings is over 50 years and the district is almost built out.

Ysleta Independent School District

The Ysleta Independent School District is the second largest school district in the City of El Paso. It was founded in the 1930s as a rural education district. At that time there was one high school, Ysleta High School, and a number of elementary and intermediate schools. As El Paso grew, many of the schools of the Ysleta ISD were absorbed into the City. Today the district has 58 campuses stretching from northeast El Paso to the Rio Grande Valley, consisting of 36 elementary schools, 13 middle schools, and 7 high school campuses, plus 2 pre-kindergarten facilities and 6 special campuses serving over 44,000 students.

During the 1990s, the district operated at state minimum achievement levels. Due to changes in leadership, the district turned itself around and in 1998 it emerged as the first urban school district anywhere in the state to be named a “Recognized District” for student performance on the Texas Assessment of Academic Skills test or TAAS.



Aoy Elementary School features a more compact design than the conventional prototypes, allowing it to be sited in an established neighborhood.

Canutillo Independent School District

The Canutillo Independent School District includes the growing rural communities of Canutillo, Vinton, Westway, Borderland, and Montoya. The first Canutillo School, named Lone Star Primary School, was built in 1911 as part of the El Paso County school system. The school served first through eighth grade. Ninth through twelfth grade students attended El Paso High School, about 30 miles away. In 1959, Canutillo residents voted to incorporate the Canutillo ISD and graduated its first senior class in 1963. Today, Canutillo ISD maintains 5 elementary schools, 2 middle schools, one high school, an early college high school, and an alternative education program. The school district serves approximately 5,600 students per year. Canutillo ISD has an annual budget of over \$45 million and employs 410 teachers, 85 educational aides, 275 auxiliary personnel, 18 campus and 11 central office administrators, and 67 professional support staff.

Socorro Independent School District

The Socorro Independent School District was formed in 1961. At the time, there was only one elementary school available. In 1964 Socorro High School was built, and the school housed about 2,800 students for almost 40 years. In 1990, a second high school was built to serve the growing population of the district. Today Socorro ISD operates 44 schools servicing over 39,000 students. There are 26 elementary schools, 15 middle schools, and 6 high schools.

PUBLIC SAFETY & EMERGENCY RESPONSE

Police Department

Mission Statement

The El Paso Police Department articulates its mission statement in its 2010-2015 Strategic Plan “to preserve life, to enforce the law, and to work in partnership with the community to enhance the quality of life in the City of El Paso.” The Department is committed to providing superior police services to the public in order to protect life, property, and freedom. They accomplish this through the concepts and practices of Community Based Policing by actively working with the community to prevent crime and create a safer environment. This decentralized focus provides personalized police service to the community at the grass-roots level.

Inventory

The Department is currently composed of over 1,100 officers and nearly 300 civilian employees. The department’s efforts are supported by a large contingent of community volunteers who donate their time to perform a variety of duties. The City’s 2011 budget allocation is \$114.6 million and includes 1,624 positions.

Fire Department

Mission Statement

The El Paso Fire Department (EPFD) provides fire suppression, rescue and emergency medical services, hazardous materials mitigation, fire inspection, fire investigation, and public education to the City of El Paso. The departmental vision, adopted as part of the current five-year Strategic Plan (2010-2015), begins by stating that the department “will be a recognized leader in the Fire and Rescue Service at the local, state, regional, and national level. This will be accomplished through the innovative application of technology and best practices with a customer service mentality as the hallmark of our organizational culture.”

Inventory

The 2011 municipal budget authorizes \$89.5 million for 1,111 positions operating out of 35 station locations. The Capital Improvements Plan for fiscal year 2011 includes \$1.8 million to be used for the construction of new Fire Station #31 located on the westside of El Paso, which is scheduled for completion in fiscal year 2011, as well as the design for Fire Station #37, to be located in the far eastside of El Paso, scheduled for completion in fiscal year 2012. Facility improvement plans include the reconstruction of existing fire stations #5, #13, #12, and #17. In addition, several existing fire stations will be modernized.

In order to provide adequate fire protection and emergency services to all citizens, the current standard is to place fire stations every 3 miles. This equates to having a fire station within 1.5 miles of every home. The cost of providing this service is described in the Costs of Building and Operating a Fire Station chart.

Costs of Building & Operating a Fire Station	
Initial Construction of the Fire Station	\$2 million
Approximate Land Costs	\$350,000
Initial Purchase of Equipment	\$800,000 <i>fire truck</i> \$250,000 <i>rescue ambulance</i>
One Time Purchase Costs	\$3.4 million
Annual Personnel Costs	\$642,000 <i>fire truck company</i> \$400,000 <i>ambulance company</i>
Annual Operational Costs	\$30,000 <i>supplies, etc</i>
Equipment Replacement Costs	\$131,250 <i>fire truck & ambulance</i>
Annual Recurring Costs	\$1.2 million

COMMUNITY CONCERNS

WATER

Adequate Drinking Water for the Future

Many El Pasoans remember that only a decade or two ago, there was serious evidence that the Hueco Bolson, the City's underground drinking water supply, was being over pumped and thus becoming brackish. At that time the City had been providing a seemingly perpetual supply of high quality water. Water management decisions to increase the use of surface water and reclaimed water, and progressive water conservation efforts, have allowed the EPWU-PSB to reduce its reliance on groundwater pumping. This is beneficial to the long-term sustainable use of groundwater in the Borderland Region although concerns remain that the continuing growth of El Paso, plus that of Juárez, will eventually outstrip the available water supply.

Irrigation Water

One of the methods that water managers use to protect the Hueco Bolson is to rely more heavily on water from the Rio Grande. River water has already been allocated to holders of water rights in the Rio Grande Valley, primarily farmers, but owners of rural home sites as well. EPWU-PSB has acquired water rights from developers in exchange for providing treated drinking water. The agency has also purchased water rights from numerous farms, ending farming activity and leaving formerly irrigated fields untended. This abandonment causes continuing consternation among remaining farmers and rural residents.

Drainage

El Pasoans clearly remember the heavy rains and damaging floods that occurred during the summer of 2006. There has been strong support for the flood-control efforts that were begun in the years following. However, flood control infrastructure can be massive and unsightly; often it serves that single purpose instead of being integrated with other activities. El Paso's experience with park ponds shows how drainage infrastructure need not be unattractive or useful only for the single purpose of drainage.

Hiking & Biking Trails

El Paso residents have exceptional recreational access to the desert and mountains. An equally bountiful recreational resource exists in the network of irrigation canals and drains that are laced throughout the Rio Grande valley. A majority of these canals are wide enough to accommodate a complete network of hiking and biking trails.

ENERGY

Reliability of Electric Power Grid

During an extreme cold spell in February 2011, two of El Paso's electrical generating plants froze, requiring rolling blackouts throughout El Paso and Las Cruces. This period of extreme need has raised questions about reliance on local energy sources. The reliability of the grid, especially in times of crisis or high demand, should be improved.

PARKS & RECREATION

Provide a Greater Inventory & Variety of Parks & Recreation Spaces

There was an overwhelming concern that El Paso needs more park lands, both smaller parks to serve immediate neighborhoods as well as regional facilities for more active recreation. Participants expressed a need for more sports venues, recreational centers, including safe places for teenagers, and some sort of theme park. Providing a greater variety of parks and recreational opportunities will help establish El Paso as a travel destination versus and overnight stay for travelers. Specific recommendations were made for a new park to be constructed in the reservoir that now exists in Kimberly Heights on streets surrounding Menlo, Pendleton, and Sundance. A new park in this area would allow families to participate in outdoor activities away from busy streets such as Lee and George Dieter. Many residents on the eastside expressed concern with the lack of parks and recreational opportunities including sports-related activities. On the westside residents made the recommendation that in hilly areas it is often inadvisable to grade areas to create large sod parks. Siting parks in existing flat areas and use of linear parks which follow contour lines would be more in context.

Provide More Family-Oriented Activities

Many residents suggested that the City provide more family-oriented activities.

Improve Existing Park Facilities

Comments suggested that existing parks be improved. One specific suggestion was to improve the senior center in Ysleta.

Make it Greener with Desert-Appropriate Landscaping

Comments emphasized the need for El Paso to become "greener" while at the same time being conscious of water conservation. Residents also suggested preserving existing green space and making more efficient use of drainage areas and detention ponds for active or passive park use. Album Park was referenced as a good example of utilizing drainage areas as part of the park.

Provide More Trails

Incorporating more trails and walkways for recreation as well as for transportation was a common theme. In addition to adding more trails, residents asked that existing and future parks be connected through a comprehensive trail system. Comments included utilizing utility corridors and natural features such as canals and the river to provide locations for trails for hiking and biking. Adding trails in the desert could improve access to hiking and biking opportunities. Many residents stated that providing more trails will improve the quality of life for residents and encourage a healthy lifestyle. In addition, residents wanted a renewed focus on improvements to the Rio Grande River Trail and its connection to the Mission Valley area into Socorro and Fabens.

Improve the Design Standards for Parks

Residents expressed a need to modify current development standards to address design issues related to park ponds. Hunt Communities, who developed Redstone Village Park Pond, was recently awarded the Excellence in Park Design by the City of El Paso. Located next to the Northeast Regional Park, the recently dedicated park is a 1.5 acre park pond which is a passive park space for neighborhood residents.

MUSEUMS & CULTURAL AFFAIRS

Locations for Displaying Public Art

There is strong community support for museums as well as cultural arts in El Paso, although there seems to be little interest from the private sector to participate in public art by providing space for display. The City should take the lead in providing locations to display public art on City-owned property.

Affordable Facilities for the Arts

There is a need for affordable space within which non-profit groups can provide programs.

Coordination with Parks Department (& Other City Departments)

A need exists for more coordination between MCAD and the Parks Department to address space needs for arts development and cultural uses. There are also opportunities for joint projects between the two departments that could be beneficial to both, such as the utilization of public art monies to create arts inspired playgrounds with themed equipment, a redo of parks signage, and recreational programming in open space areas and parks. An example of coordination are the murals at the Acosta Center and the atrium at Pat O'Rourke Recreation Center.

Create an Identity through Public Art

The City's public art program should play a key role in creating an identity in the new and existing developments either by way of green space, traffic circles, or gateways. There should be a percentage allocated to the public art program from any capital money dedicated to individual neighborhoods. This could also be an opportunity to start developing a City policy for private developers to set aside funds for public art in their developments. There was a specific recommendation to utilize the equestrian statue at the airport entrance as a focal point.

LIBRARIES

Make Libraries the Centerpiece of Neighborhoods

Not only parks, but libraries as well, should be a focus of neighborhoods. Because they are public facilities their use should be open for appropriate shared public activities.

Provide New Locations and Types of Library Facilities

Although there are 14 locations within the City, some see the

need for additional libraries. Some desire smaller more numerous facilities rather than larger more central ones.

SCHOOLS

Safe Walking & Biking Routes to School

There was concern expressed, as in many communities, that schools should be designed for walkability and thus should be integrated into neighborhoods, particularly at the elementary and middle school levels. Even though walking increases health, there is concern in today's world about the safety of students commuting via walking. Making schools walkable requires more than just proximity. Attention to creating safe linkages is essential.

Joint Use of School Facilities

Concerns were expressed that schools should be multi-use facilities used every day, all day, and by a wide range of groups. The City and ISDs should share facilities and the cost of operating and maintaining of those shared facilities. Limited financial resources sometimes cause a desire for new facilities and a desire for historic preservation to be at odds. Maintenance issues between the City and school districts can be an issue when considering joint use facilities. In regard to the joint use of facilities, it was commented that even though the Socorro ISD built a central sports stadium to be used by all schools to use, each school still wants their own stadium.

School Closures

Elementary schools are designed for an optimal number of students to make economic sense to cover standing costs and to efficiently and effectively incorporate literacy, math, and science coaches. In older parts of El Paso, there are severe reductions in population and some school populations have been reduced to half. At that level, the operational costs are too high and they are not able to offer all services to the students.

CIVIC SPACES & CIVIC BUILDINGS

Provide Civic Spaces & Buildings Throughout the City

There is a feeling that most if not all community and civic spaces are concentrated in the Downtown area and that there is a lack of those public spaces elsewhere.

Provide Civic Spaces & Buildings in Specific Locations

The idea of public spaces excites people and comments were made regarding improvements to facilities such as to the senior center in Ysleta to include a public café or library and the incorporation of tree planted plazas in various parking lots such as the Cielo Vista Mall. Visual enhancements and focal points at the airport were also mentioned.

Incorporate Art & Culture into the Design of Public Places

In general the public expressed a desire to see more spaces for art display and cultural activities.

STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS

WATER

Potable Water

Two other elements of *Plan El Paso* also provide strategies for potable water, Regional Land Use Patterns and Sustainability Elements.

The Regional Land Use Patterns Element provides a map showing areas in El Paso County, primarily in northeast El Paso, where groundwater from the Hueco Bolson is available for the potable water supply. This higher-quality water sits on top of much saltier water in the same aquifer. Placing future development near this source of freshwater, instead of on desert lands in far east El Paso, would reduce public costs considerably.

The Sustainability Element addresses important uses of water that compete with agriculture and municipal water supply. The natural environment, including wildlife, rely on a dependable water supply, as do local food production efforts such as personal and community gardens and commercial niche crops.

EPWU-PSB uses a conjunctive management approach of using surface water from the Rio Grande and local groundwater to provide the water supply for the City. Using this conjunctive management approach, EPWU-PSB will maximize its use of surface water during a full river allocation and groundwater pumpage will be minimal during this time. Under “drought” conditions, use of groundwater will be maximized to make up for the shortage of surface water.

The Kay Bailey Hutchinson Desalination Plant converts brackish water from the Hueco Bolson into a potable supply of water for the City of El Paso and Fort Bliss. Operation of this plant will be consistent with the conjunctive management approach of using surface water and groundwater to supply the City with water.

The Far West Texas Regional Water Plan is a 50-year water plan that evaluates current and future populations’ water demands and availability of water supplies. When future demands exceed available supplies water management strategies are developed. The plan is updated every 5 years.

As presented in the Far West Texas Regional Water Plan, updated in 2011, EPWU-PSB will use an integrated approach to providing for the long-term water supply of the City. The water supply strategies that are included in that plan are:

- increased conservation and reclaimed water reuse,
- recharge of groundwater with treated surface water,
- treatment of agricultural drain water,
- increased use from the Rio Grande,
- importation of groundwater from the Capitan Reef Aquifer (Culberson and Hudspeth Counties), and

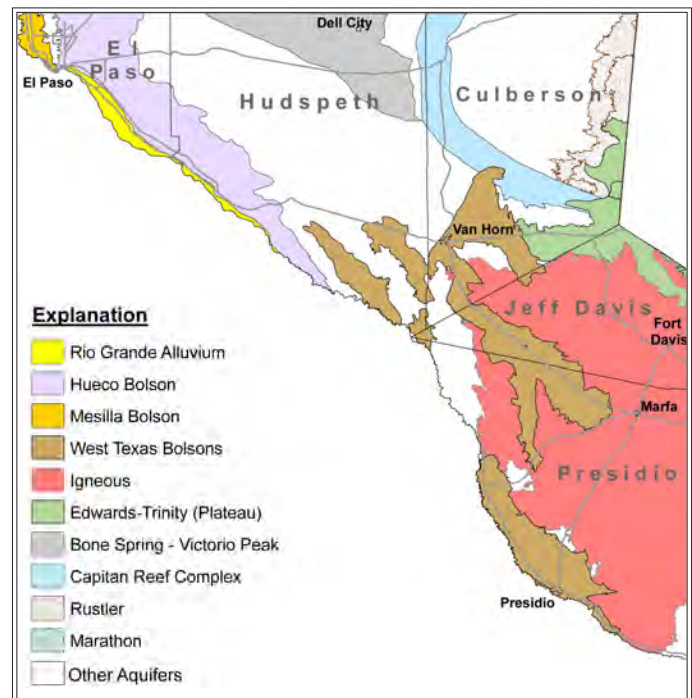
- importation of groundwater from the Bone Spring-Victorio Peak Aquifer in the Dell City area (Hudspeth County).

The proposed importation of groundwater from Culberson and Hudspeth Counties is scheduled to begin in the year 2040.

Surface water from the Rio Grande is shared by 3 states and 2 countries through a complex set of legal arrangements. There is no comparable arrangement governing the sharing of groundwater, even though aquifers ignore political boundaries.

For instance, Juárez depends entirely on the Hueco Bolson and the Conejos Medanos Aquifer to satisfy its municipal and industrial demands. Past experience in El Paso has demonstrated the severe problems with over-reliance on the Hueco Bolson, especially for a growing city as large as Juárez whose population is already estimated at over 1.5 million people.

Future water supplies for Juárez are anticipated from 4 “imported” groundwater sources. Plans are also being developed to convert over half of the surface water from the Rio Bravo (Rio Grande) for municipal supply use; currently, this entire allocation is used for irrigated agriculture. The conversion would involve supplying treated wastewater to farmers in exchange for rights to raw surface water.



Aquifers in Far West Texas

Irrigation Water

The Far West Texas Water Plan estimated that agriculture currently uses 77% of the water in the region. Conservation in the agricultural sector has strong potential to reduce total water demand.

Nearly all farmland served by EPCWID is irrigated by conventional flood irrigation. Proven water-saving methods such as drip irrigation have occasionally been tried on large scales in El Paso County but have not yet proven commercially successful; a major difficulty is the amount of sediment, and sometimes salt, in local irrigation water. Other promising techniques include the installation of soil water sensors that help farmers avoid excessive irrigation. In addition, the lining of major irrigation canals reduces water seepage.

Adoption of water-saving irrigation methods could increase the amount of land that can be irrigated, allow the diversion of irrigation water for municipal purposes, or for the natural environment. At present, the Rio Bosque Wetlands Park near Socorro receives water only when surplus effluent is available from the adjoining wastewater treatment plant, limiting the park's ability to recreate native cottonwood-willow habitats and provide food for migrating waterfowl.

The success of the Bosque del Apache National Wildlife Refuge near San Antonio, New Mexico, illustrates the value of converting conventional cropland into a haven for wildlife, particularly the hundreds of species of birds that migrate every year along the Rio Grande Valley. With a regular supply of irrigation water, the Rio Bosque Park and the large farms in the upper valley acquired by EPWU-PSB could also provide exceptional wildlife habitat and recreational opportunities.

Wastewater & Reclaimed Water

EPWU-PSB operates under the philosophy that water is too valuable to be used only once. Treated wastewater is a potential resource rather than a by-product to be disposed of, especially in El Paso's desert climate.

Reclaimed water has proven safe for a wide variety of applications. More and more communities are now supplying reclaimed water to individual homes for landscape irrigation. Opportunities to do so in El Paso are somewhat limited because reclaimed water lines (purple pipes) aren't in place in most neighborhoods. This shortcoming can be remedied by installing reclaimed water lines at the time of initial development and when other opportunities present themselves, such as when potable water or wastewater lines are being replaced or expanded. By increasing the network of reclaimed water users, more wastewater can be re-used in future years.

Stormwater

Completion of the drainage improvements in the Stormwater Master Plan will significantly reduce future flooding throughout El Paso. Much work remains to be done however to integrate drainage with other community goals.

An advisory committee that guided the stormwater plan recommended using natural arroyos wherever possible and using natural materials in drainage improvements. The final master plan document supported these ideas; however, many of the improvements, particularly in established and vested areas of the City, continue the use of engineered basins, concrete-lined channels, and pumped discharges. Increased use of low-impact green design of these improvements is necessary in newer development and in existing areas where the opportunity allows. Several recent projects have incorporated these design features including Saipan-Ledo Park, Van Buren Dam, Mesa Drain Jogging Path, and the Northeast Channel Jogging Path.

A promising exception is the new Saipan-Ledo Park. The flood prone Saipan neighborhood between Evergreen Cemetery and I-10 suffered exceptional flooding in the 2006 storm. A total of 59 flood-damaged homes north of Durazno Avenue were to be replaced with a reservoir to protect the surrounding neighborhood from future flooding. Instead, the homes were replaced with soccer fields and picnic areas that were also designed to detain stormwater. Pumps will remove excess water to allow the soccer fields to recover after flooding.

Park-ponds such as Saipan-Ledo are not always practical; they can be expensive and often hold less stormwater than single-purpose stormwater basins. However, they provide multiple benefits to the larger community and they create value in the surrounding neighborhoods. Multi-purpose designs are generally preferable to single-purpose reservoirs such as the Van Buren Dam.



Van Buren Dam in central El Paso

The Downtown Element of *Plan El Paso* proposes a new Central Park, a large-scale park and stormwater detention facility that could replace Union Pacific's Dallas railyards, many of whose current functions are being relocated to Santa Teresa, New Mexico

Green Infrastructure Design (GID), sometimes also referred to as low-impact development (LID), is a general term for managing stormwater through an interconnected network of parks, preserves, arroyos, wetlands, and native vegetation. Stormwater is directed to areas where it can be re-used or it can evaporate or recharge aquifers. Natural materials, such as soil, vegetation, and rocks, are used instead of, or along with, concrete and other impervious materials.

Conventional stormwater infrastructure uses bare-earth detention basins and concrete-lined channels, which consume land and hinder infiltration. Increased runoff and higher stormwater velocities can cause erosion problems downstream; it can damage property and create safety hazards. GID techniques such as native vegetation or naturally-lined or rock-lined basins and channels can slow runoff velocities and even create wildlife habitat.

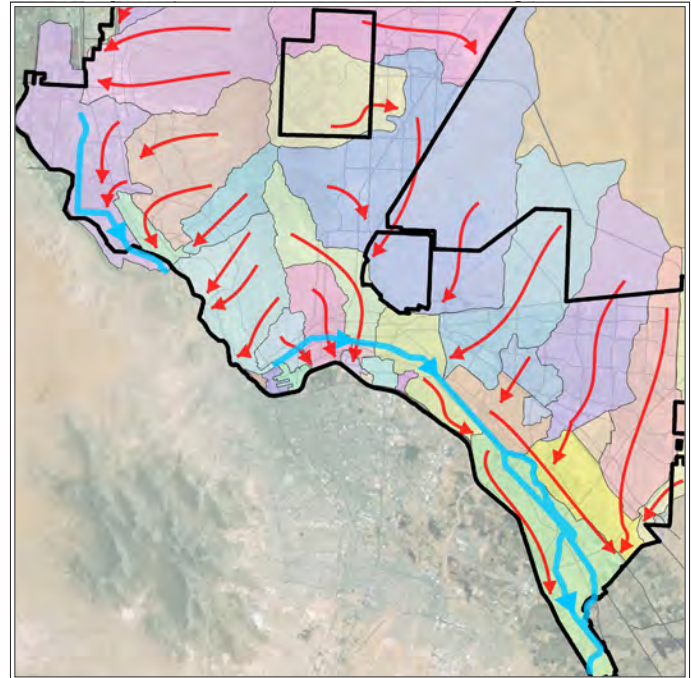
GID techniques can provide a natural and open feel for surrounding neighborhoods, enhancing livability and property values instead of being unsightly. EPWU-PSB's 2009 Stormwater Master Plan calls for incorporating GID techniques as design considerations for all capital projects, even when their use may require changes to existing City ordinances. The EPWU-PSB has designed and built GID projects funded with federal grant monies as shovel-ready green projects: Feather Lake II Basin, Basin G expansion, and the RV Channel and Spillway. These projects are great examples for using LID and GID techniques.

Many proposed improvements in the Stormwater Master Plan maintain most existing stormwater discharge routes rather than looking for potential opportunities to create new streams and bosques (using existing irrigation canals and potentially unneeded railroad rights-of-way). These new streams could run through linear parks, re-routing typical stormwater flows parallel to the Rio Grande instead of disposing it by speeding or pumping it along the flat valley floor into the border channel. The EPWU-PSB is actively pursuing the acquisition of open space along the Franklin Mountains slopes, underused agricultural drains, and other parcels that offer strategic natural flood control.

The drainage basins map at the top of the page shows the existing drainage basins in various colors, with red arrows pointing to their discharge points. Conceptual alternatives for new streams parallel to the Rio Grande are shown in blue.

These streams plus the existing irrigation canals and drains

could form the backbone of an urban park system with extensive hiking, cycling, and equestrian trails and other civic spaces, as discussed in the Sustainability Element of *Plan El Paso*.



Drainage Basins



A conventional drainage basin



An alternative to the conventional drainage basin creates habitat through the use of native plant species while still performing stormwater duties.

ENERGY

Electricity

The electric power grid that supplies El Paso was not designed to withstand the sustained cold temperatures experienced in early February 2011, which has been deemed the second worst cold spell in the last century.

The El Paso area is not connected to the massive power-sharing grid that serves $\frac{3}{4}$ of the state of Texas. During this storm, the larger two of El Paso Electric's three local power plants froze. Similar problems occurred in other power plants in New Mexico and Arizona, limiting their ability to send electricity to El Paso. The result was rolling blackouts throughout El Paso and Las Cruces, except in critical areas with hospitals, fire stations, and television stations. These blackouts deprived many residents of heat for their homes, contributed to a lack of the public water supply, and causing the bursting of frozen water pipes throughout the region.

This dramatic period of critical need for power has increased public scrutiny of local power sources. The City should pursue the use of renewable and alternative energies as well as potential deregulation and other non-traditional forms of electric distribution outside of the current alternatives. This shall be done in order to meet new demand, reduce reliance on fossil fuels, and increase the ability to meet demands when unforeseen circumstances reduce reliability of specific power sources. The Sustainability Element describes in detail some of the alternative energy sources that should be explored.

Regarding the expansion of Fort Bliss, El Paso Electric's system expansion plan for 2015 anticipated a large but unknown increase in demand for Fort Bliss. Officials at El Paso Electric are confident they will be able meet this demand.

Natural Gas

A significant issue for natural gas service in El Paso became apparent during the February 2011 storm when the natural gas system also suffered various failures. The freezing temperatures reduced the amount of natural gas being pumped from the production basins just as demand from customers rose to levels never before experienced and well above the system's capacity. Over 800 customers in El Paso lost service for an entire day, an outage that occurred nowhere else in Texas.

Other Energy Sources

The Sustainability Element of *Plan El Paso* discusses other sources and potential sources of energy, including coal, biomass, solar, wind, geothermal, and nuclear power.

SOLID WASTE

Under its current permit, the Clint Landfill has the capacity for an additional 25 million cubic yards of waste. It is estimated that the Clint Landfill has a life expectancy through 2032 based on its present usage.

Landfill gas is produced naturally as solid waste stabilizes in landfills. It is considered a potential hazard that is usually vented into the atmosphere. However, it can also be collected and used to generate electricity or burned as a fuel comparable to natural gas if a suitable user is nearby. A 2008 study by R.W. Beck concluded that the Clint Landfill would generate enough landfill gas after 5 years of operation to justify commercial sales of this resource. El Paso officials are currently using a \$1,000,000 federal grant to construct a landfill gas recovery system at the Clint Landfill.

An alternative to expanding the McCombs Landfill would be a waste-to-energy plant that would use the energy within solid waste and its heat to generate electricity. If such a plant were constructed, expanding the McCombs Landfill may not be necessary, or its useful life could be dramatically lengthened. Waste-to-energy plants are expensive to construct but they can reduce the amount of solid waste deposited into landfills by 90% while creating a salable product from the heat generated. Modern waste-to-energy plants are now operating around the world; they are more common outside the United States, particularly in Europe. The City should explore partnering with Fort Bliss in order to develop a modern waste-to-energy plant.

The Rio Grande Council of Governments has been designated as the state's solid waste planning entity. The Rio Grande Council of Governments receives about \$350,000 from the Texas Commission on Environmental Quality each year, with two-thirds available for pass-through grants to local governments for projects that implement the Municipal Solid Waste Plan for Far West Texas, last amended in 2002.

PARKS & RECREATION

The El Paso City Council has committed to creating a world-class parks and recreation program. Major improvements began after approval of the 2000 Quality of Life bond program, as described earlier in this Element.

Detailed planning for parks culminated in 2006 when a parks and recreation master plan was adopted by the City Council. That plan was intended to cover through the year 2016, but an update is needed to establish new short- and mid-term objectives. The following strategies should be pursued during that update.

Greens, Squares & Neighborhood Parks

Like Mundy Park and Madeline Park in El Paso, small neighborhood greens and parks created prior to World War II were often a prime selling feature for the neighborhood and were designed accordingly. As neighborhoods began to be built in less walkable formats, personal yards were often deemed more important than public green spaces. Consequently, the quality of new greens and parks decreased, with new ones often equipped only to minimum City standards.

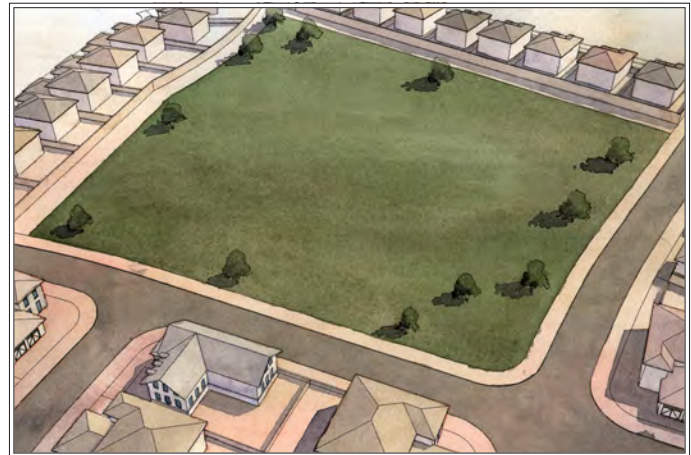
Recent City initiatives have begun reversing that trend. To improve the usability and attractiveness of neighborhood parks created while land is being subdivided, the City now allows multiple smaller neighborhood greens or parks that can be reached by more people on foot or by bicycle. Amenities such as playgrounds are encouraged.

It remains important to require green space in new subdivisions, but past implementation has resulted in many greens that were treated as leftover space instead of an important neighborhood feature. Integrating these spaces into neighborhoods should be an important priority; locating them prominently in conjunction with churches and schools is often beneficial.

The edges of greens and small parks are critical to their success. The top illustration shows a typical neighborhood green that faces the backs of houses, which limits interaction with surrounding properties and reduces natural surveillance.

A new layer of development with the fronts of buildings facing the green would activate this space, as shown in the middle illustration. One or more walkable tree-lined street would provide an active edge to what will now function as a true neighborhood green or park. Shade trees would also be added to adjacent streets, helping to define the edges.

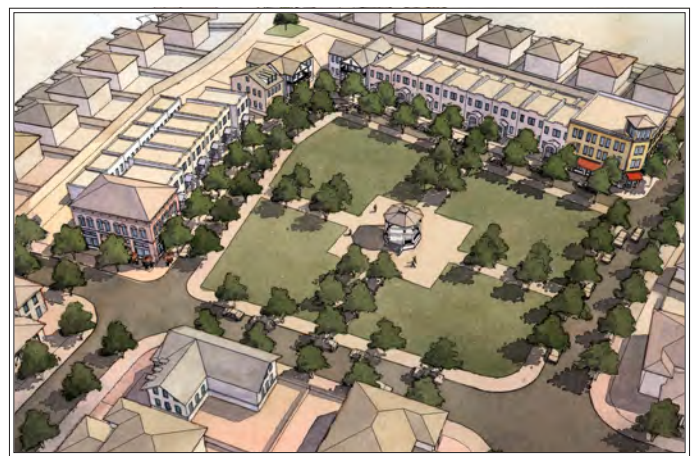
In compact settings, residents can enjoy neighborhood squares and engage more fully in civic life outside their homes. Squares are typically located at the intersection of important thoroughfares and are clearly defined by adjoining buildings. Squares should be separated by streets which are lined by a variety of building types and uses, which will provide the additional elements that are necessary for a vibrant square.



A potentially lifeless neighborhood green.



A lively neighborhood green.



A lively neighborhood green made more lively by adding a corner store and small offices. Additional uses are made possible by virtue of adding more people, and attached units around the periphery. The image shows five types of units: attached, detached, accessory, and apartments above shops and offices. This kind of diversity in housing type would likely lead to a neighborhood of varied ages and incomes – a true neighborhood.

Park Ponds

El Paso is energetically experimenting with green spaces that function as active parks but also detain stormwater after heavy rains. Eastwood Park, built in the 1970s, is an early example; the park's gentle slopes hold stormwater while providing large usable recreational areas. Other successful park ponds include Lomaland, Bartlett, and Redstone Village.

Another promising example is the new Saipan-Ledo Park, completed by the City in 2011 and described in the stormwater section of this Element. The flood-prone Saipan neighborhood between Evergreen Cemetery and I-10 suffered exceptional flooding in the 2006 storm. Instead of the original plan to replace flood-damaged homes with a typical reservoir, the City built soccer fields and picnic areas that can also detain stormwater.

Regional Parks

Regional parks are typically 100 to 500 acres and combine natural areas with developed facilities that draw from very large areas. El Paso has only a few developed parks that might qualify as regional parks, Blackie Chesser in the Mission Valley and the Northeast Regional Park in northeast El Paso. Washington Park is also considered a regional park but is now home to the El Paso Zoo. Ascarate Park, owned by El Paso County, is the only true regional park in operation today. A 90-acre tract has been acquired by the City for a new regional park on the far Eastside.

The parks and recreation master plan concluded that additional regional parks were its single highest priority. That plan proposed developing the far east regional park site, expanding the Northeast Regional Park, considering a destination regional park around the Keystone Dam detention areas in the upper valley, and redeveloping Ascarate Park which has fallen into disrepair after the Western Playland amusement park moved out in 2006.

A state constitutional amendment that would have allowed El Paso voters to establish a special taxing district for regional parks was rejected in 2011. A similar concept should be reconsidered in the future because there are few other options for funding regional parks.

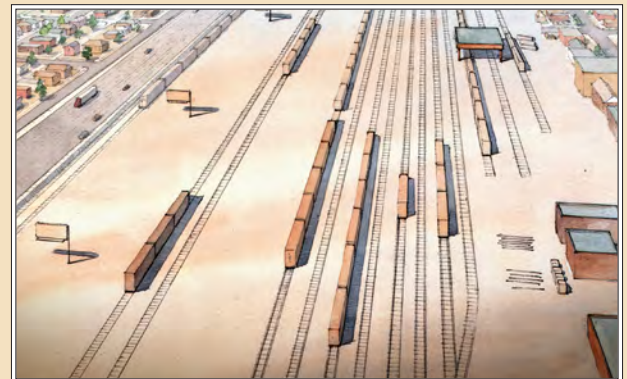
Central Park

The park-pond concept is not limited to neighborhood parks. El Paso residents have expressed a desire for a grand public open space that can serve as a central park for the City. An excellent site is the underutilized, centrally located railroad yards just south of I-10 between Campbell Street and Cotton Street. This area is subject to repeated flooding and would benefit greatly by a regional park that could also hold large amounts of stormwater after heavy rains.

Central Park, as envisioned in this comprehensive plan, would be large enough to contain a variety of functions. In addition to storing stormwater, there would be space for formal and informal play fields, sites for pavilions and gardens, and a pond that could stay wet year-round for paddle boats. Over time, as the City finds the need for new museums or performance spaces, they might be placed here.



Saipan-Ledo provides a park pond with both drainage and recreational uses.



Existing railroad yards south of I-10



A grand new central park for El Paso

Open Spaces

While the 1925 City Plan for El Paso encouraged the preservation of natural areas, active efforts to that end were not a high priority. El Paso is very fortunate to have the Franklin Mountains as a spectacular natural backdrop. But within the City itself, and even along the lower fringes of the mountains, very little open space has been preserved. The result is a distant glimpse of the beauty of the mountains, tempered by little access to nearby open space.

In 2007, the City Council adopted a formal open space master plan to address the serious shortage of natural open spaces left in the City. The implementation of that master plan is overseen by an appointed Open Space Advisory Board and is guided by the plan's vision statement.

The Rio Grande corridor was once covered with cottonwood bosques; today most of the trees along the river have been replaced by development or by flood control levees and immigration barriers that separate the river from the community. Bosque restoration is a high priority of the open space master plan. The levees provide an opportunity for trails along El Paso County's longest continuous open space corridor, which traverses over 32 miles.

In addition to the mountains and the Rio Grande, arroyos are a distinguishing natural feature of El Paso. Arroyos at one time existed along the entire perimeter of the Franklin Mountains, but most of the arroyos in the lower 50% of the mountain range have been channelized or covered over. Preserved arroyos are essential parts of several of the most valued neighborhoods in El Paso, a pattern that should be repeated and expanded as land development takes place. Preservation of the remaining undeveloped arroyos is a high priority of the open space master plan; most remaining arroyos are shown as an overlay on this plan's Future Land Use Map.

El Paso has the raw materials to continue growing into a spectacular City; an aggressive and ongoing commitment is required to carefully preserve key open spaces before they are gone.

Arroyos as Parks

El Paso's arroyos, intriguing and irregularly shaped channels full of vegetation and wildlife, are an important part of the local ecology and landscape. Carved over many years by the movement of rainfall across the earth, these shallow, moist ravines feature a high degree of biodiversity.

Arroyo Park, between Kern Place and the Rim-University neighborhoods, was created at the time of subdivision to form a distinctive edge between neighborhoods. It features a scenic drive along its edge and recreational facilities within. More typically, arroyos have been replaced with concrete channels and walled off, losing the historic value and beauty of arroyos.

If adjacent development is properly configured, additional arroyos can form very attractive public spaces that add value to adjacent neighborhoods. The key is to provide continuous public access along the neighborhood edge abutting the rim of the arroyo. This can be done with a public street or even just a public pedestrian walkway. Lots must be arranged so that the fronts or sides of buildings face the arroyos (not the backs of buildings). This will ensure that the developed edge around the rim of the arroyo is beautiful and well-maintained. If frequent access points are provided, the arroyo will function as a valuable amenity for the entire neighborhood.

A Vision Statement for Open Space

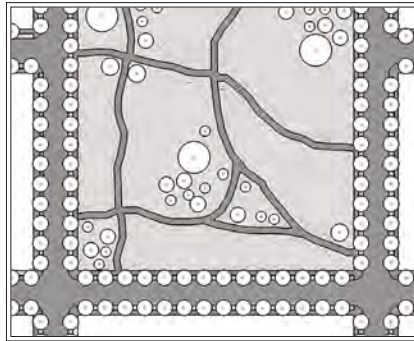
The Franklin Mountains and the Rio Grande River Corridor will be at the heart of a densely interconnected network of trails, parks and natural areas covering our entire City. Critical arroyos, irrigation canals and drainage features will serve as "green infrastructure" arterials with links to neighborhoods, schools, libraries, museums, public transit terminals, workplaces, shopping areas, parks, native habitat preserves and grand open spaces. El Paso's Open Space and Trail Network will be attractive and easily accessible to all. It will be the site of many kinds of healthy recreational activities, and provide numerous opportunities for educating the public about Chihuahuan Desert ecosystems. Through a carefully-planned balance of development and preservation, El Paso will be recognized as a city uniquely in harmony with its natural setting, and become a mecca for outdoor enthusiasts, eco-tourists and people seeking an excellent quality of life.



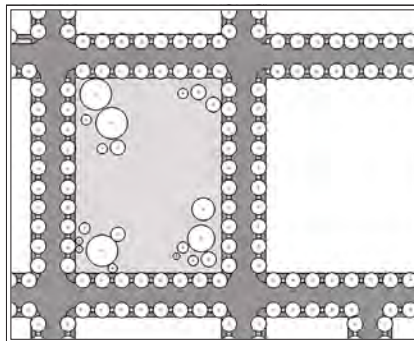
CIVIC SPACES

High-quality civic spaces should be thoroughly integrated into new development and introduced during redevelopment. Neighborhood greens and parks have been discussed earlier in this Element; other types of public open spaces that mirror El Paso traditions are illustrated below. Plazas and squares are the most urban types of space; they are enclosed by surrounding buildings that form an outdoor room. Parks and greens are more open, bounded on at least one side by buildings, and framed by plantings. Other types of civic spaces, including community gardens and playfields, are more open and only occasionally shaped by buildings or formal plantings.

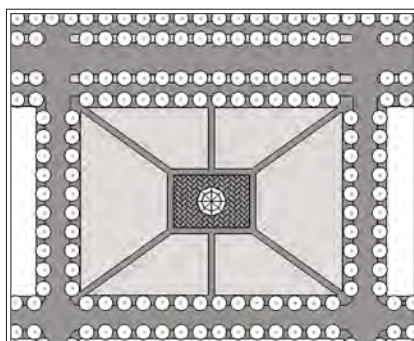
A **park** is a natural preserve that serves environmental goals such as the preservation of habitat or filtration of water. It may also be available for active recreation. The shape of the park may follow the boundaries of natural features. Parks may contain trails, arroyos, bosques, rock escarpments, water bodies, woodlands, and meadows. A park may also contain orchards or food gardens.



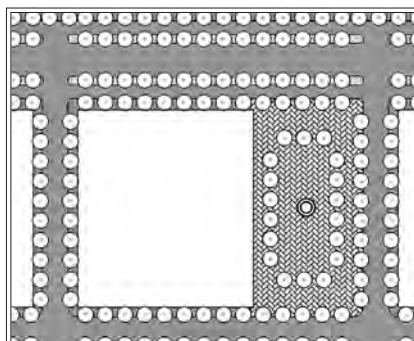
A **green** is available for structured or unstructured recreation. A green may be spatially defined by landscaping rather than by buildings. Trees can be formally or naturalistically planted. A green contains lawns, trees, pavilions, memorials, benches, and playground equipment. A green may also contain orchards or plots for cultivation of crops.



A **square** is available for structured or unstructured recreation and civic purposes. A square is clearly defined by building frontages. A square can provide a public open space that provides a setting for civic buildings. Squares are located at the intersection of important thoroughfares. Squares may contain lawns, trees, and pavilions that are formally disposed.



A **plaza** is designed for civic, commercial, or residential activities. A plaza is clearly defined by building frontages. Its surface is typically covered with pavers or compact earth. Trees are optional and plazas are located at the most central intersections or as quiet neighborhood centers. Spanish missions were always organized around a plaza.



FRANKLIN MOUNTAINS AND TRAIL SYSTEM

Franklin Mountains State Park

El Paso's striking mountainous backdrop is also the largest urban wilderness park in the United States. Franklin Mountains State Park protects 37 square miles of rugged mountains and desert wilderness that are laced with trails for hiking, climbing, and mountain biking. The park is speckled by cactuses and ocotillos and populated by small mammals, birds, reptiles, deer, and the occasional mountain lion. The mountain's summit rises 3,000 feet above the City. The state park was created by a 1979 act of the Texas legislature. Acquisition began in 1981 and the park was opened to the public in 1987. The park is still expanding; in 2009, 1,650 acres of City land on both sides of the mountain were added to the park.

There are additional opportunities to expand the park. Castner Range, 7,081 acres in northeast El Paso, hasn't been used by the Army since 1966. It contains some of the most geologically complex and visually striking parts of the mountains and is prized for its wild gold poppies. City, county, and state officials have strongly supported the transfer of the entire range to the state park. The Fort Bliss Element of *Plan El Paso* describes an interim strategy to accomplish that goal.

In addition, the lower reaches of the Franklin Mountains just above Scenic Drive, although undevelopable, are still largely in private ownership, as are other lands along the fringes of the park. These lands are shown on this plan's Future Land Use Map in the O-2 open-space sector, which indicates important natural features without protected status; public acquisition should be considered for these lands. Lands that are already protected from development are in the O-1 open-space sector, as discussed in the Regional Land Use Patterns Element of *Plan El Paso*.

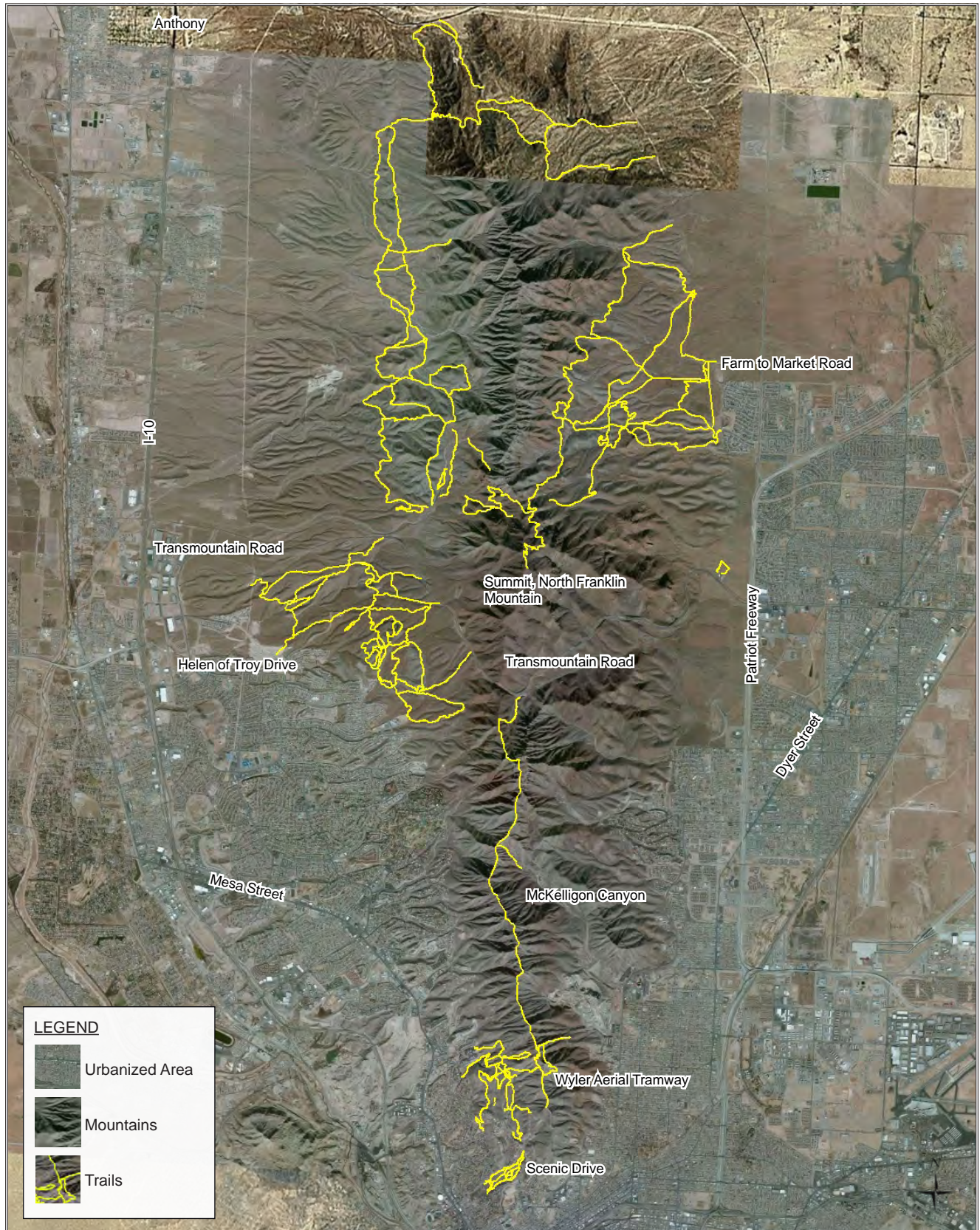
Trails, Existing and Proposed

City-owned lands both north and south of Transmountain Road currently host many informal trails in addition to those within the Franklin Mountains State Park. If development should occur on these lands these trails should be reconfigured into a more cohesive systems, thus connecting the new neighborhoods of each proposed plan to each other and generating opportunities for recreation between and around the proposed neighborhoods. The trails should be reconfigured as a network that takes advantage of the topography along the arroyos and linkages to the Franklin Mountains State Park after coordination with park management.



Trailheads provide parking, signage and maps, restroom facilities, and covered shelters. Despite the many informal trails on City-owned lands and within the Franklin Mountains State Park additional trailheads would make enjoyment of the high desert scenery more convenient.

FRANKLIN MOUNTAINS AND TRAIL SYSTEM



PLAN EL PASO

Strategies for Addressing Community Concerns

RIVERPARK AND TRAIL SYSTEM

Many El Pasoans have expressed that the Rio Grande should be a source of pride and an asset that adds to the cultural inventory. Many feel that it is not a source of pride due to its current state and appearance. It has been treated as a piece of water conveyance infrastructure rather than a crucial piece of the City's history and a living ecosystem.

County Judge Veronica Escobar, who created an eco-tourism committee, has articulated in a precise way that in peer communities, waterfront property is the most valuable and the most valued; rivers are part of tourism and economic development, and rivers are a source of environmental pride and honor.

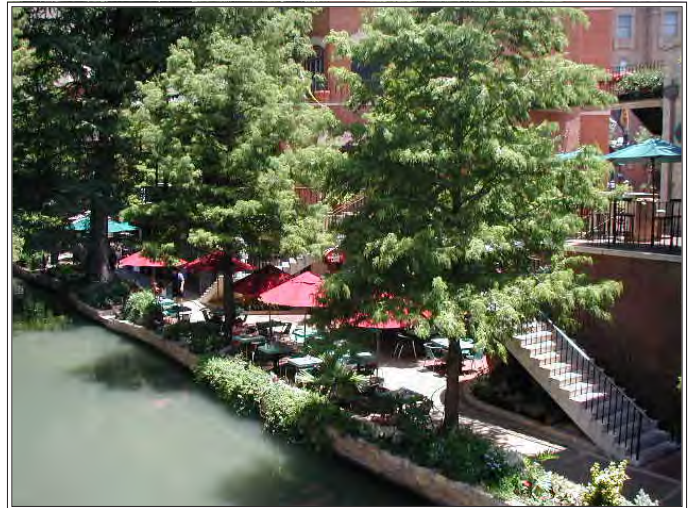
Currently, the Rio Grande is often dry due to the enormous demands placed upon a limited water budget. It has a concrete canal that runs alongside it, diverting water from the main channel. The international border wall is adjacent to it, further blighting this environmental and cultural resource. There are multiple jurisdictions and other entities that have control over parts of it, and it is directly across from what is perceived as a dangerous part of Mexico.

The Rio Grande deserves better. First, a Rio Grande Revitalization Plan should be commissioned. The County and the City have already embarked upon the planning of an ambitious Riverpark and Trail System. The Northwestern portion of the trail is already built, but there is an opportunity for securing new park space or expanding upon existing parks in order to make more of the River accessible to the public. This portion of the trail starts near the County line and passes through the communities of Anthony, Vinton, and Canutillo.

The Central Portion has several difficult constraints that will likely make this the final phase, rather than an earlier phase. Some of these constraints include the rugged terrain, the fact that the River crosses south of the Border Wall, and the lack of unbuilt land along either the channels or River. This portion of the Trail System passes by Sunland Park, UTEP, Downtown, Chihuahuita, Segundo Barrio, Chamizal, and ends at Ascarate Park.

The Southeastern Portion includes Ascarate and J.P. Shawver Parks. The Rio Bosque Park has trails, wetlands, and forests, and preserves native species found in the River Valley. The trail remains on the north side of the border fence and follows the canals rather than the River itself. Already well established is the Mission Trail, which passes by the Ysleta and Socorro Missions. The current terminus of the trail is located near Tornillo, but this could be extended to beyond the County line in the future, recognizing that the cultural and ecological line of the river does not stop at today's boundaries.

In addition to these considerations, El Pasoans have expressed the wish that the physical design of the River and its adjacent lands do not foreclose upon the possibility of a more porous movement of people, ideas, and commerce across the border in the future. Urban rivers in peer cities such as Rio Mapocho in Santiago, Chile or the Rio Grande in Albuquerque, New Mexico can offer clues as to how to create linear parks along the Rio Grande in El Paso.



Though San Antonio has a completely different geographical, political, and cultural context than El Paso, its Riverwalk is worthy of study as inspiration for revitalization of the Rio Grande. This precedent may be most relevant for portions of the Rio Grande that have bulkheads and that pass through the urban, central portions of the City.



Restoring year-round flow to the Rio Grande will require cooperation with the local governments upstream from El Paso, such as municipalities and the State of New Mexico, in addition to coordination between the City of El Paso, EPWU-PSB, and El Paso County.

In the stretches of the River that pass through the agricultural lands of the northwestern and southeastern portions, the design of the River should feature softer banks with gentle slopes and generous landscaping. Rather than framed by buildings, bulkheads, and hardscaped pathways, as would be the case in the central areas, these stretches of the river would be framed by bosques, orchards, and in some spots, lush wetlands. Pathways should be pervious, preferably composed of crushed, local rock, and could lead to drop-in or take-out areas for kayakers and canoeists. The trails should welcome those on horseback as well.

The Mission Valley Segment of the Rio Grande River Trail

An alternative recreational trail to mirror the previously planned Rio Grande River Trail (now the site of the Border Wall) in Mission Valley is the Playa Drain. Running parallel to the Rio Grande River, but on the opposite end of the Border Highway, the Playa Drain was identified as the most suitable substitute. In the early days of the Mission Valley, the Playa Drain provided irrigation to farmland. While most of the farmland is gone, the connectivity remains. Repurposing of the drain would restore a more rural character to the area, showcasing the “valley” in the Mission Valley.

Ultimately, the river trail would connect Ascarate Park to the Rio Bosque Wetlands. A series of EPWU-PSB ponding areas along the route could be restored in the style of Feather Lake or as park ponds. These ponding areas are located near or at Ascarate Park, Riverside High School, JP Shawver Park, and Capistrano Park. With creative design, the project could feature artistic, historical, or interpretive elements to enhance the pedestrian experience.

Symbolically, the Playa Drain River Trail would serve as a source of civic pride to Mission Valley. Functionally, it alleviates problems in the Mission Valley. Adding vegetation to the ponds and the length of the drain would not only beautify these areas, it would also help stabilize the soil that creates visibility problems during high winds. Furthermore, with TxDOT toll roads being constructed in the area, landscaping would serve as an additional buffer between highway traffic and homes and provide a pleasant viewshed for highway travelers.

The trail would provide improved non-vehicular access between the Zaragoza International Port of Entry, Sun Metro’s Mission Valley Transfer Center, and the Alameda RTS system. With the City’s investment in RTS on the nearby Alameda Corridor, it is especially important that the area have safe pedestrian options. Within a five minute walk (1/4 mile) of the Playa Drain boundaries, there are 125 bus stops, 5 parks, and 13 schools. Of those schools, there are two high schools, a middle school and 5 elementary schools. Within a half mile of the Drain the number grows to 261 bus stops, 7 parks, and 24 schools including 4 middle schools and 15 elementary schools.

Green Infrastructure Plan

The City of El Paso should map existing green infrastructure throughout the City. This will allow the gaps and linkages between critical green infrastructure elements to be mapped and prioritized. This complete and coherent green infrastructure plan will help resolve some contradictory intentions between the policy objectives, ownership, and management of significant lands. Although the adoption of the *Mountain to River – A Green Infrastructure Plan for El Paso* was a critical first step, an update is necessary to fully develop a comprehensive inventory of green infrastructure and to identify major areas for preservation to guide the community towards the donation, conservation, or acquisition of the most critical areas.

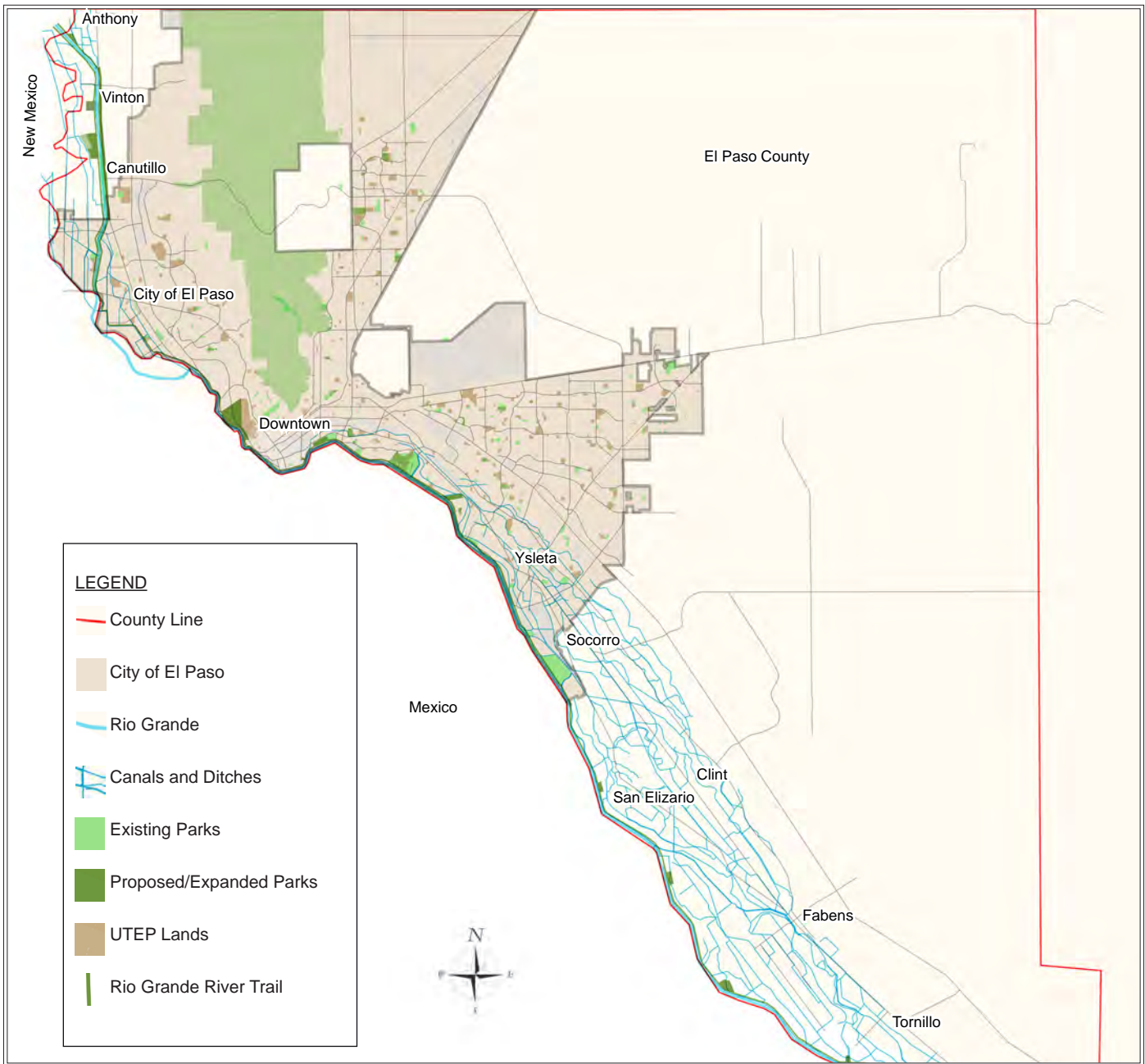


Central El Paso: In the future, some stretches of the River or the channels that run to and from the main watercourse could be lined with buildings and public pathways like this example from Downtown Indianapolis.



During a public charrette to redesign the former ASARCO site, El Pasoans asked for a riverfront park that could combine mixed-use development with cultural and sports amenities. The park was designed in such a way that if security and international relations become favorable, a neutral zone could be established in which Mexicans and Americans could interact without passing through a formal border crossing. Even if the idea of a porous border remains elusive, a park could remain a symbolic gesture to express hope for a safer Juárez and unified metropolitan region.

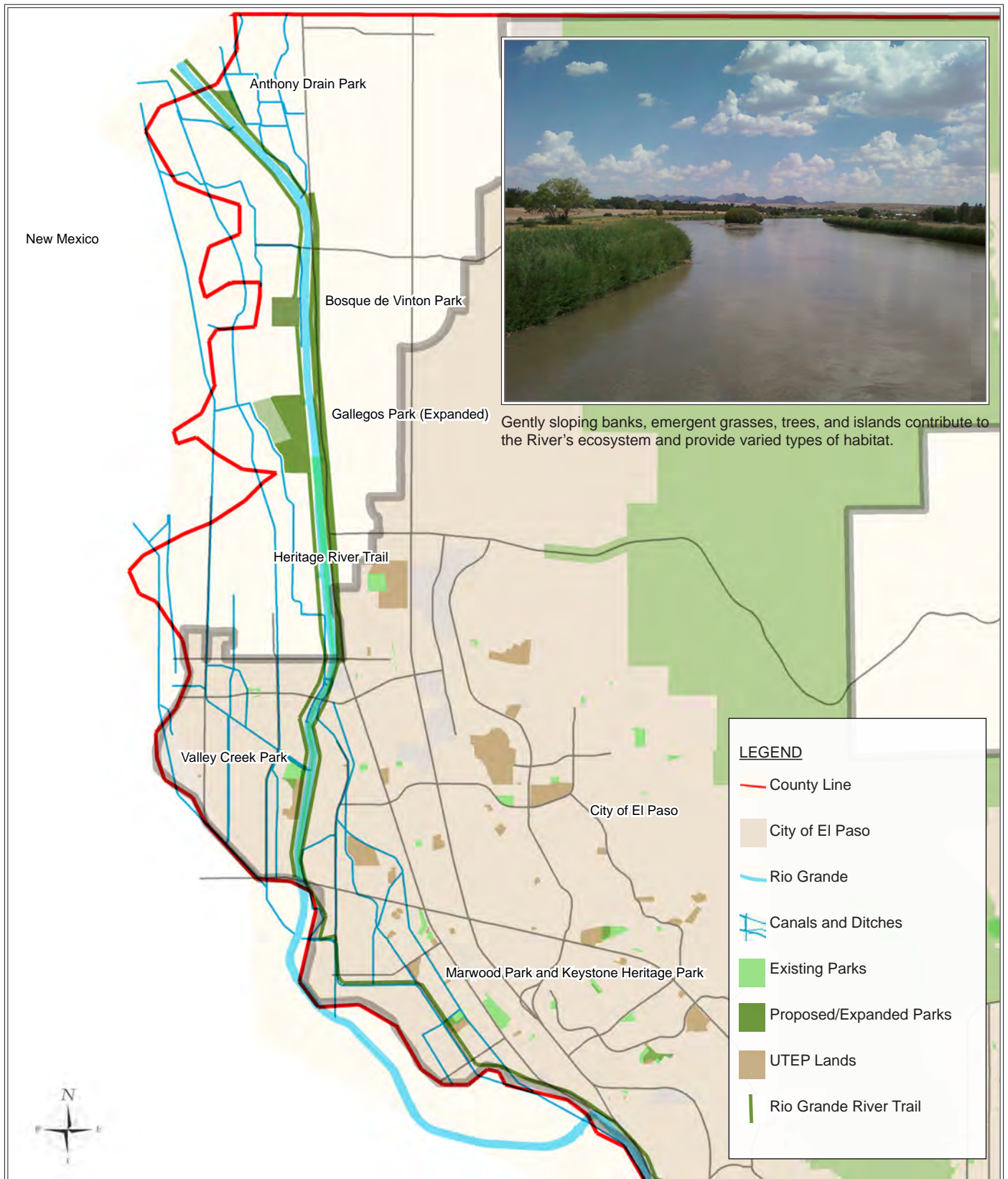
RIVERPARK AND TRAIL SYSTEM



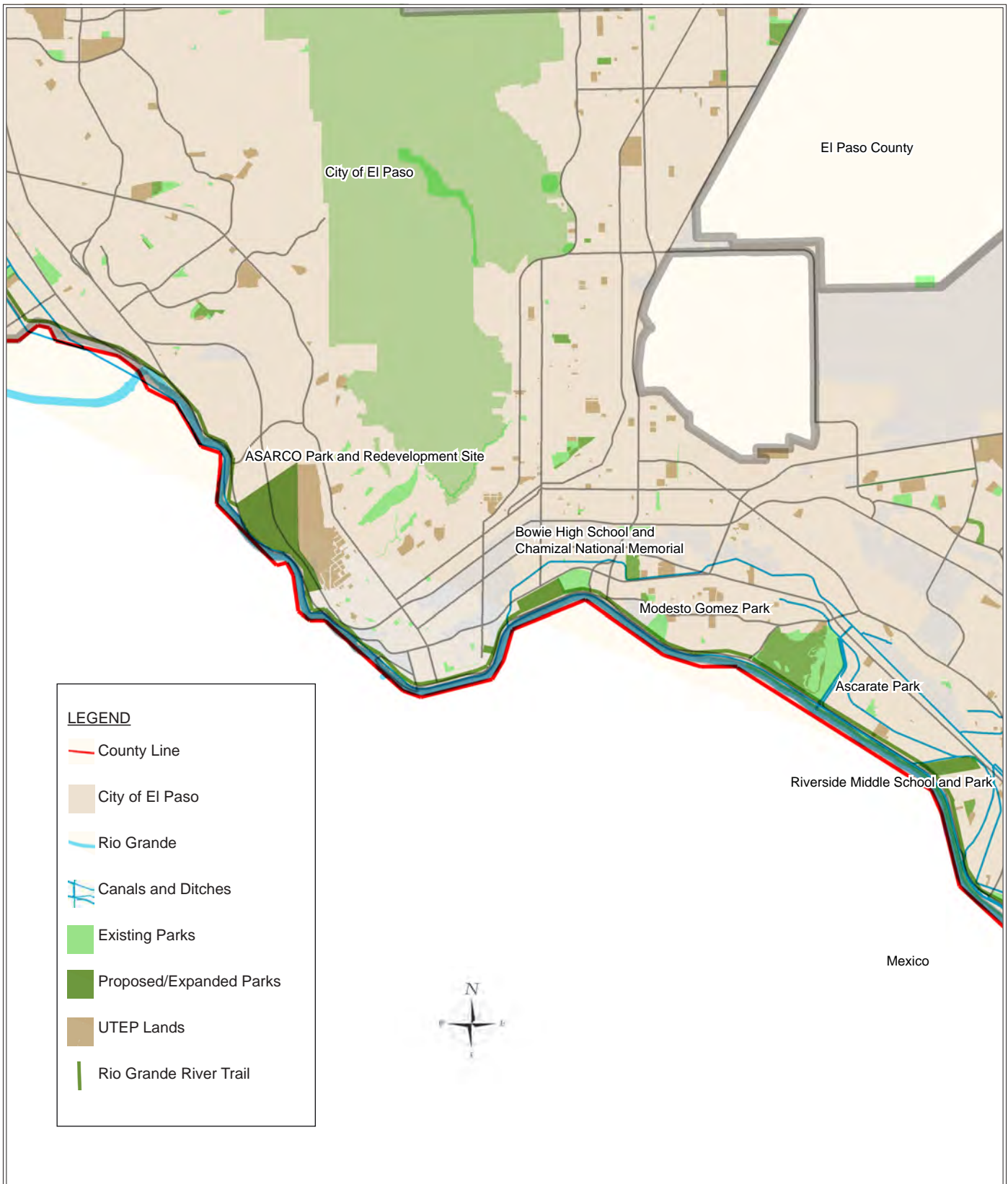
Goals of the Riverpark & Trail Plan

1. Restore year-round flow of water.
2. Reassess the requirements of the water needs of the riparian ecosystem and place these on equal footing with competing interests such as agriculture, industry, and municipal supply.
3. Restore riparian ecology in key locations, including the softening of banks and installing native ecosystems.
4. Provide multi-use trails and parks adjacent to the River.
5. Set aside sites, create infrastructure, and create policies to stimulate eco-tourism and economic activity related to the River.
6. Facilitate access to the River for El Pasoans
7. Face the River with habitable space. Increase natural surveillance for trails and parks. Make the River a great address.
8. When and where water levels are suitable, add drop-in and take-out points for kayakers and canoeists.

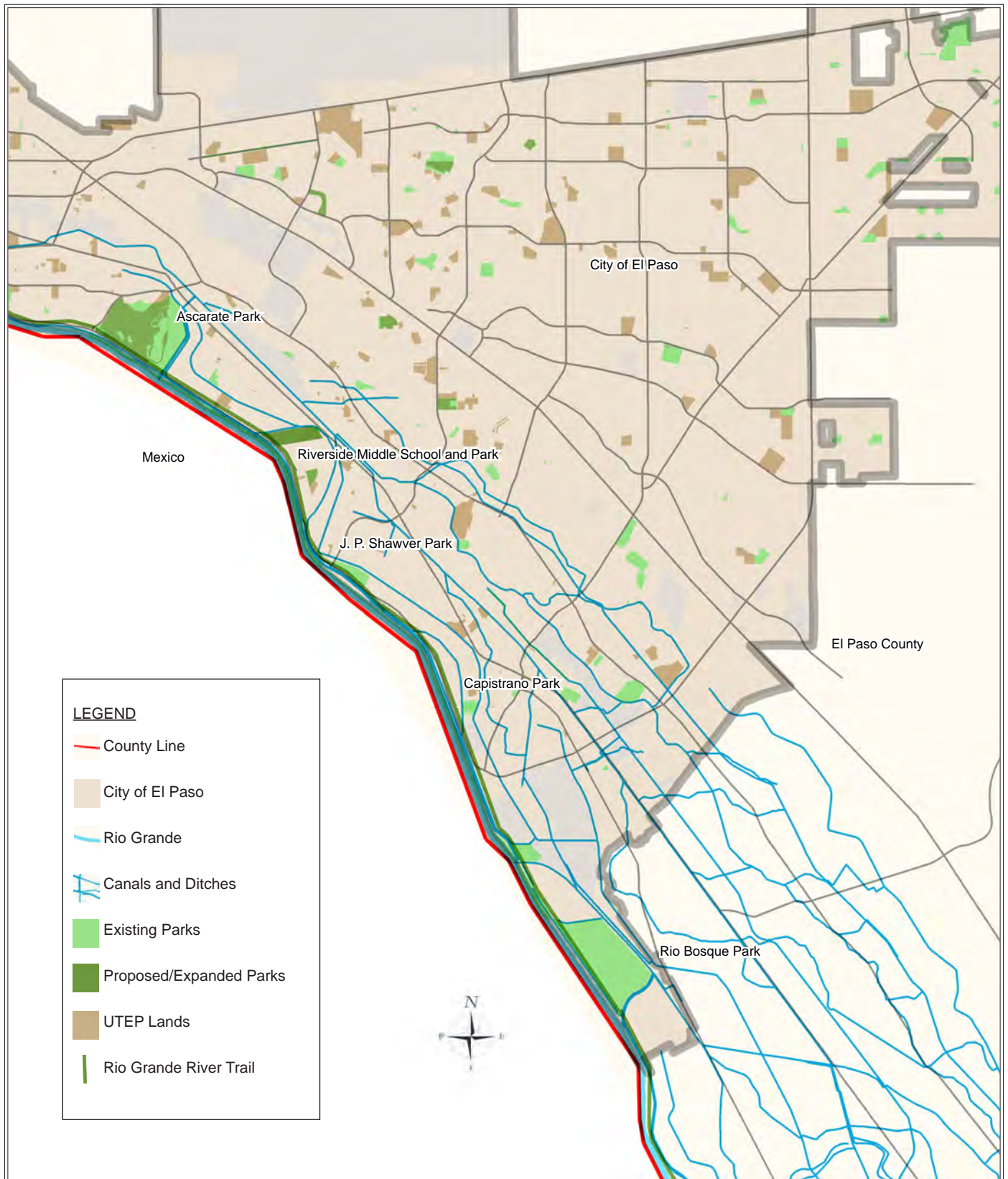
RIVERPARK AND TRAIL SYSTEM: NORTHWESTERN PORTION



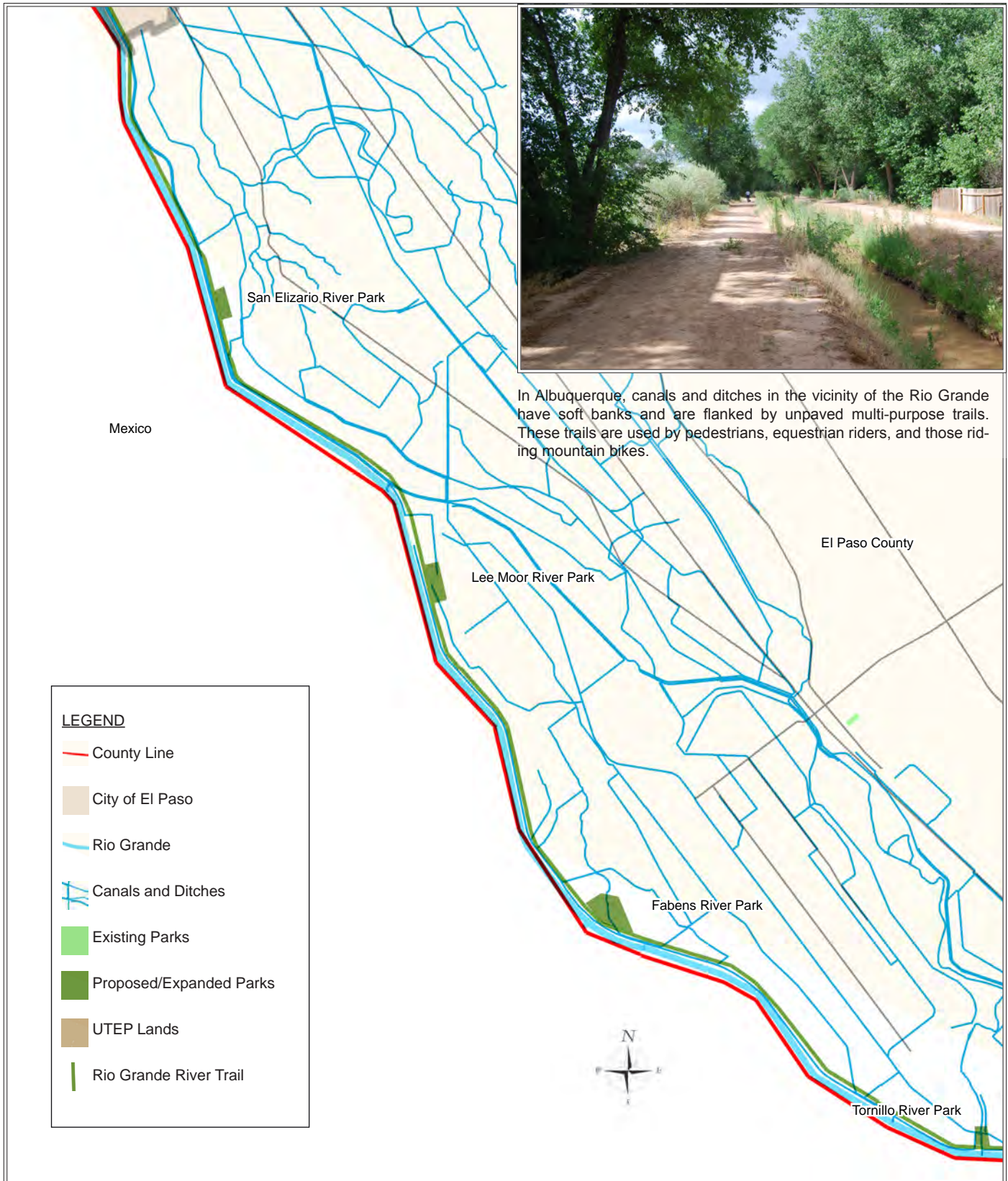
RIVERPARK AND TRAIL SYSTEM: CENTRAL PORTION



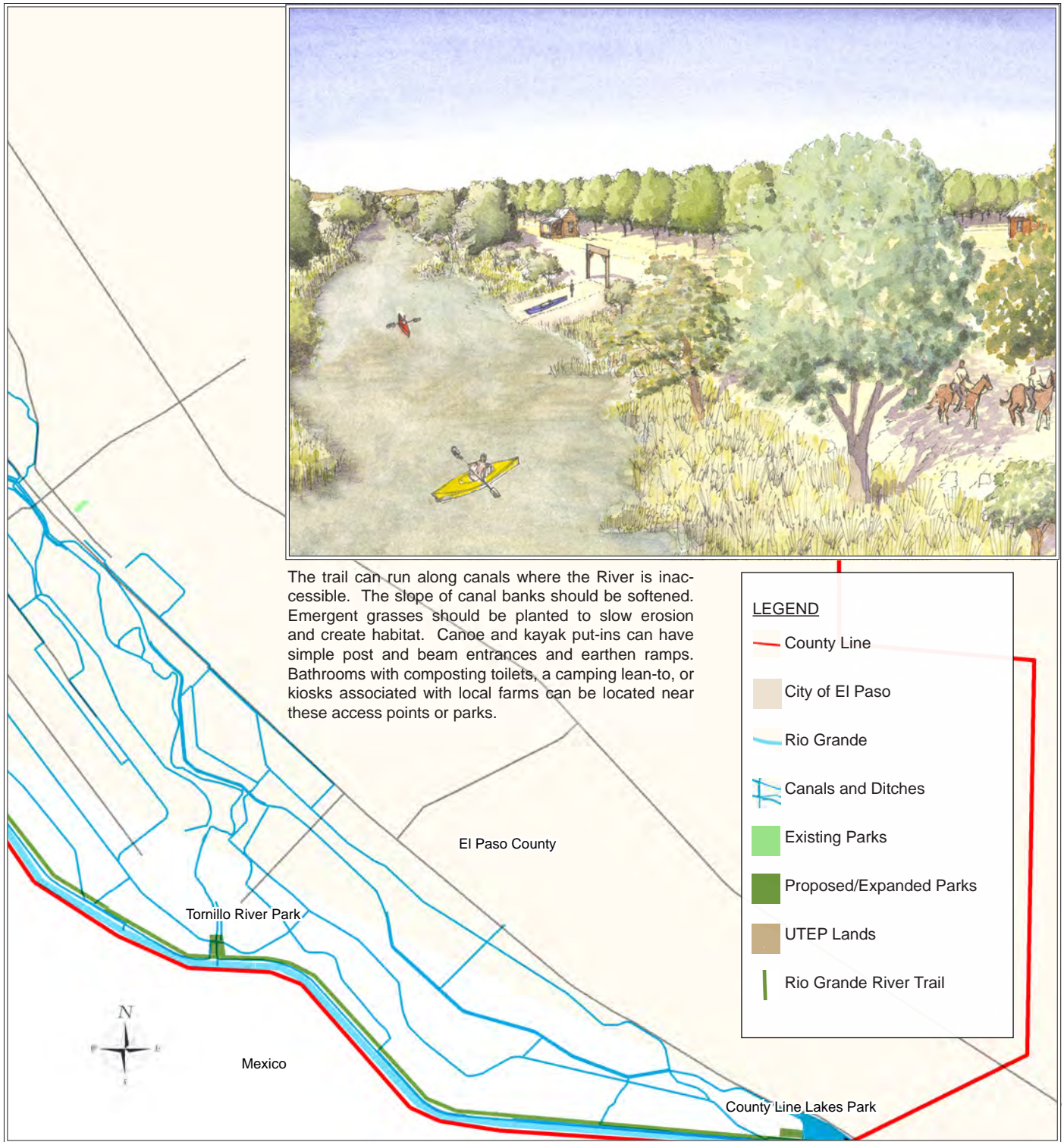
RIVERPARK AND TRAIL SYSTEM: SOUTHEASTERN PORTION



RIVERPARK AND TRAIL SYSTEM: SOUTHEASTERN PORTION



RIVERPARK AND TRAIL SYSTEM: SOUTHEASTERN PORTION



Strategies for Addressing Community Concerns

LIBRARIES

The City of El Paso has set out to create a nationally recognized library system by planning upgrades to its facilities, collections, and services.

An early milestone was the 2010 opening of the new José Cisneros Cielo Vista Branch Library, the first “green building” in the library system. This library includes other new technology including 30 wireless laptop computers available for loan, which provides greater convenience to library patrons while reducing the need for dedicated computer lab space.

Other libraries in the system are also being provided with new technology. Recent service enhancements include:

- downloadable books and other resources,
- automatic notifications to patrons about the status of book requests and overdue material, and
- wireless internet service so that patrons can use library resources and on-line resources simultaneously.

New technologies that supplement existing library services will be added over time. Older techniques will be reconsidered where appropriate, such as mobile libraries and mini-libraries that are located within other neighborhood facilities.

The siting and design of library buildings is critical to how the libraries serve the public and how the library buildings do or do not contribute to the City’s public realm.

As to location, libraries serve a broad cross-section of the public and should always be located on public transit lines so that a private car isn’t needed to reach them. Libraries should be located in regionally central locations or in neighborhoods where they will be conveniently accessible to local patrons.

As to design, libraries are important civic buildings. Library buildings should appear dignified to indicate their importance to the community and should be convenient and welcoming to users.

Civic buildings are frequently placed in or adjoining civic spaces, as discussed in the following section of this Element. An example of ideal placement of a small civic building like a branch library is illustrated to the right.



Original Carnegie library, opened in 1904 and demolished in 1968 (with Cleveland Square bandstand in background)



New José Cisneros Cielo Vista Branch Library



Current Main Library facing Cleveland Square



Illustration of ideal placement of a branch library facing a playground and integrated into a neighborhood.

SCHOOLS

The location and design of schools strengthens communities and neighborhoods by providing a center for community activities that extend beyond the school day. The joint use of school facilities can result in a more efficient use of scarce resources and provide community amenities. Neighborhood amenities may include shared use of playing fields, auditoriums, libraries, health clinics, and other community services incorporated into schools while also designed for greater community access.

Apply Smart Growth Principles to Schools

Many of the Smart Growth principles throughout this plan may be applied to the planning and development of schools. In an effort to extend the Smart Growth development strategy to school planning, the following specific criteria will provide decision-makers with tools to enhance decision-making.

Full Cost Analysis

Will old schools be restored rather than replaced so long as the cost is less than a new school?

This type of analysis is critical to the City of El Paso given the current financial context and the recently failed school bond election. As the school district is contemplating the closure of multiple schools, decision-makers must examine the effect upon the community as a whole.

Holistic Planning

Is school planning done in conjunction with land planning and transportation planning, or are these segregated?

The land use and thoroughfare planning around the school should be thoughtful and compliment the neighborhood context. For example, pedestrian linkages should be strategically located via sidewalks, bikeways, arroyos and other common areas to provide internal and external neighborhood circulation.

Community Buy-in

Is the school planning process designed in a way to secure community input prior to key decisions being made?

Input by the community provides benefits to the entire community, including better decisions and long-term support by the citizens.

Context-Sensitive Designs

Do you have the flexibility to design the school efficiently for the site and the community?

The school should be designed with the site and needs of the community in mind. Many school districts have minimum acreage requirements, minimum square footage requirements, and other design standards that prevent them from being inserted into fine-grained neighborhoods and may prevent more context-sensitive design alternatives. Because minimum size requirements can often only be satisfied on large unbuilt tracts of land, they contribute to sprawl.



Del Valle Elementary School has some joint-use amenities and sustainable architectural features and landscaping.

Source: *Del Valley Elementary Website.*

Neighborhood School

Is the school embedded into a walkable neighborhood so that most students can reach it safely without the necessity of a car or bus? Residents and students should be encouraged to walk to and from the school campus in a safe environment.

Prominent Site

Is the school sited in a prominent location so that it communicates the importance the school has in the culture of the community? Neighborhood schools should be located within the heart of the area they serve rather than at its periphery. A school can be at the center of the neighborhood, especially if it serves only one neighborhood. If it serves multiple neighborhoods, it should be located at the edge of the neighborhoods in a place that is roughly central to the neighborhoods that it serves. School buildings and architectural features should terminate views where they interrupt the grid of streets.

Shared Use

Is the school sited or designed so that it can share uses with the community? Joint-use facilities should be encouraged to maximize the public's investment including the sharing of recreational facilities to reduce campus size. Neighborhood parks should be located next to schools to maximize recreational areas and the opportunities of joint-use facilities.

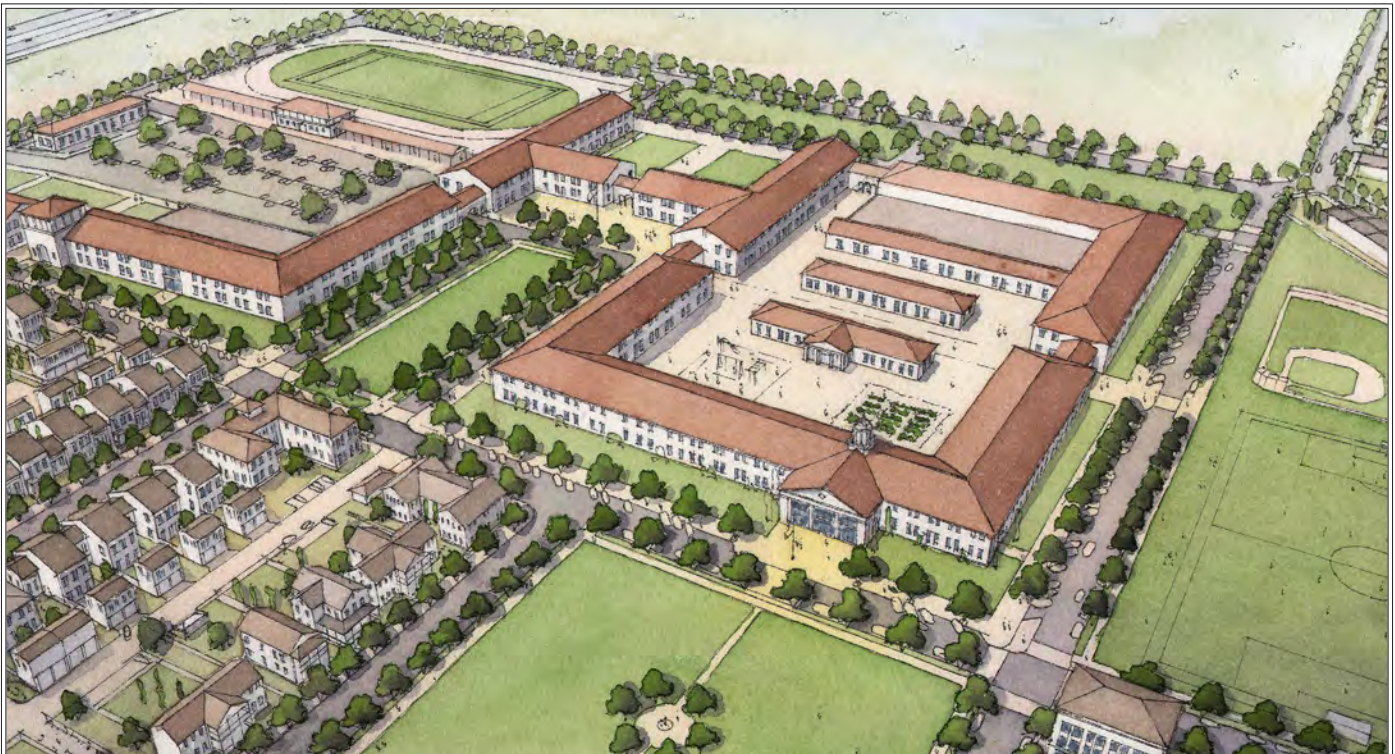
Flexibility

Is the school designed so that it can grow in size and services as the neighborhood grows or contract so that it remains useful over a longer period of time?

Thoughtful site planning provides long-term benefits including a more sustainable school campus.



Conventional school site planning often lacks integration with the surrounding urban fabric.



A school should be integrated with the urban fabric, sited prominently, shape public space, and facilitate pedestrian and cyclist access. Playfields can be thought of as public amenities, especially after school hours and on weekends.

Connected Learning Environment

Does the school connect itself to effective distance learning opportunities?

Schools should be connected to the local community through interaction with local businesses or through a community service program.

Community Pride in Design

Is the school designed so that it generates community pride as measured by a Visual Preference Survey?

El Paso High School on East Schuster Avenue is an example of community pride in design.

High Performance Green Building Certification

Does the construction or renovation of the school follow best practices regarding energy efficiency, water efficiency, indoor air quality, daylighting, light pollution, and earth-friendly construction techniques as set out in the LEED for Schools or similar high-performance building certification program?¹

Incorporate Schools Into The Neighborhood Fabric

There should be a more urban prototype that allows for schools to again be incorporated into the urban neighborhood fabric. The community loses when schools are no longer stately fixtures of neighborhoods, instead becoming institutions found a driving distance away in settings that resemble business or manufacturing facilities.

Allow elementary school students to attend schools within their neighborhoods as well as choose educational settings outside their neighborhoods. Sharing of facilities should be encouraged. There are already joint-use agreements; yet, these are set up on a case-by-case basis and are often difficult to obtain. In urban areas it is imperative that community uses overlap and that parks be consolidated with schools. Community and educational uses naturally overlap, even though they are provided by different governmental entities.

Implement Safe Pedestrian Routes To Schools

Build upon the Safe Routes to School program to design and fund safe pedestrian routes to schools and transit. Implement improvements around schools such as wider sidewalks, street trees planted between the sidewalk and the travel lanes, on-street parking to serve as a barrier between pedestrians and moving vehicles, highly visible pedestrian crossings, traffic calming, human-scaled street and pedestrian lighting, pedestrian trails, and engage in educating children about traffic safety. Many improvements have been designed through the state-funded Safe Routes to School program; state funding has not been consistently provided to implement all improvements, however. Neighborhood traffic safety programs should be encouraged such as the “Walking School Bus” effort, in which parents and other adults share the responsibility of escorting children to and from school.

Promote Good Health Through Educational Programs & Design

Public schools often promote good health in the classroom but sometimes contribute to poor health by their location and design. Each school has the potential to transform a neighborhood, becoming a community center for all. School siting criteria that require schools to be placed on large sites and provide ample bus queues and parking lots ensure that new schools will not be placed in traditional neighborhoods and that many existing schools will be deemed sub-standard. When schools are not within walkable or bikable distances, children must be driven or bused each day, contributing to childhood obesity and diabetes and many other conditions that result from reduced physical activity. School design is directly related to childhood health issues.

Partner with the Texas School Health Advisory Committees (SHAC)

Each of the four Independent School Districts in El Paso has a state-mandated advisory committee focusing on childhood-related health issues within the school district. Each committee is comprised of parents, educators, administrators, and local community volunteers. Some advisory committees have established subcommittees to address specific health issues. A subcommittee could be established to explore school design issues and how they are directly affecting our children’s health. The committee could address health-related issues such as childhood obesity and how it is affected by school design, walkability, and accessibility.

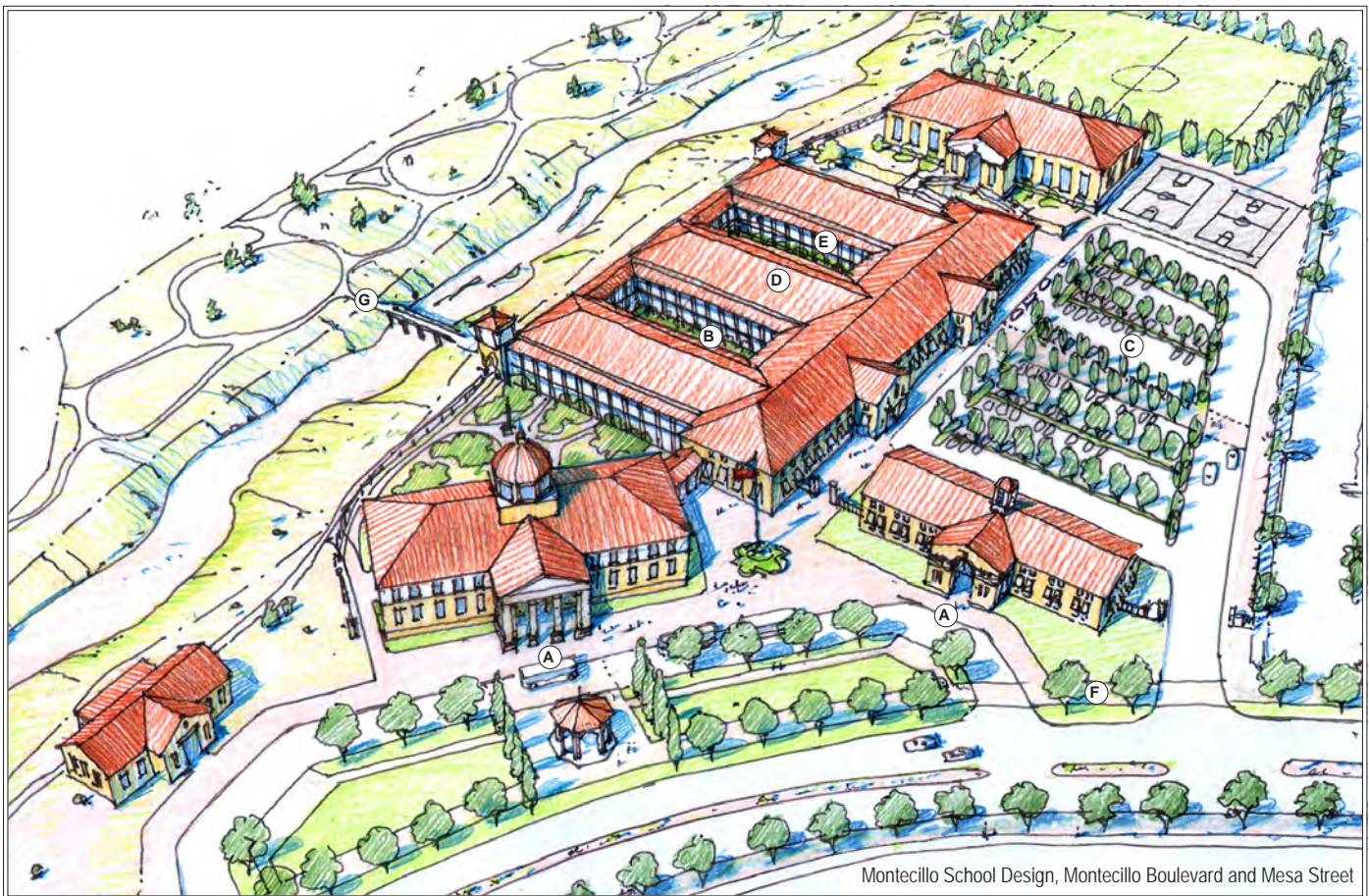
¹ “Smart Growth Schools Report Card,” by Nathan Norris, August 15, 2009, v2.2

The Architecture of Schools Should be Linked to their Natural and Cultural Surroundings

School design should respond to the surrounding context both man-made and natural. Incorporate natural features like arroyos into the plan for schools to create opportunities for outdoor classrooms. A genuine architectural culture must also be rooted within the accumulated experience provided by historical continuity. The trial-and-error of El Paso architecture has produced a local collection of iconic buildings like El Paso High School which generation after generation has cherished. Architecture must be informed by the wisdom of enduring values, traditions, and methods.

DOWNTOWN ARTS DISTRICT

Museums should be located where they contribute to their surroundings. Several of El Paso’s museums were concentrated with the convention center and City Hall during an era when civic campuses were considered beneficial. A better strategy would be to place new museums within walkable distances in central locations, but separated enough from each other that they become part of City life rather than creating lifeless zones in the City after hours. Areas with single-use concentrations of uses should become focus areas for a diversity of uses. New residential units, and the services that support daily life, should be sited within the Downtown and Downtown Arts District.



General School Design Recommendations

- (A) Welcoming and memorable front entrances for each school that faces the street.
- (B) Buildings are placed to form well-shaped outdoor spaces.
- (C) Parking lots are screened from view from the street.
- (D) Classrooms are arranged around courtyards that frame views of the arroyo.
- (E) Colonnades, porticos, and louvered shutters provide shade.
- (F) Connected sidewalks, shaded by street trees, make it possible to walk or bike to school.
- (G) Pedestrian trails connect to the neighborhood across the arroyo.

PUBLIC ART

The art of El Paso's streets and public spaces express a variety of perspectives in a range of mediums. Inspiration is both local and international, from desert landscapes and traditional portraits to abstract explorations and the free association of the avant garde movement. While an excellent City to be inspired, the number of commercial galleries and art buyers in the City is low and El Paso remains a difficult place to make a living as an artist.

An El Paso public art program was initiated in 2006 to integrate public artworks throughout the City into new municipal projects. A Public Art Ordinance established a recurring budget for the program, setting aside 2% of the cost of all capital improvements to acquire art for municipal property.

The El Paso Downtown Arts District and its Artist Market has also been officially recognized by the Texas Commission on the Arts and this designation is intended to boost Downtown urban revitalization while providing a physical center for the arts community.



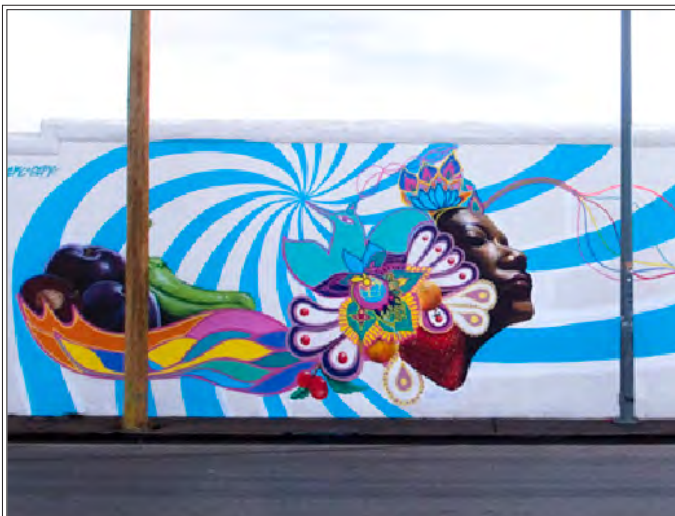
Corner of South Zaragoza Road and Alameda Avenue



Medical Center of the Americas Campus. Artist: Mitsu Overstreet



"Los Lagartos" in San Jacinto Square. Artist: Luis Jimenez



Corner of Copia Street and Pershing Street. Artist: Werk



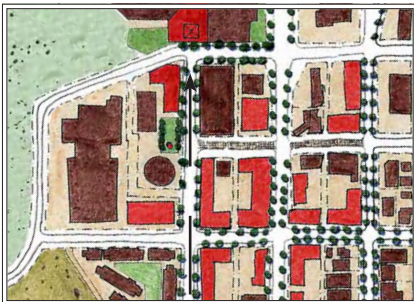
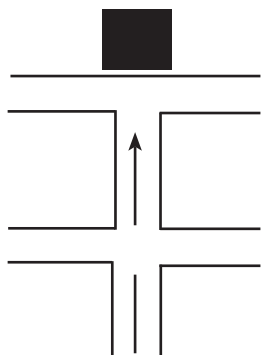
The El Paso Transnational Trolley Project. Artist: Peter Svarzbein

CIVIC BUILDINGS

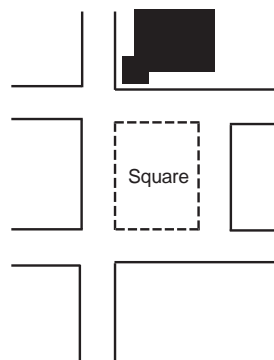
Civic buildings should be placed prominently and should have grander proportions and materials than their surrounding urban fabric. Approaches include locating public buildings at the ends of streets, across greens, or at the center of greens. Public buildings can be relatively small if placed strategically in the public view. Sites for civic purposes should be reserved even before there is a need for them to be constructed. The uses of these buildings may change over time as the needs of the community evolve. The art deco style Court House, depicted to the right, is an example of grand and dignified proportions, prominent siting, and durable craftsmanship. The building anchors a green space along East San Antonio Avenue.



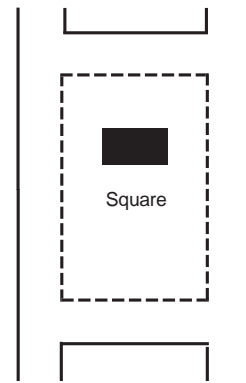
As a Terminated Vista



Across a Green

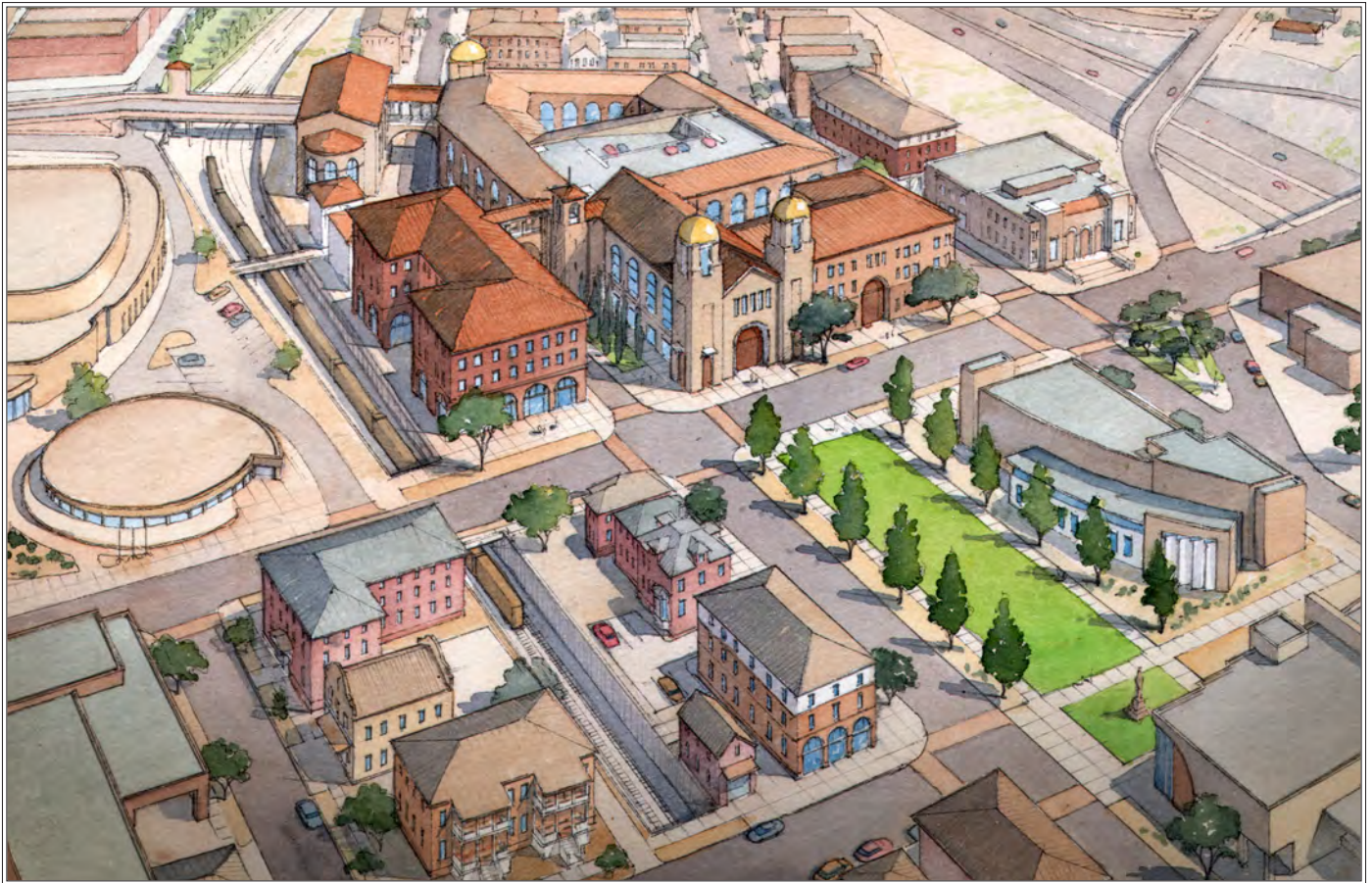


At the Center of a Green





Concept for transit center embedded in a central civic space.



A new City Hall complex configured into walkable streets and blocks with civic presence.

GOALS & POLICIES

Overall Goal: Provide community services and facilities that meet the physical, educational, and recreational needs of all segments of the City's community.

Raw Water Sources

Goal 5.1: Manage diverse sources of raw water so that El Paso enjoys a continuing supply of drinking water that is healthful, affordable, sustainable over time, and shared with other users of common sources.

Policy 5.1.1: Minimize the impact, cost, and effects of drought conditions by carefully managing surface water and balancing available water resources in the Mesilla and Hueco Bolsons. Reduce groundwater pumping as necessary to maintain or improve aquifer conditions.

Policy 5.1.2: Continue with regional water resource planning to evaluate the cost and benefits of desalinating additional water in El Paso County versus importing groundwater from other West Texas counties. Expand demand assessment and groundwater modeling to include southeast New Mexico and Juárez.

See also Sustainability Element on long-term water supply, groundwater, and regional water resources.

Conserving Potable Water

Goal 5.2: Conserve water by continuing to lower water consumption rates over time.

Policy 5.2.1: Reduce overall per-capita water consumption to 130 gallons per person per day or less by 2015.

Policy 5.2.2: Price water as a precious resource. Monitor the impact of the rate structure on water demand and adjust rates to encourage conservation.

Policy 5.2.3: Promote the availability of xeriscape and native plant materials and water-efficient turf grasses.

See also Sustainability Element on water conservation and on drought contingency planning.

Irrigation Water

Goal 5.3: Make wise use of El Paso's allocation of irrigation water from the Rio Grande to support agriculture, public water supply, and the natural environment.

Policy 5.3.1: Make sustained attempts at reducing agricultural water use without sacrificing agricultural output. Potential methods include soil water sensors, drip irrigation, improved irrigation scheduling, tailwater recovery improvements, lining of irrigation canals, and water district delivery systems strategies.

Policy 5.3.2: The natural environment requires a share of Rio Grande water that has been diverted for agriculture and municipal water supply. With proper irrigation and management, the Rio Bosque Wetlands Park and the fallow farmland now owned by EPWU-PSB could provide exceptional habitat for migrating waterfowl.

See also Health Element on local food production, Sustainability Element on farming and nature preserves.

Wastewater & Reclaimed Water

Goal 5.4: Stretch El Paso's limited water supply by continually reusing water.

Policy 5.4.1: Develop maintenance programs for turf management on municipal property such as golf courses, parks, and rights of way.

Policy 5.4.2: Reduce the amount of potable water used for irrigation and industrial purposes by recruiting new customers who are located on existing reclaimed water lines.

Policy 5.4.3: Expand the reclaimed water "purple pipe" program wherever feasible. Identify potential users including school districts and residential irrigators.

Policy 5.4.4: Measure success by increasing water reuse usage from 10% of total wastewater to 15% by 2020.

See also Sustainability Element on reclaimed water.

Stormwater

Goal 5.5: Manage El Paso's limited rainfall to maximize its benefits for nature, irrigation, and aquifer recharge while preventing localized flooding after heavy storms.

Policy 5.5.1: Continue to implement the 2009 *Stormwater Master Plan*. In addition to expanding and improving the drainage system, blockages and overflows should be corrected along with other maintenance activities that will reduce unexpected flooding.

Policy 5.5.2: Employ green infrastructure design (GID) techniques when designing all drainage improvements. These techniques use an interconnected network of parks, preserves, arroyos, wetlands, and native vegetation to direct stormwater where it can be re-used or it can evaporate or recharge aquifers. Natural materials are used instead of or along with conventional detention basins and concrete-lined channels to slow runoff and to create wildlife habitat and a natural feel for surrounding neighborhoods.

Policy 5.5.3: Ultimate GID techniques combine civic spaces with stormwater management. One is to create park/ponds whose recreation fields and other civic spaces can detain stormwater after heavy rainfall. Another is to create linear parks and trails that parallel drainage channels, either newly constructed or alongside arroyos or irrigation canals.

Policy 5.5.4: Update the 2009 *Stormwater Master Plan* on a continual basis as part of project evaluation to identify green solutions and to evaluate two additional large-scale stormwater projects:

a. One project, which could be funded by the Army Corps of Engineers, could be constructed on Union Pacific's Dallas railyard, many of whose current functions are being relocated to Santa Teresa, New Mexico. This project could create a new Central Park for El Paso (see also *Transportation and Downtown Elements*).

b. Another project could identify opportunities to create new streams and bosques using existing irrigation canals and potentially unneeded railroad rights-of-way. These new streams could run through linear parks, re-routing typical stormwater flows parallel to the Rio Grande instead of disposing it by speeding or pumping it along the flat valley floor into the border channel.

Policy 5.5.5: Assure the safety of all dams in El Paso by upgrading dangerous conditions as required by the TCEQ Dam Safety mandate.

Policy 5.5.6: Cooperate with El Paso County and other governmental entities in regional stormwater planning.

Policy 5.5.7: The City should examine the feasibility of impact fees or other funding mechanisms for constructing area-wide stormwater facilities that could replace stormwater ponds on individual development sites.

See also *Sustainability Element on flooding*.

Energy

Goal 5.6: Improve the reliability, efficiency, and cost-effectiveness of public energy providers through careful use of the City's regulatory authority.

Policy 5.6.1: El Paso's electric power and natural gas systems must be upgraded to withstand extreme weather to forever avoid a repeat of the February 2011 outages and resulting damage to the potable water system and private property.

Policy 5.6.2: Support and pursue the development of renewable energy sources such as solar, wind, geothermal, biofuels, and landfill gas capture.

See also *Sustainability Element on energy issues*.

Solid Waste

Goal 5.7: Efficiently manage the disposal of solid waste to protect the natural and human environment while extracting reusable materials and energy from the waste stream.

Policy 5.7.1: Extract and resell landfill gases that are generated by the Clint Landfill. Consider a similar gas recovery system if the McCombs Landfill service is increased.

Policy 5.7.2: Investigate the feasibility of constructing a waste-to-energy plant that would burn solid waste and use the heat to generate electricity. Waste-to-energy plants can reduce the amount of solid waste deposited into landfills by 90% and they create a salable product from the heat generated.

Policy 5.7.3: Participate in regional solid waste planning with the Rio Grande Council of Governments, the Texas Commission on Environmental Quality, and other agencies.

Policy 5.7.4: Partner with Fort Bliss on waste-to-energy projects.

See also Sustainability Element on solid waste disposal, recycling, and hazardous materials.

Neighborhood Greens & Parks

Goal 5.8: Provide a wide variety of neighborhood parks and recreational programs that are integrated with neighborhoods and accessible to most residents and visitors to El Paso.

Policy 5.8.1: The City shall strive to create extraordinary parks that express the natural beauty and cultural diversity of El Paso and fund the park system at a level that corresponds to its significant importance to El Paso residents.

Policy 5.8.2: The City will provide a balanced parks system with a variety of park sizes and facilities, including trails, open spaces, and indoor recreation facilities.

Policy 5.8.3: The City will use the 2006 parks and recreation master plan as a guide to improving the City of El Paso park system and recreational programs. Update this plan by 2012 to incorporate the strategies and policies in *Plan El Paso* and to establish new short- and mid-term objectives.

Policy 5.8.4: The City will strive to convert portions of existing parks to drought-tolerant designs to reduce water consumption.

Policy 5.8.5: The City will continue to require improved neighborhood greens or parks when land is subdivided, with adequate regulations that ensure they will become important features in the new neighborhood:

- a. The edges of small greens and parks are critical to their success; the fronts and sides of buildings, not the backs, must face the park to provide natural surveillance and a well-maintained edge.
- b. Greens and parks must be separated from private buildings with a street or public path.
- c. Drought-tolerant shade trees should define the edges of parks and greens.

Policy 5.8.6: The City will encourage the provision of small parks within new neighborhoods by providing flexibility in the required amenities for parks. The requirement that all parks must be provided with the same amenities should be reconsidered in favor of more creative and diverse small parks.

Policy 5.8.7: The City shall create a program by which park credits could be accepted for the dedication of any arroyo acreage when the arroyo is preserved in a relatively natural state rim to rim, is unfenced, is lined by walking paths at its ridge, and is faced by the fronts of buildings along the dedicated portions.

Policy 5.8.8: The City shall map priority and critical arroyos for protection and should consider a program to guarantee park credit and City maintenance for critical arroyos. These arroyo parks should also meet the design requirements of Policy 5.8.7. The 2005 arroyo inventory should be utilized until further mapping is completed.

Policy 5.8.9: Create partnerships for the future success of the park system, involving every governmental entity, the school systems, the county, and the state. Recreational facilities at schools should be integrated into El Paso parks system for the mutual benefit of schools and the community. Stormwater detention areas can often be integrated with parks.

Policy 5.8.10: The City should consider the inclusion of a staff landscape architect within the Parks and Recreation Department to oversee the design, drainage, and use of parks, park ponds, and drainage facilities throughout the City. The goal of the landscape architect should be facilities that are artful, recreational, and functional.

Regional Parks

Goal 5.9: Significantly expand the number of the City's regional parks, which combine natural areas with developed facilities that draw from very large areas.

Policy 5.9.1: Seek new funding sources for regional parks, such as a regional parks authority that would serve all of El Paso County.

Policy 5.9.2: Work with El Paso County government to redevelop Ascarate Park, at present the only true regional park in the City.

Policy 5.9.3: Conduct the necessary feasibility studies for a new Central Park for El Paso on the Union Pacific's Dallas railyard that could provide a major regional park with informal and active play fields, pavilions, gardens, and grand civic structures.

Zoological Park

Goal 5.10: Provide the best zoological facilities and experience possible for residents and visitors to El Paso.

Policy 5.10.1: Promote the zoo as a regional center for education, recreation, and tourism.

Policy 5.10.2: Develop the zoo as a place for scientific study and conservation of wildlife and the natural environment.

Open Spaces

Goal 5.11: The City of El Paso shall endeavor to permanently preserve open spaces that represent the full range of El Paso County's natural features, including mountains, arroyos, valley and desert environments, wetlands, and wildlife habitats.

Policy 5.11.1: Expand the Franklin Mountains as El Paso's signature physical feature. Mountain lands to be considered for this expansion are shown in the O-2 open-space sector on this plan's Future Land Use Map.

Policy 5.11.2: Permanently preserve Castner Range as an expansion to the Franklin Mountains State Park (see *Fort Bliss policy 12.2.1*).

Policy 5.11.3: The City shall strive to preserve at least 75% of arroyos in El Paso, either in their natural state or modified to also serve as parks and stormwater detention areas.

Policy 5.11.4: Restore significant bosque areas along the upper and lower Rio Grande to provide natural open space, stormwater detention, and wildlife habitat.

Policy 5.11.5: Incorporate stormwater detention facilities in an interconnected network of parks, preserves, arroyos, wetlands, and native vegetation.

Policy 5.11.6: Create trails, greenbelts, and linear parks for their inherent value and to provide connections between other parks, schools, neighborhoods, and natural open spaces.

Policy 5.11.7: Continue to utilize the 2007 *Open Space Master Plan* and the 2005 arroyo inventory report which contain detailed strategies to carry out policies described in this Element. The *Open Space Master Plan* also discusses compensation of land owners for the preservation of land and equitable compensation must be a primary goal in all land preservation efforts.

Museums & Cultural Affairs

Goal 5.12: Promote quality art and cultural programming that enlivens and celebrates the City and region and encourages the participation of diverse groups with varying interests and backgrounds.

Policy 5.12.1: Position El Paso's Museums and Cultural Affairs Department (MCAD) as a leader in building partnerships that advance El Paso's cultural prosperity.

Policy 5.12.2: Structure MCAD to provide operational support to all three museums – Art, History, and Archeology – and achieve accreditation for all three museums.

Policy 5.12.3: Provide exemplary museum programming that is representative of the City's diverse cultures.

Policy 5.12.4: Place new museums within walkable distances in central locations so they become part of City life rather than being isolated in large campuses of civic buildings.

Policy 5.12.5: Continue the City's cultural funding program that assists artists and cultural organizations and supports access to arts and culture for residents and visitors.

Policy 5.12.6: Continue the City's program of integrating public artworks by setting aside a percentage of the cost of all capital improvement projects.

Libraries

Goal 5.13: Improve the El Paso Public Library system until it is among the best in the nation.

Policy 5.13.1: Identify the best public libraries in the nation and select quality benchmarks that can be used to assess progress in improving library services in El Paso.

Policy 5.13.2: Expand the library system to match demands created by El Paso’s growth. Joint use of facilities with schools and parks is encouraged.

Policy 5.13.3: New libraries should be served by public transit and should be in regionally central locations or in neighborhoods where they will be conveniently accessible to local patrons.

Policy 5.13.4: New libraries should be important contributions to El Paso’s public realm. Library buildings should look dignified to indicate their importance to the community and should be convenient and welcoming to users. Libraries, like other civic buildings, should be sited within or adjoining civic spaces.

Policy 5.13.5: Continually evaluate library services to supplement traditional media with emerging technologies and reconsider older techniques such as mobile libraries and mini-libraries that could be located within other neighborhood facilities.

Schools

Goal 5.14: Provide the best possible educational facilities and services possible to serve all residents of the community.

Policy 5.14.1: Encourage use of smaller school sites for schools that have smaller enrollments, and/or incorporate space-saving design features such as multi-story buildings.

Policy 5.14.2: Eliminate school siting criteria that require large acreage and thus eliminate most urban neighborhoods as potential school sites.

Policy 5.14.3: Coordinate with the independent school districts and higher education institutions in siting facilities, minimizing unnecessary travel, sharing facilities and playfields, using reclaimed water for irrigation, etc.

Policy 5.14.4: Build proud, dignified schools with a timeless architecture that provides a clear sense of location and affirms continuity of enduring values through time.

Public Safety & Emergency Response

Goal 5.15: Protect the health, safety, and welfare of all residents and visitors to El Paso through effective and efficient police, fire, and emergency medical services.

Policy 5.15.1: Invest in technological advances and quality personnel to enhance the City’s ability to deliver these services more efficiently and cost-effectively.

Policy 5.15.2: Continue support and participation with other agencies in the provision of emergency preparedness.

Policy 5.15.3: Maintain El Paso’s achievement as the “Safest Large City in the United States” through strong leadership, community partnerships, dedicated officers and civilian personnel, and community volunteers.

Policy 5.15.4: Continue responding to all fire, emergency medical, and hazardous materials calls in the City and providing mutual aid to Fort Bliss and the unincorporated county. Continue improving the specialized teams that respond to water, mountain, and technical rescues.

Policy 5.15.5: Maintain the Fire Department’s recently obtained ISO Class 1 rating.

Policy 5.15.6: Use the fire department’s strategic plan as updated from time to time to aid decision-making regarding to the physical development of the City.

Civic Spaces

Goal 5.16: Provide all citizens access to high-quality civic spaces that are thoroughly integrated into existing neighborhoods and new development.

Policy 5.16.1: Civic spaces are outdoor gathering places dedicated for public use. Civic spaces can be defined by a combination of physical factors including their size, intended use, landscaping, and the character of their edges.

Policy 5.16.2: El Paso development regulations should define the following types of civic spaces:

a. Parks, both passive and active; neighborhood parks often have buildings on at least one side.

b. Greens, for structured or unstructured recreation; greens are defined by buildings on at least one side.

c. Squares, which are located at the intersection of important thoroughfares and clearly defined by adjoining buildings.

d. Plazas, which are usually hardscaped and are clearly defined by adjoining buildings.

e. Playfields, community gardens, and other types which are defined more by their intended use than by their surroundings.

Policy 5.16.3: Allow City streets to host outdoor dining by allowing use of the sidewalk right-of-way for tables and chairs provided a minimum of five feet of clearance is provided for pedestrian movement.

Civic Buildings

Goal 5.17: Construct and nurture civic buildings that are both traditional and distinctive and which clearly signal their important civic and cultural functions within the City.

Policy 5.17.1: Civic buildings should have grander proportions and materials than the surrounding urban fabric.

Policy 5.17.2: Civic buildings also achieve prominence by strategic placement at the ends of streets, across greens, or at the center of greens. Sites for civic buildings should be reserved even before there is a need to construct them.

Policy 5.17.3: Where feasible, provide distinctive public open space, public art, greens, and/or plazas around civic buildings such as courthouses, libraries, post offices, and community centers to enhance the character of these civic and public buildings.

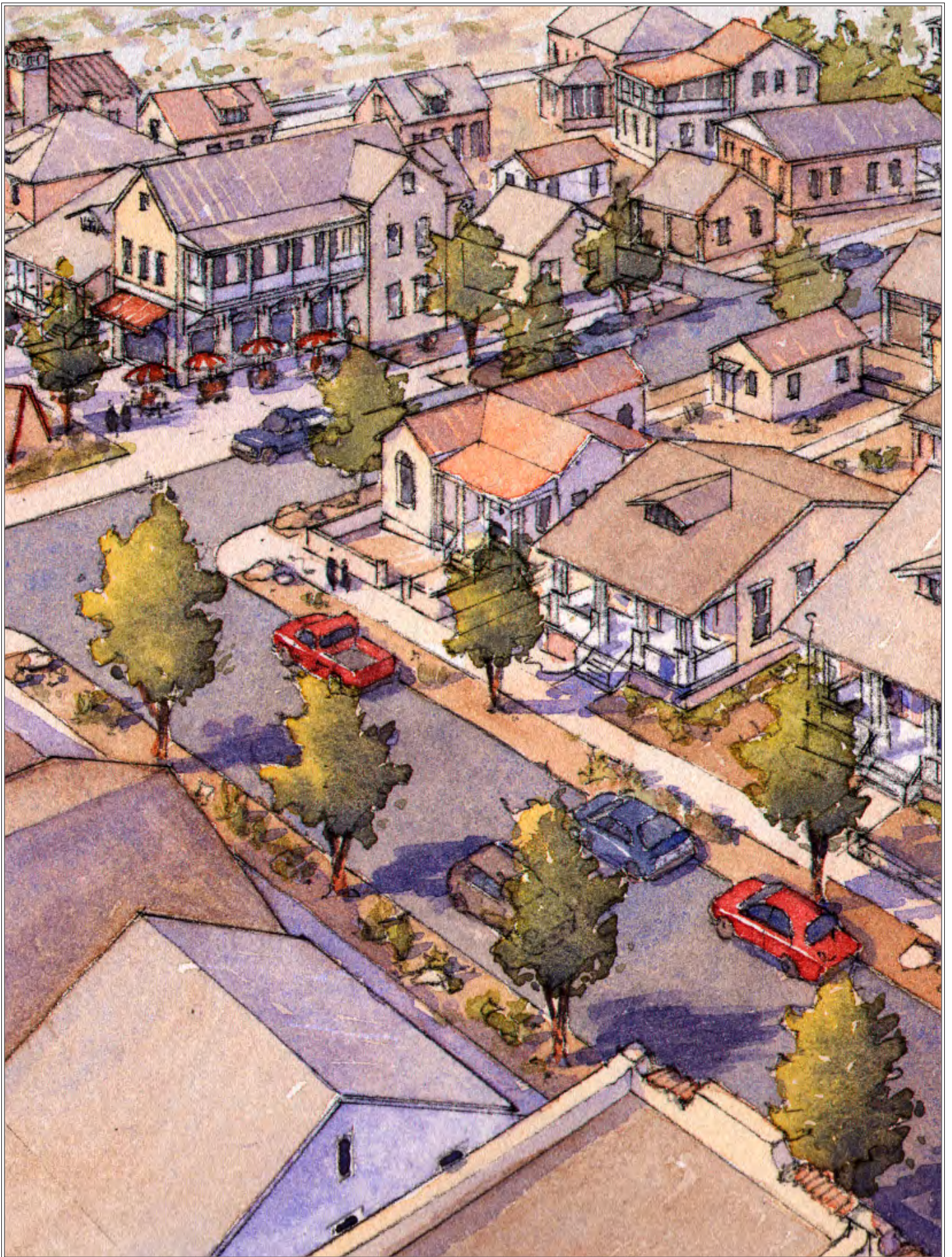
Public Art

Goal 5.18: Continue to support the local arts community in El Paso with the encouragement of murals, sculpture, and other outdoor art installations.

Policy 5.18.1: Encourage temporary outdoor art installations which allow a rotating display of exhibitions. Endeavor to make those art pieces that are particular favorites of the public part of the City's permanent collection.

Policy 5.18.2: Increase the City's commitment to the El Paso Downtown Arts District by making it a focal point for community investment. Seek to provide employment, attract residents and tourists, expand the tax base, and build housing that attracts a resident art community.

Policy 5.18.3: Design the Stanton Street International Port of Entry as a place of art demonstration that also urbanistically facilitates pedestrian movement from other points within the Downtown.



HOUSING

6

Overall Goal: To provide housing in El Paso through complete, connected neighborhoods containing quality, affordable, and accessible choices to serve all income levels and age groups.

Current Conditions	6.2
<i>Housing Trends since 1900</i>	6.2
<i>Demographics and Housing Profile</i>	6.3
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<i>Citywide Target Market Analysis by Planning District .</i>	6.10
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"THE HOUSE ITSELF IS OF MINOR IMPORTANCE. ITS RELATION TO THE COMMUNITY IS THE THING THAT REALLY COUNTS."

- CLARENCE STEIN

CURRENT CONDITIONS

HOUSING TRENDS SINCE 1900

The residential housing development pattern in El Paso has changed substantially over time. What is now considered central El Paso is the area that was developed through the 1920s, as shown in the map below from the 1925 City Plan for El Paso.

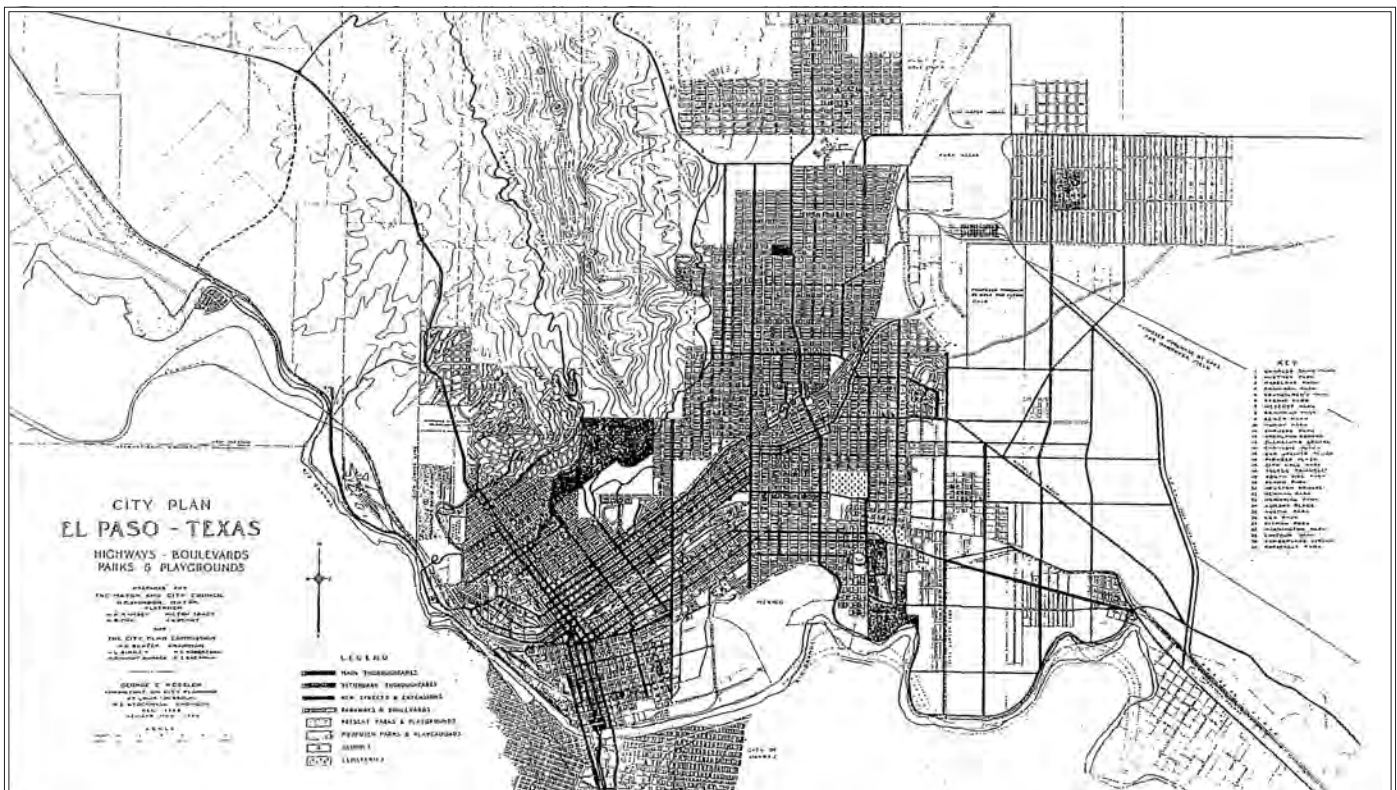
The original street grid system in the Downtown area was extended into residential areas such as Sunset Heights and Kern Place. These traditional neighborhoods near Downtown provided a variety of housing types to allow for a balanced neighborhood for residents of varying ages and incomes. Lot sizes varied in these neighborhoods, allowing a mix of housing sizes to meet the needs of families in the area. While these neighborhoods were predominantly residential, they were located within walking or streetcar distance of shopping, services, and employment.

Automobile ownership became more common in the mid-twentieth century, which allowed families to move further away from central El Paso and away from streetcar lines. National housing trends led to the more typical suburban developments comprised of solely single-family detached homes. Like many post-war communities, El Paso adopted a zoning code that encouraged the strict separation of land uses. Single-use subdivisions have been developed farther and farther from central El Paso since that time. This auto-oriented neighborhood pattern has been self-fulfilling, and today most El Pasoans rely on their cars for all of their daily activities.

El Paso has recently experienced considerable population and commercial growth, in part due to the major expansion of Fort Bliss. Most of that growth has continued to take place in new, single-use subdivisions at the City's edges, particularly on the far Eastside. This growth pattern can be problematic, causing a strain on City resources and providing limited choices for new residents. Suburban growth requires the costly expansion of infrastructure into the desert, valley, and mountainside, including roads, water and sewer lines, and other utilities. The housing stock offered in recent decades has been limited in variety, with few options to live in infill or rehabilitated properties near Downtown or in the surrounding in-town neighborhoods, or to live in new mixed-use, walkable communities.

Overall, despite limited economic contraction in the area due to the adverse effect of the national and global recession, the greater El Paso area has withstood the recession better than other regions of Texas and other metropolitan areas of the country. The base expansion has had a significantly positive effect on the local economy, both directly and indirectly. As such, the already strong El Paso housing market will be strengthened even further over the next five years.¹

¹ *Housing Needs Assessment for the El Paso Metropolitan Area*, Vogt, Williams & Bowen Research, June 2009.



El Paso's development by 1925, as mapped in the City Plan for El Paso by George Kessler. The map above illustrates the road network for the growing City as well as the locations of parks and playgrounds.

DEMOGRAPHICS AND HOUSING PROFILE

Population Growth

According to the 2010 Census, the City gained 85,459 people (34,831 households) between 2000 and 2010. It is projected that between 2010 and 2030, approximately 67,775 new households will be added to the City of El Paso. Approximately 18,850 new households are projected within the next five years, at an annual average increase of 3,770 net new households per year. At an average household size of 2.75 persons (the average household size in El Paso in 2010 was 2.95 persons per household), the City would be home to an additional 51,850 persons by 2015.²

Those households likely to move both within and to the City of El Paso would be as follows:

Anticipated City of El Paso Housing Market, by Draw Area	
From City of El Paso:	58.4%
From balance of El Paso County:	9.1%
From Doña Ana, Maricopa, Los Angeles Counties:	4.5%
From balance of US and Mexico:	28.0%
Total:	100.0%

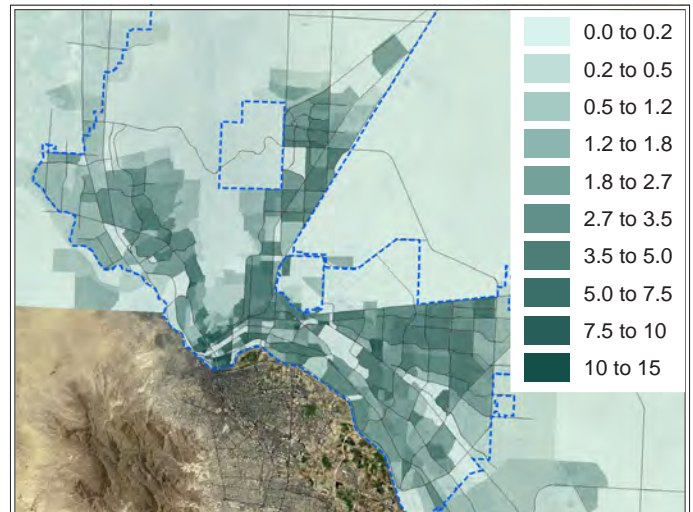
As determined by the target market methodology—which accounts for household mobility within the City of El Paso as well as migration and mobility patterns for households currently living in all other cities and counties—up to 38,950 households represent the annual potential market for new and existing housing units within the City over the next five years. The incomes of these households fall within three basic groupings:

- Households with incomes at or below 30% of the area median income (AMI) for the El Paso metropolitan statistical area. These households typically qualify only for public housing or deeply-subsidized housing such as Section 8 private sector housing.
- Households with incomes between 30% and 80% of AMI. These households typically qualify for tax credit, workforce, or other forms of affordable housing with financial assistance.
- Households with incomes above 80% of AMI. These households generally have sufficient incomes to rent or purchase market-rate housing.

Existing Housing Stock and Transportation Patterns

The majority of El Paso’s recent housing growth has been in suburban, auto-oriented locations primarily on the Eastside. The majority of the housing stock is classified as single-family detached (66.9%), while 3.6% are rowhouses or townhouses and 2.9% are mobile homes. The remainder are part of two, three, and multi-unit buildings.

² Population projections by Urban Advisors, utilizing data from IPED & Zimmerman/Volk Associates, Inc., *An Analysis of Residential Market Potential*, 2011, complete report available in Appendix C.



Number of Housing Units per Acre in 2000, analyzed by Traffic Analysis Zones

Approximately 9.4% of El Paso’s households do not own automobiles. 34.1% own only one vehicle and 37.7% own two vehicles. Of employed residents over age 16:

- 79.9% drive to work alone
- 10.9% carpool
- 2.5% use other means including bicycling
- 2.4% work at home
- 2.2% take public transportation
- 2.1% walk to work

Home Ownership

Recent home ownership data indicates that approximately 38.1% of El Paso households are rentals while 61.9% are owner-occupied.

The City of El Paso has implemented several programs focused on increasing homeownership by residents of low to moderate incomes.³

Housing Finance Corporation (HFC)

The Housing Finance Corporation (HFC) was created by the City Council in 1979 as a non-profit corporation. Its purpose is to assist persons of low and moderate income to acquire and own decent affordable housing and increase the local tax base. Down payment assistance and closing cost assistance is used to encourage homeownership in strategic areas of El Paso. In addition, the HFC serves as the lead agency in the “Don’t Borrow Trouble” campaign to educate El Pasoans on the consequences of high-cost loans.

³ Zimmerman/Volk Associates, Inc., *An Analysis of Residential Market Potential*, 2011, complete report available in Appendix C

Fair Housing Task Force

In 1998 the City established the Fair Housing Task Force which analyzes impediments to fair housing choice and develops a Citywide strategy to address the impediments.

Neighborhood Stabilization Program (NSP)

El Paso’s NSP program is funded by the federal government through the Housing and Economic Recovery Act of 2008. It addresses the negative effect of the nation’s economic decline and housing market collapse. The intent is to stabilize and revitalize the communities most affected. The City of El Paso received \$4.76 million to participate in four specific program activities including financing mechanisms, purchase and rehabilitation of abandoned or foreclosed homes, demolition of blighted structures, and redevelopment of demolished or vacant properties.

Through the NSP program, the City purchases foreclosed vacant properties in targeted areas of the City and sells these properties to income-qualified households. The City will also provide down payment and closing cost assistance in addition to a principal reduction loan of 0% interest to make the home more affordable and cover the cost of repairs. The principal reduction loan may be deferred and forgivable if the homebuyer remains in the home for a specific period of time. Homeowners may also qualify for a \$10,000 deferred payment forgivable loan.

Another element of the NSP program includes developer financing incentives to redevelop property into multi-family rental units in targeted areas. Amortized deferred payment loans are available for the redevelopment of tax-foreclosed vacant land or abandoned blighted foreclosed properties. Developers may be eligible for loans amortized over thirty years at interest rates of 0-3%.

Housing Authority of the City of El Paso (HACEP)

The Housing Authority provides affordable housing for families whose income is below 80% of the median income. The Housing Authority rents existing housing stock, subsidizes private rentals under the Housing Choice Voucher (HCV) program, and can partner in income-producing real estate ventures.

The HCV homeownership program, previously known as Section 8, helps participants transition from rental assistance to homeownership through a voucher system. The HCV program was originally designed to address the special housing needs of people with disabilities. The program is now available to all voucher holders meeting the minimum qualifications which include successful participation in the rental assistance program for one year.

The HACEP also provides a variety of other related programs such as education, recreation, anti-drug programs, job training, and small business development to help residents of public housing achieve self-sufficiency and economic independence.

Home Value

Housing values in El Paso are affordable when compared to the rest of the United States. The median sales price in El Paso in 2010 was \$133,300, compared to the national median of \$173,100. However, El Paso continues to be deemed one of the least affordable housing markets in the nation because 23.8% of El Paso households have annual incomes below \$25,000. The Texas Housing Affordability Index—calculated quarterly by the Real Estate Center at Texas A&M University—gave El Paso the state’s worst affordability rating for 2009 and 2010 after comparing the El Paso median income to the income required to purchase the median-priced house in El Paso.⁴

Residences Sold Through the El Paso Multiple Listing Service		
Year	Average Sales Price	Median Sales Price
1990	\$73,500	\$64,600
1995	\$89,800	\$76,700
2000	\$98,200	\$80,600
2005	\$127,300	\$110,300
2010	\$152,200	\$133,300

Source: Real Estate Center at Texas A&M University

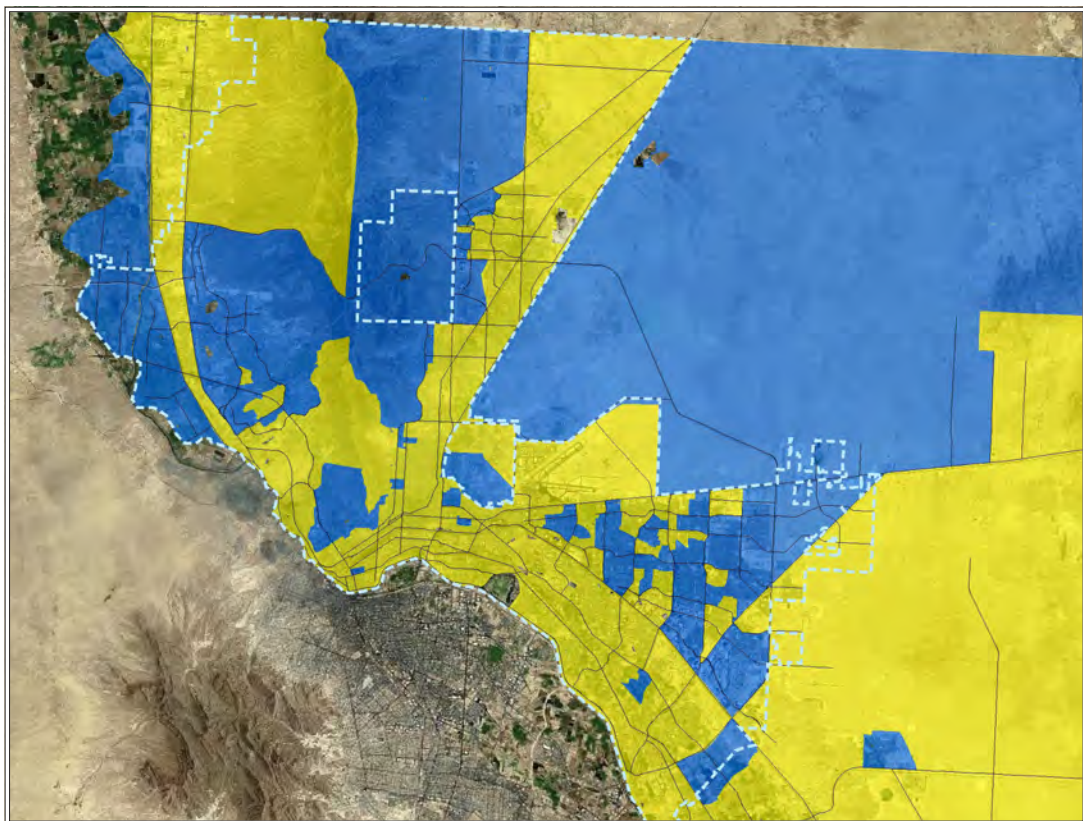
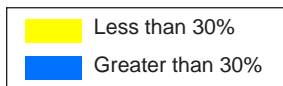
Housing and Transportation Affordability

There is a popular belief that living at the edge of the City or outside the City limits is more affordable than living in central El Paso, given the ease of developing raw land and the financing incentives offered in new subdivisions. This belief is based on the traditional measure of affordability, which recommends that housing costs should be less than 30% of household income. However, once daily transportation costs are factored into the equation, these locations are much less affordable than previously thought. The Center for Neighborhood Technology, an urban planning think-tank, has combined the housing and transportation costs for locations on El Paso’s outskirts and determined that they can add up to more than 75% of median income. This indicates that there are many areas, particularly those near or outside the City limits, where median income households become overburdened by housing and transportation costs. In contrast, combined housing and transportation costs for locations in central El Paso are often less than 35% of median income. This indicates that when taking both of these major household costs into account, centrally-located neighborhoods in El Paso are more affordable.⁵

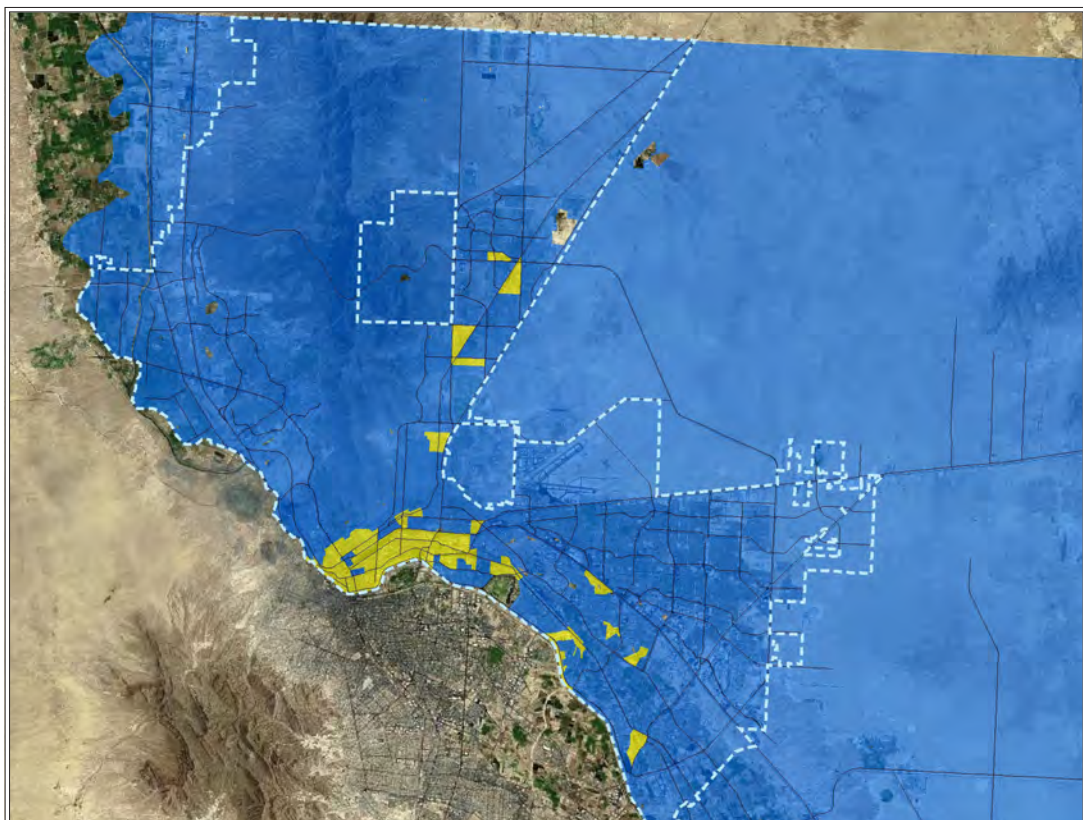
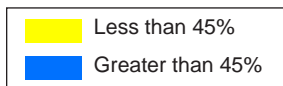
⁴ Zimmerman/Volk Associates, Inc., *An Analysis of Residential Market Potential*, 2011, complete report available in Appendix C.

⁵ H+T Affordability in El Paso, Center for Neighborhood Technology, 2009

Housing Costs as a Percentage of Income



Housing & Transportation Costs as a Percentage of Income



“YOU KNOW THE PHRASE, ‘DRIVE UNTIL YOU QUALIFY?’ PEOPLE ARE DRIVING OUT FROM EL PASO UNTIL THEY CAN FIND A MORTGAGE THEY CAN QUALIFY FOR.”

- FORMER CITY REPRESENTATIVE BETO O’ROURKE

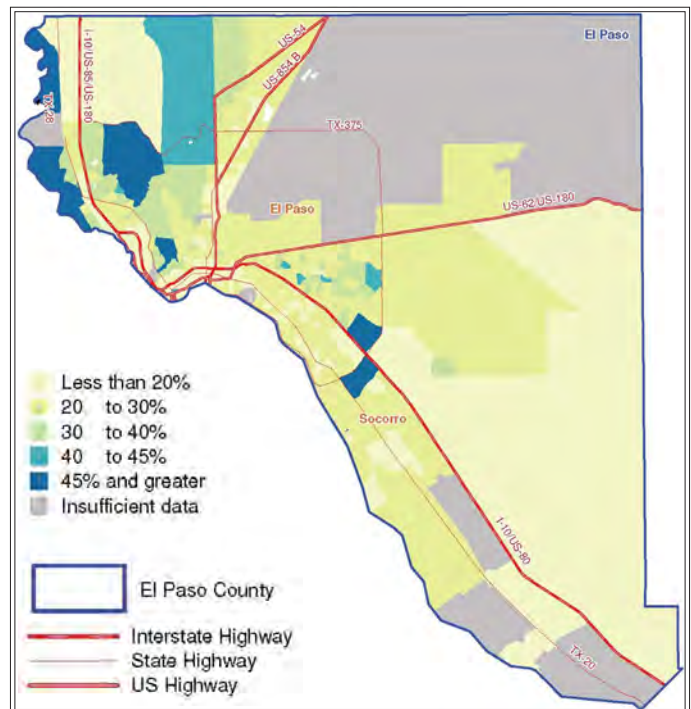
Housing Demand & Permitting

According to the US Census, the City of El Paso gained 85,459 people and 34,831 households between 2000 and 2010. Between 2010 and 2030 the City’s population is forecasted to add another 202,653 residents and 67,775 new dwelling units. An analysis in the Regional Land Use Patterns Element of this plan indicates that 94% of those dwelling units can be accommodated in areas already designated for growth on the Future Land Use Map. Half of those units can be built on infill parcels or on tracts that have vested rights to develop in the conventional manner as seen in El Paso in recent decades; the other half can be built in more traditional urban patterns in new master-planned neighborhoods.

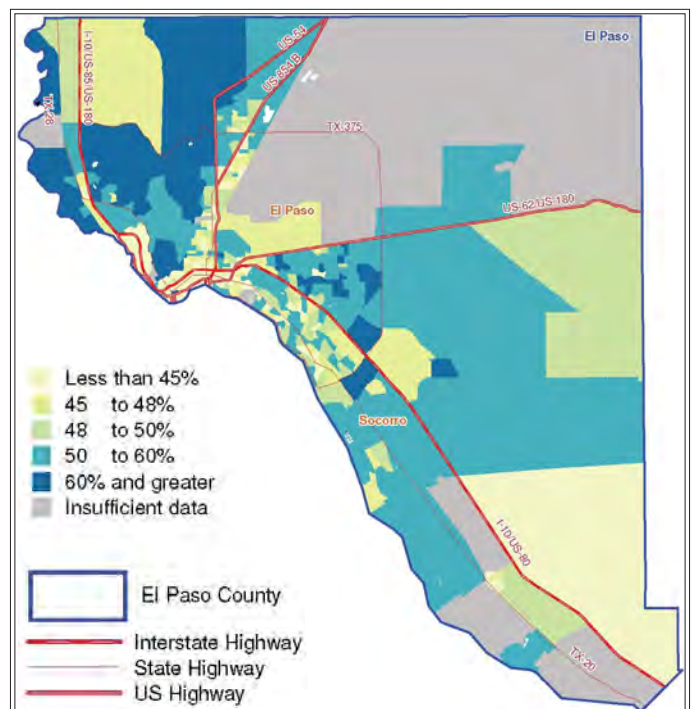
Housing Trends

According to housing preference research conducted by Urban Advisors, approximately 25% of El Pasoans would prefer an urban center or urban neighborhood location. Urban centers provide the greatest diversity of housing types, with the preference for single-family housing making up less than half of all demand. Even in suburban areas, 16.5% of households would choose a townhouse over a single-family home and 5.9% would choose a multi-family unit over a single-family home. A greater diversity of housing products is desired in suburban locations than is currently being provided because of the single-use nature of current development practice.

In El Paso, there is only a 14.2% preference for a single-family home in a suburban subdivision versus a single-family home in an urban location. These preferences indicate that many El Pasoans appreciate the lifestyle available in central El Paso and its adjoining neighborhoods. Revitalization of these central area neighborhoods can address this market preference.



Housing Costs as a percent of income for the AMI earning household
Source: Center for Neighborhood Technology



Housing and Transportation Costs as a percent of income for the AMI earning household
Source: Center for Neighborhood Technology

CITYWIDE TARGET MARKET ANALYSIS

A target market analysis was conducted by Zimmerman/Volk Associates to identify the depth and breadth of the potential market for new and existing housing units within the City of El Paso. The analysis encompasses those households already living in the City as well as those households that are likely to move into the City. A target market analysis considers the potential market for a wide range of possible housing types even if those housing options are not currently available.

Changing Demographics and Housing Preferences

The increasing interest in traditional American neighborhoods—walkable, with a mix of uses and a variety of housing types—is the result of dramatic changes in American households. These changes include the growing cost of commuting by private automobile and the profound effects of the Great Recession—which began in 2007—on both households and home-builders, particularly in exurban locations. In addition, the changing composition of American households may have the most lasting influence because of the changing housing preferences of the two largest generations in the history of America: the Baby Boomers (currently estimated at 77 million), born between 1946 and 1964, and the estimated 78 million Millennials, born between 1977 and 1996.

In addition to their shared preference for downtowns and walkable traditional neighborhoods, particularly those served by transit, the Boomers and Millennials are changing housing markets in many ways. In contrast to the traditional family (married couples with children) that comprised the typical post-war American household, Boomers and Millennials are predominantly singles and couples. As a result, the 21st century home-buying market in the United States now contains more than 63% one- and two-person households, and the 37% of the home buyers that could be categorized as family households are as likely to be non-traditional families (single parents or unrelated couples of the same sex with one or more children, or adults caring for younger siblings, or grandparents with custody of grandchildren) as traditional families.

The target market analysis determined that three market segments represent the best potential market for new market-rate and workforce housing units in El Paso:

- Traditional and non-traditional family households, of which a significant number are single parents with one or two children, as well as traditional family household heads who are government employees (including the military), small business owners and private-sector employees, or are affiliated with one of the colleges, or hospitals located in the City (43%, and likely to continue to decline);

- Younger singles and childless couples—including young professionals, office, and retail workers, “knowledge” workers, and students and other young college and hospital-related employees (likely to grow from the current 40%); and
- Empty nesters and retirees, some with incomes from social security alone, others who also have pensions, savings and investments, and the remainder who are still working (likely to grow from the current 17%).

Changing Household Size & Type

Trends in American demographics over the past decade have shown not only a decrease in family size but a dramatic change in family composition. Smaller one- and two-person households are becoming predominant and non-traditional families are on the rise. These factors combined with the economic changes occurring in the country have resulted in changes in neighborhood and housing preferences. There is a shift from suburban single-family detached houses to higher-density housing such as smaller single-family detached houses, attached housing such as townhomes, and more dense multi-family housing such as apartments and condominiums. Location have also shifted to areas that are more walkable, served by transit, and containing a mix of housing types, land uses, and populations. These trends present a timely opportunity for El Paso to focus again on its downtown and on revitalizing in-town neighborhoods.

Currently, just over 45% of all households in El Paso contain just one or two persons (compared to 59% nationally); 19.4% contain three persons, and the remaining 35.6% contain four or more persons (compared to just 25.2% nationally). Due to the decline in household size, it is anticipated that the actual number of households will rise at a faster rate than the overall population.

Housing Preference

Of the 38,950 households that represent the annual potential market for new and existing housing units within the City, over 26,220 (67.3%) are expected to have incomes above 30% of the area median income (AMI). The remaining 12,730 households would have annual incomes below 30% of AMI and would not qualify financially for workforce or market-rate housing. The housing preferences of these 26,220 households—according to tenure (rental or for-sale) and general financial capacity—are as follows:

Annual Potential Market For New and Existing Housing Units City of El Paso		
Housing Type	# of Households	% of Total
Multi-family for-rent*	8,760	33.4%
Multi-family for-rent† (lofts/apartments, leaseholder)	3,890	14.8%
Multi-family for-sale*	1,260	4.8%
Multi-family for-sale† (lofts/apartments, condo/co-op ownership)	1,510	5.8%
Single-family attached for-sale*	620	2.4%
Single-family attached for-sale† (townhouses/live-work, fee-simple/condominium ownership)	930	3.5%
Single-family detached for-sale*	3,900	14.9%
Single-family detached for-sale† (houses, fee-simple ownership)	5,350	20.4%
Total	26,220	100.0%

* Affordable to households with incomes between 30 and 80% of AMI in 2010, calibrated by household size.

† Affordable to households with incomes above 80% of AMI in 2010, calibrated by household size.

Approximately 48.2% of these 26,220 households comprise the market for rental dwelling units. Some are renters by choice; many, however, would prefer to own but cannot afford the type of housing they want in neighborhoods where they would consider living.

The remaining 51.8% of the market would choose some form of ownership housing (reflecting affordability issues, somewhat below the current estimated homeownership rate of approximately 62.4%). Only 35% of the market would prefer single-family detached units—currently, an estimated 67% of El Paso’s housing stock is comprised of single-family detached houses. The remaining 16.5% of the market would choose for-sale single-family attached (duplexes/townhouses) or multi-family units (condominium/co-operative units).

These numbers represent the market potential for new and existing housing units within the City of El Paso and should not be confused with projections of housing need or change in the number of households.

New Housing

The current constrained market is characterized in many locations throughout the nation—including the external draw areas for the City of El Paso—by reduced housing prices, high levels of unsold units, high levels of mortgage delinquencies and foreclosures, and restrictive mortgage underwriting and development finance. Although these market constraints do not reduce the size of the potential market, they are likely to reduce the initial percentage of the potential market able to overcome those constraints.

In the context of the target market methodology, new development in general (including adaptive re-use of existing non-residential buildings, as well as new construction) should be able to achieve an annual capture of 15% of the potential market. According to data from the National Association of Realtors, new housing units represented approximately 15% of all units sold nationally through 2007. New housing units, configured according to target market preferences, may not only attract new households to a city, but can also provide appropriate alternatives to households living in the city that otherwise would have moved out.

Based on the assumption that 15% of the potential market prefers newly-constructed housing units, the City of El Paso should be able to support up to 3,933 new market-rate and workforce housing units per year over the next five years, as shown below:

Annual Capture of Market Potential, City of El Paso			
Housing Type	# of Households	Cap- ture Rate	# of New Units
Multi-Family For-Rent*	8,760	15%	1,314
Multi-Family For-Rent† (lofts/apartments, leaseholder)	3,890	15%	583
Multi-Family For-Sale*	1,260	15%	189
Multi-Family For-Sale† (lofts/apartments, condo/co-op ownership)	1,510	15%	227
Single-Family Attached For-Sale*	620	15%	93
Single-Family Attached For-Sale† (townhouses/duplexes/ live-work, fee-simple ownership)	930	15%	140
Single-Family Detached For-Sale*	3,900	15%	585
Single-Family Detached For-Sale† (houses, fee-simple ownership)	5,350	15%	802
Total	26,220		3,933

*Affordable to households with incomes between 30 and 80% of AMI in 2010, calibrated by household size.

†Affordable to households with incomes above 80% of AMI in 2010, calibrated by household size.

This number represents net new units, not net new households. As determined by the target market analysis, just over half of those households, or 1,992 households per year, would prefer new market-rate and affordable units located in infill locations in older traditional neighborhoods in central El Paso or in new traditional neighborhoods that could be developed on vacant tracts.

The recent expansion at Fort Bliss has proceeded faster than the production of housing to serve the additional personnel. One credible estimate of the pent-up demand is a need for 6,000 additional units of private housing over the next two years. Another estimate is an additional annual increase of 1,500 military households over the next five years. Both increases would be in addition to the 2,270 new civilian households per year.

Based on the migration data and internal and external mobility rates, the production of 3,933 net new units a year, and including households with incomes below 30% of AMI, the City of El Paso could experience an average increase of 2,270 additional households per year over the five-year timeframe, as follows:

Annual Net New Households, City of El Paso		
Housing Type	# of Net New Households	# of New Units
Multi-Family For-Rent*	1,314	460
Multi-Family For-Rent† (lofts/apartments, leaseholder)	583	325
Multi-Family For-Sale*	189	65
Multi-Family For-Sale† (lofts/apartments, condo/co-op ownership)	227	135
Single-Family Attached For-Sale*	93	30
Single-Family Attached For-Sale† (townhouses/duplexes/live-work, fee-simple ownership)	140	85
Single-Family Detached For-Sale*	585	145
Single-Family Detached For-Sale† (houses, fee-simple ownership)	802	525
Total	3,933	1,770
Households with incomes below 30% AMI:	500	
Total	2,270	

*Affordable to households with incomes between 30 and 80% of AMI in 2010, calibrated by household size.

†Affordable to households with incomes above 80% of AMI in 2010, calibrated by household size.



Detached housing for military families.



Multi-family housing for military families.

TARGET MARKET ANALYSIS BY PLANNING DISTRICT

The market potential analysis identifies the depth and breadth of the potential market for new and existing housing units within the City of El Paso, encompassing those households already living in the City as well as those households that are likely to move into the City if appropriate housing options were made available.

For the purposes of examining housing in El Paso, each of the City's five planning districts was considered individually:

- Central - Downtown El Paso and the surrounding in-town neighborhoods.
- Mission Valley - Includes the area east of the Central District between Interstate 10 to the north and the Rio Grande to the south.
- East - Includes property east of the central district between Interstate 10 to the south and Fort Bliss to the north.
- Northeast - Encompasses the area north of the Central District between Fort Bliss to the east and the Franklin Mountains to the west.
- West - Incorporates properties northwest of the Central District and encompasses the Upper Valley.

There is considerable diversity among the five districts. As a result, each district attracts a different mix of target market household groups in response to its location, existing housing stock, and neighborhood conditions.⁶

From the market perspective, there is considerable market potential over the next several years for new housing units within all five districts. The annual market potential for new and existing housing units—affordable to households above 30% of median income—within each of the five districts over the next five years is shown in the tables on this page.

Study Area Characteristics				
Study Area	% Owners	Median Household Incomes	Median Home Values	% 1 & 2 Person Households
Central	44.4%	\$23,300	\$86,700	53%
Mission Valley	68.5%	\$29,500	\$79,000	33%
East	72.5%	\$45,500	\$112,600	39%
Northeast	64.3%	\$38,900	\$89,900	48%
West	63.0%	\$56,100	\$148,500	53%

Annual Potential Market by Household Types			
Study Area	Empty Nesters & Retirees	Traditional & Non-Traditional Families	Younger Singles & Couples
Central	25%	12%	63%
Mission Valley	53%	40%	7%
East	28%	60%	12%
Northeast	36%	38%	26%
West	21%	42%	37%

Annual Housing Market Potential by District New and Existing Housing Units Over the Next 5 Years	
Study Area	# of Households
Central	5,510
Mission Valley	3,140
East	7,820
Northeast	4,050
West	5,670

⁶ Zimmerman/Volk Associates, Inc., *An Analysis of Residential Market Potential*, 2011, complete report available in Appendix C.

New development, including both adaptive re-use of existing non-residential buildings as well as new construction, can achieve an annual capture of 15% of the potential market. Based on that capture rate, annual absorption of new units within the five districts is forecast as follows:

Annual Capture of Market Potential by District Annual # of New Housing Units Over the Next 5 Years	
Study Area	# of Units
Central	827
Mission Valley	473
East	1,173
Northeast	608
West	852

Each district can expect an annual net household increase over the five-year timeframe as shown in the table below, based on the migration data, internal and external household mobility rates, the production of new units within each district each year, and including households with incomes below 30 % of average median income:

Annual Net New Households	
Study Area	# of Net New Households
Central	420
Mission Valley	168
East	619
Northeast	535
West	528

The expected average annual increase of 1,500 military households over the next five years will not be evenly distributed throughout the City. The annual number of net new households, including military households, that could be expected in each district over the next five years is shown in the following table:

Annual Net New Households Including Military Households	
Study Area	# of Net New Households
Central	620 (200 military HHs)
Mission Valley	318 (150 military HHs)
East	1,119 (500 military HHs)
Northeast	1,035 (500 military HHs)
West	678 (150 military HHs)

At an annual average increase of 3,770 net new households per year, the City of El Paso will have gained 18,850 households in five years. At an average household size of 2.75 persons (the average household size in El Paso in 2010 was 2.95 persons per household), the City would be home to an additional 51,850 persons by 2015.

Clearly, the effect of land availability, as well as infrastructure, zoning regulations, building incentives, and financing structures can have a significant effect on where new housing development is located and what type of housing is built. However, as this analysis demonstrates, new housing supply, when targeted to the appropriate markets, can exert a significant influence on where households settle, as well as how many will move to, or remain within the City of El Paso.



Apartment houses allow a great number of residents to live within walking distance of retail, services, transit, and public spaces. Well-designed multi-family buildings can offer both compact and spacious dwelling units.

COMMUNITY CONCERNS

The neighborhoods where people live and the quality of their housing are important factors in their overall sense of well-being and community. During the charrette process, El Pasoans expressed several concerns when speaking about the places where they live.

Improve Existing Neighborhoods Before Building New Ones

Overwhelmingly residents asked the City to focus efforts on improving existing neighborhoods and utilizing land within central areas. Instead of spending more time and money constructing remote residential neighborhoods, efforts should be redirected back into the core of the City where infrastructure is available; the suburban sprawl that has occurred in recent history should be stopped.

Create Vibrant Neighborhoods that Attract Retirees & Young Professionals

Conventional subdivisions cater to families with children, with too little attention paid to smaller households. Smaller households may be slightly younger or older than the households including retirees, empty-nesters, and young professionals.

Build Neighborhoods Like We Used To

Many residents talked about the desire to be able to more easily walk within their community. Walkable neighborhoods may take many forms, including historic neighborhoods or new traditional neighborhood developments. In addition to walkability, there should be areas to walk to that provide for daily needs such as shopping, personal services, and community services.

Integrate Public Spaces & Facilities into Neighborhoods

El Paso has a rich history of incorporating public facilities and spaces within neighborhoods. Examples include Mundy Park in the Sunset Heights neighborhood and Madeline Park in Kern Place. The public spaces/parks located in the heart of these neighborhoods provide active and passive recreational opportunities as well as a gathering place for neighborhood events.

Build Houses Like We Used To

People expressed a desire to live in houses that face the street with doors, windows, and a front porch instead of a garage in front. Residents also expressed concern with the quality of new housing being constructed which may not have the life expectancy of older homes and may not hold its value.

Variety and Choice

Many were concerned that a variety of housing choices be available considering the range of age, income, and cultural differences that exist within the City. The sometimes opposing comments regarding neighborhood design concepts (involving front porches and car parking locations for example) reinforces the need for a variety of housing choices and living environments necessary to meet the diverse population within the City of El Paso. Providing a variety of housing choices will attract young professionals and encourage them to stay in El Paso.

Property Value

Because one's home is often the largest investment one makes, there was concern for neighborhood protection through code enforcement and through land use decisions that do not negatively affect quality of life in the neighborhood. There is little certainty regarding how an adjacent vacant tract will be developed.

Design Standards

A desire to see more order and beauty and to require master planning of neighborhoods was discussed. Design standards should be modified for the overall layout of the neighborhood including street connectivity, pocket parks, accessible and desirable open spaces and transportation corridors.



A well-designed building that undergoes thoughtful renovations can accommodate many different uses over its lifespan, including housing, office, and retail.

Safety & Security

Neighborhoods should be designed with safety in mind. Stagnant spaces, blank walls, inappropriate or insufficient illumination, and ill-defined and ambiguous territory may contribute to crime or at least increase the perception that crime would go unnoticed. Increasing natural surveillance, eyes-on-the-street and Crime Prevention Through Environmental Design (CPTED) can thwart crime and increase the sense of safety and security in both the private, semi-public, and public realms.

Provide Housing for New Soldiers at Fort Bliss

Additional housing opportunities should be made available for soldiers off base. Many of the ideas for mixed-use neighborhoods and live/work units should be implemented within close proximity to Fort Bliss. Providing alternative housing types and more urban residential environments may appeal to young soldiers and their families. In addition, such housing types may also appeal to young professionals and encourage them to remain in El Paso.

Provide Affordable Housing

There should be more variety and selection of affordable housing. Given the recent trends of building homogenous single-family detached housing units with identically sized lots on cul-de-sac streets has limited options for true affordable housing. Neighborhoods should provide a mix of housing types for residents with varying needs and incomes. For example, in many of the older neighborhoods in El Paso, accessory rental units were allowed. These accessory units provide additional income for the owner of the main home to help subsidize the mortgage as well as affordable housing options for residents or family members. Accessory units help to fill a need in order to provide life cycle housing options within one neighborhood.

Provide Accessible Housing

Accessible housing that meets the needs of the physically handicapped or disabled is in high demand in El Paso and throughout the country. Housing that is accessible or can easily be converted is needed especially in an environment where retirees are being recruited to live. Having a home that is accessible by wheelchair or other assistance is critical to residents being able to remain independent and live in their home as long as possible. “Universal Design” principles should be encouraged through financial assistance or incentives for accessibility.

Visitability is the related pursuit of designing structures so that disabled individuals can at least visit the ground floors of structures that may not be completely accessible. Access to buildings and public spaces should be increased for people with varying physical capabilities.

Historic & Cultural Preservation

There is a strong desire to preserve the history and culture of the City, and many neighborhoods were called out specifically, including Segundo Barrio, Chamizal, Ysleta, and Chihuahuita. Within the historic districts of the City there are many abandoned and underutilized properties which, if renovated, could meet some of the affordable housing needs of El Paso. Simultaneously, new life would be brought into some of these older, more walkable, neighborhoods, while cultural resources are preserved.



In the past, El Paso’s neighborhoods were built with a diverse housing stock. Cottages, mansions, and apartment houses can be found on the same street in some historic neighborhoods. Architectural styles are diverse as well.

STRATEGIES TO ADDRESS COMMUNITY CONCERNS

Rehabilitate and Infill Existing Neighborhoods First

Rehabilitate the vacant upper floors of Downtown buildings for housing. Renovate existing vacant or partially occupied properties in Downtown and in-town neighborhoods for housing. Incentives could also be designed to encourage the development of small infill projects (approximately 8-20 units). Smaller infill projects have traditionally played a key role in addressing attainable housing options. Infill projects are often more affordable because they use existing infrastructure and reduce commuting times and transportation costs.

Retrofit Existing Subdivisions

Focus on providing more connectivity through new streets or walking path connections between culs-de-sac. Provide better access to high-quality parks and services. Introduce commercial and civic space where possible.

When New Neighborhoods Are Built, Make Them Complete, Compact and Connected

Incorporate walkable design elements. Provide a mix of uses—parks, public services, live/work, and neighborhood retail. Provide a mix of housing types including apartment buildings, apartments above first-floor retail, duplex, townhouses, large and small houses, and accessory dwelling units.

Mix Uses and Incomes in All Neighborhoods

Improve the jobs/housing balance. Locate a variety of housing types near employment centers to reduce commute times. Locate a variety of housing types near Sun Metro transfer centers to provide access to transit and jobs throughout the City. Plan new development as mixed-use communities to provide a mix of offices and housing in convenient locations.

Use the Housing + Transportation Cost Calculator to Assess the True Cost of Housing

The rental or purchase price of a home tells only part of the affordability story. Costs associated with commuting from seemingly less expensive housing on the suburban fringe can make such housing just as a expensive or even more expensive than centrally located transit-served housing. By factoring in transportation costs associated with a home, a better picture emerges about the true cost of living in that home. Location-efficient mortgages have begun to address this more complex but realistic way of measuring the true cost of housing.

Provide High-Quality Affordable Housing

HOPE VI programs and other high-quality housing programs

for households earning less than 30% of median income are currently undertaken by the City. Affordable housing should not be concentrated but should be integrated with market-rate housing. It should be of a similar scale to its neighboring buildings, exhibit dignified proportions and materials, and not appear to be less-expensive than market-rate structures in the vicinity.

Housing for households earning between 30 and 80% of median income can be provided through at least three approaches: by mixing housing types and unit sizes; through zoning changes such as the allowance of smaller lots and smaller increments of development such as rowhouses and multi-family units; and by separating the cost of parking from the cost of the unit.

Support Innovative Affordable Housing Programs

Artspace El Paso is a project to create affordable artist housing as the keystone project to provide artists the hub that they need in order to create a thriving art scene in Downtown.

Provide Senior Housing

Housing for retirees and seniors should not be segregated but rather be integrated into age-diverse, walkable communities. Aging-in-place means the ability for a neighborhood to accommodate the changing needs of its residents as they age so that they can maintain family and community bonds.

Provide Greater Housing Variety to Meet Demand

Single-family detached houses constitute nearly two-thirds of the current El Paso housing stock. Even after accounting for single-family rentals, a greater variety of housing types is needed to meet changing household composition and housing preferences. Multi-family buildings should be encouraged, especially near transit and mixed-use nodes. Attached houses, in duplex and townhouse buildings, along with small-scale apartment buildings compatible with single-family housing, should be permitted in most neighborhoods.

Encourage a Mix of Housing

By encouraging a mix of housing types (multi-family, single-family attached, and detached) and tenures (rental and ownership) in most neighborhoods, a variety of different households can be accommodated. Housing variety within each neighborhood means residents are not compelled to move out when their family or economic circumstances change, neighborhoods can then remain resilient in the face of market and social fluctuations. In the Downtown and in-town neighborhoods, higher-density housing types and tenures should be mixed at the block and street level.

Building Basics

Traditional homes differ from recently built homes in typical subdivisions. New homes, if thoughtfully designed, will be pleasing neighbors. A major difference is in the proportions and details, which often entail no additional expense.

Traditional homes:

Habitable space is located close to the street, creating an interesting experience for those passing by;

Often have deep, usable porches or balconies;

Have simple volumes and proportions;

Have architectural style and details in keeping with desert southwest building traditions;

Typically define their property lines with short fences or walls;

Locate parking on the street or at the rear of the lot by use of alleys or long side driveways.



Typical subdivisions:

Living space is generally set further back behind garages, creating a less friendly appearance for those passing by;

Rarely provide welcoming features such as front porches or balconies;

Have a convoluted volume and proportion;

Typically do not define their front or side property boundaries;

Parking is at the front of the lot, often in the form of wide garage doors that dead-end the street.



GOALS & POLICIES

Overall Goal: To provide housing in El Paso through complete, connected neighborhoods containing quality, affordable, and accessible choices to serve all income levels and age groups.

Housing Supply

Goal 6.1: Maintain a sustainable and efficient housing supply for all residents of El Paso.

Policy 6.1.1: Strive to distribute a variety of housing types throughout the City to expand choices available to meet the financial, lifestyle, and cultural needs of El Paso's diverse population. Strongly encourage housing types that take into account non-traditional households and multi-generational families.

Policy 6.1.2: Encourage the redevelopment of areas within existing neighborhoods for accessible village centers.

Policy 6.1.3: Adopt a permanent supportive housing program that focuses on a mix of target populations including the chronically homeless, veterans, people who were recently institutionalized, and youth who are aging out of foster care.

Policy 6.1.4: Allow, by-right, a variety of residential lot sizes and housing types within existing and new neighborhoods.

Policy 6.1.5: The City should develop and utilize a rating system as a tool to rank new housing projects and determine which projects should receive incentives such as fee waivers, density bonuses, City investment in infrastructure, and other public financing incentives.

Policy 6.1.6: Encourage green practices in housing construction and rehabilitation that support durable, healthy, and energy-efficient homes.

a. The City should explore the use of a rating system, such as LEED-ND, to evaluate new housing projects and determine which projects should receive incentives such as fee waivers, density bonuses, expedited permitting, and other public-private partnerships.

b. The City of El Paso will strongly consider the adoption of a rating system for neighborhoods that draws from LEED-ND or other neighborhood rating systems when they become available. This system will be used by the City, not the applicant, and will not have any bearing on the approval of an applicant's request. The full LEED-ND rating system may be a tool for neighborhood design in the future, but in the short-term a subset rating criteria will be developed in a collaborative process with multiple public and private stakeholders.

Policy 6.1.7: The City will ensure that accessible housing that meets ADA standards is available. The City should adopt universal design and visitability standards for accessible housing without sacrificing walkable urban design principles.

Policy 6.1.8: Support housing that demonstrates simplicity, practicality, permanence, and creativity as described in the Community Design Manual in Appendix D of *Plan El Paso*.

Existing Neighborhoods

Goal 6.2: Preserve and revitalize El Paso's existing neighborhoods.

Policy 6.2.1: Actively seek opportunities to retrofit suburban subdivisions to improve connectivity, add high quality parks, and introduce limited commercial uses where possible.

Policy 6.2.2: Develop programs to focus on infill and rehabilitation of existing neighborhoods.

Policy 6.2.3: Approach increased density as a neighborhood preservation strategy and allow by-right density increases through the use of accessory dwelling units, duplexes, townhouses, and small apartment buildings that are integrated into the fabric of the neighborhood in a manner similar to Sunset Heights and other historic neighborhoods.

Walkable Neighborhoods

Goal 6.3: El Paso's neighborhoods should become the most connected and walkable in the southwest.

Policy 6.3.1: The City should encourage all new residential developments to be complete and connected, using the design principles under Goals 2.1 through 2.6 of the Urban Design Element, City-developed rating systems, SmartCode, and/or national standard such as LEED-ND as tools to assess the design of proposed developments.

Policy 6.3.2: Encourage the master planning of newly developing or redeveloping areas to promote healthy living through walkable environments.

Policy 6.3.3: Encourage mixed use developments that allow people to live without requiring everyday use of an automobiles.

Policy 6.3.4: Support higher density housing in designated future compact neighborhoods on this plan's Future Land Use Map.

Housing Affordability

Goal 6.4: Expand opportunities for affordable housing through new tools, technologies, and partnerships.

Policy 6.4.1: Adopt the "Housing + Transportation" formula developed by the Center for Neighborhood Technology as a tool to determine the true cost of living in various locations around El Paso.

Policy 6.4.2: Expand the availability of affordable housing throughout the City of El Paso and preserve existing affordable housing opportunities.

Policy 6.4.3: The City should partner with local non-profits and pursue grants for weatherizing and renovation programs for the existing affordable housing stock. This will reduce utility and maintenance costs for owners and occupants.

Policy 6.4.4: Encourage home-ownership alternatives beyond single-family housing.

Policy 6.4.5: Conduct a "completeness" audit in low-income neighborhoods to determine action steps to improve quality and affordability of life for residents.