

CITY OF EL PASO, TEXAS COMPREHENSIVE PLAN

AUSTIN EASTON **NORTHEAST** HIGH SCHOOL MISSION VALLEY JACKSON PLACE SAN JACINTO PLAZA NORTHGATE
PIEDRAS DRIVE RIM ROAD NEIGHBORHOOD MADELINE DRIVE MUNDY PARK
BURGESS HIGH SCHOOL SUNSET HEIGHTS **WESTSIDE** YSLETA
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
BANDOLERO TARASCAS LOMAS DEL REY MESA HILLS FESTIVAL HILLS
LAMBKA PARK FALCON HILLS ROSEDALE **LOWER VALLEY** FARMS
HIGH RIDGE CRESTMONT PARK LAKEHURST
BELVIDERE BEAR **CENTRAL** RIDGE REMCON MONTOYA HEIGHTS
THREE HILLS SUNSET VIEW WEST GREEN BORDERLAND
MARWOOD PARK RIVERBEND EASTWOOD MEMORIAL PARK ARMSTRONG FIELD
AUSTIN TERRACE MILITARY HEIGHTS HIGHLAND PARK **EASTSIDE**
FIVE POINTS LOGAN HEIGHTS SUNRISE
NATIONS TOBIN PARK PARKLAND SUN VALLEY TERRACE HILLS
DOLPHIN PARK APOLLO HEIGHTS PLEASANT HILLS TIMBERWOLF
BUENA VISTA WASHINGTON PARK SAMBRANO STILES GARDEN
MEDINA CLARDY FOX DELTA PARK COLLINGSWORTH
GARDENS RIVERSIDE PARK
LAFAYETTE PLACE





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

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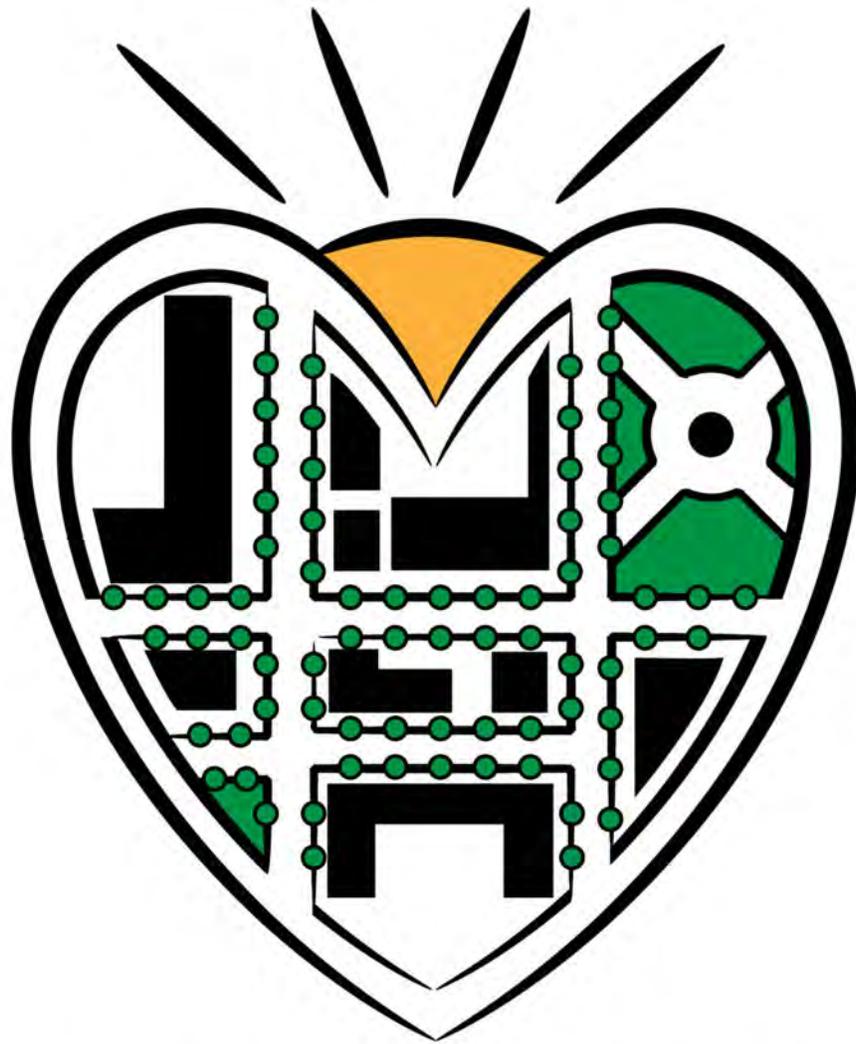
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PREFACE

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 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. 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 out-perform other US metropolitan regions. Fort Bliss, the outpost base that 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 generations. 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 the maquila sector 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 choosing 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 preserve 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 were 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 30,000 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.

The Plan for 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 both authors of the plan and 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 (chapters). 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:** Direct public funding and private development to the Downtown where it will have economic and social benefits shared by the entire 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:** El Paso will strive to become the most walkable and least car-dependent City in the nation through sustainable mobility. The City seeks to implement a balanced transportation system with meaningful travel options to prioritize person-based mobility, and land use patterns that support walkability, livability, and sustainability.
- **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 health and quality of life for all residents in the City.
- **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.

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

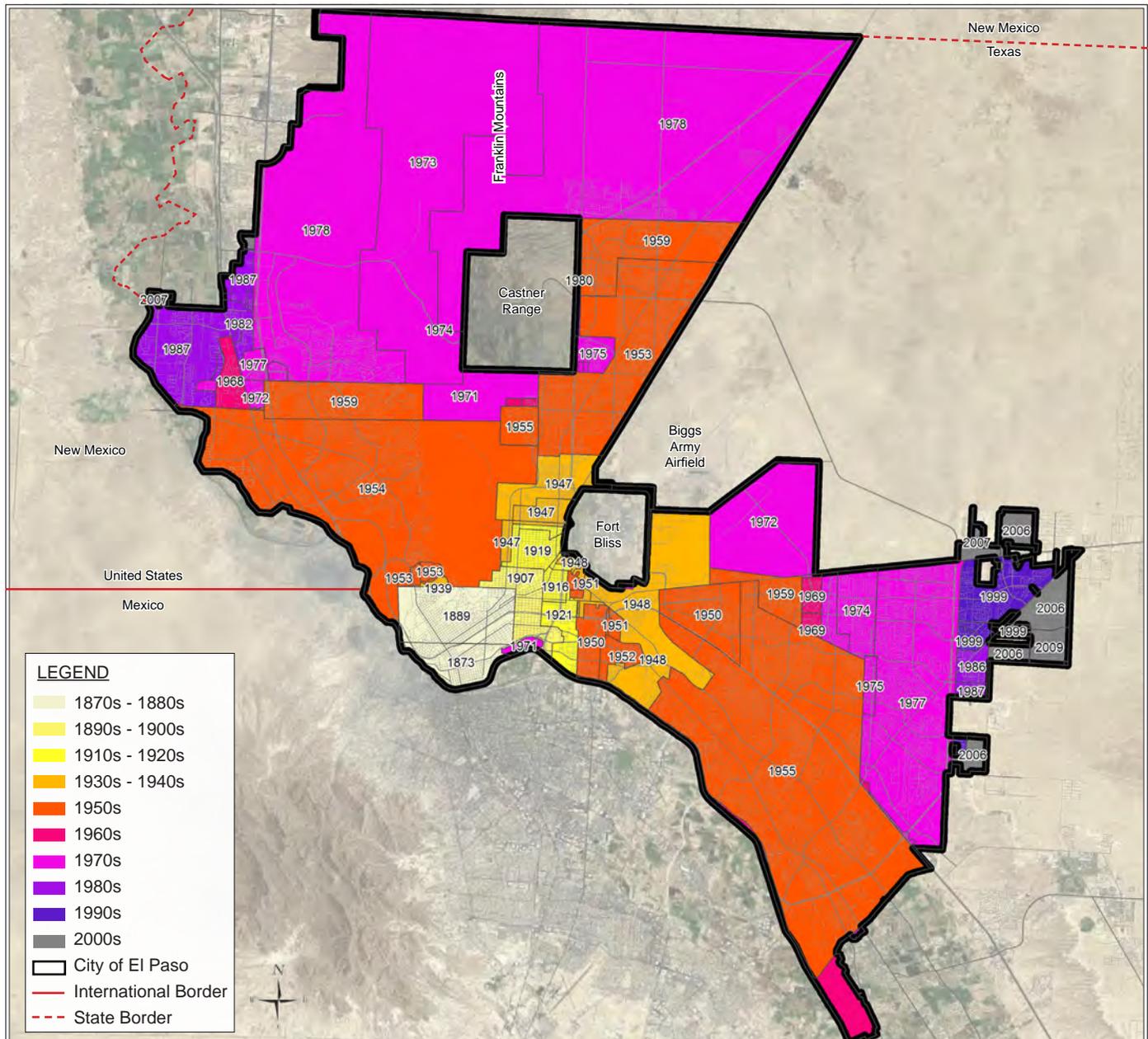
EL PASO'S OUTWARD EXPANSION

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.

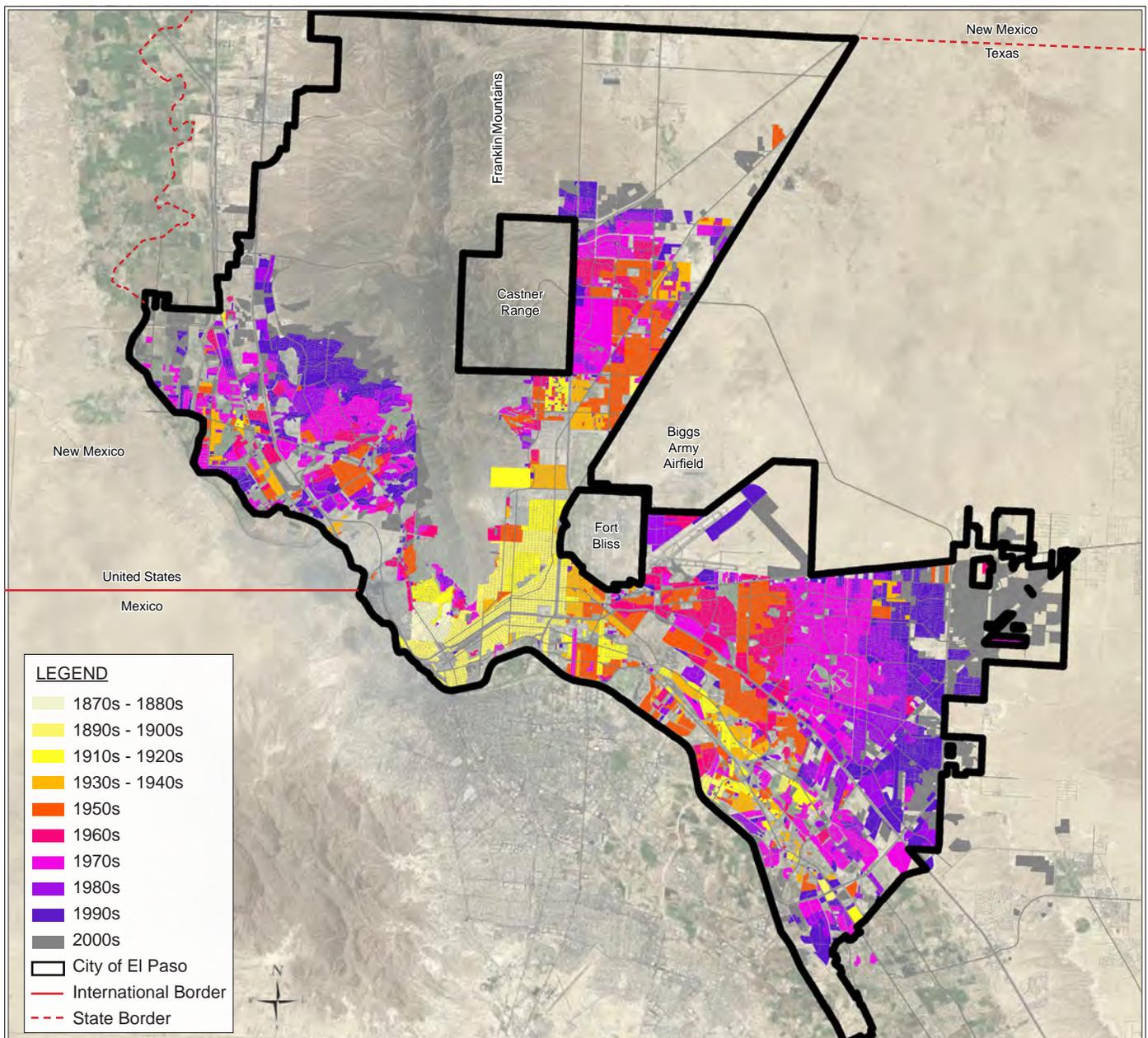
Annexations slowed beginning in the 1980s, however expansion filled out the current City boundaries east of Loop 375 with the exception of several skipped-over tracts. Land was also annexed in the Upper Valley north of Country Club Road.



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.



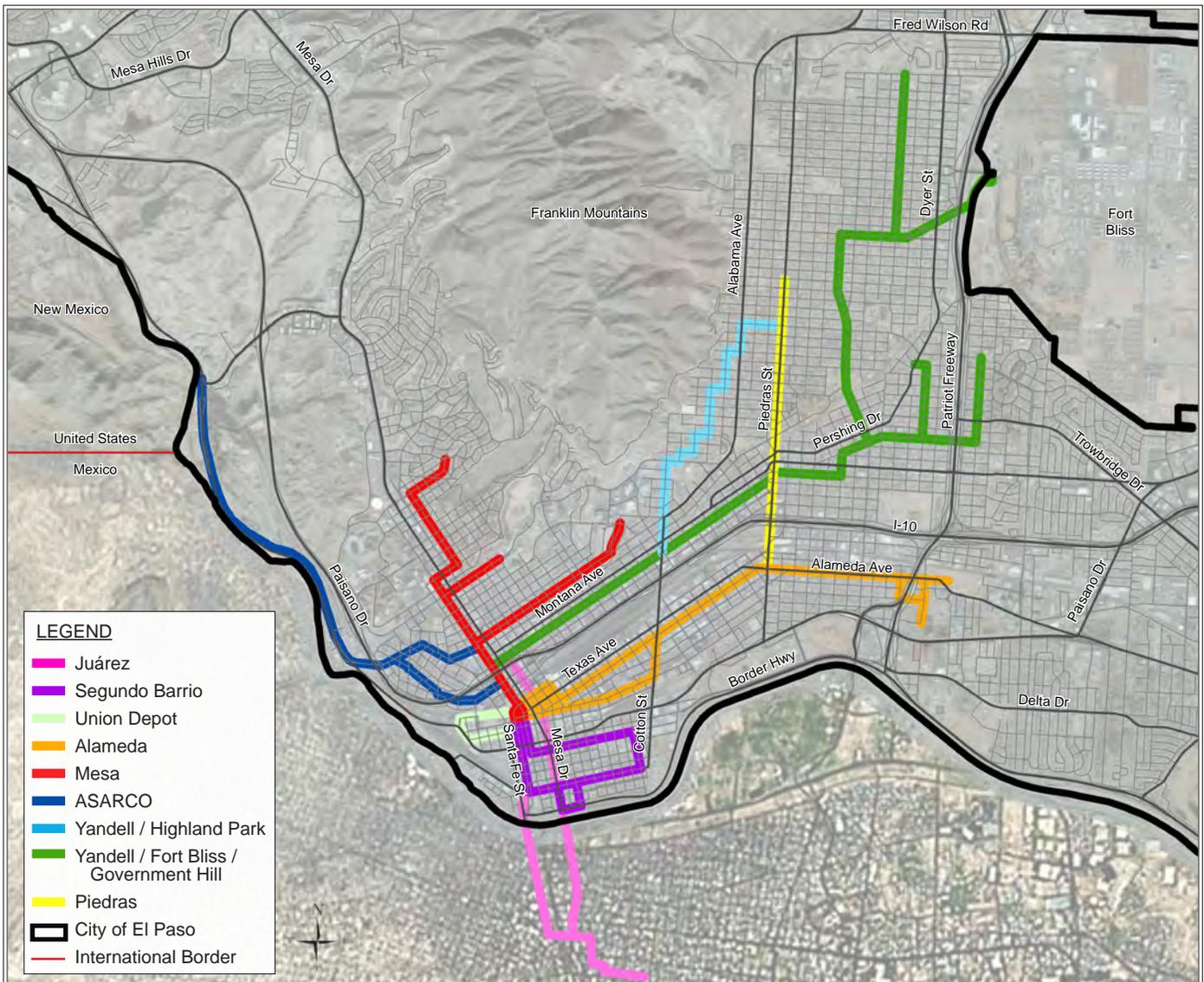
Decade in which land in El Paso was subdivided for urban development

PLAN EL PASO

Current Conditions

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 down Mesa Street and crossed over to Juárez, ended service in 1974.

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

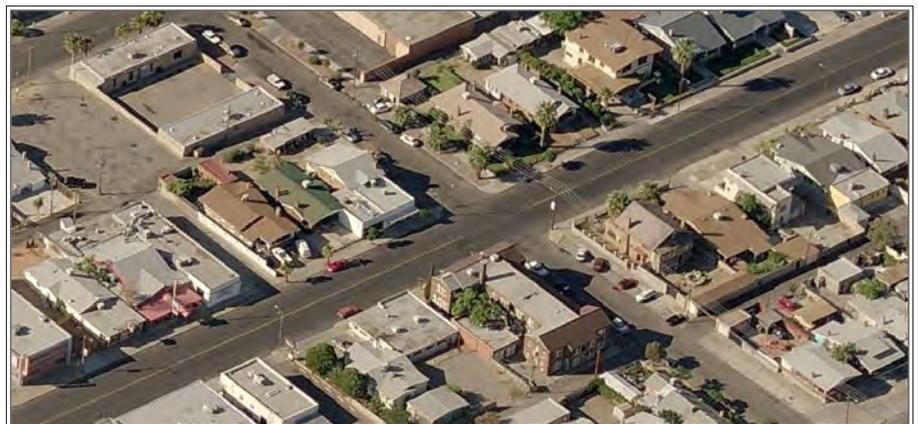
Houses in pre-World War II neighborhoods faced streets of every type. Because the rectangular street network dispersed traffic, streets were never too busy for private homes. Schools were relatively small in size, were integrated within neighborhoods, and were accessible on foot and bicycle. Parks were 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 highway 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. Seven 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 map 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 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 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.

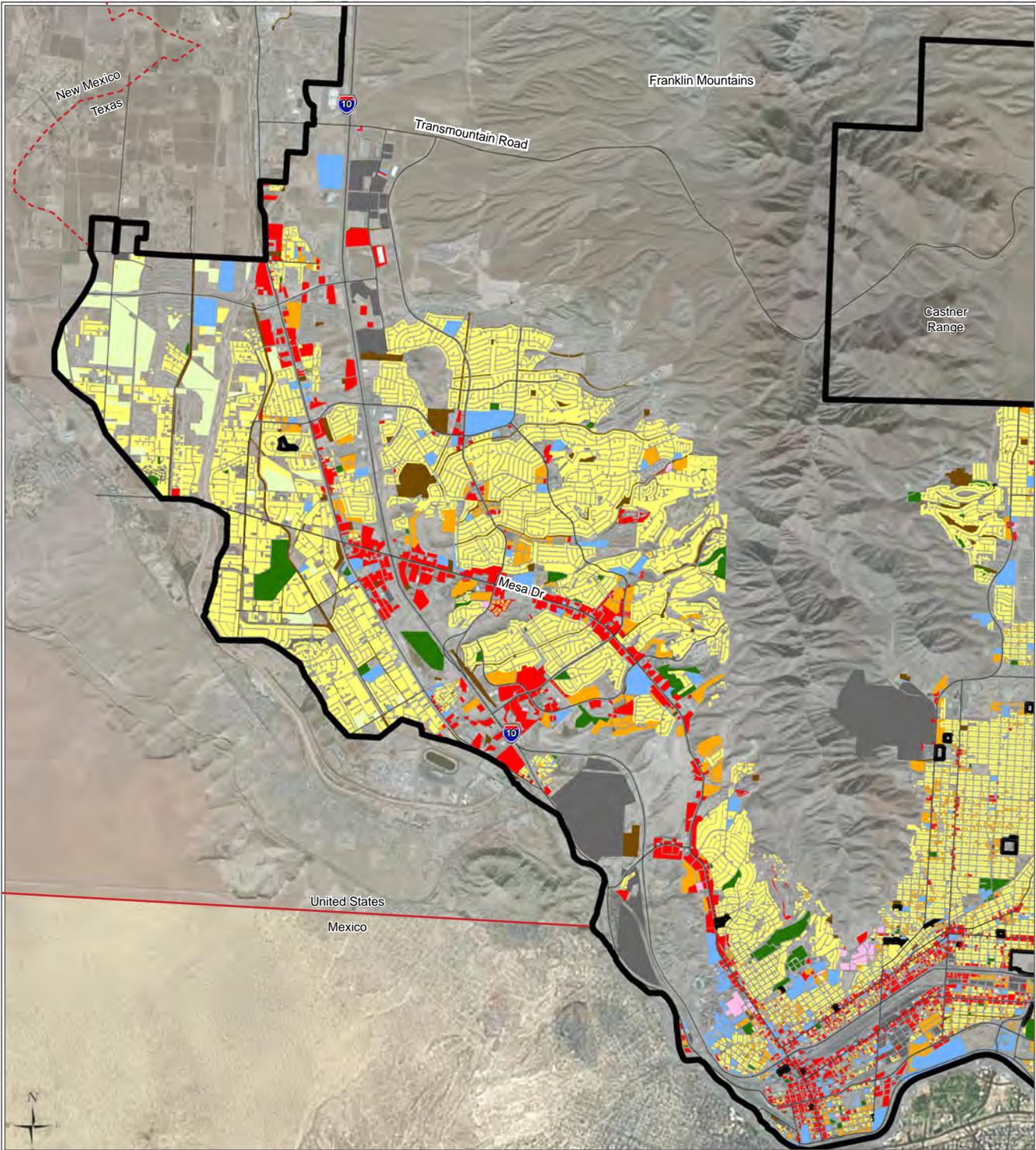
The data used to create these maps has been compiled by the City's planning department over the past seven years. Sources for this data include central appraisal district records, building permits, field verification, and professional knowledge of staff planners. This data has been simplified for these 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

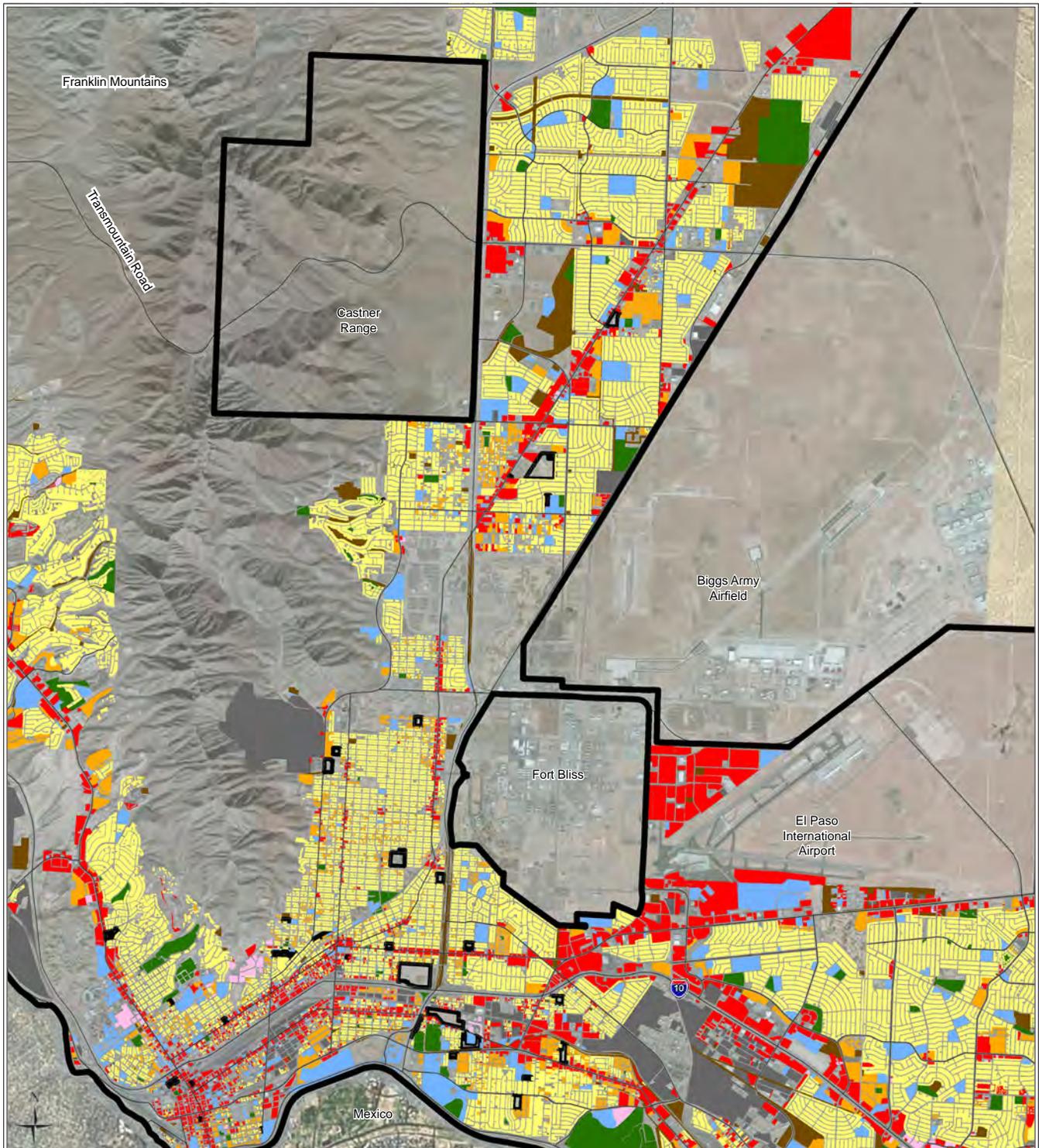
EXISTING LAND USES - WESTSIDE / CENTRAL



LEGEND

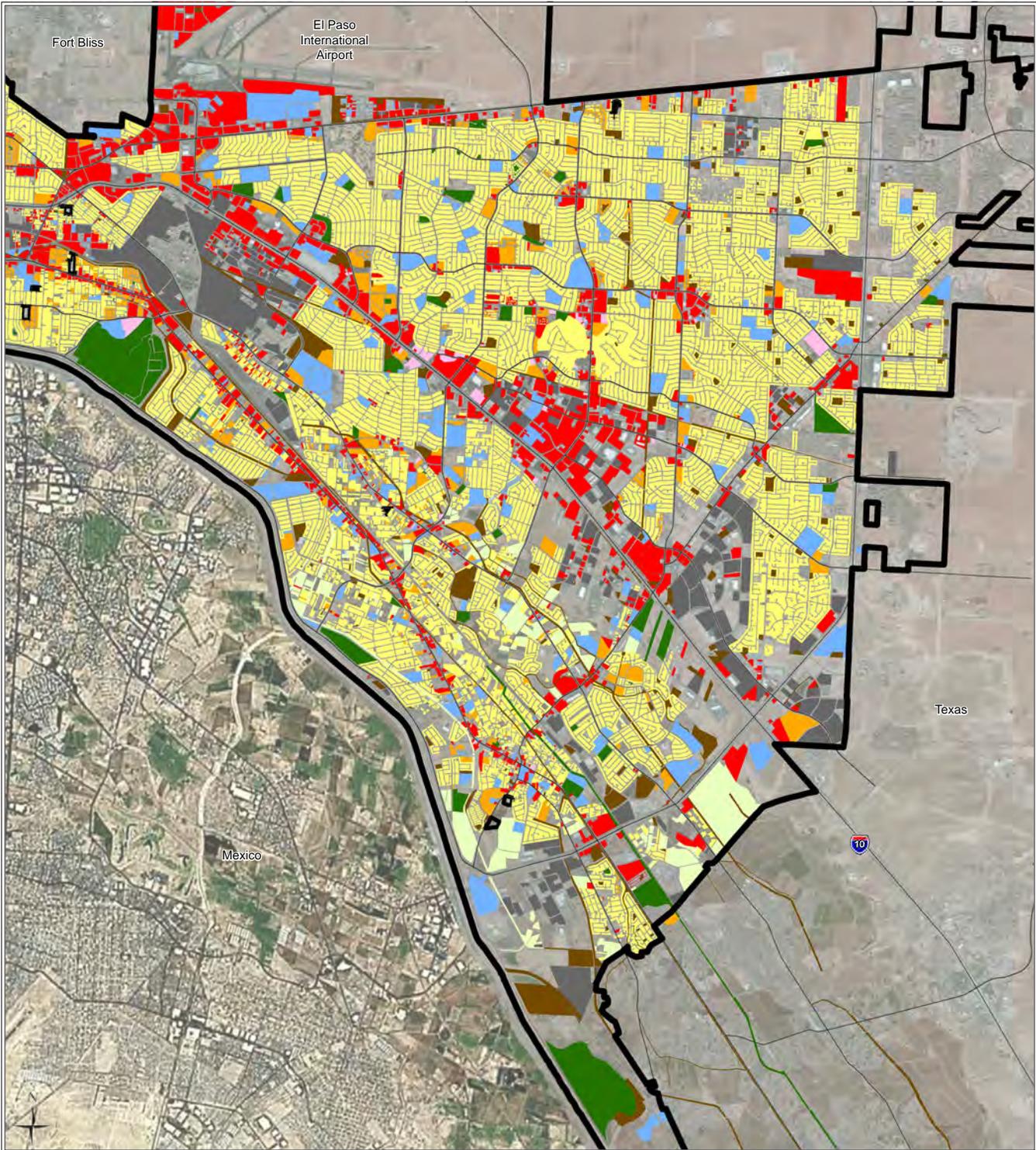
- | | | | |
|----------------------------|------------|----------------------|----------------------|
| Residential / detached | Medical | Parks / Cemeteries | City of El Paso |
| Residential / multi-family | Industrial | Drainage / Utilities | International Border |
| Commercial | Civic uses | Farmland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

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 the Public Service Board (PSB). The choice of whether the City should expand in these directions, and if so how, is within the discretion of City and 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.

This comprehensive plan, especially the Urban Design element, 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.

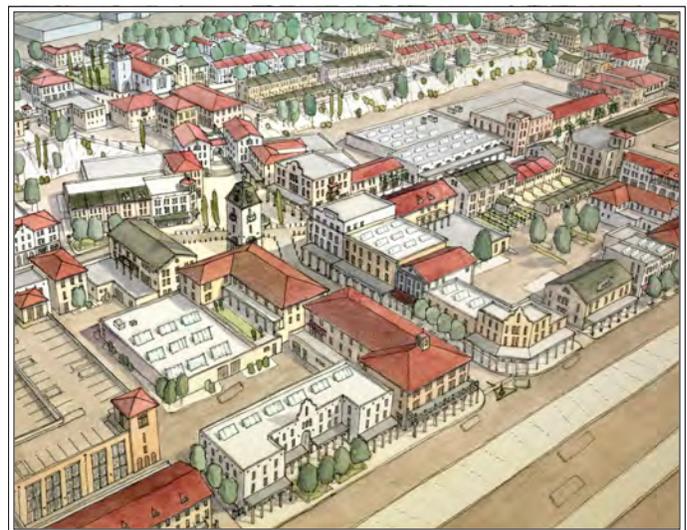
Retrofit Suburban Neighborhoods at Strategic Locations

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.



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 the central City. The Public Service Board 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 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 arroyos, yet current regulations and practices have not fulfilled this pledge. Although public and private funds have been used to save some arroyos, improved City regulations could help preclude unnecessary destruction 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 allow 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 protect arroyos while also taking maximum advantage of arroyos for scenic views, recreation, and drainage. These concepts should become standard practice.

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 arroyos and steep slopes, or tracts that should 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. An interlocal agreement should be forged to memorialize cooperative agreements that are in the interests of both the City and the County.

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.

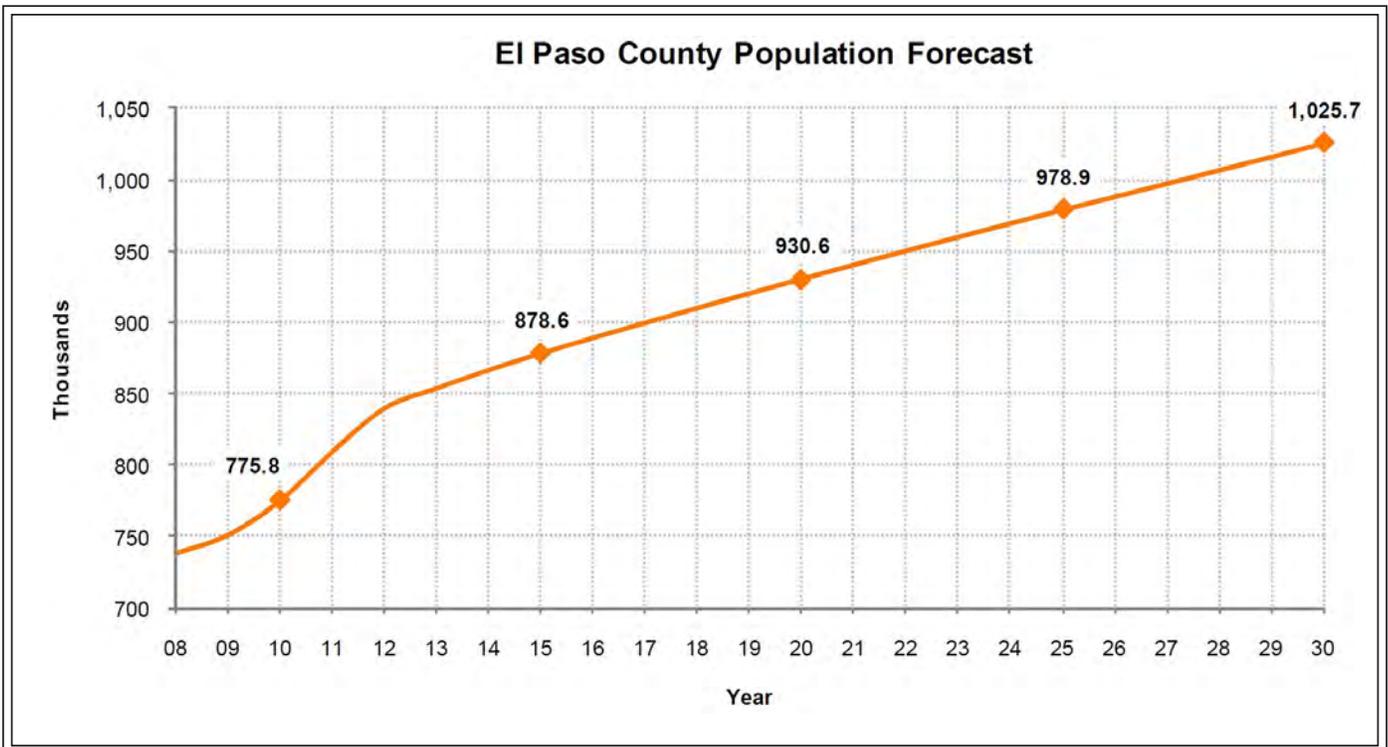
The Future Land Use Map identifies where the expected population in 2030 will live and work. The expected number of people and jobs for 2030 is based on 2010 research by the Institute for Policy and Economic Development at UTEP, which considered effects of the Fort Bliss expansion and local industry 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 five major growth sectors (G-1, G-2, G-3, G-4, and G-8), 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, 63,749 new dwelling units can be accommodated on the land described above. This amounts to approximately 94% 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 2028. 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 this comprehensive plan.

**Developable Tracts in City of El Paso
(in G-1, G-2, G-3, G-4, G-8, and O-7 sectors)**

	Developable Acres	Density (DU per acre)	Dwelling Unit Capacity	Population Capacity
Potentially Vested, With Land Study:				
Central				
Northwest	3,494	2.6	9,084	26,072
Northeast	1,209	2.6	3,143	9,022
East	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				
Northwest	178	2.9	516	1,481
Northeast	98	2.9	284	816
East	149	2.9	432	1,240
Lower Valley				
subtotal:	425		1,233	3,537
Other Large Infill Tracts:				
Central	64	4.2	269	771
Northwest	1,572	2.6	4,087	11,730
Northeast	1,372	2.9	3,979	11,419
East	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:	21,022		63,749	182,959

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. El Paso Water Utilities (EPWU) currently supplies about 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 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 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 had been decreasing as brackish water replaced the higher quality water being pumped out.

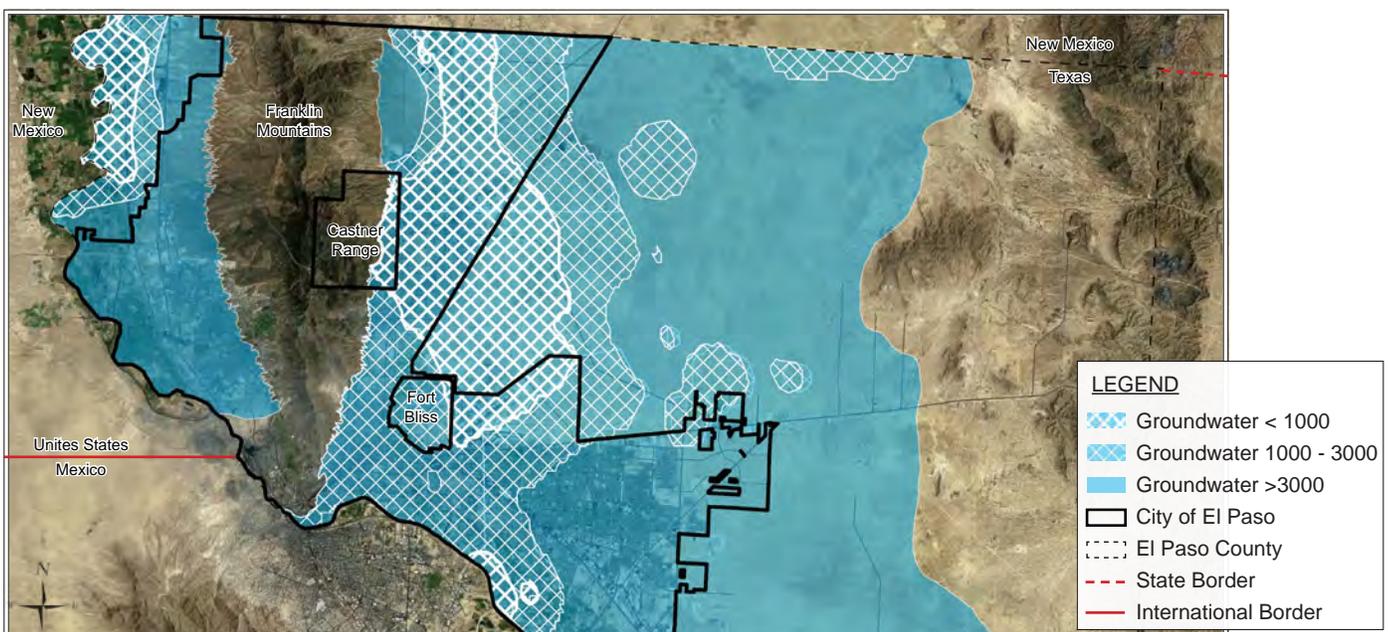
Five management strategies have been followed since that time:

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.
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 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).

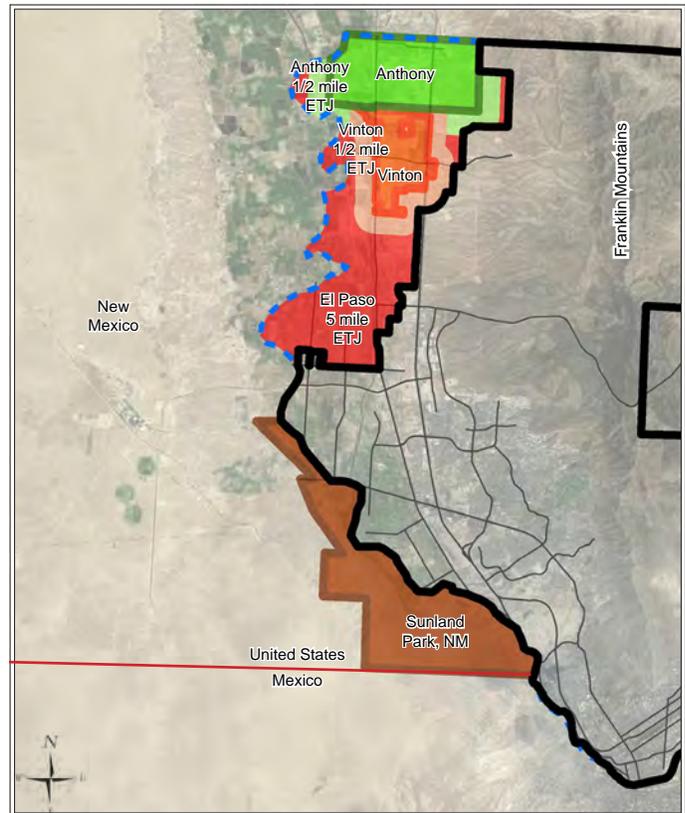
The size of the ETJ is defined by State law; for El Paso, it extends five miles beyond the City limits. Exceptions include land already in other cities, land previously in the ETJ of other cities, federal land, and land in New Mexico and Mexico.

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, although by written agreement sole authority could be delegated by the County to the City.

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.

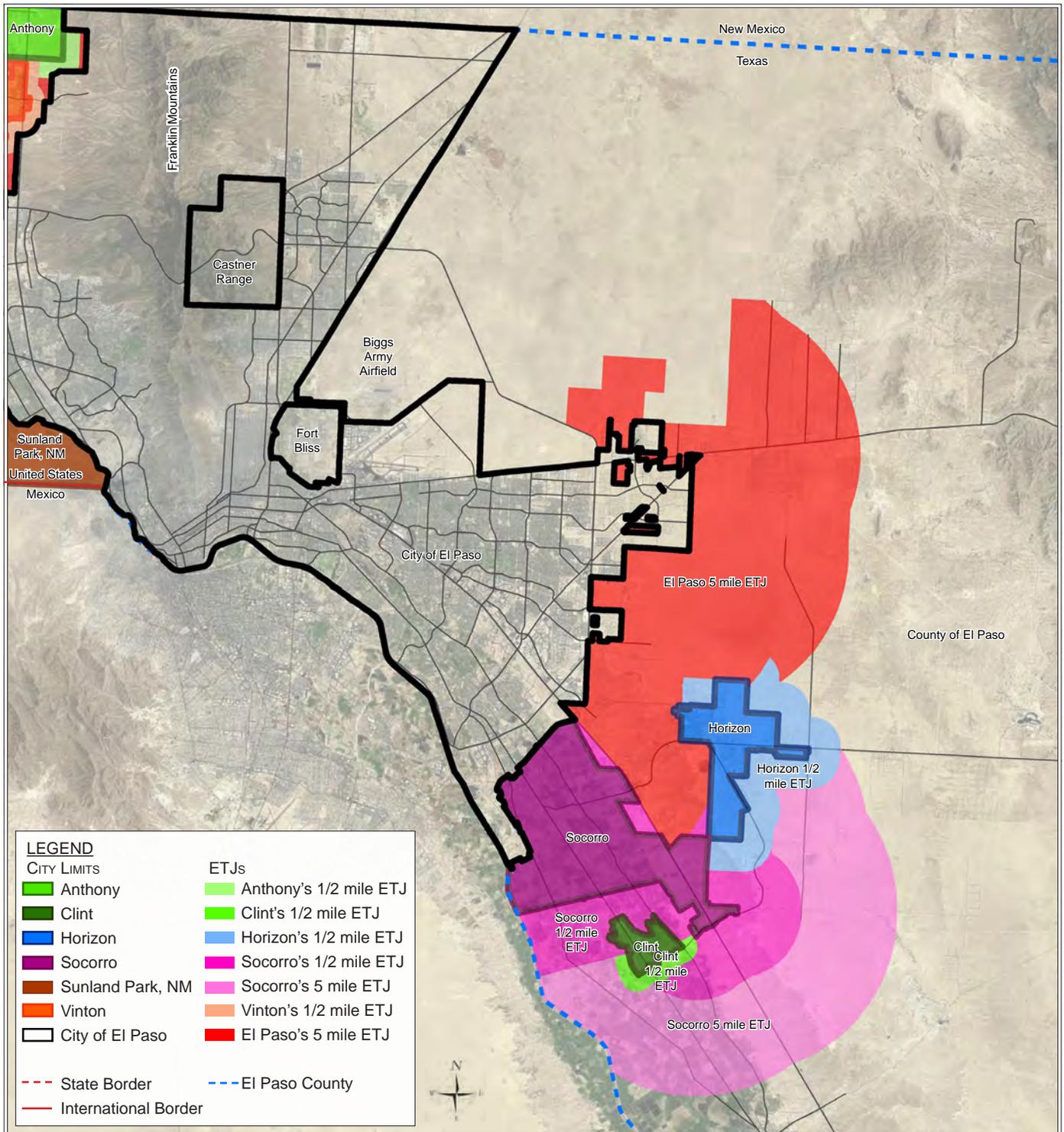
The City's Subdivision Code, Title 19, applies to land within the ETJ, with special provisions for ETJ land found in Chapter 19.11. That chapter should be strengthened as one method of carrying out this plan's policy of discouraging suburban sprawl (see Goal 1.6). For instance, new subdivisions in the 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 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 provides for 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.



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 narrow Rio Grande valley. Much of this valuable resource has already been lost due to El Paso’s location at one of the widest point 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.

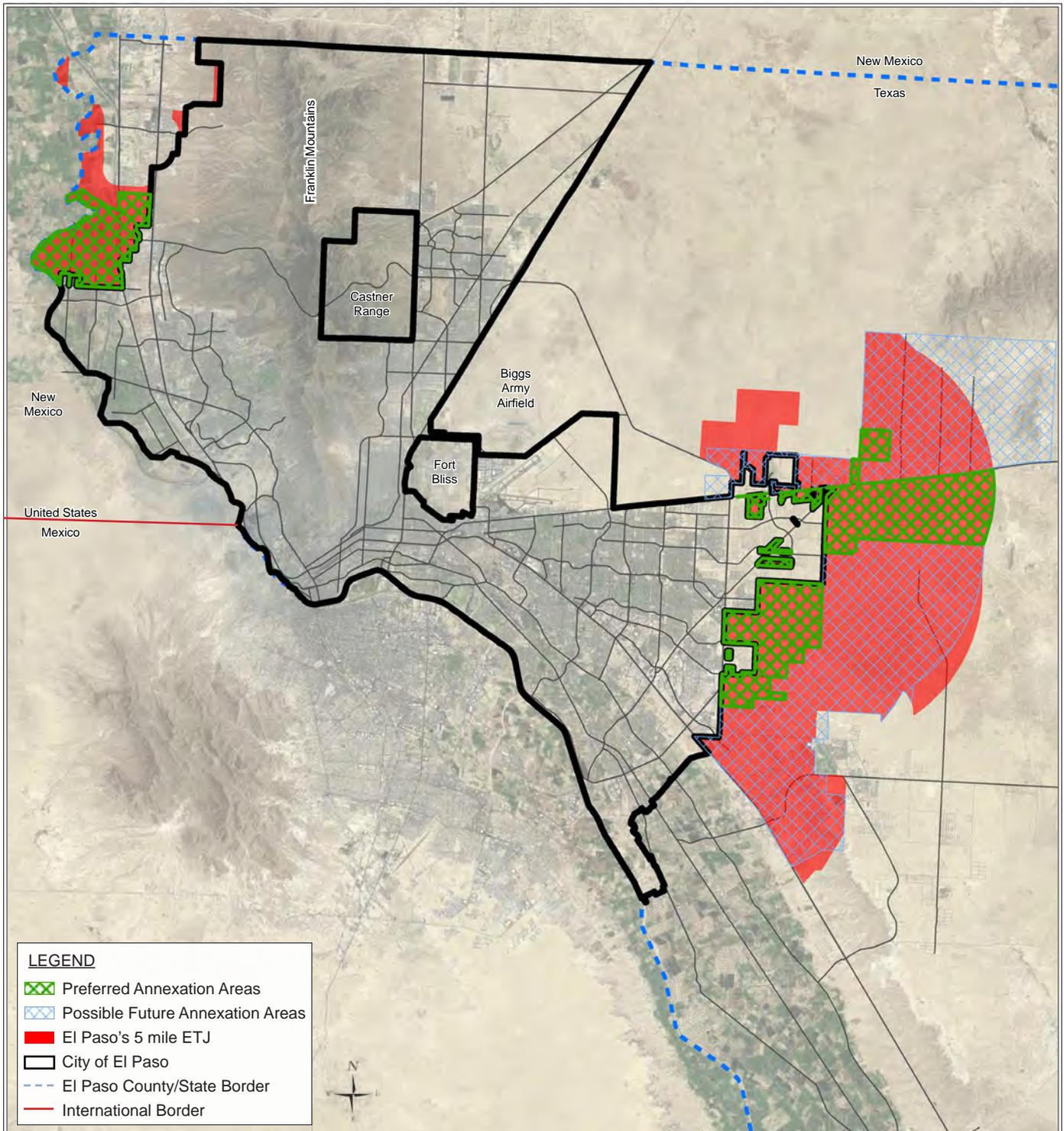
Most land north of Borderland Road has not yet been annexed. Annexation creates an expectation that municipal services will be provided, which works against the long-term viability of farmland. Yet the land north of Borderland Road could still be developed in suburban patterns without annexation, especially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

The solution to this conundrum is for the City to:

1. Remove active farmland from the preferred annexation map (see Policy 1.7.3); and
2. Decline to extend water and sewer service to this land 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 (see Policies 1.5.2 and 1.8.2).

The land to be removed is identified on the Future Land Use Map in this element as being in the O-3 sector and outside the City limits. See also policy 1.7.4.

A second adjustment is also needed. When City officials adopted the preferred annexation map, they also established review requirements for proposed annexations, one of which was to measure the extent to which the general development plan incorporated Smart Growth principles, particularly a mix of land uses, an interconnected network of streets, and transit alternatives. To more thoroughly implement these criteria, this comprehensive plan creates a distinction between small infill tracts in developed areas that could be annexed and then developed using standard City regulations, and larger vacant tracts in undeveloped areas that should be developed using Smart Growth



Extraterritorial Jurisdictions and Preferred Annexation Areas

principles rather than being continuous extensions of suburban patterns. This geographic distinction is made by identifying the large tracts as “Potential Annexation” on the Future Land Use Map. The second adjustment to the current annexation policies

is requiring a stronger Smart Growth commitment on larger tracts in the development agreements that accompany formal annexation, for instance by agreeing to develop using the El Paso SmartCode instead of conventional zoning (see Policy 1.7.2).

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.

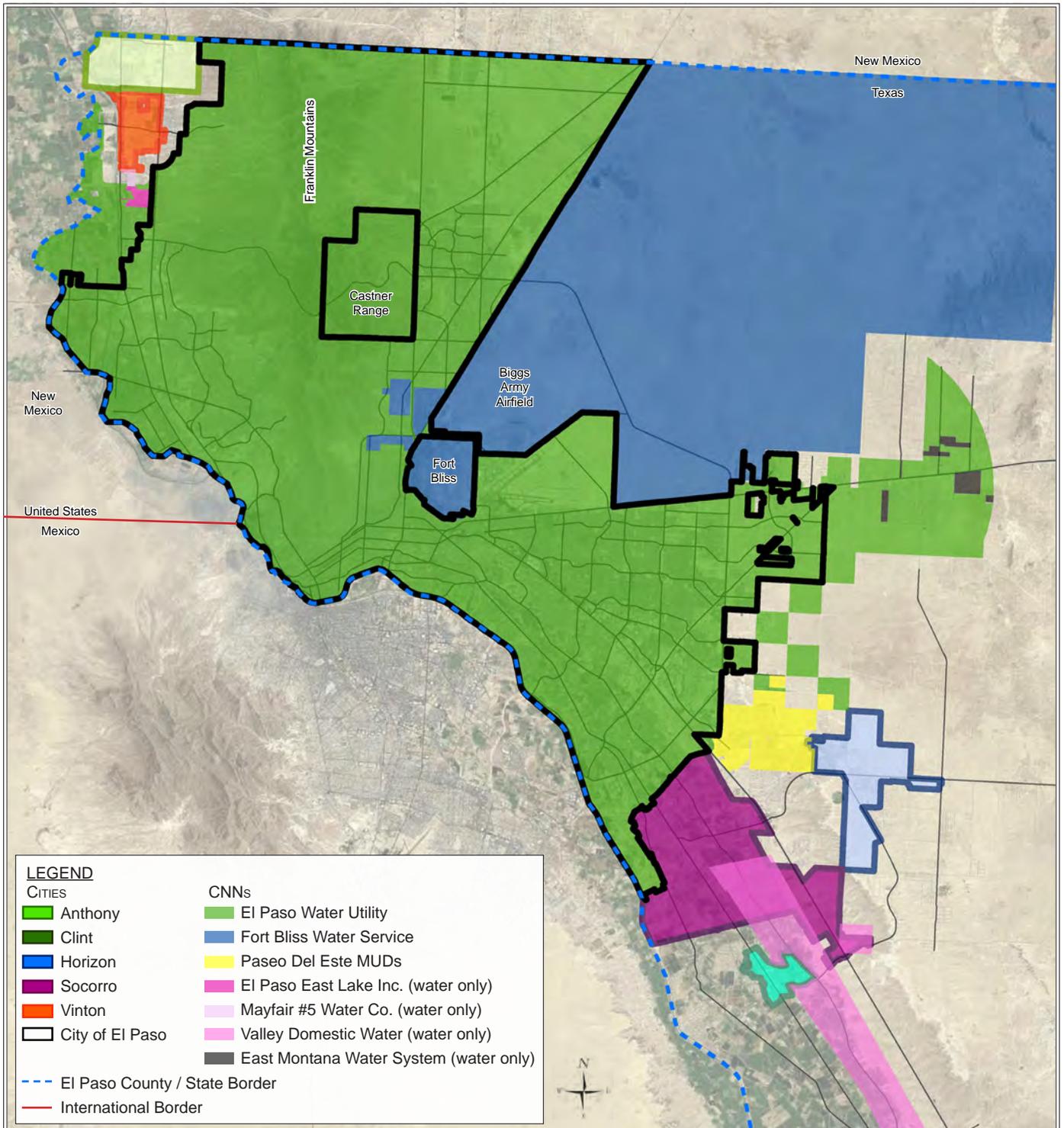
EPWU is a governmental entity, reporting to the Public Service Board (PSB) which acts on behalf of the City of El Paso. Like many public utilities, it is financed and operated in a manner similar to a private business. Its bonding capacity is separate and funds cannot be commingled with other City departments. Public utilities are required to operate like a business yet also carry out public policy; these two roles can be difficult to reconcile. The professional management of the utility and its low rate structure and conservation efforts have been a source of pride for the City and were instrumental in attracting substantial public investment at Fort Bliss.

Because the PSB also manages over 24,000 acres of City-owned land, the sale of that land for development not only generates income for the utility from the sale price but adds to the utility's customer base. In addition, EPWU collects impact fees from each new customer to offset some of the cost of physically extending pipes and increasing their supply and treatment capacity.

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 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 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 holds a CCN for water and sewer service well beyond the City limits and even beyond the preferred annexation areas described previously. A request to modify this CCN should be filed by City officials so that its outer boundaries match the new Potential Annexation sector (see Policy 1.8.4). Future expansion to the CCN should only take place if amendments to this comprehensive plan modify El Paso's outward growth policies.

Some administrative actions by El Paso Water Utilities can be interpreted to commit the City to actions it may wish to avoid. Utility 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. No renewals should be granted to any past agreements that would extend utilities for new development without formal annexation (see Policy 1.8.1).



Certificates of Convenience and Necessity (CNN) 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. 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 could create 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 El Paso Water Utilities 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 would then be adjusted accordingly.

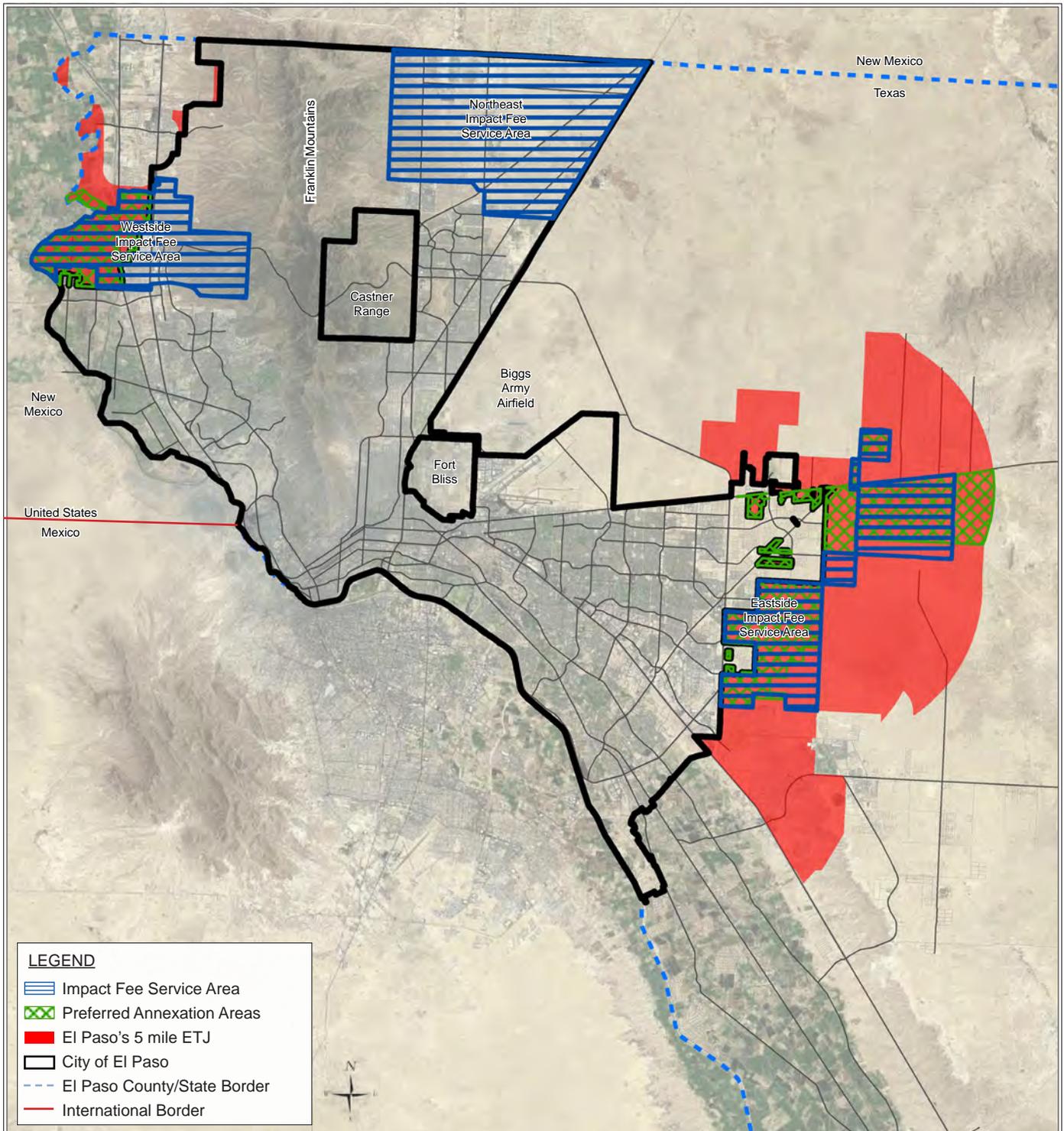
- When establishing impact fee rates, the City Council decided to charge only 75% of the actual costs for extension of services. The remaining expenses will be absorbed by El Paso Water Utilities, which hopes to recover the money over time through utility bills – but there is no guarantee that this will 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.

The first adjustment is to modify the impact fee service areas (see Policy 1.8.2). 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 will 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 is 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 1.8.3). The impact fee rates would 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 managed by the PSB where the 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.



Extraterritorial Jurisdiction and Impact Fee Service Areas

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.
- El Paso Water Utilities has been granted a certificate of convenience and necessity to provide utilities everywhere within the City and considerably beyond in several directions.
- El Paso Water Utilities 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 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 before 2035. City decisions about annexations, ETJ regulations, impact fees, and utility expansions should be based on the final 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, major 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 should help keep these lands in their natural state for drainage, natural habitat, and scenic protection. Public acquisition should be considered in the future especially when key drainage features can be protected.
- **O-3 – Agriculture:** Active farmland in the Rio Grande Valley. City utilities will not be extended for urban development beyond the City limits unless such extension simultaneously protects 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 will not be developed because they are needed for military training.
- **O-5 – Remote:** Remote land in the desert and mountains. Some of this land is within the City limits; City regulations should not allow urban development.
- **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 that is master-planned for potential urban expansion 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.

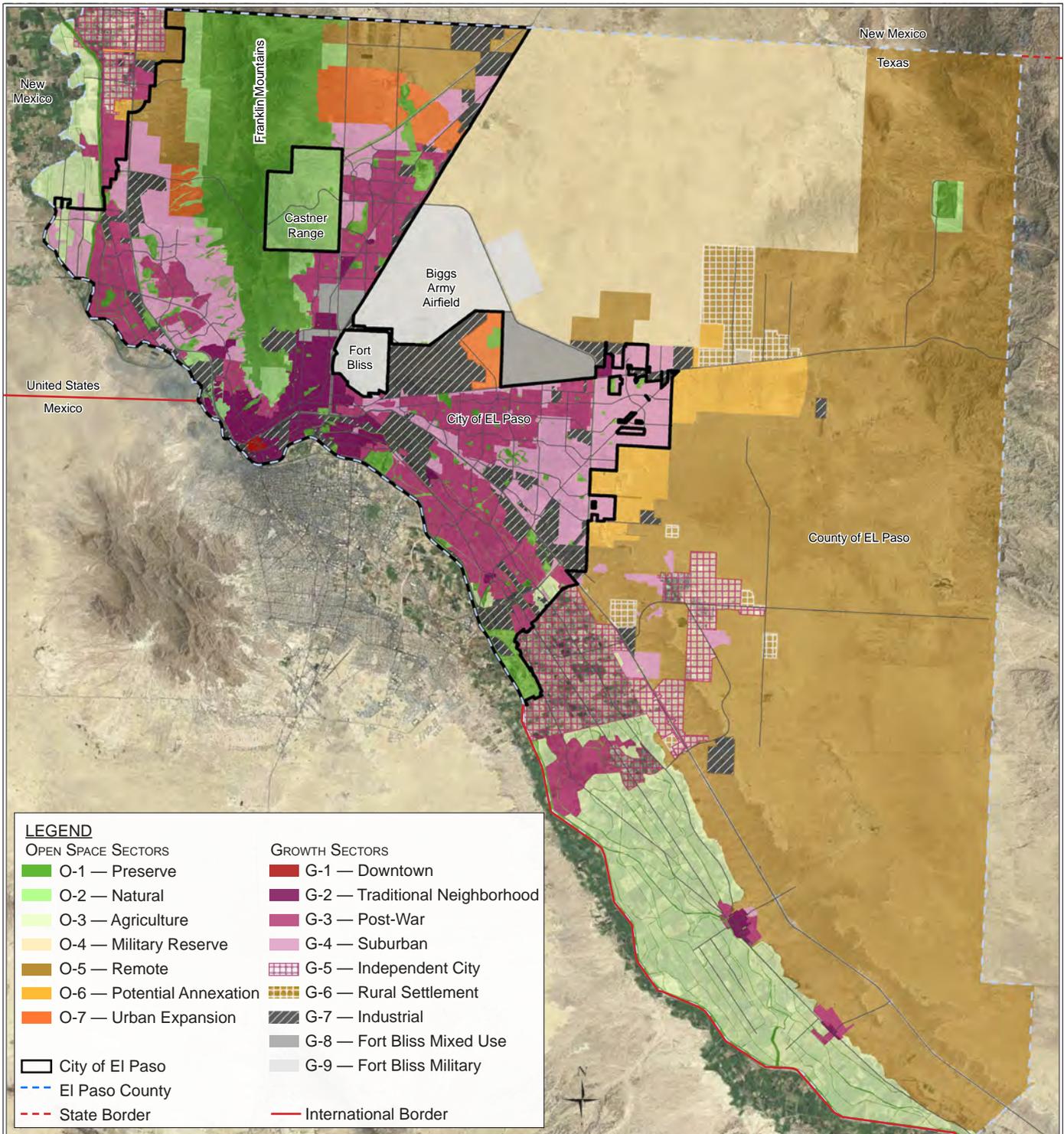
The nine growth sectors can be described as follows:

- **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 will 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.
- **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 will be eligible for annexation into the City of El Paso provided it meets the "LEED for Neighborhood Development" smart location standards contained in the Urban Design element of this Comprehensive Plan.
- **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 within the City limits that define key generators of movement and economic activity, plus prime locations for development and redevelopment. These overlays are described on the following pages.

PLAN EL PASO

Strategies for Addressing Community Concerns



Future Land Use Map - Base Sectors

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

Conceptual physical designs for each future compact neighborhood and many RTS transfer stations are provided in the Urban Design Element. In order to facilitate the anticipated development and redevelopment of these areas, the El Paso Department of Transportation and the Texas Department of Transportation should consider the future walkable context of these areas when considering improvements to roads, sidewalks, and bicycle facilities. The illustrative plans in the Urban Design Element are El Paso's first attempt at visualizing the future physical context of these areas, which will include changes to land uses and corresponding changes toward slower-speed and walkable urban thoroughfares. Similar thoroughfares are warranted in the G-1, G-2, and O-7 base sectors.

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) Transfer Stations:** 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 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.

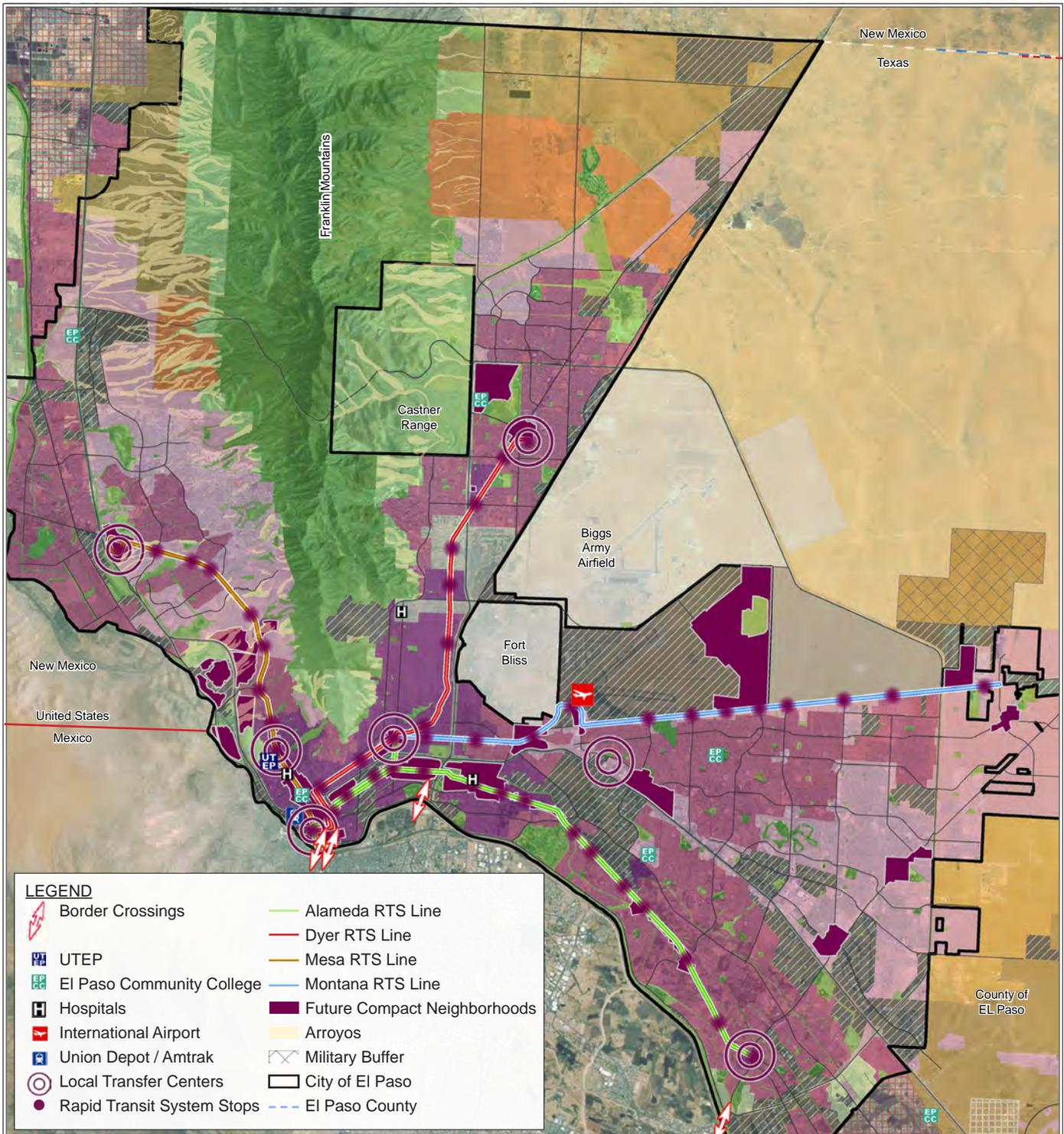
Suggested physical designs for each area are provided in the Urban Design element. In order to facilitate the anticipated development and redevelopment of these sites, public agencies including the Texas Department of Transportation should design their facilities to correspond with the compact walkable nature of the redevelopment plans (see the Transportation element).

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 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.

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.

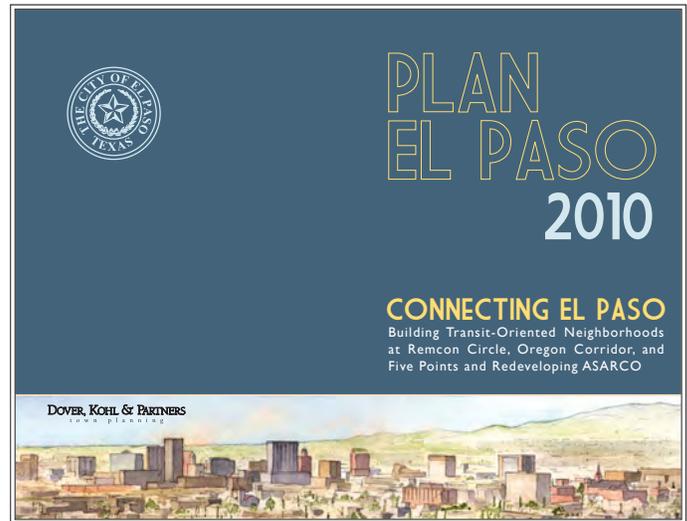
DESIGN GUIDANCE

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 this comprehensive plan, particularly the Urban Design and Downtown elements.

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 will apply in this sector.

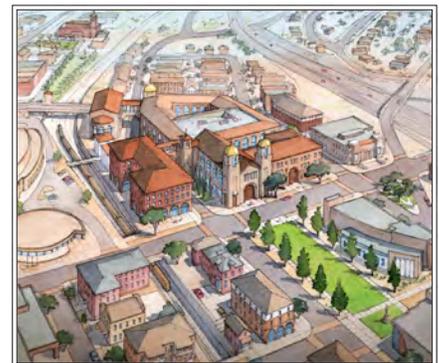
Design Guidance: Downtown El Paso is remarkably intact, with most historic buildings still standing and an abundance of civic buildings. The traditional street grid is largely in place. Pedestrian-oriented streetscape improvements, coupled with on-street parking, will slow traffic and create a better barrier 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.



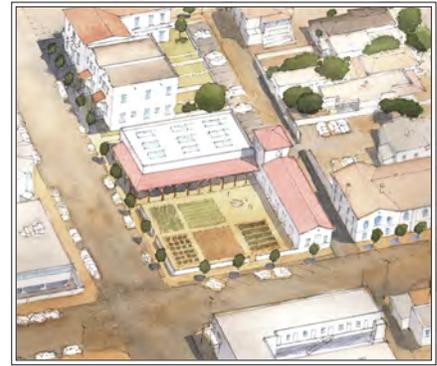
G-2 – Traditional Neighborhood: This sector includes the remainder of central El Paso as it existed through World War II. Blocks are small and usually have rear alleys; buildings directly faced streets; schools, parks, and small shops are integrated with residential areas. This sector is well-suited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

Design Guidance: G-2 neighborhoods already have walkable street 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 street network, while curvilinear and without alleys, is already well-connected internally and to the regional road 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 station, which will be energized by the presence of passengers. Future development around transit stations 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. City utilities will not be extended for urban development beyond the City limits unless such extension simultaneously protects 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 pages 2.37 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 network of streets allows residents to access all parts of the neighborhood, and other neighborhoods, without having to use the regional road 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 that is master-planned for potential urban expansion using Smart Growth principles.

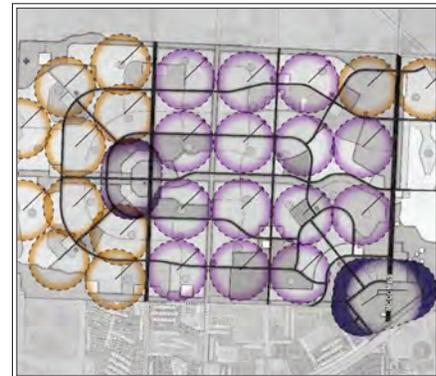
Design Guidance: Development of these large tracts should be organized by assignment of “community types” as described by the SmartCode: Regional Center Developments (RCD), Traditional Neighborhood Developments (TND), and Clustered Land Developments (CLD). Each community type is based around pedestrian 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 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 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 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 will 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 public 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 1.1.5: The City’s historic landmark design regulations will 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.

Policy 1.2.1: The City will 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 must 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 will be modified accordingly. Additional infill incentives will be provided 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) 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 major stopping points offer 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)
- 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 ameliorate these patterns in existing neighborhoods and intends to modify them for new neighborhoods. This goal and policy apply to land in the 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.

Policy I.4.1: The City’s zoning and land development regulations will be reviewed and amended to require 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 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 urban expansion.

Policy I.5.1: The City will be insistent that further outward expansion take the form of complete new neighborhoods that meet or exceed the standards 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, through the following means:

- a. Land outside the City limits and designated O-3 shall be removed from the impact fee service areas, from the City’s official map of preferred annexation areas, and from the State’s map of certificates of convenience and necessity.
- b. The City will not extend water and sewer service to land that is outside the City limits and designated O-3 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.

Policy I.5.3: Arroyos are shallow, moist 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 arroyos, which are designated as overlays on the Future Land Use Map:

- a. Under nearly all circumstances, arroyos should be maintained in their natural state rather than being filled, channelized, or piped.
- b. The location of arroyos is generalized on the

Future Land Use Map overlay; the precise location shall be determined during rezoning and site planning processes.

c. 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.

Policy 1.5.4: The City wishes to begin a new era of cooperation with El Paso County on the management of growth. The City will seek an interlocal agreement with El Paso County that might relieve the County of responsibility for regulating subdivisions in the City's extraterritorial jurisdiction, that could provide City water and fire hydrants to existing development, and that could assist the County in other growth-related tasks.

Policy 1.5.4: 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.

Extraterritorial Jurisdiction

Goal 1.6: The City of El Paso 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 this comprehensive plan.

Policy 1.6.1: The City will strengthen its existing regulations that regulate the subdivision of land within the ETJ. Future subdivisions will 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 fully interconnected with each other and with a suitable regional road network. This comprehensive plan's major thoroughfare plan has been 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.

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 this comprehensive plan.

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 be revised to require a stronger Smart Growth commitment on the larger tracts in the development agreements that accompany formal annexation, for instance by agreeing to develop using the El Paso SmartCode instead of conventional zoning.

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 And 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 this comprehensive plan.

Policy 1.8.1: El Paso Water Utilities will obtain City Council approval prior to agreeing to provide utility service outside the City limits and prior to granting any renewals to past agreements that would extend utilities for new development without formal annexation.

Policy 1.8.2: Within two years, the City will modify its impact fee service areas as follows:

a. In the northwest, the service area will be adjusted to eliminate upper valley farmland that lies outside the City limits and is being removed from the revised map of preferred annexation areas pursuant to Policy 1.7.3.

b. In the northeast, the service area will be adjusted 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, the service area will be adjusted 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 land-use assumptions upon which the impact fee rates are based will be adjusted to reflect the revised impact fee service areas and the other outward growth strategies in this comprehensive plan. The impact fee rates would then be re-adopted following a reexamination of the 2009 decision to provide a 25% discount.

Policy 1.8.4: El Paso Water Utilities shall request a modification to its state-issued Certificate of Convenience and Necessity (CCN) so that its outer boundaries will match the “Potential Annexation” sector (O-3 on the Future Land Use Map). Future expansion to the CCN should only take place if amendments to this comprehensive plan modify El Paso’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 1.9.2: Encourage the development of new industrial areas and the redevelopment of existing older or marginal industrial areas.

Policy 1.9.3: 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 1.9.4: Discourage access to industrial development through residential areas.

Policy 1.9.5: 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 will take affirmative steps to maximize this potential. These sites are generally in the G-7 “Industrial” growth sector on the Future Land Use Map.

Future Land Use Map

Goal 1.10: The City of El Paso will base relevant future decisions on a new Future Land Use Map that is an integral part of this comprehensive plan. This map has been created to assist City officials and private developers in understanding the growth management goals and policies of this plan, particular as to the form, direction, and timing of future development.

Policy 1.10.1: The City of El Paso’s 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.

Open-Space Sectors

Policy 1.10.2: 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, major 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 should help keep these lands in their natural state for drainage,

natural habitat, and scenic protection. Public acquisition should be considered in the future especially when key drainage features can be protected.

O-3 Agriculture: Active farmland in the Rio Grande Valley. City utilities will not be extended for urban development beyond the City limits unless such extension simultaneously protects 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 will not be developed because they are needed for military training.

O-5 Remote: Remote land in the desert and mountains. Some of this land is within the City limits; City regulations should not allow urban development.

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 that is master-planned for potential urban expansion 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 will 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.

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 will be eligible for annexation into the City of El Paso provided it meets the "LEED for neighborhood Development" smart location standards contained in the Urban Design element of this Comprehensive Plan.

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 within the City limits 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 regular 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 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 I.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 two overlays where walkable urbanism is anticipated to emerge (RTS Stops and Future Compact Neighborhoods). When considering road improvements in these areas, the Texas and El Paso Departments of Transportation must consider the future walkable context of these areas and modify their designs to provide slower-speed and walkable urban thoroughfares.

URBAN DESIGN

2

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

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"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.



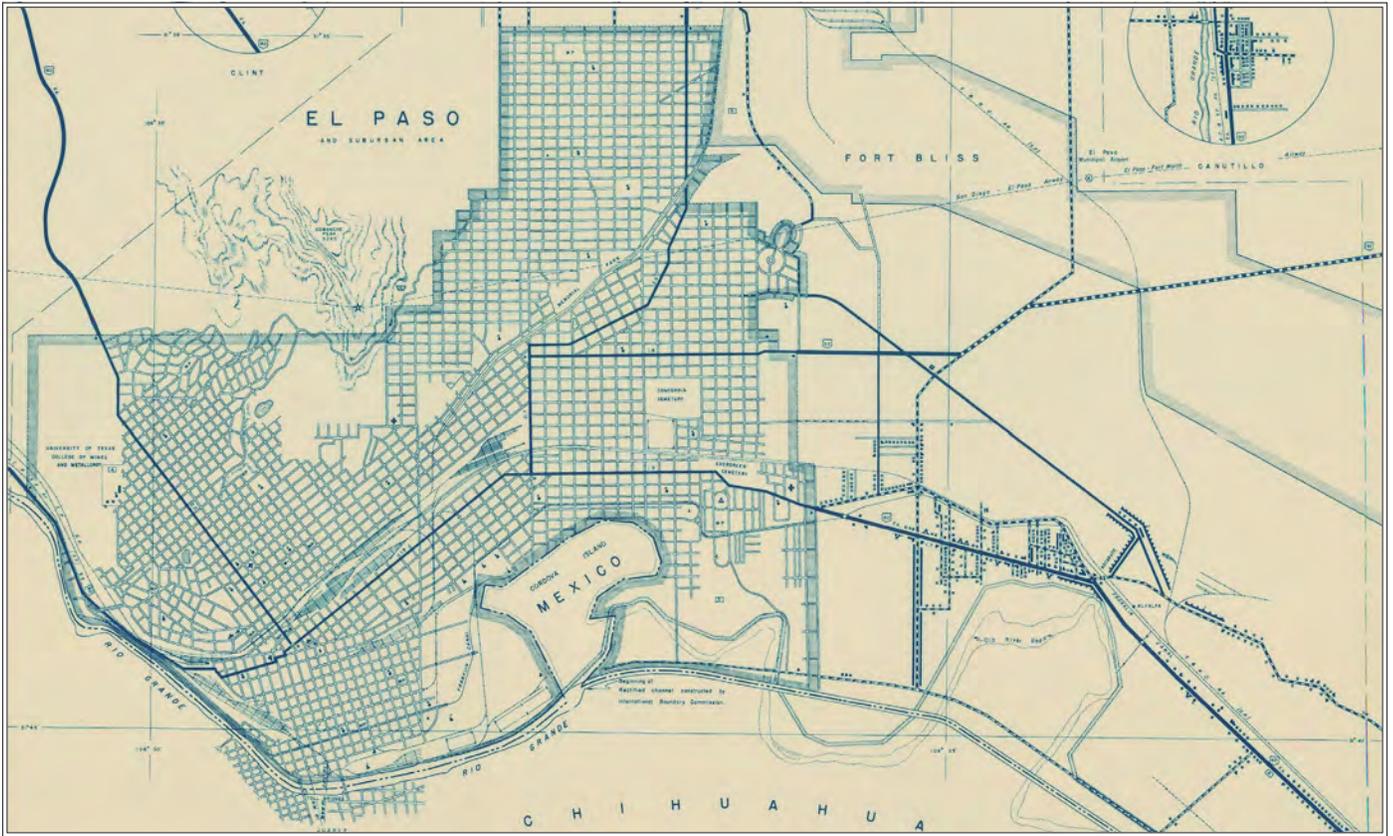
South El Paso Street



Madeline Park

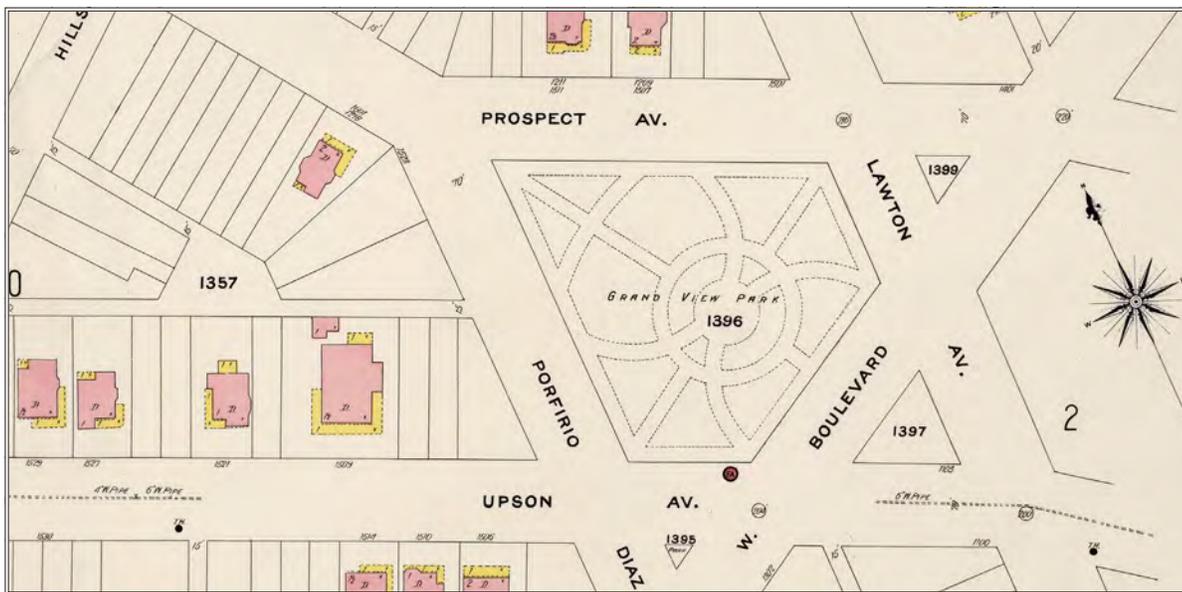


Nestor A. Valencia Mission Valley Transfer Center



Street Map, 1940

The Downtown grid laid out by Anson Mills is evident in the 1940's 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 Chichuahuita 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 Chichuahuita 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.

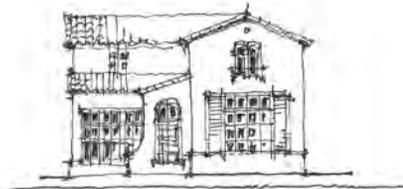
Practicality

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.



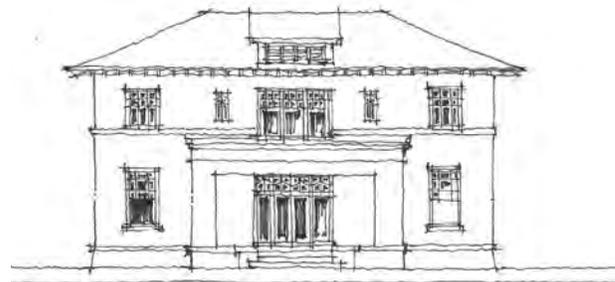
Small House: Craftsman



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.

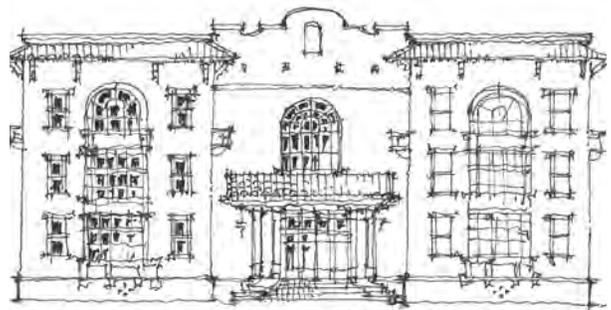
There is no substitute for an architect who can dedicate their skill and training to each individual project. However, the ultimate judge of architectural quality is the general public and their values are to be discovered in the buildings that have been preserved and protected through the generations.



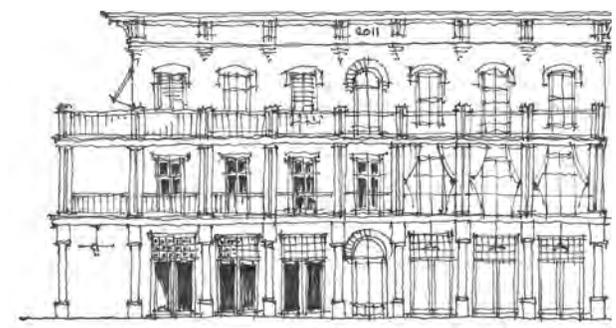
Townhouses: Contemporary



Townhouses: Mission-Spanish



Apartment Building: Mission-Spanish



Mixed Use: Italianate

PLAN EL PASO

Current Conditions

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 highways 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.

Lighting for highways tends 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 highways and major corridors 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 roadways. 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 road 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.

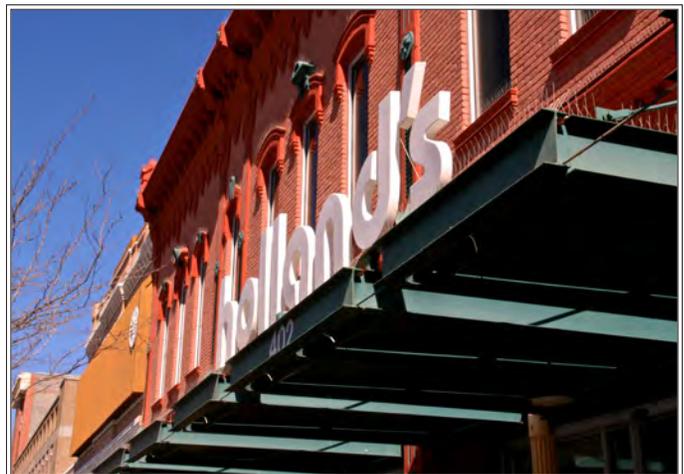
In the older parts of the City, utilities are located within the alleys, freeing the main roadways from the visual clutter of utility poles, overhead wires, mechanical equipment, and utility boxes. The newer suburbs and more rural parts of the City do not have alleys and so utilities are located within 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.



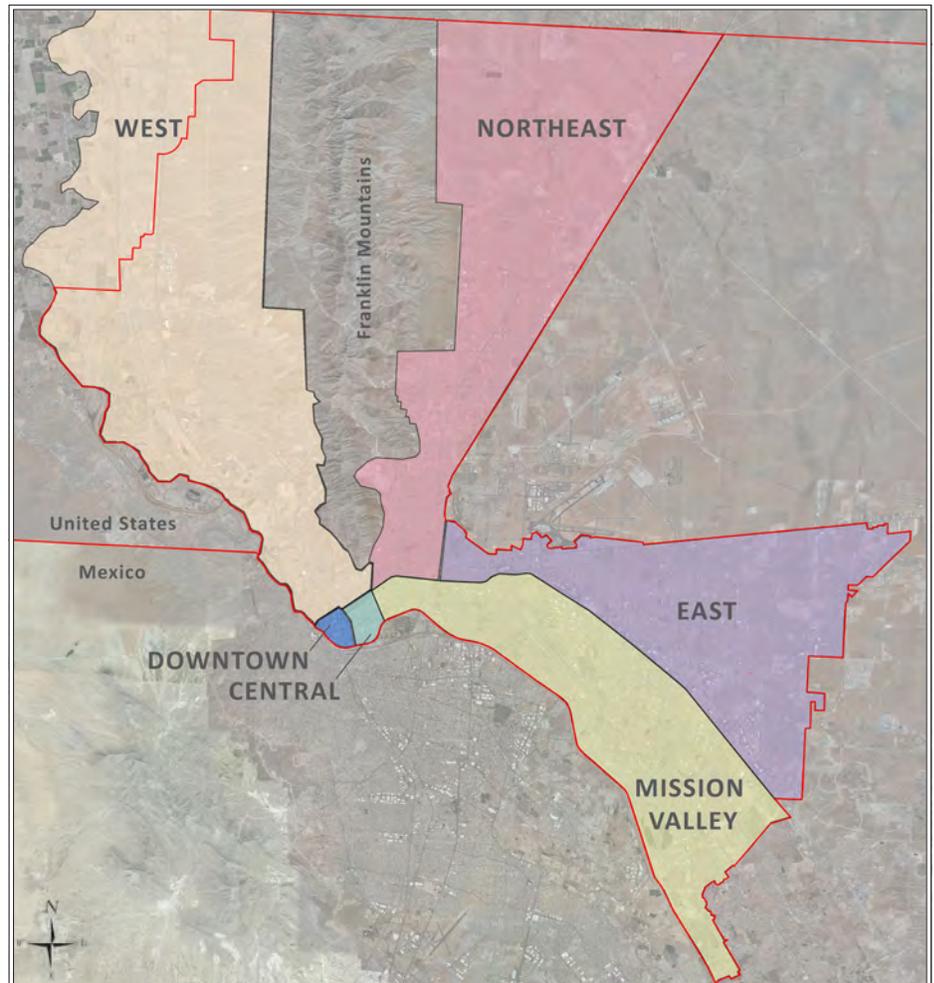
Simple vertical lettering above a marquee is visible to both pedestrians and vehicles.

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, Northwest, 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 needs to 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.

OVERALL COMMUNITY CONCERNS

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 business' 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 replicatable.

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, Parking in the Rear and 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 the 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.



Mundy Park along Prospect Street

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 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-homebuyer. 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.



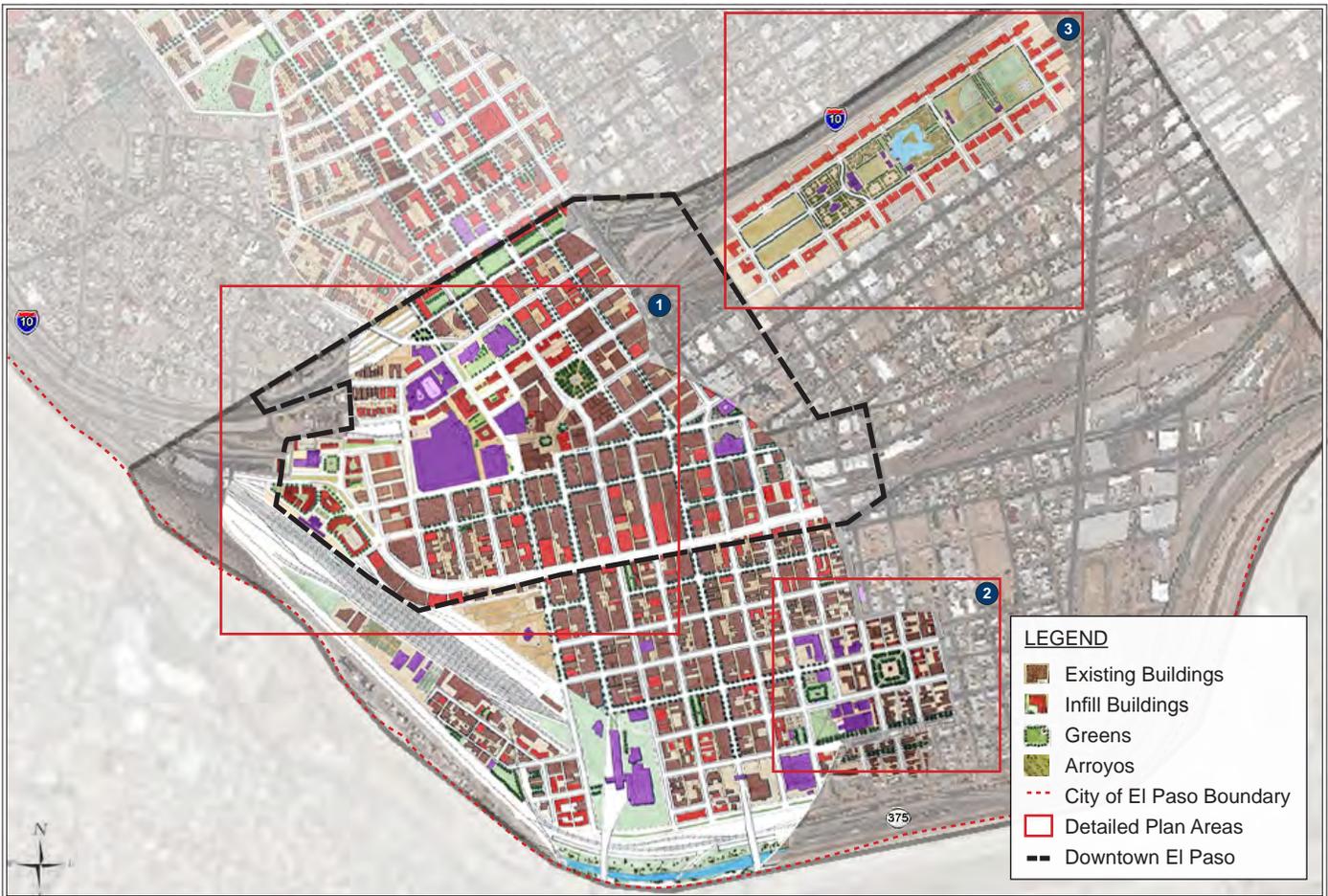
The parking requirements of big-box retailers overwhelm many of El Paso's shopping areas and become the most dominant visual image of the City as one drives its major roads.

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.



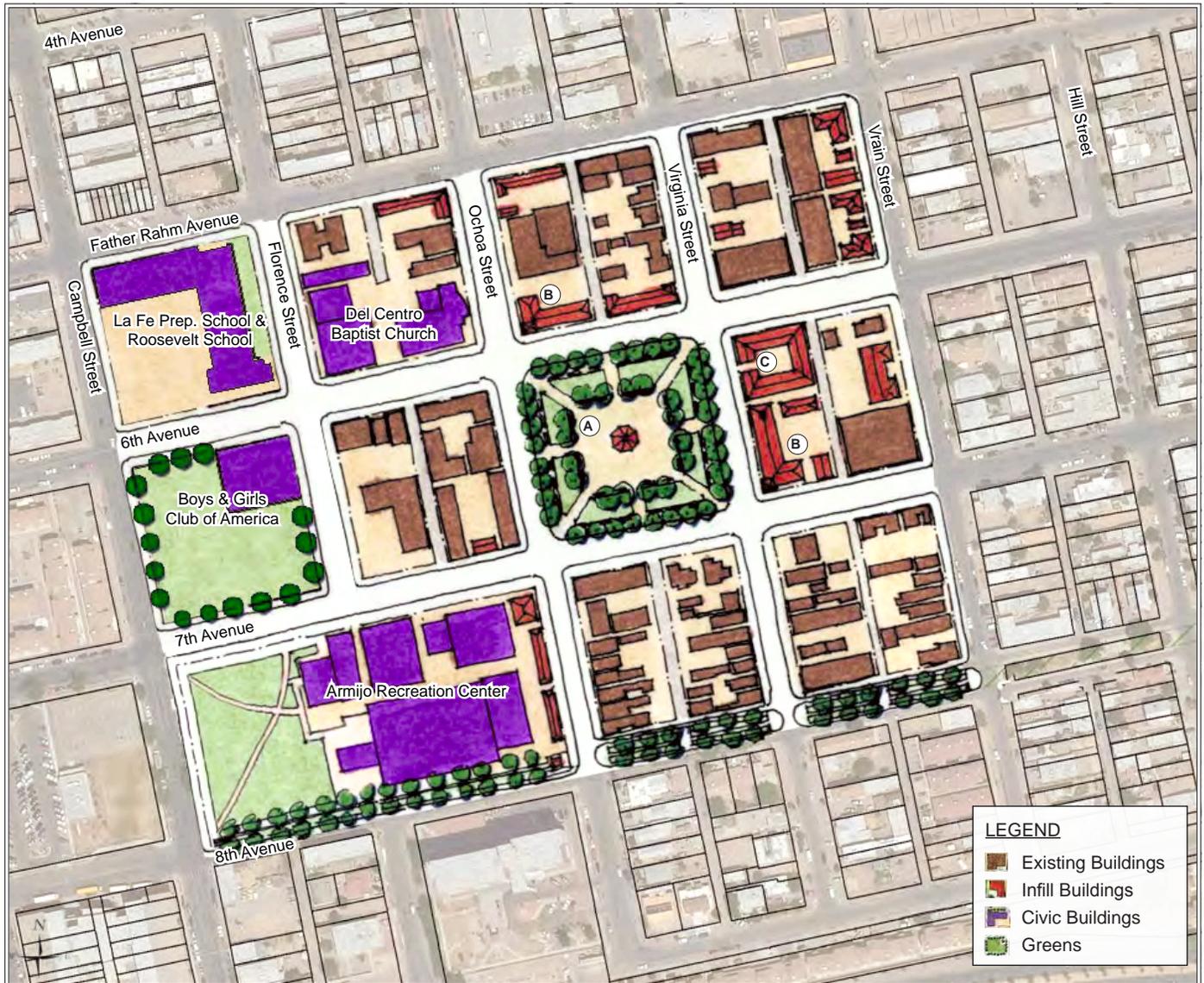
Illustrative plans for several key planning areas demonstrate important community design and planning strategies for the Central area of El Paso.



Illustrative Plans

- 1 Strategies for addressing the redevelopment of City Hall redevelopment, Union Plaza District improvements, Convention Center, and San Jacinto Plaza area are addressed in the Downtown element of this Comprehensive Plan.
- 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.

CENTRAL: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS
SEGUNDO BARRIO



General Recommendations

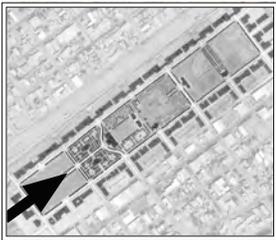
(A) New central green space (B) Infill development should be of a similar character and size as existing buildings. (C) Courtyard buildings provide additional housing.

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 right-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.

RAIL YARDS “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 will 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.

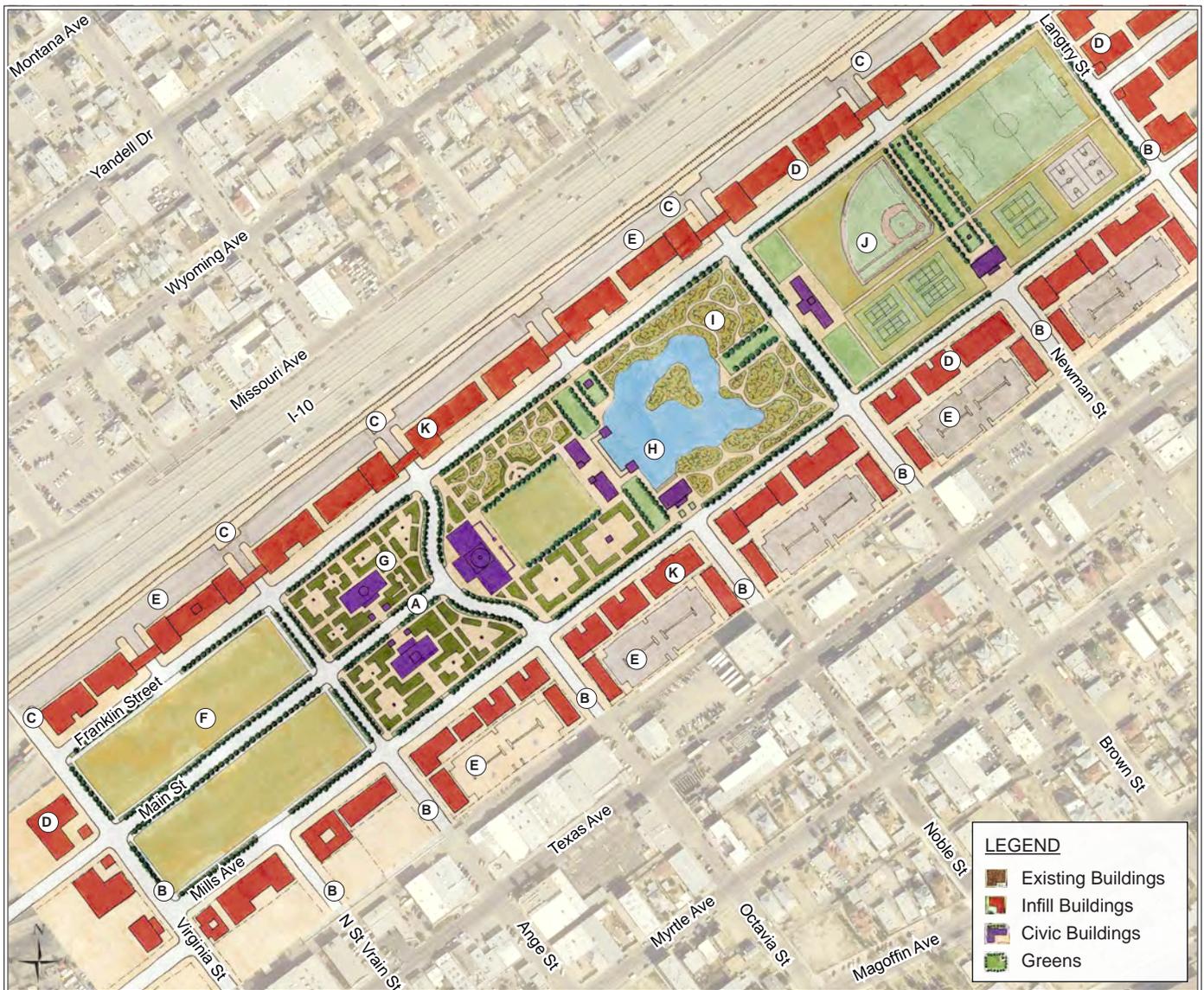
Strong Built Park Edges

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 highway.
- 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.

The park is large enough to accommodate a variety of spaces including:
- 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.

WESTSIDE: COMMUNITY CONCERNS

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.

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 detracton from 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.

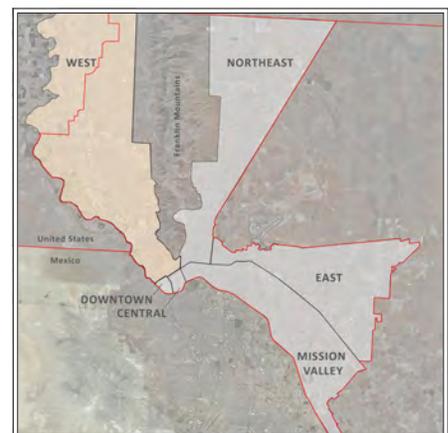
If housing is not allowed to cluster, and large lot zoning (such as 2.5 units per acre) is permitted, this will likely result in the subdivision of entire sites into private individual lots, leaving no meaningful open space or landscape being preserved. The unfortunate result would be the creation of 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

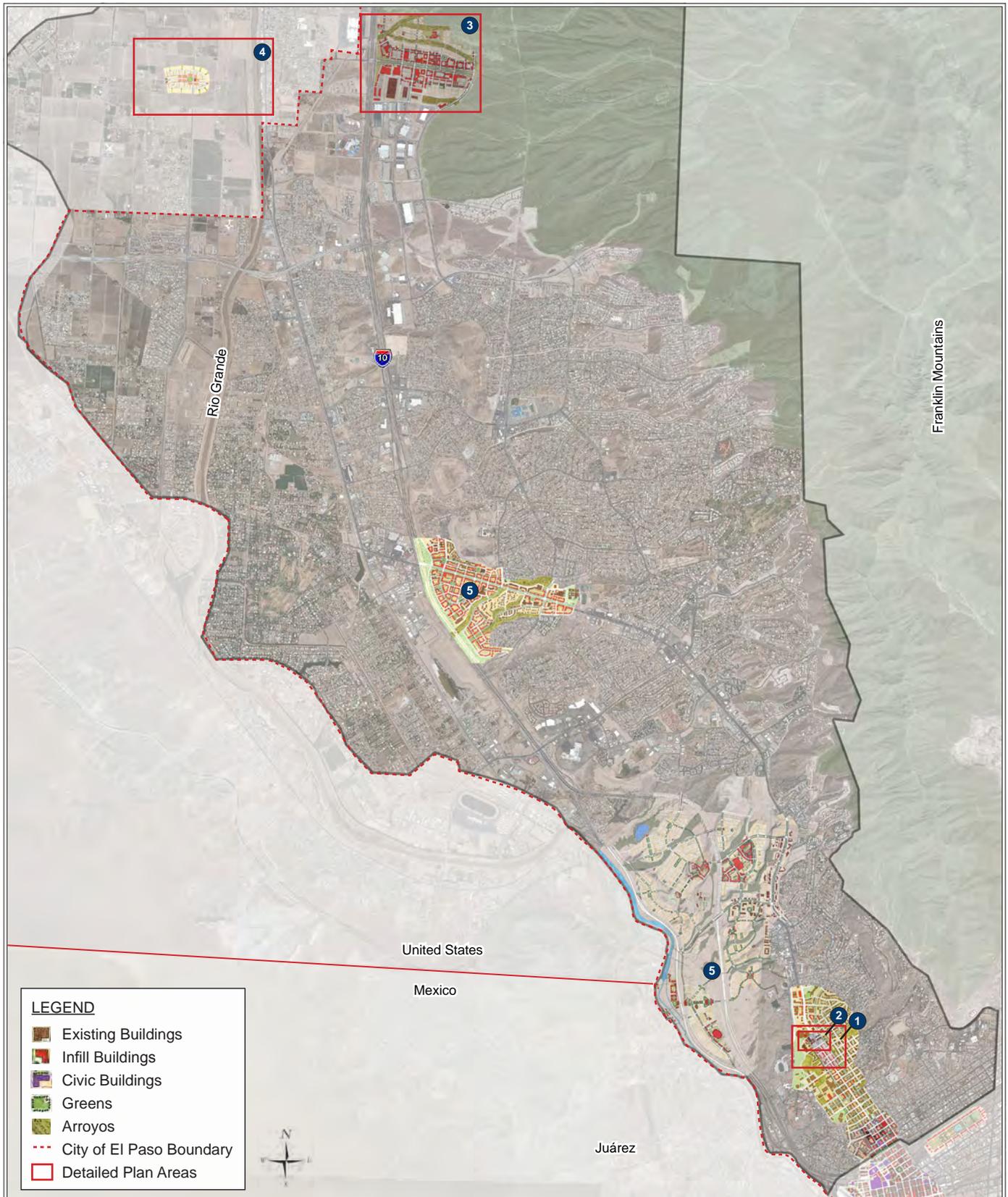
Another aspect that sets the valley apart from the rest of the City is its rural roads. Even as development comes to the valley, the scenic nature of the rural roads should remain. This includes narrow lanes, drainage swales instead of gutters, and trails instead of sidewalks. Mobility via horseback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

Illustrative Plans

- 1 Mesa Street: Re-balancing of the street for multiple modes of transportation along a walkable corridor.
- 2 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.
- 3 Transmountain Road: Preservation of the entrance to the Franklin Mountains while still permitting vested development rights and the ideal way development should address adjacent arroyos.
- 4 Upper Valley Development: Strategy for allowing development in the upper valley while preserving farmland, open space, and the rural character of the area.
- 5 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.

MESA STREET

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

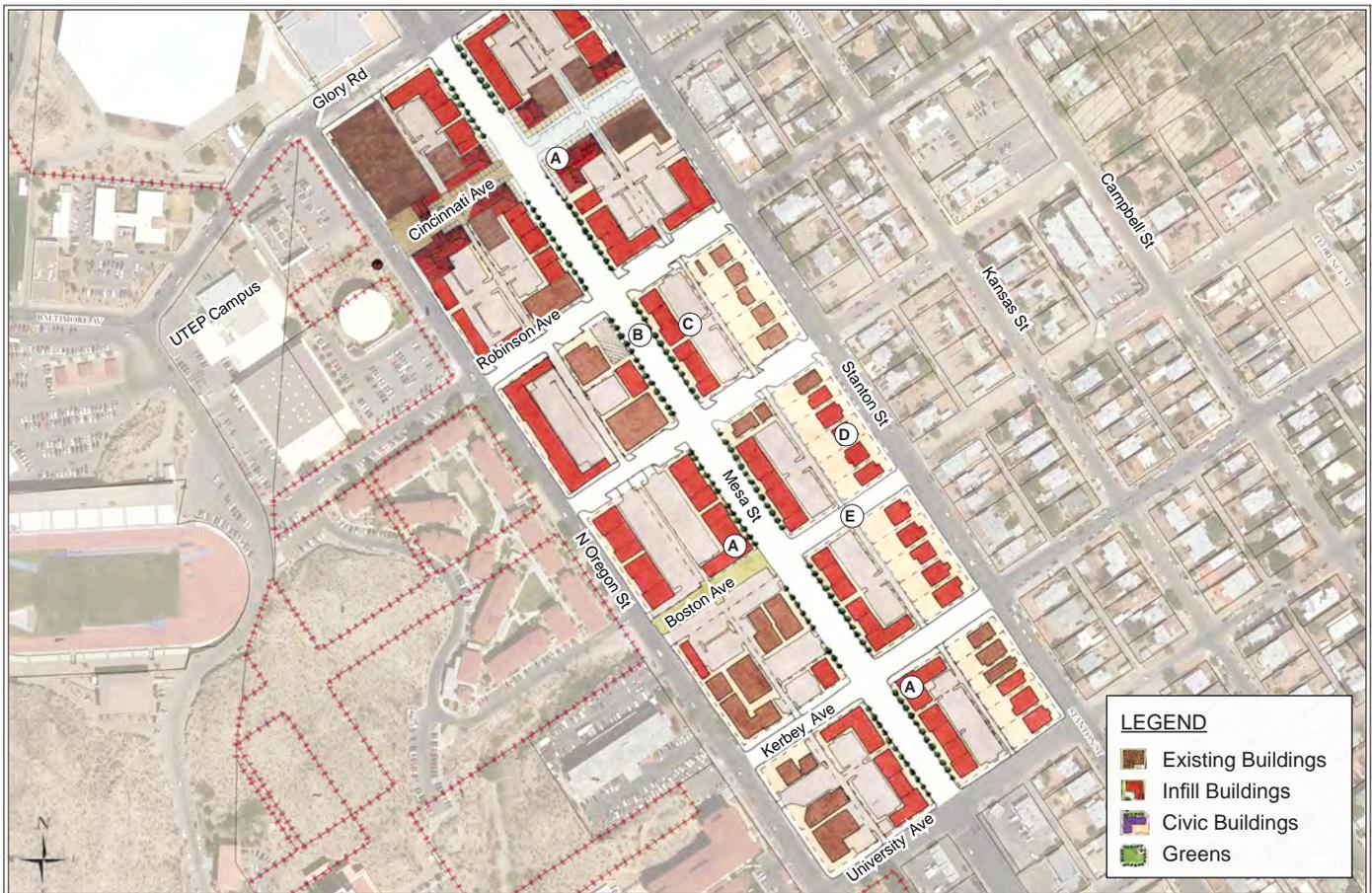


STEP 1: Mesa Street is converted to a multi-way boulevard. Street trees, a central median, slip lanes, bike lanes, and parallel parking are added, and bus stops are incorporated along the outer medians. Paved sidewalks and dignified lighting replace gravel landscaping along the edge of parking lots.



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 creates a physical buffer between pedestrians and moving vehicles. Outdoor dining and strolling become safer behind the on-street, vehicular buffer. Street-oriented architecture, with doors, windows, and balconies that face the street, creates a natural sense of surveillance.

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.

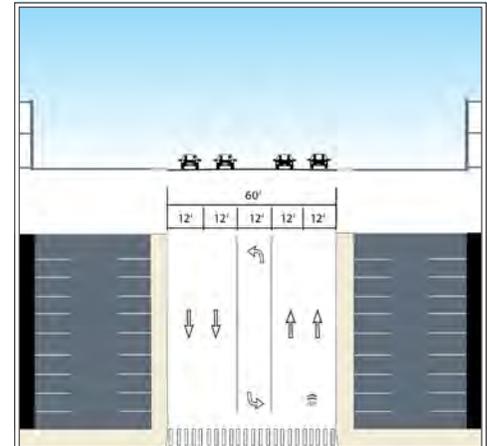
Mesa Street near UTEP – Proposed Improvements

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 - Existing Conditions



Mesa Street - Existing Street Section

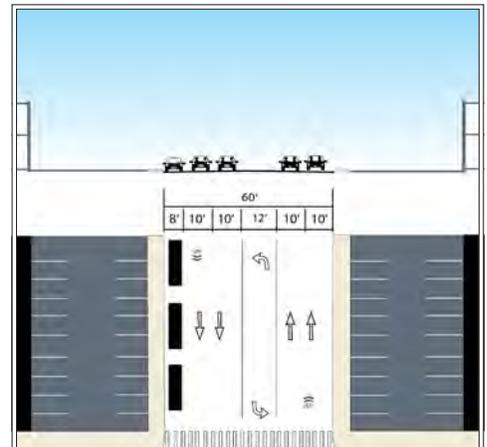
Mesa Street – Existing Conditions

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

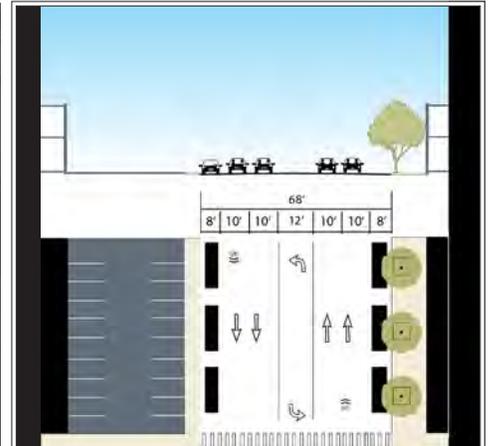
In Step I, on-street parking should be implemented on one side of the street, adjacent to the existing sidewalk. No private redevelopment is necessary to implement this improvement; it is accomplished simply by adjusting travel lane dimensions within the roadway from twelve feet to ten feet. The on-street 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

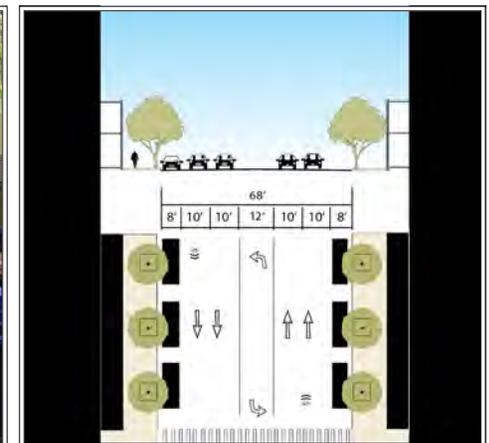
Mesa Street – Step 2

Building upon the foundation established in the first phase of improvements, future redevelopment along Mesa Street should include additional adjustments to the road’s 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 buffer the pedestrian realm from the vehicular travel lanes. New development should be required to have buildings located close to the street with 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

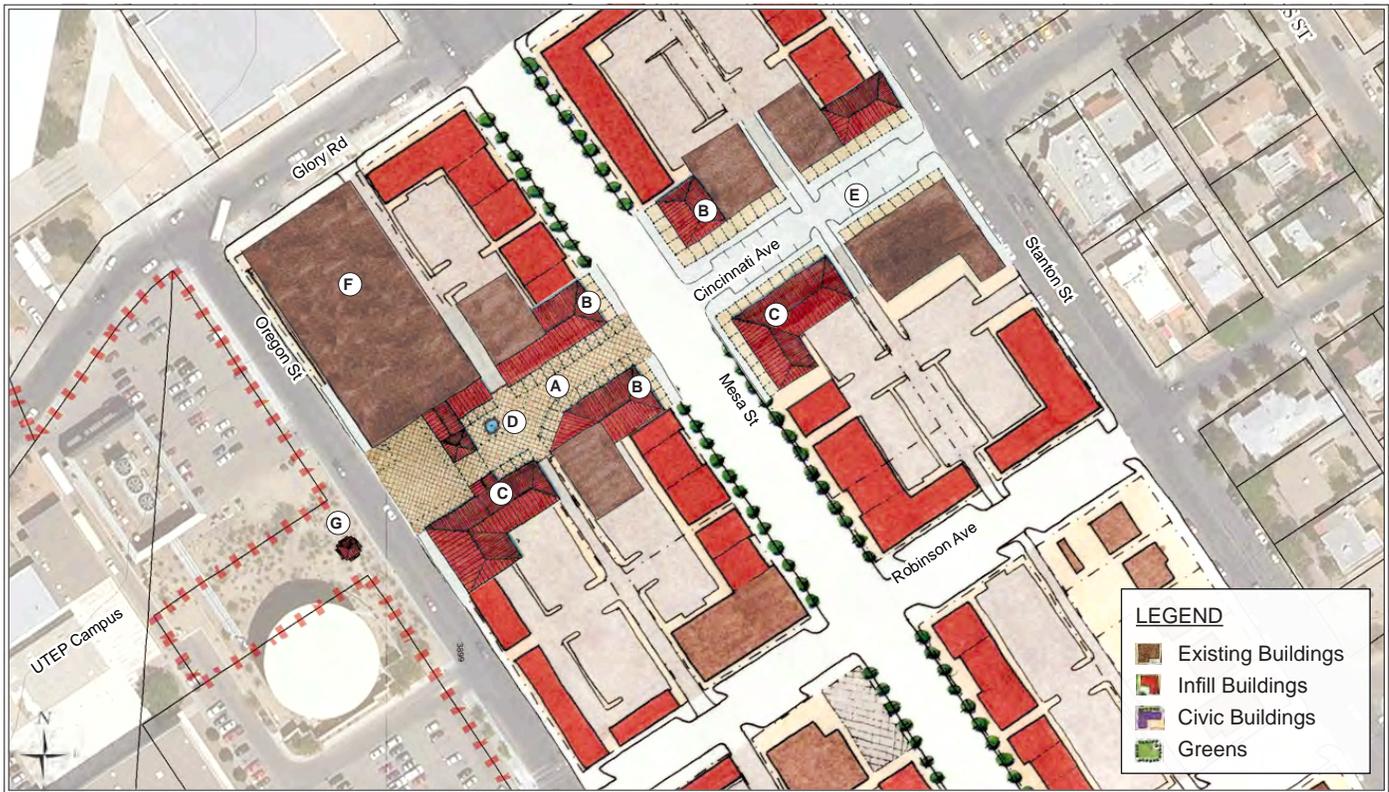
As additional redevelopment opportunities become available, new buildings should follow the pattern established in previous steps. Positioning buildings at the back of wide sidewalks on both sides of the street will change the spatial composition of Mesa Street. The effect will be a more intimate and 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 buildings 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

TRANSMOUNTAIN ROAD

Transmountain Road is an important corridor that links the West side 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

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 conventional suburban configuration, and would feature buildings pushed far from the road with dominant parking – the 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 highway street 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. (See pages 2.31 and 2.32)

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.

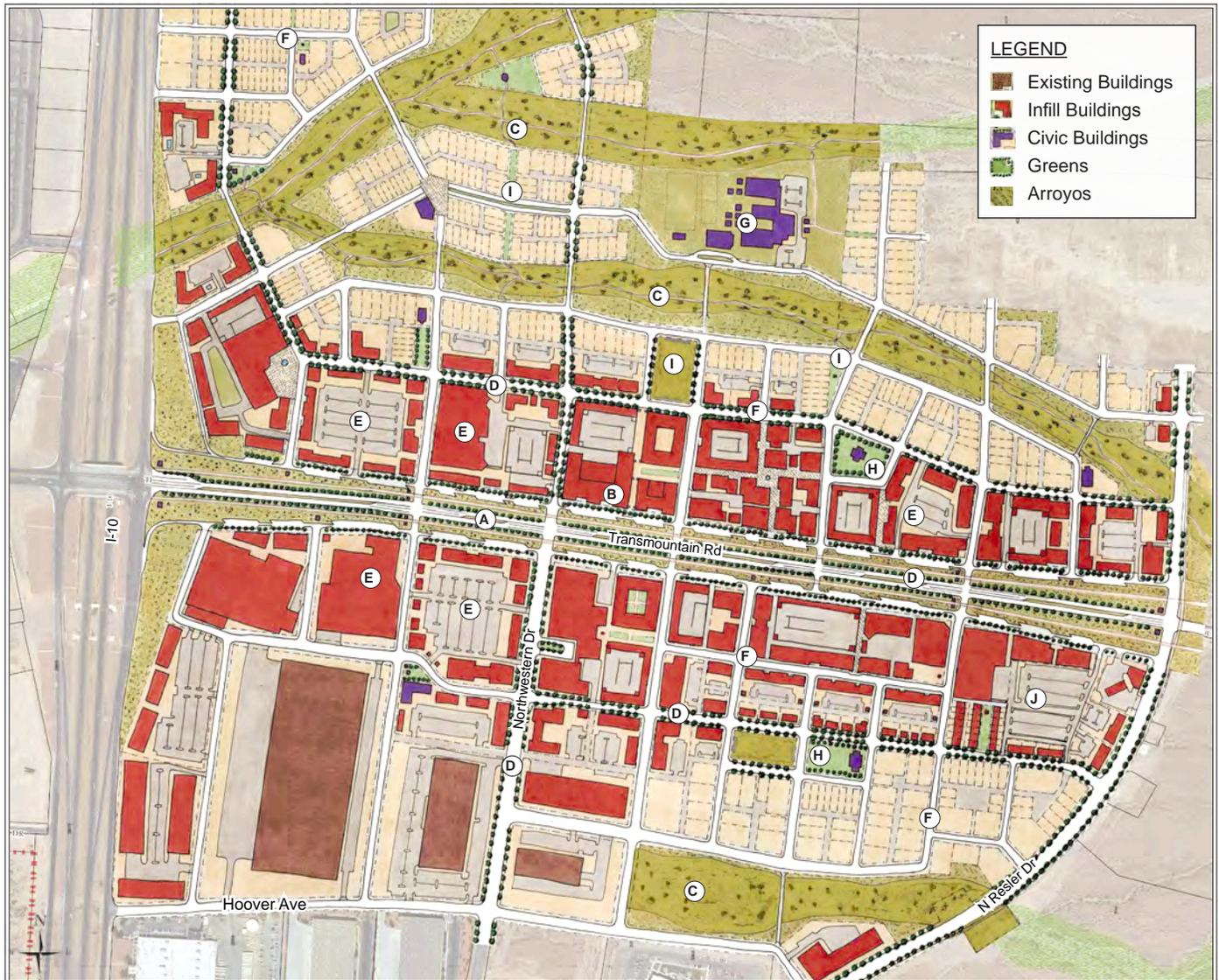
Accommodate Large-Format Retail in a Pedestrian-Scaled Environment

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

Where possible, 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.

TRANSMOUNTAIN ROAD



General Recommendations

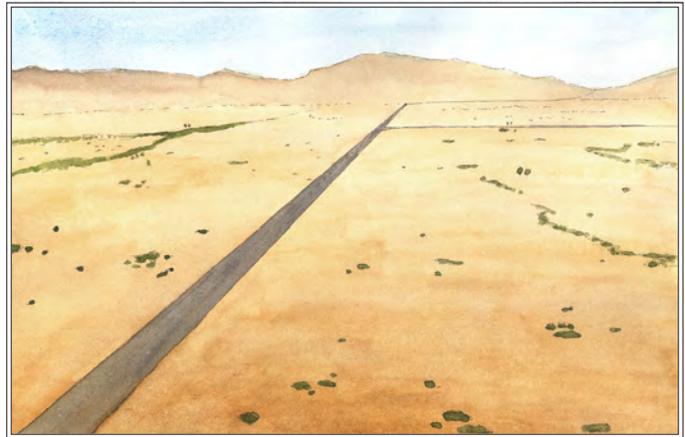
- A** Transmountain Road should become a multiway boulevard with landscaped medians and local access lanes.
- B** Street-oriented, varied-use buildings should front Transmountain Road, creating a pedestrian-oriented environment.
- C** Arroyos should be preserved as open space amenities.
- D** Street 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.

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, nor would anyone 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 – there



Transmountain Road – existing conditions

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

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 low-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 adds a buffer between pedestrians and traffic and 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

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. The natural feature type varies in size, depth, and ecological importance from case to case. The City has no official map of arroyos to protect. Another question that arises is whether the arroyo only be counted as park space if it is preserved rim to rim only, 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 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 that 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 on 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.

UPPER VALLEY DEVELOPMENT

Farmland Preservation

Though 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 development rights on a portion of a site while preserving the rest of the land for open space or farmland.



Upper Valley — Existing Conditions



Upper Valley Development — Conventional Development

LEGEND

- Existing Buildings
- Infill Buildings
- Civic Buildings
- Greens
- Arroyos

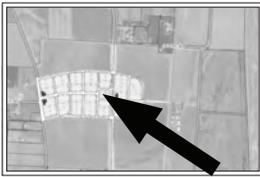
General Recommendations

- 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.

One potential strategy for the preservation of land is 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.

Examples such as Serenbe, outside of Atlanta, Georgia and Hampstead, in Montgomery, Alabama demonstrate how a compact, walkable neighborhood 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.

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 controlled and managed by the Public Service Board (PSB). The northeast portion of the City is also where many El Paso residents get their drinking water. The PSB managed 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 PSB managed lands are currently being planned utilizing an assortment of mixed-density zones. Although this is a form of mixed-use zoning, it does not go far enough 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

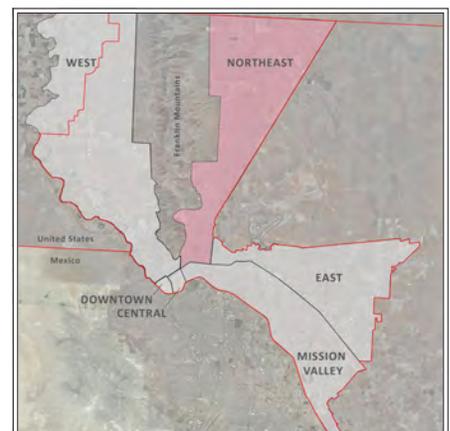
Northgate Mall is slated to be the location of the Rapid Transit System (RTS) terminus along the Dyer Corridor. As such, the property should be redeveloped in coordination with the construction of the RTS transfer station. Northgate Mall is uniquely located along Dyer Street, adjacent to a high school 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 has the ability 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

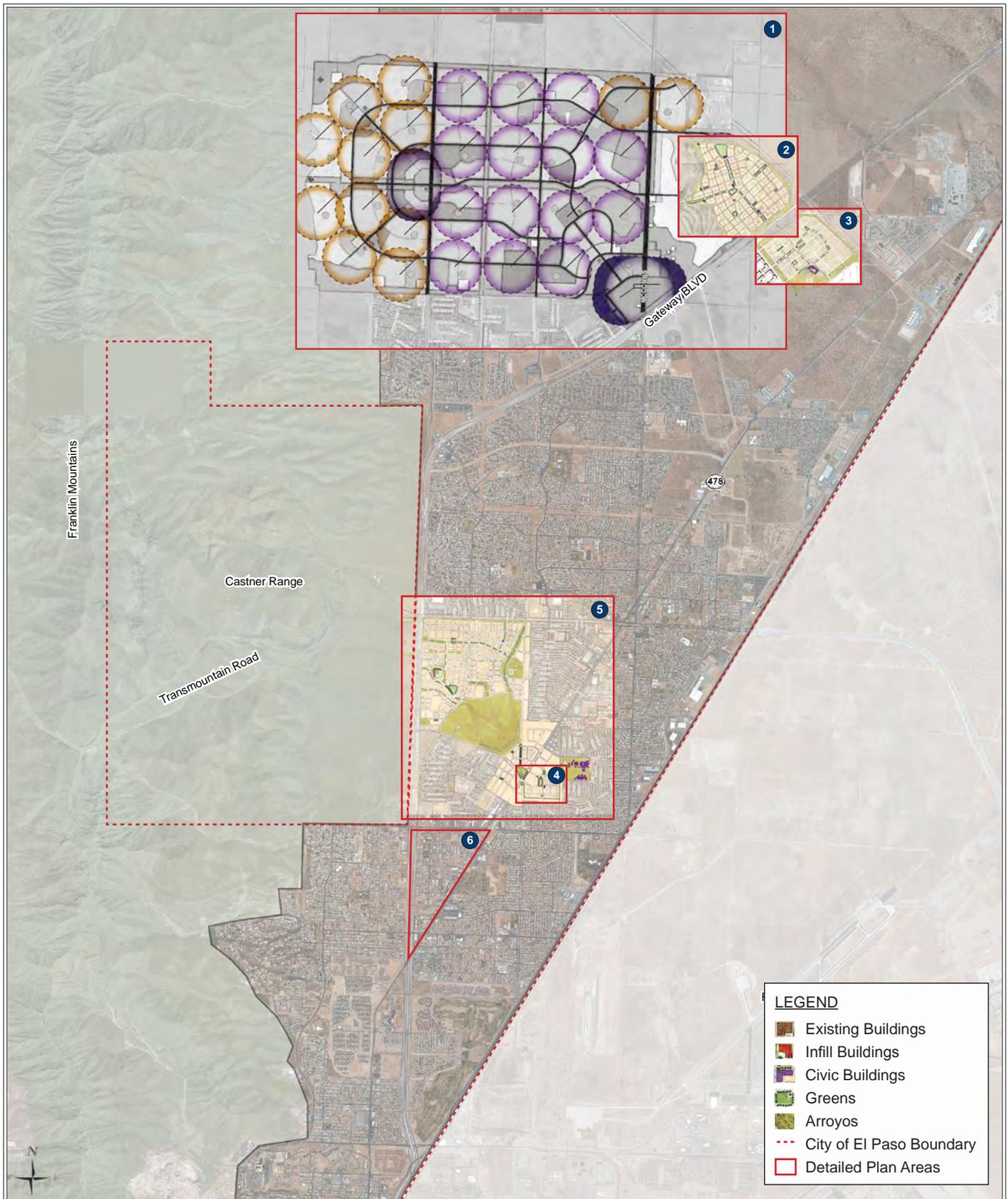
Although El Paso has largely grown in a contiguous manner, as new areas developed some older ones have become neglected and partially abandoned. These areas often feel unsafe and undesirable. Reinvesting in these areas will take time, but they can be revitalized and be made vital again. In order to limit 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

Illustrative Plans

- 1 PSB Managed Lands: Demonstrates the application of the SmartCode on large tracts of land by using community types to create diverse neighborhoods.
- 2 PSB Managed Lands – Active Senior Community: Demonstrates the application of SmartCode regulations at the level of multiple neighborhoods.
- 3 PSB Managed Lands – Desert Dunes: 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: Infilling development in skipped over parcels within developed portions of the City.
- 6 Angels Triangle: 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.

PSB MANAGED LANDS

El Paso is expecting to grow into the PSB managed lands in the northeast quadrant of the City. Although some residents question the sustainability of building on the PSB managed lands, current plans and zoning exist for these areas, and responsible plans for building in the future should be in place. Plans for this area have previously been begun 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 of PSB managed lands 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.

RCD's 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 example plan of an active senior community shown on page 2.42 has two RCD's. The first is located along the visible frontage where the property is adjacent to Highway 54 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 highway 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 PSB managed lands.

The placement of TND's and CLD's depends on the size and type of neighborhood to be developed. CLD's require more undeveloped land and should be utilized in locations that have large preserved areas. They should be located on the PSB managed lands primarily as they approach 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 TND's.

Place Schools at the Edges of Walkable Neighborhoods

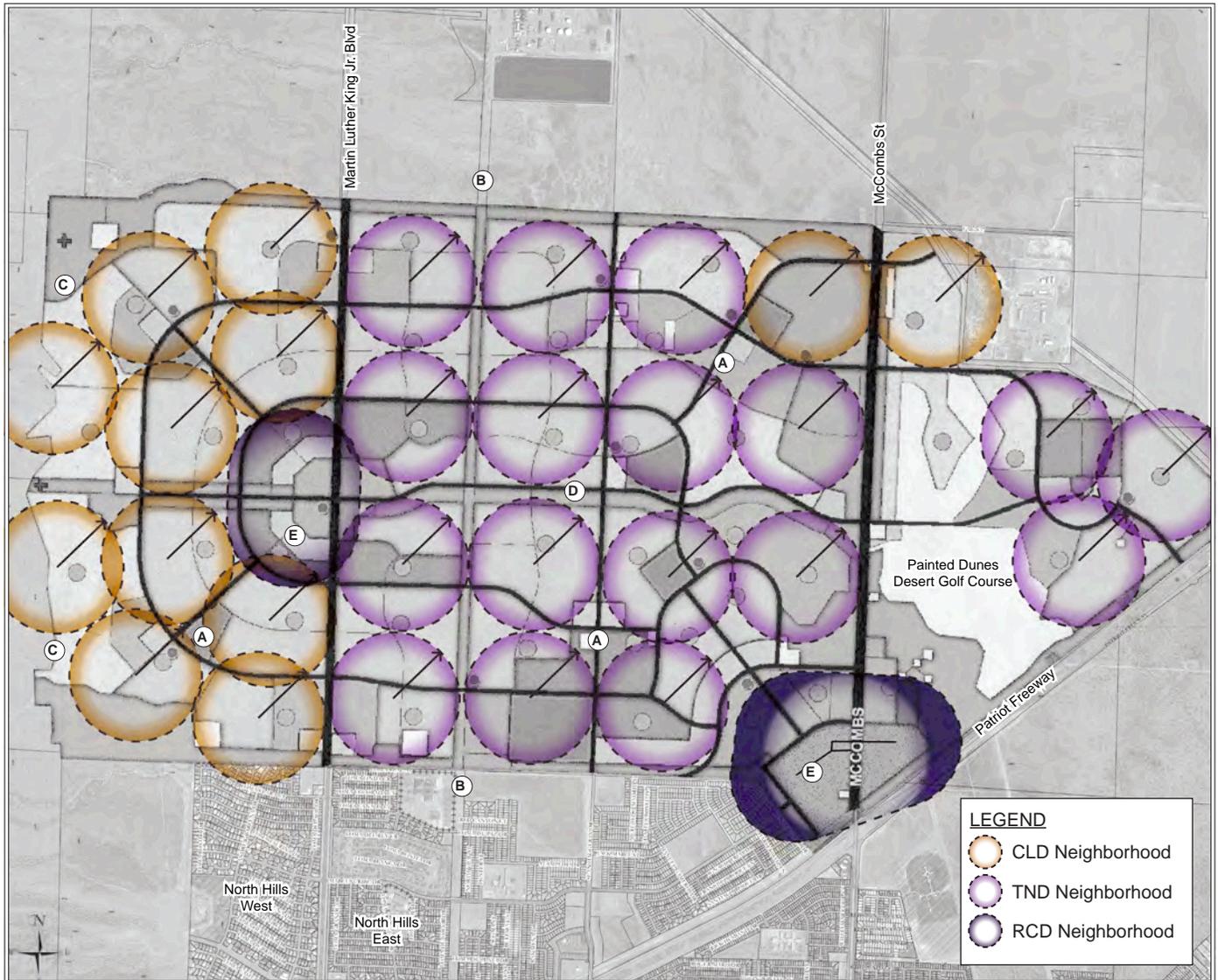
Schools and their play fields should be located where multiple neighborhoods meet. Ideally, the schools would be utilized by the surrounding neighborhoods. By locating schools within walking or biking distance of several neighborhoods, more children are able to get to school by their own accord, reducing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

Organize the Community With Edge Roads

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

In the example plan of an active senior community shown on page 2.42, 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.

PSB MANAGED LANDS



SmartCode Community Types placed over an existing master plan for the PSB managed lands 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 passersby.

PSB MANAGED LANDS – EXAMPLE OF AN ACTIVE SENIOR COMMUNITY



General Recommendations

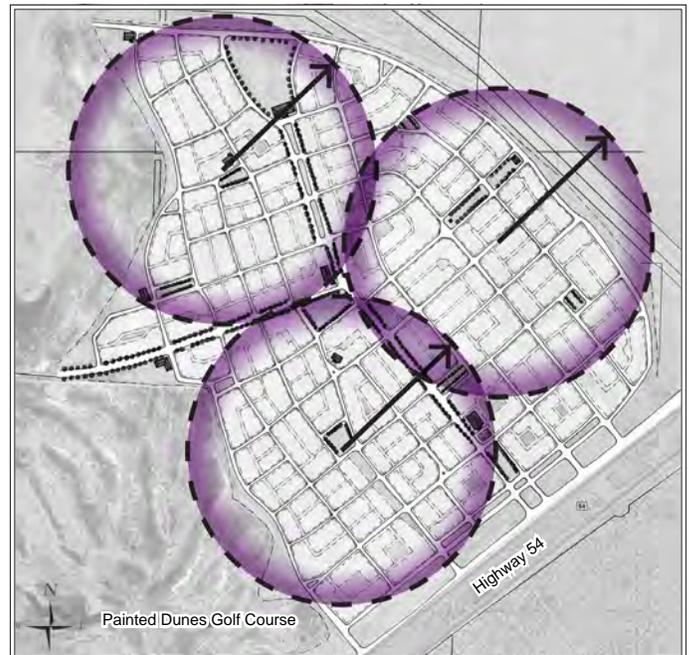
- Ⓐ A frontage road parallel to Patriot Freeway (Highway 54) creates opportunities for on street parking and a more domesticated address for residential on-street units to front toward.
- Ⓑ Residential units should face towards greens and the edges of neighborhoods.
- Ⓒ A large green should create a 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.

PSB MANAGED LANDS – ACTIVE SENIOR COMMUNITY

Designing at the Level of Multiple Neighborhoods

SmartCode community types should be used to organize large amounts of land, such as the PSB managed lands, 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 the Painted Dunes Desert Golf Course and Highway 54 are slated to become an active senior community and 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.

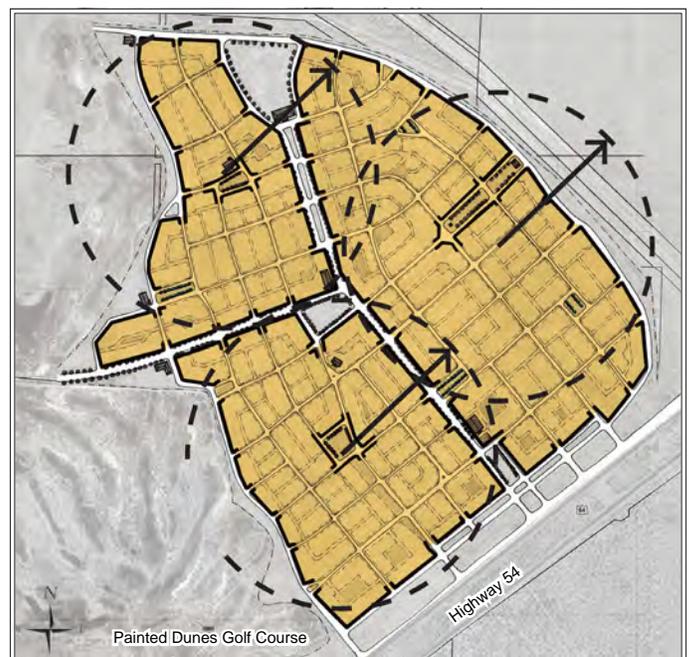


Community Types

LEGEND
 TND Neighborhood

Neighborhoods

This example active senior community on PSB managed lands is to be located between the Painted Dunes Desert Golf Course and Highway 54. 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

PSB MANAGED LANDS - ACTIVE SENIOR COMMUNITY

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 2.45).



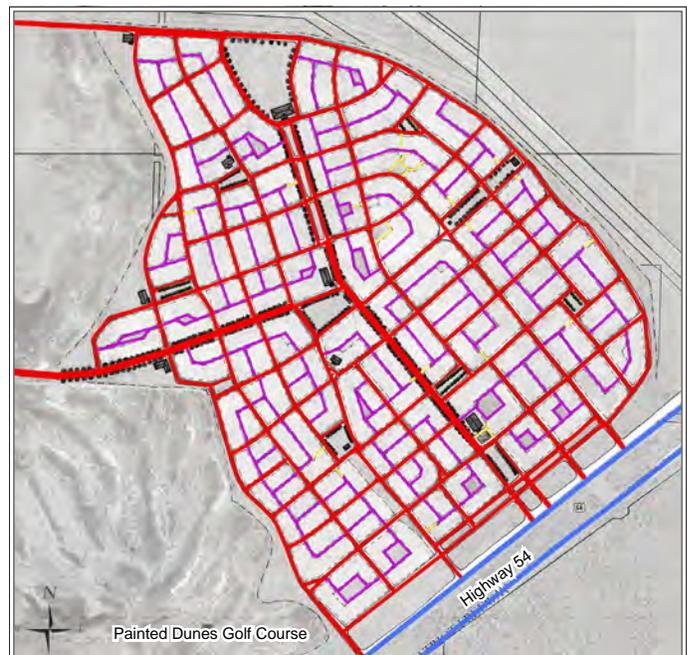
Street Network

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 of 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

PSB MANAGED LANDS - ACTIVE SENIOR COMMUNITY

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 Highway 54. 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 Highway 54, 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

LEGEND

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

PSB MANAGED LANDS - DESERT DUNES COMMUNITY

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.



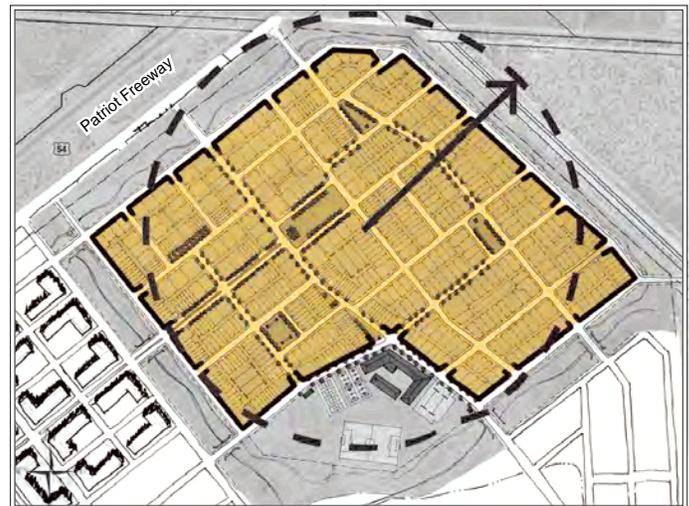
General Recommendations

- 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.

PSB MANAGED LANDS - DESERT DUNES COMMUNITY

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 up 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.

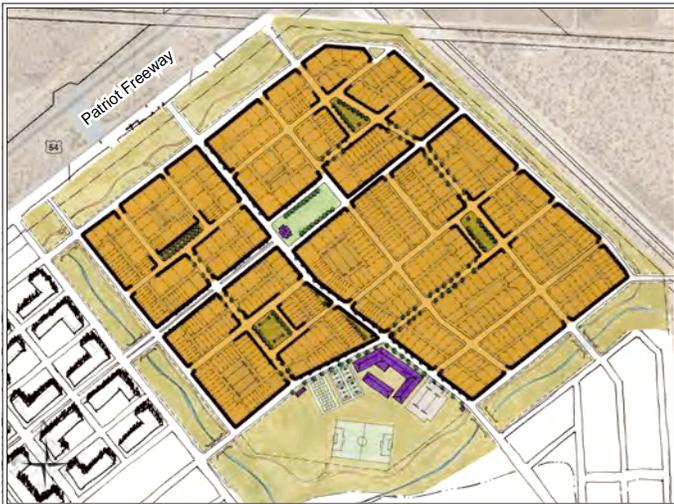


Civic Spaces

LEGEND

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

PSB MANAGED LANDS - DESERT DUNES COMMUNITY



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

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.



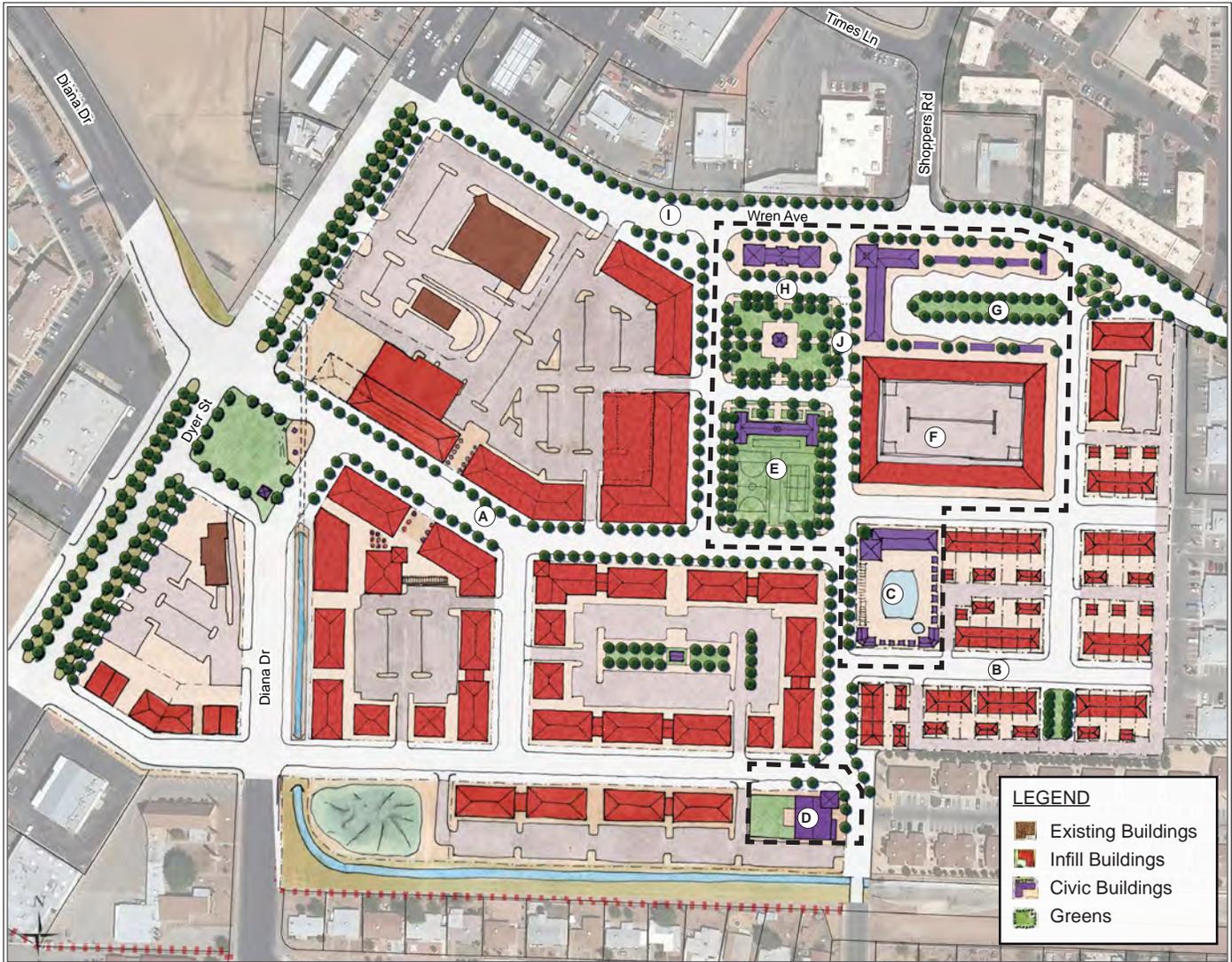
A complete, walkable neighborhood with a variety of building types and spaces would form an important center for the surrounding community.



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.



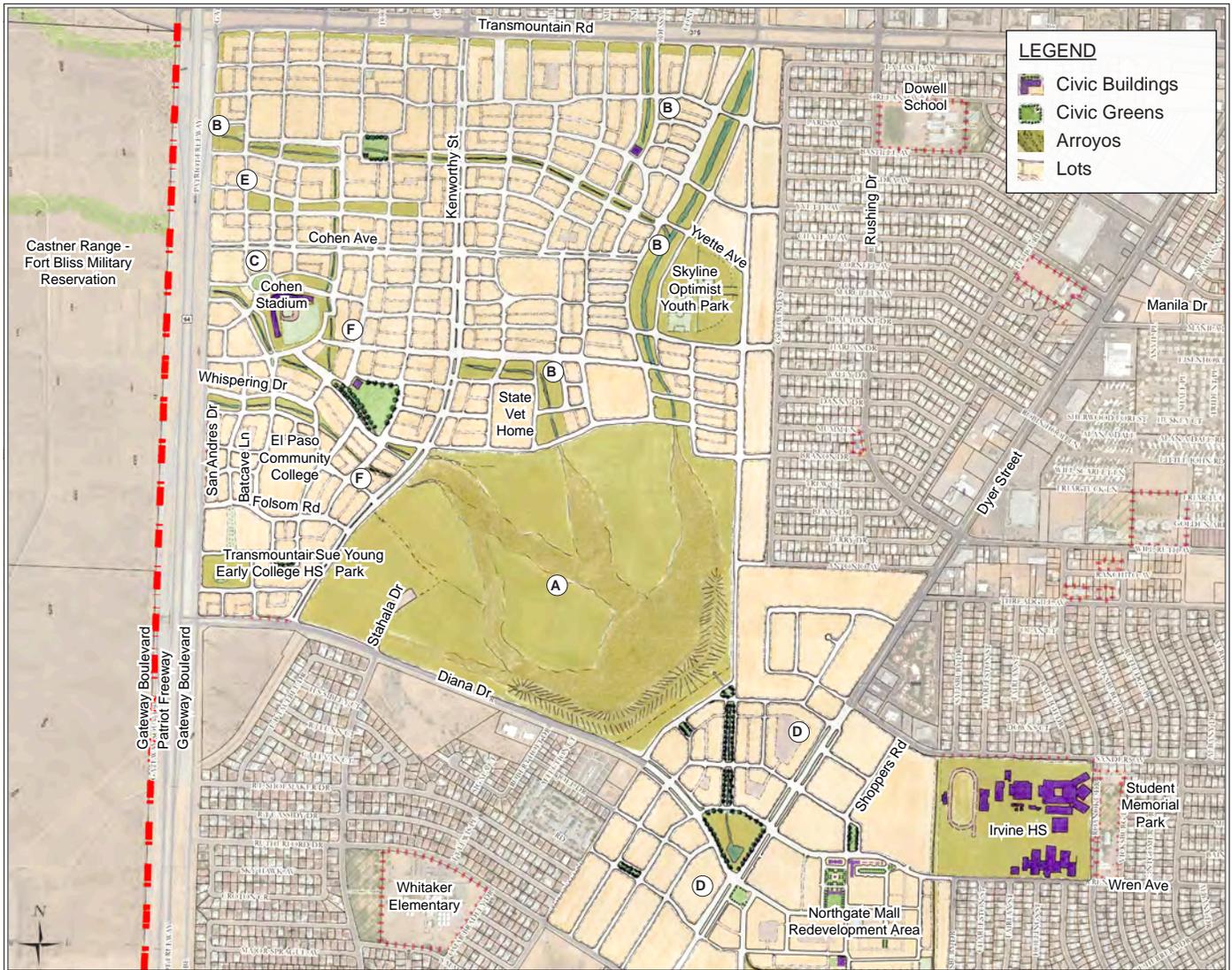
General Recommendations

- 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 farmer's 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. This leads 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

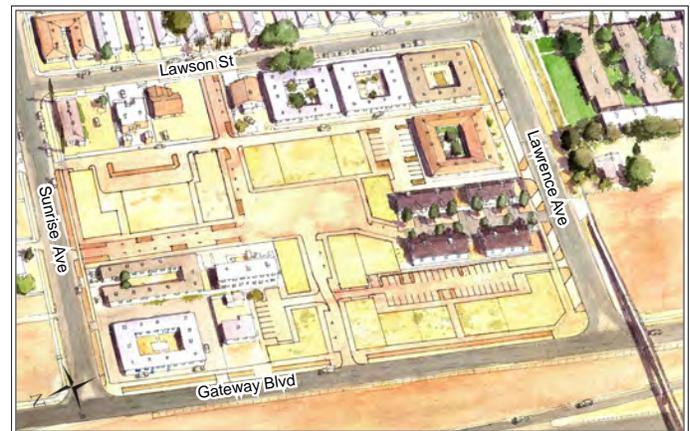
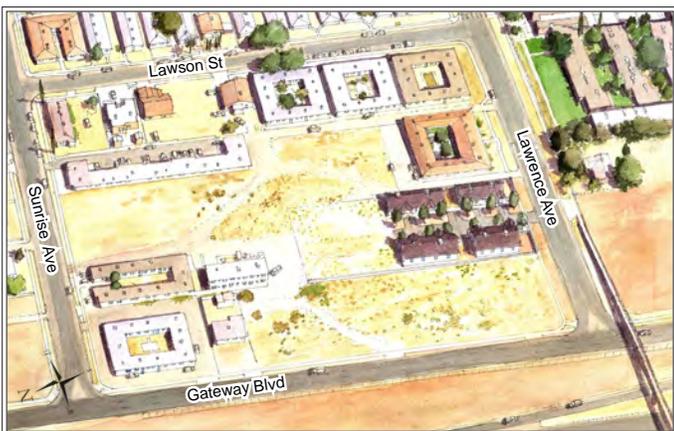
New courtyard buildings should not only provide transparency and loggias inward, but also offer transparency and fenestration outward, toward the public and semi-public realms. Accessory dwelling units and rear façades provide natural surveillance to alleys and rear parking courts. Mixed-use commercial 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

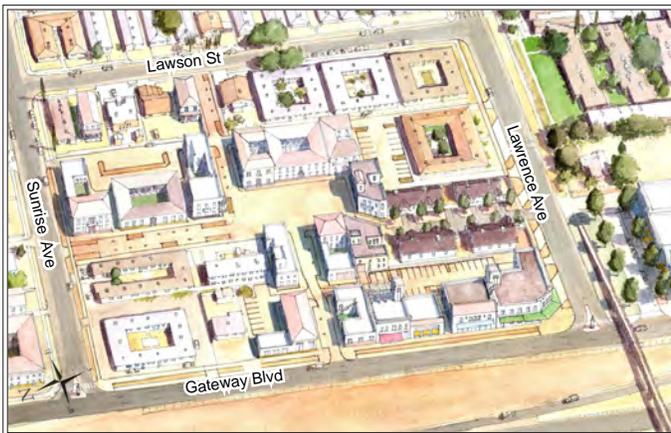
Planting courtyards, paseos, and placitas with desert-adapted or edible plants can create new habitat and enable the community to achieve a degree of self-sufficiency. Retrofitting existing buildings and designing new buildings to harness the sun's power can reduce demand for costly, non-renewable energy.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

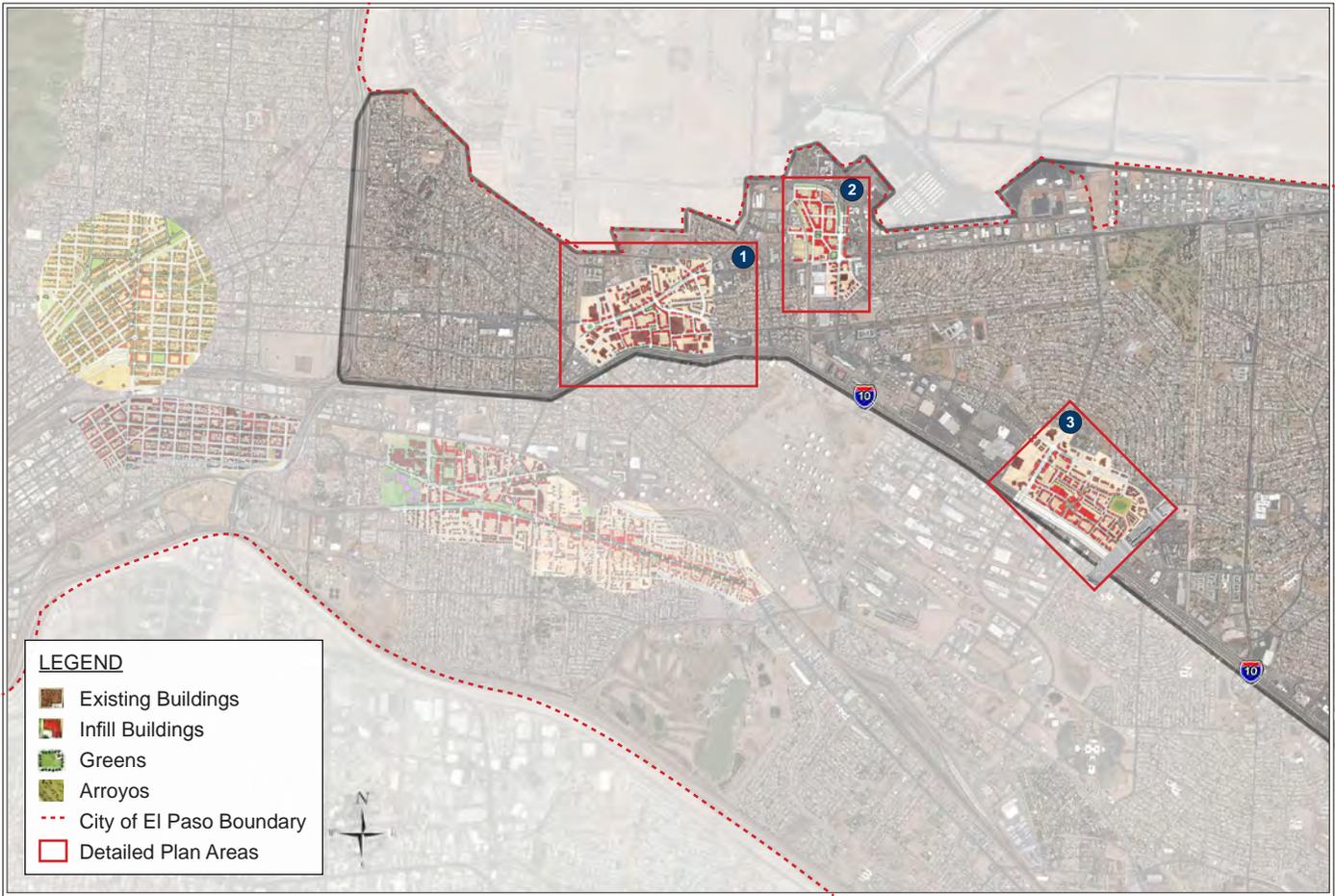


CPTED Solutions, Step 3: Desert adapted trees and plants are installed on existing and proposed planting strips and swales. They are spaced wide enough and staggered in order to maintain surveillance "line of sight" across public spaces.



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

EASTSIDE: COMMUNITY CONCERNS



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

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.

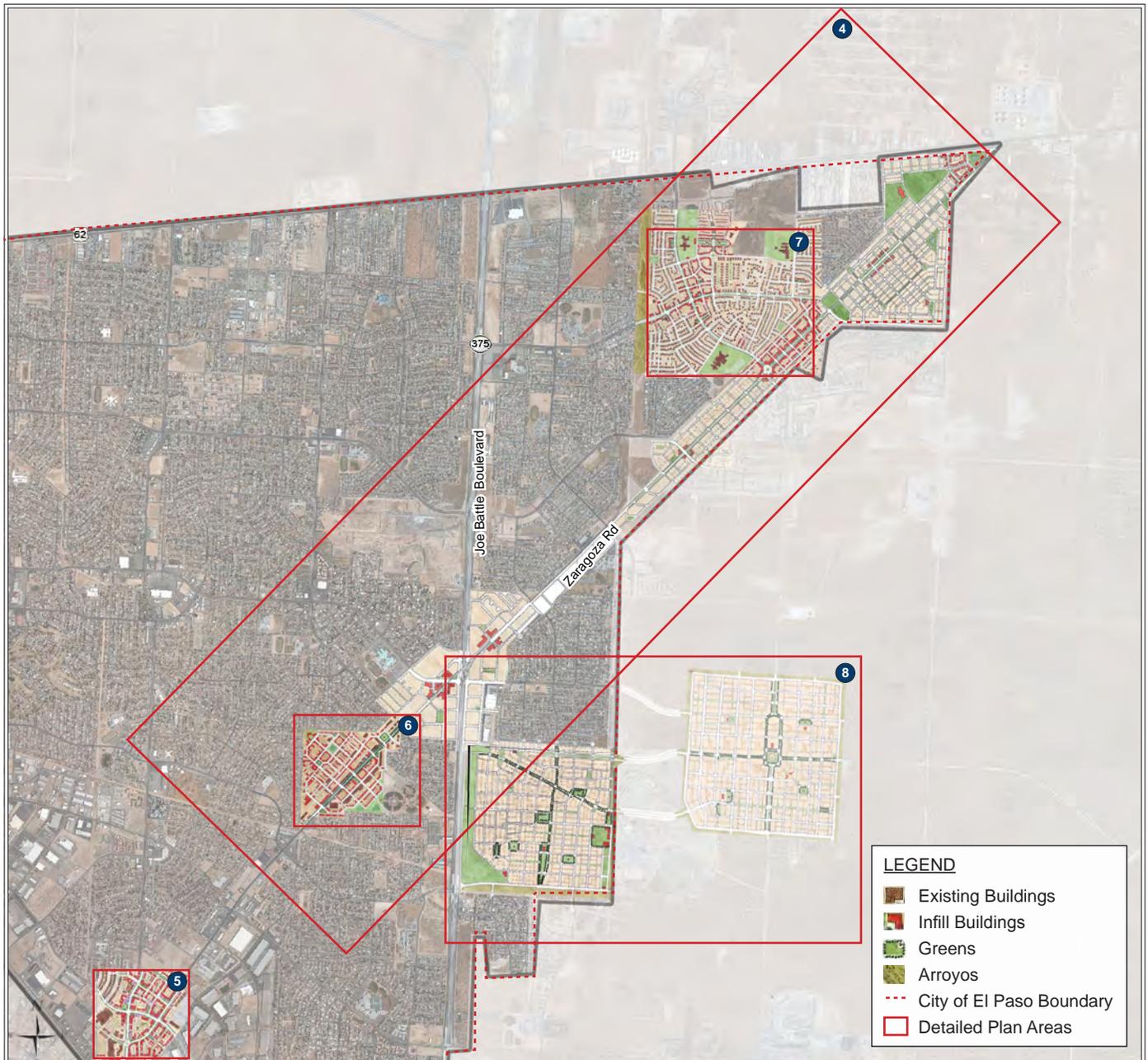
Commercial Strips

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

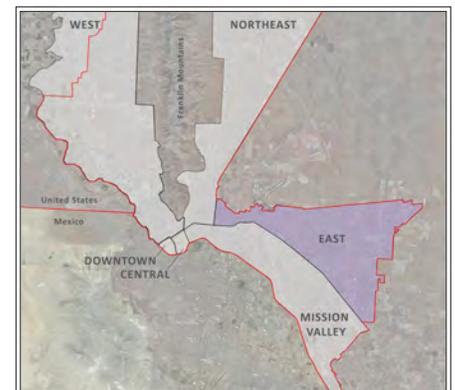
Major streets like Viscount Boulevard and Montwood Drive have deep potholes which make navigating the area difficult. Safety striping along the street has worn off. Sidewalks are often too narrow for pedestrians and many of the sidewalk crossings do not have ramps for wheel chairs. Periodic street maintenance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

EASTSIDE: STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



Illustrative Plans

- 1 Bassett Place Mall: Redevelopment of a shopping mall into a mixed-use center.
- 2 Airport: Sample design for a new hotel and entertainment area for visitors by the airport.
- 3 Hawkins Boulevard and Gateway Boulevard: Example of densifying and diversifying an existing urban area.
- 4 Zaragoza Corridor: Making a multiway boulevard on an arterial street.
- 5 Zaragoza Road and I-10: Strategies for creating coherent blocks, streets, and a sense of place out of large commercial blocks.
- 6 Zaraplex: Reconfiguring a strip mall and unlocking potential on isolated properties.
- 7 Montana Corridor Transfer Center: Sample design for the end of the Montana Corridor RTS Line.
- 8 East of Zaragoza: Demonstration of controlling growth outside the eastern edge by utilizing the SmartCode principles.



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

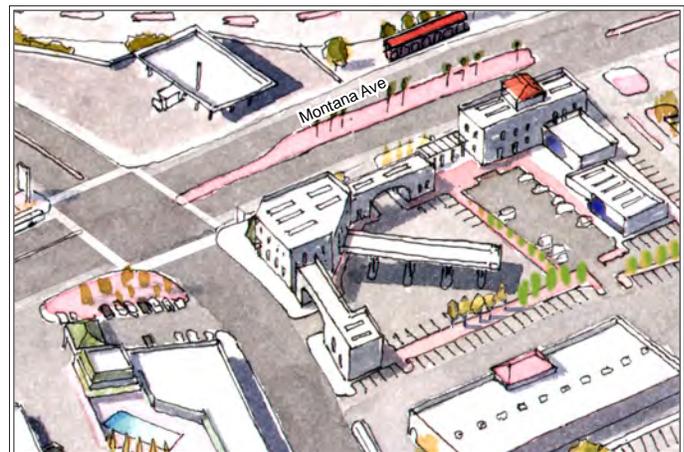
Currently, this section of Montana Avenue seems to offer only auto-oriented retail. Retail diversity can be increased by introducing smaller footprint buildings, pedestrian-friendly buildings that are visitable by customers arriving by car and by foot, and by reducing building setbacks. Reducing setbacks 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 contain wide curb cuts, often extending the length of the lot. This contains all auto-zone 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.

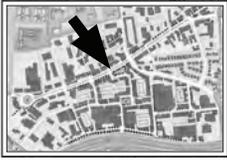
BASSETT PLACE MALL



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.



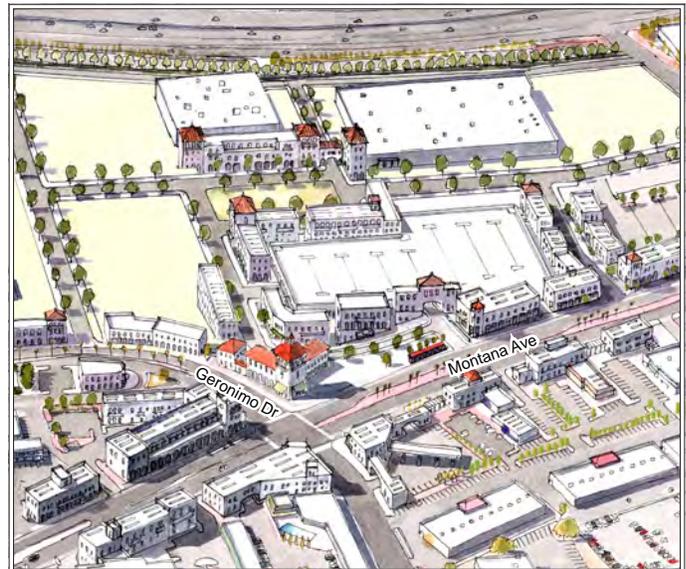
Existing Conditions Bassett Place Mall is visible from I-10. The enclosed mall is surrounded by acres of parking. Parcels along Montana Avenue are developed in an auto-oriented manner.



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 2.60.

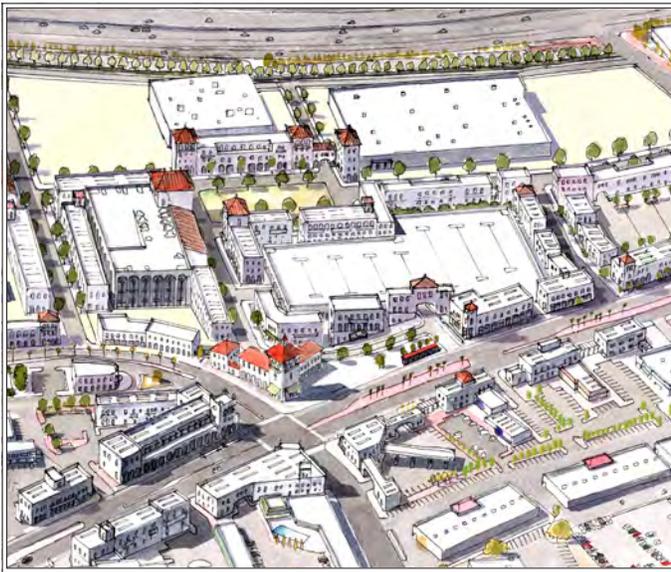


Step 2: Infill and redevelopment build out the street wall along Montana Avenue. Along with the redevelopment opportunities on the other three corners, a focal building at the bus stop begins to create the a complete sense of place by placing street oriented development on all sides of the intersection.

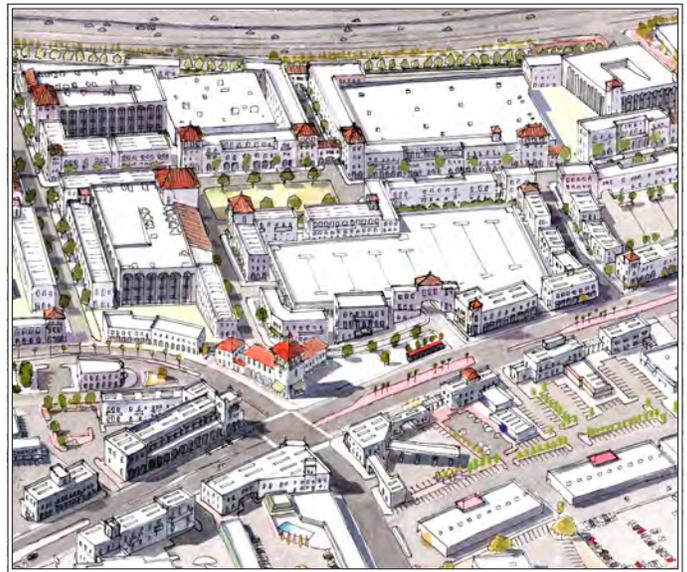


Step 3: Streets and public spaces are created on the mall site. Buildings fill in around the parking deck and portions of the mall are removed to create mixed-use buildings. Anchor stores may be kept and built around as mid-block areas. Topographical changes allow for a deck of parking to be built without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

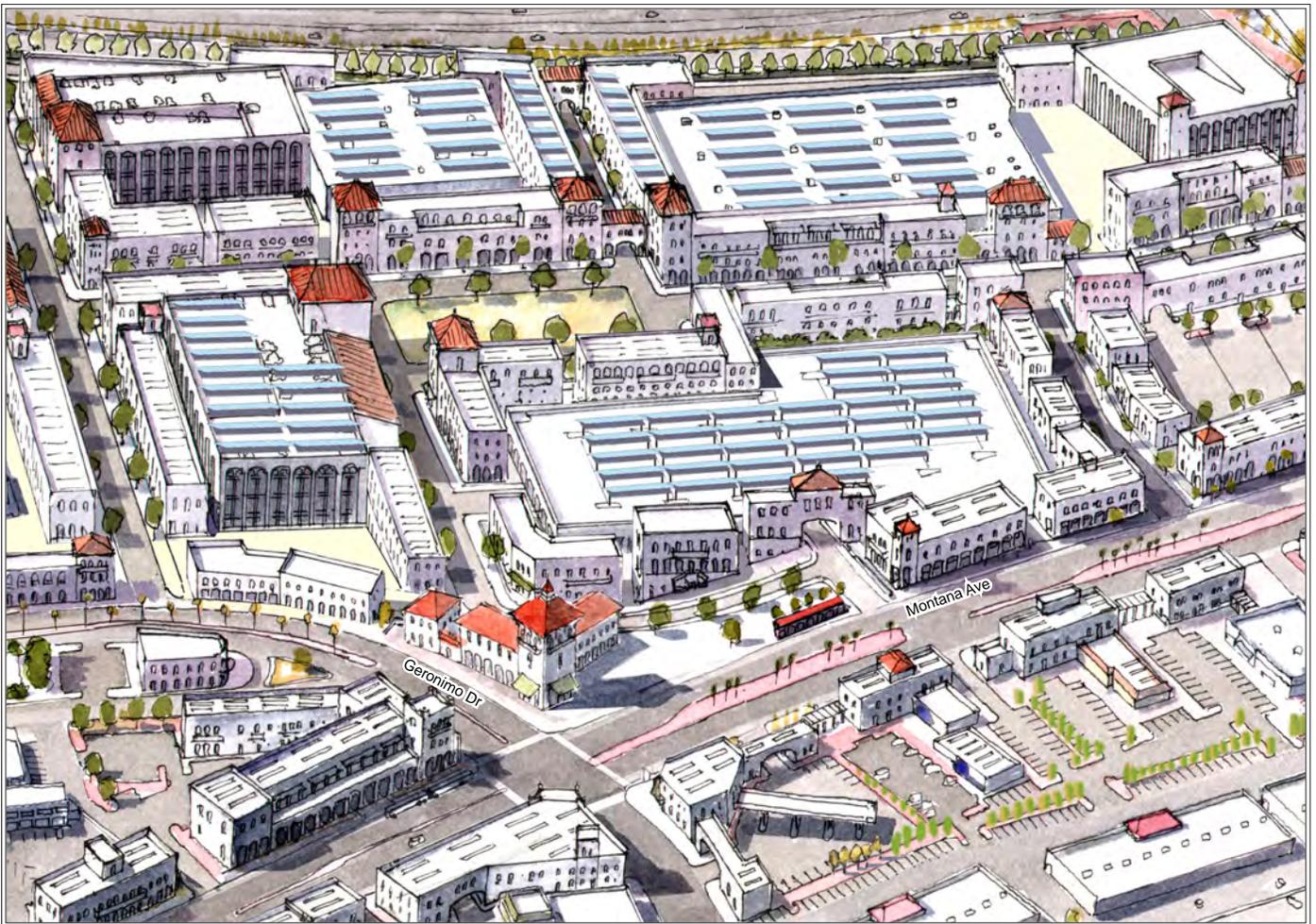
BASSETT PLACE MALL



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 street-oriented buildings developing while auto-dependent, drive-thru buildings remain open.



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 and 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.

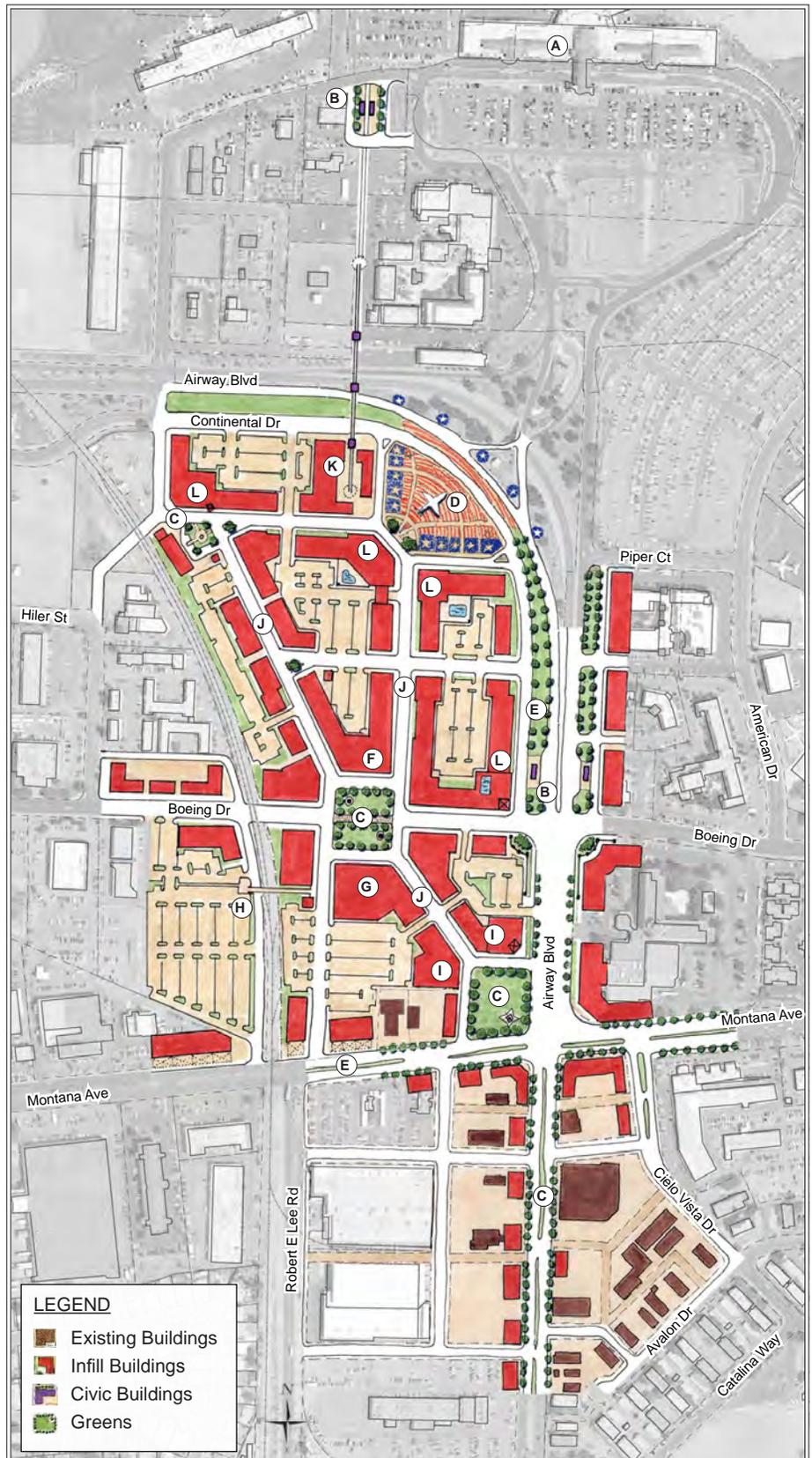
AIRPORT

Visitors arrive and leave from the El Paso International Airport everyday. As such 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 and has activities for visitors and residents alike.

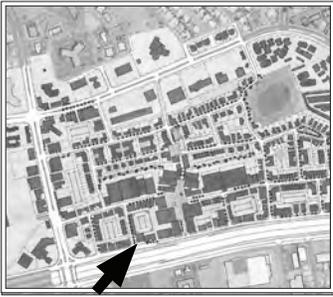
The RTS transportation system will connect to the airport making it possible to visit much of El Paso without renting a car.

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 off of 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.



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

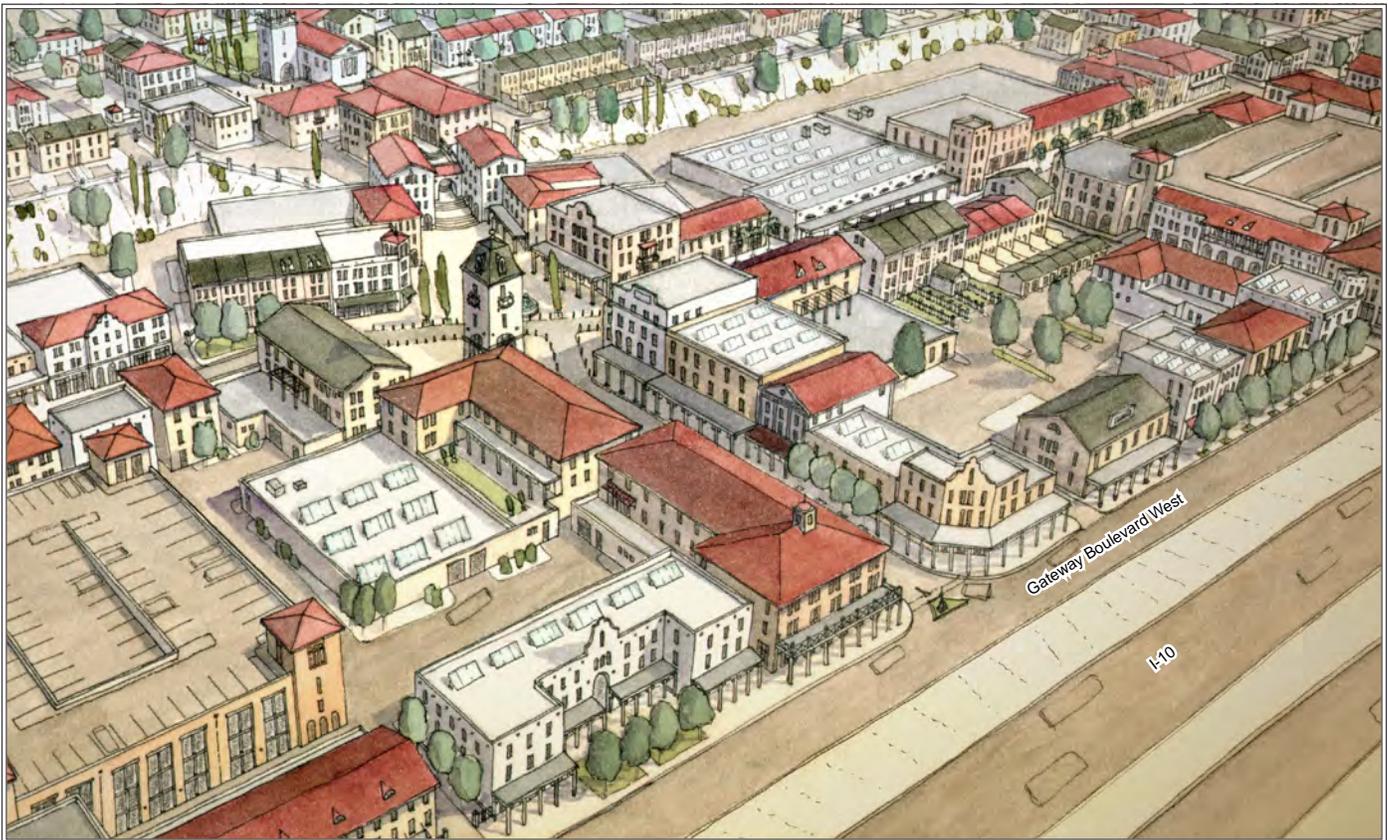
The key to creating a successful mixed-use neighborhood is to carefully phase development in a way that creates complete and active spaces each step of the way. While it makes sense to lay out many of the blocks and streets (along with infrastructure) early on, structures can be developed gradually. 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.

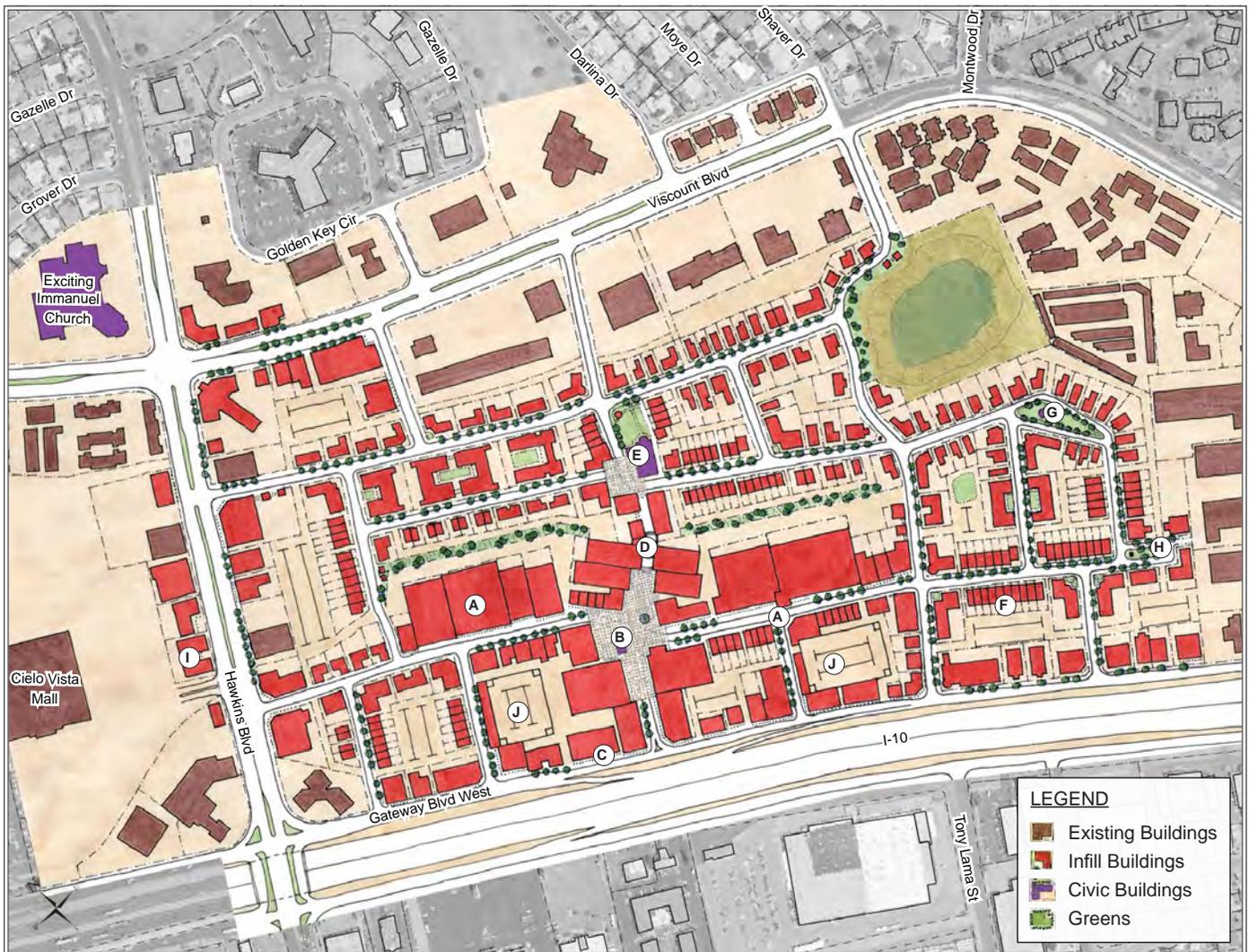
Plan for Future Expansion

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.

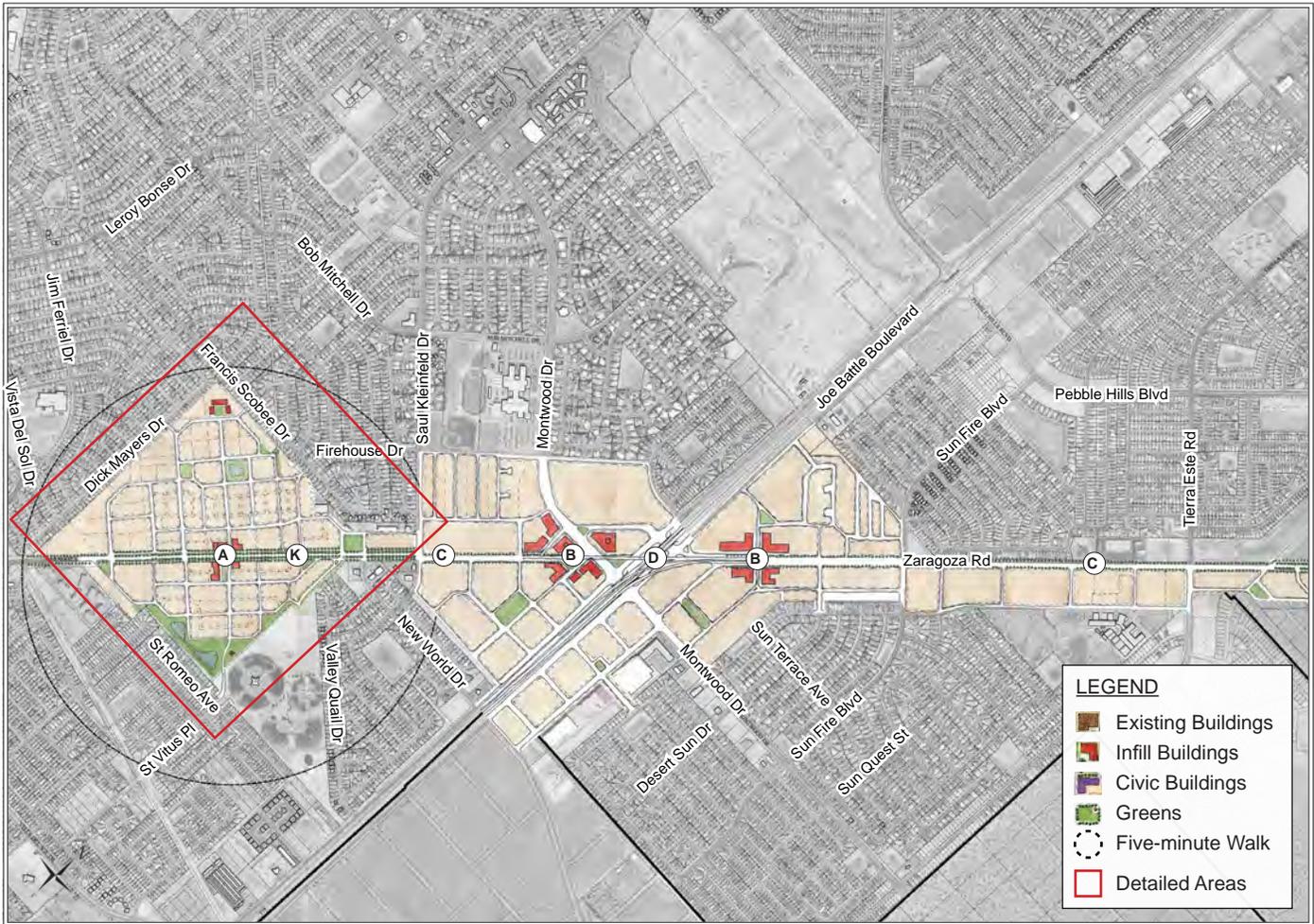
HAWKINS BOULEVARD & GATEWAY BOULEVARD



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.

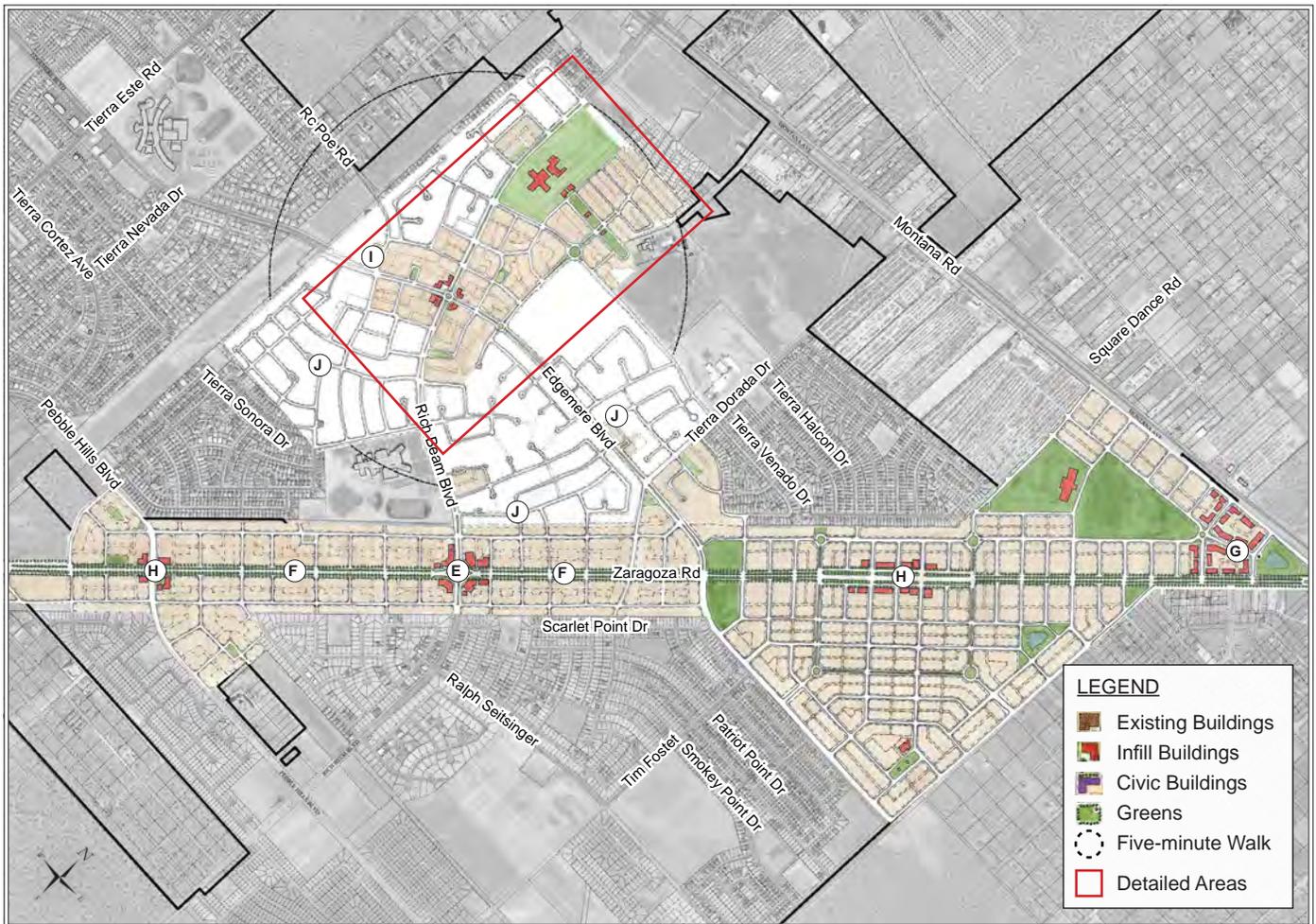
ZARAGOZA CORRIDOR



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.

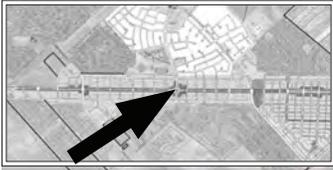
ZARAGOZA CORRIDOR



General Recommendations

- Ⓒ The entrance to the Zaragoza corridor at Montana Road is marked by a high-quality urban neighborhood, indicating the character of the corridor.
- Ⓓ Urban centers sprout up at important intersections and become focal points for surrounding neighborhoods.
- Ⓔ The Eastside Transit Terminal is a catalyst for walkable urban development, creating the transit infrastructure needed to support high-quality urban development.
- Ⓕ Surrounding suburban residential developments are reconnected to the larger community.
- Ⓖ A first step in implementation of the multi-way boulevard could be south of Joe Battle Boulevard where new out parcel buildings could line the access lanes with storefront retail which relies on the large parking fields already developed.

ZARAGOZA ROAD



Development along the Zaragoza Road 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.

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. 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 ground-work for future development.

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 on Zaragoza Road. The neighborhood itself becomes an amenity, and attracts investment that reconnects surrounding neighborhoods to the corridor.



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



Zaragoza Road is reconfigured into a multiway boulevard.



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 boulevard.



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.

East Side: Strategies for Addressing Community Concerns

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

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

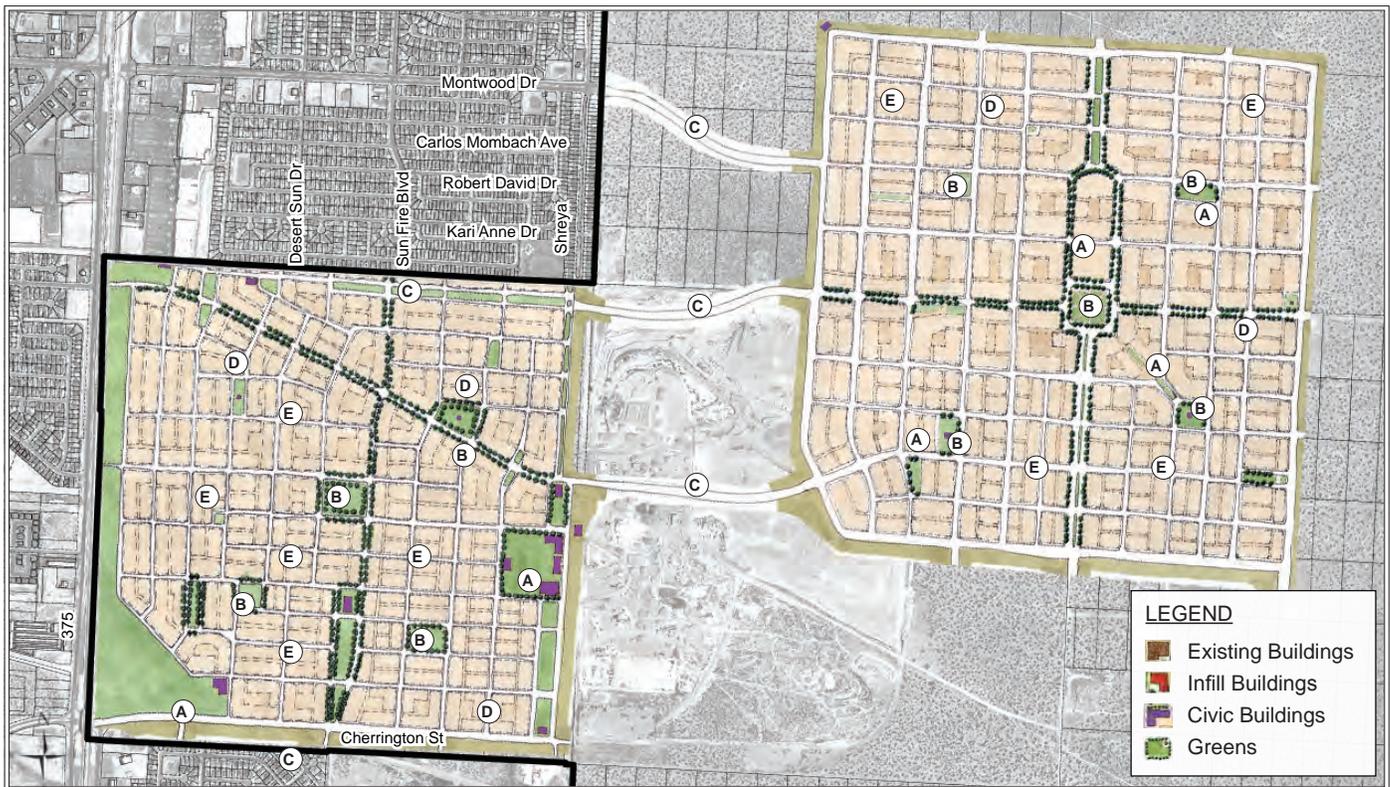
As development continues to occur on the Eastside, it should be configured in a way, and provide the amenities necessary, to allow driving a car to be an option rather than a necessity. The SmartCode seeks to remedy some of these problems that often come with conventional development that require the use of a car for all of a household's 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. Green fingers 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 Saint 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.



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

Change Over Time

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

Existing Conditions: Neighborhood Avenue is like a speedway channeled between two six foot tall stone walls. Although the street section has five foot 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.

Step 1: A first step would be to add street trees to the planting strip. Trees will provide shade in the brutal El Paso heat and break-up the visual appearance of the road as a speedway. The planting of 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 the neighborhood for many years.

Step 2: If the road is thought of as a connecting neighborhood street instead of a thoroughfare between two places, houses may want to front toward the street instead of turning their backs toward it. Openings in the walls will allow people access to the street and the sidewalks. More people would walk along the street if it is easier to access from their homes and provides shade. 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. People have more to see, look at, and discover than the single view of a solid uninterrupted wall.



Step 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.



Step 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 using. 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 real 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.



Step 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.



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. Due to modern-controls, the river rarely floods today, but poor street drainage, especially during the monsoon season, is a continuing concern for residents in the Mission Valley. Certain streets reliably flood. A look at drainage policy for new construction in addition to looking at the drainage around low-lying streets should be assessed.

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 emulated throughout the City.

Gasoline Prices

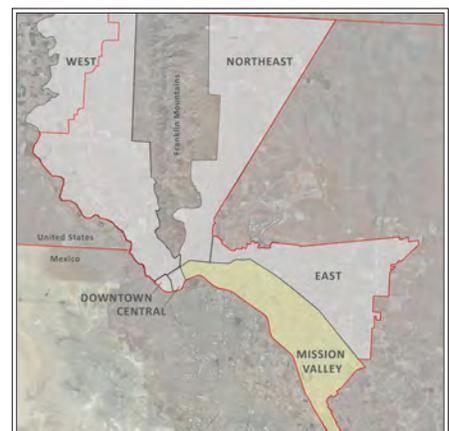
Mission Valley residents are especially vulnerable to rising fuel prices given their long commutes. Efforts should be made to cultivate a better jobs / housing balance over time in Mission Valley to reduce average commuting distances.

Dangerous School Zones

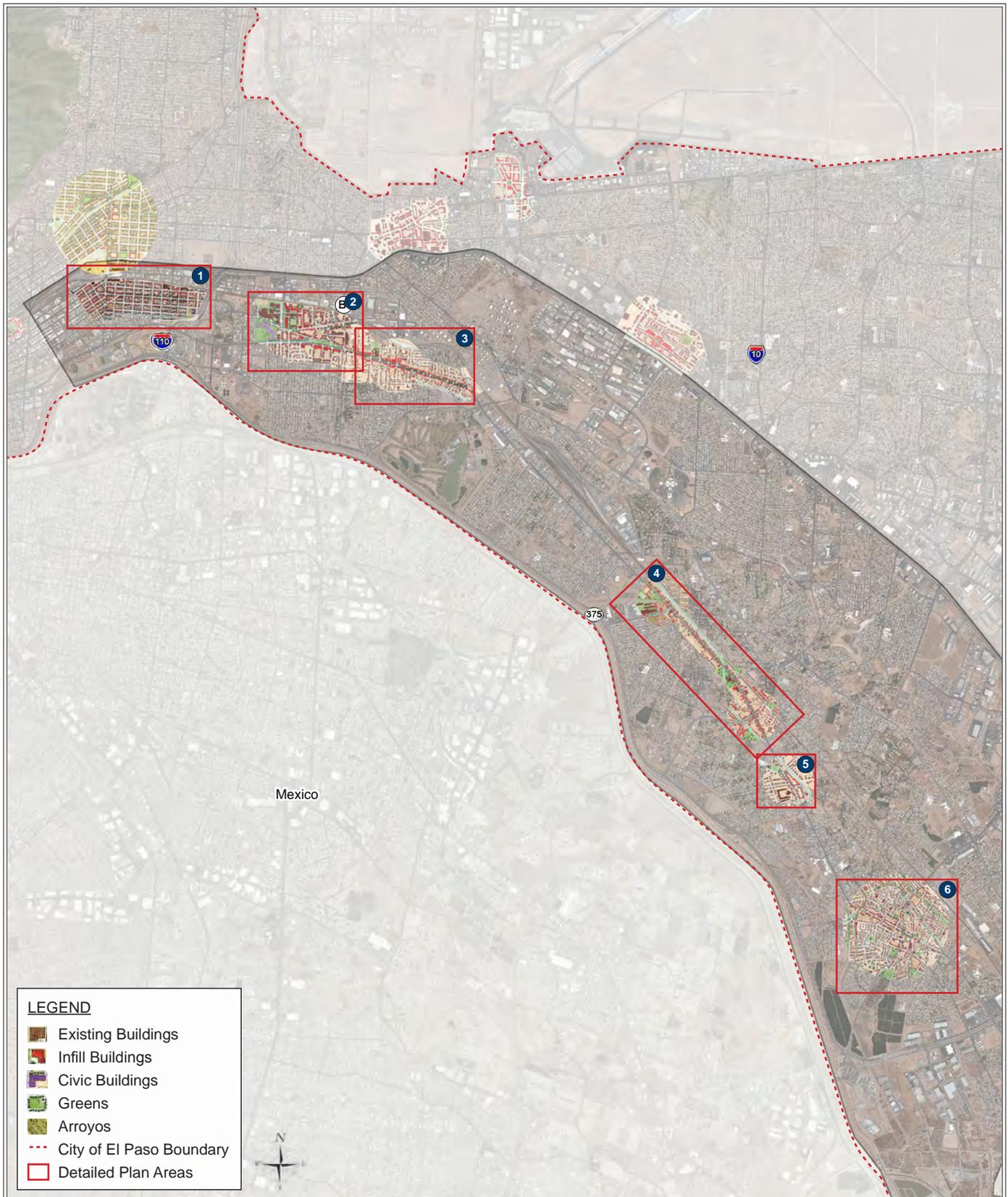
“Sallies,” removable school zone signs, were once placed in the center of roadways to signal to drivers that they were in a school zone; however, the State has outlawed the signs. Schools were required to replace the temporary signs with permanent signs; these are to be placed on the side of the roads, 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 – Piedras Street to Patriot Freeway: Prioritizing Alameda Avenue as a walkable corridor and reinvigorating the historic commercial street.
- 2 Strategies for addressing the Medical Center of the Americas area are addressed in the Health Element.
- 3 Alameda Avenue – Glenwood Street to El Paso Drive: Filling in the gaps to create walkable neighborhood fabric.
- 4 Alameda Avenue from Yarbrough Drive to Midway Drive: Strategies for enhancing Alameda Avenue around the RTS stops
- 5 Strategies for Alameda Avenue and Hammer Way can be found in the Health Element.
- 6 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 - PIEDRAS STREET TO PATRIOT FREEWAY



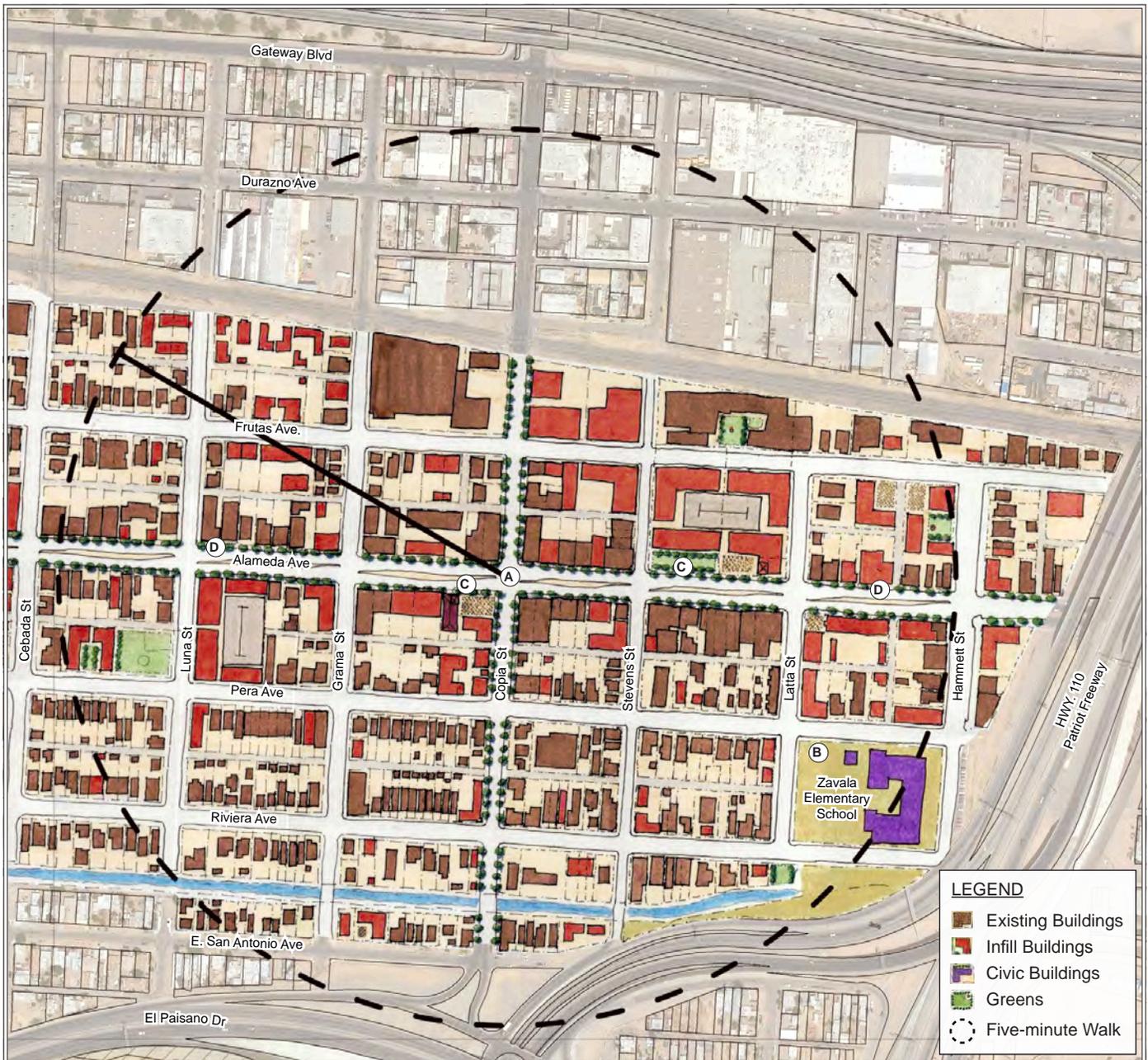
Alameda Avenue, also known as Texas Highway 20, begins at Texas Avenue and runs southeast to the City’s limit and into the County. A variety of cafes and restaurants, stores, and services are located along Alameda Avenue, to the west of Patriot Freeway, and make this avenue a vital commercial corridor. 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 current-

ly 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

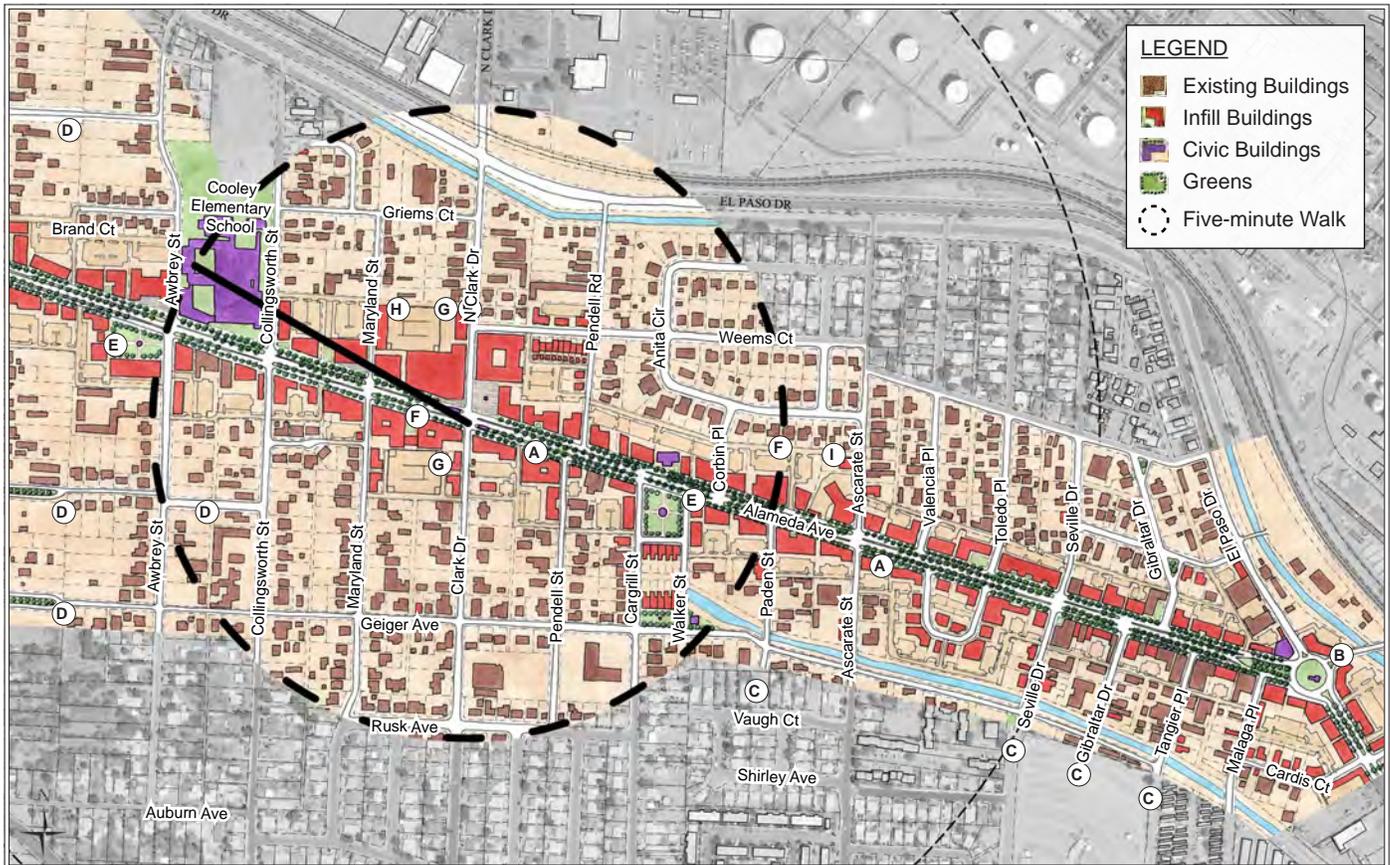
- A** The City's planned RTS system has the potential to support compact centers of reinvestment and redevelopment at select areas along the route, especially within a short, five-minute walk of the stations. Emphasis should be placed on repair of the street fabric with new infill buildings.
- B** The many children that walk to neighborhood schools should be accommodated by safe streets with ample sidewalks and slow speeds on and off Alameda Avenue. 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.
- C** doned 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 both sides and median 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 is 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.

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 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.

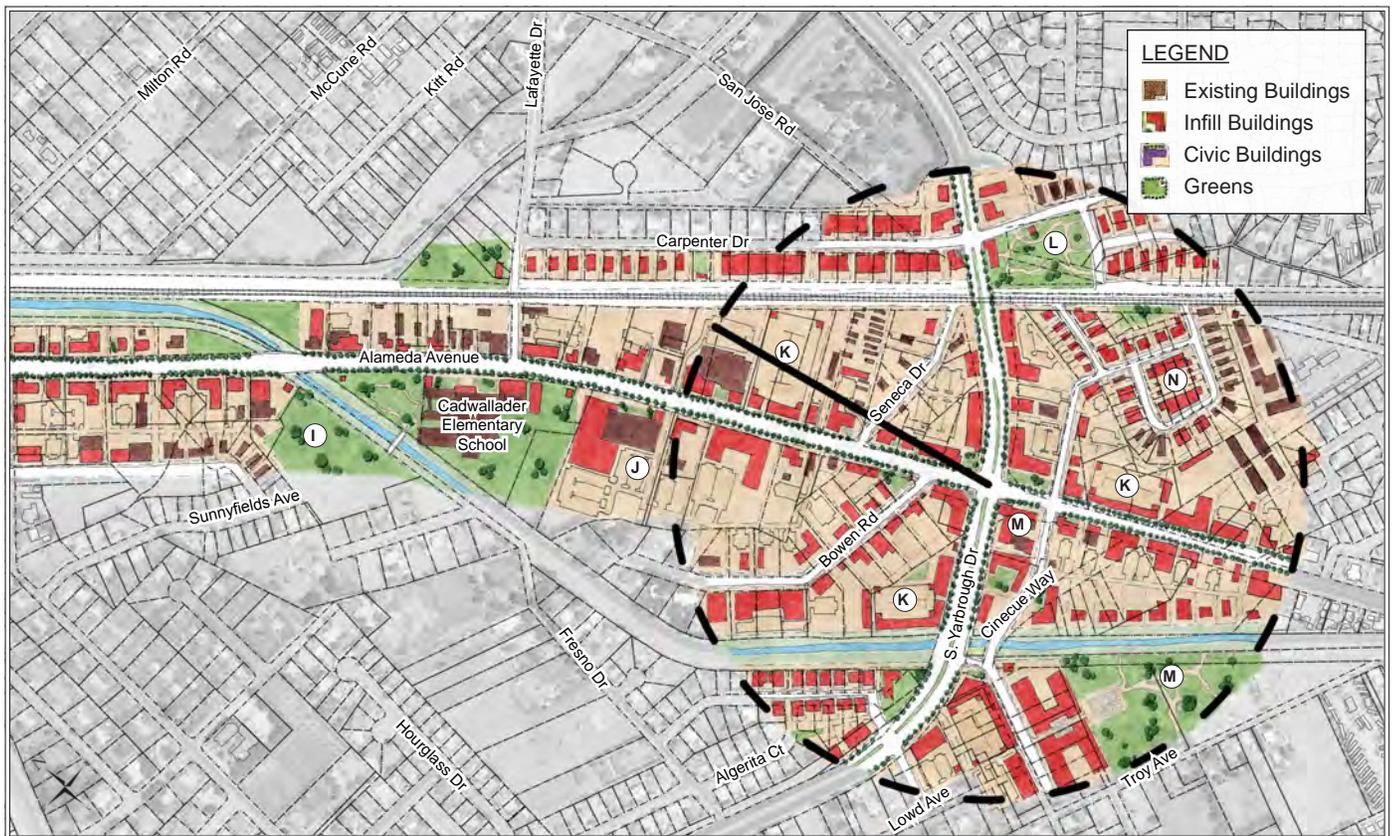
Anticipate Proposed Transit

Transit options in El Paso have been scarce, making 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

- ⓘ A pedestrian connection across the canal should be pursued to allow for better connectivity from near-by neighborhoods to the elementary school.
- Ⓝ Over time, new additions can be added onto existing buildings to complete the streetwall.
- Ⓚ Parking should be located in the middle of the block and lined by habitable space. Additional parking spaces will be helpful to accommodate increased transit riders.
- Ⓛ 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.
- Ⓜ Proposed RTS Stop; create 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.
- Ⓝ 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
- T4 - General Urban
- T1 - Natural
- T5 - Urban Center
- T3 - Sub Urban
- 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



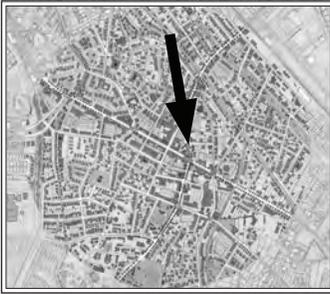
cent railroad tracks to the northeast of Alameda, but there are also few connections to the residential areas to the southwest.

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.

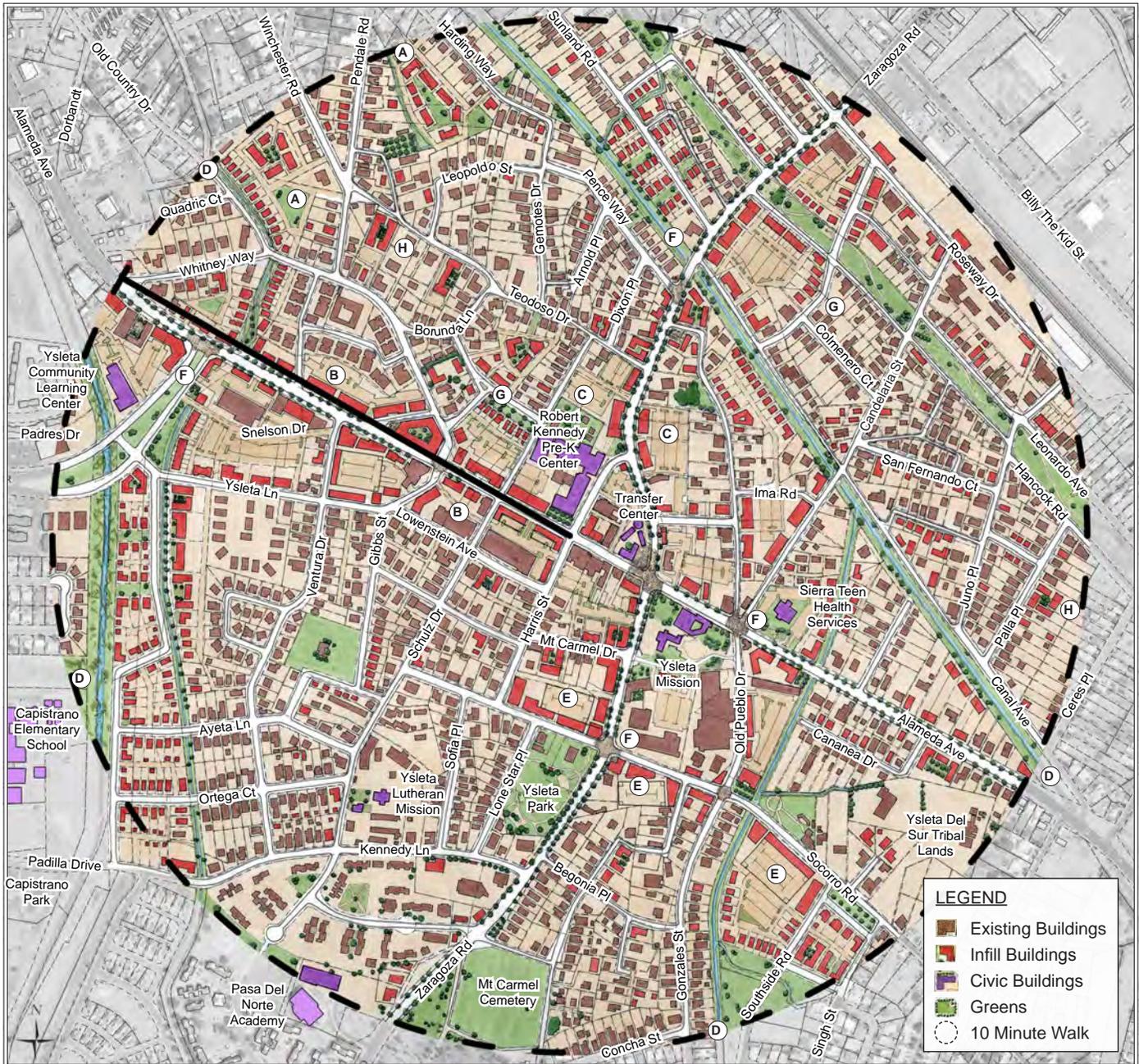
Provide a Destination that Celebrates Tigua Culture

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.

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Enrich Commercial and Office Opportunities

With increased density and increased modes of mobility, it is important to be able to meet ones 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

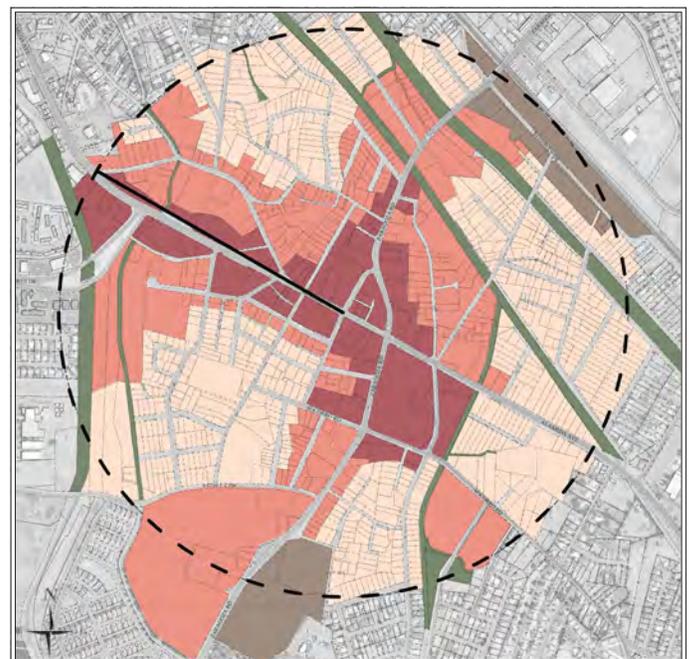
The Ysleta Mission offers a unique opportunity as a tourist attraction at the end of the Alameda corridor RTS line. With a connected bus system, the transfer center allows people to easily visit the historic mission from various points around the City. This will additionally help to increase the potential transit ridership in this area.

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
 T1 - Natural	 T5 - Urban Center
 T3 - Sub Urban	 10 Minute Walk

YSLETA & MISSION VALLEY TRANSFER CENTER

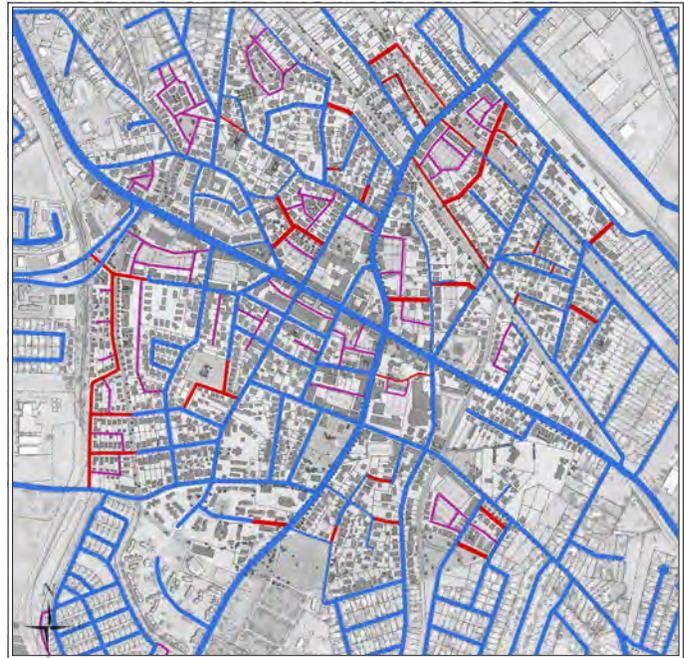
Street Network

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.

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.



Street Network

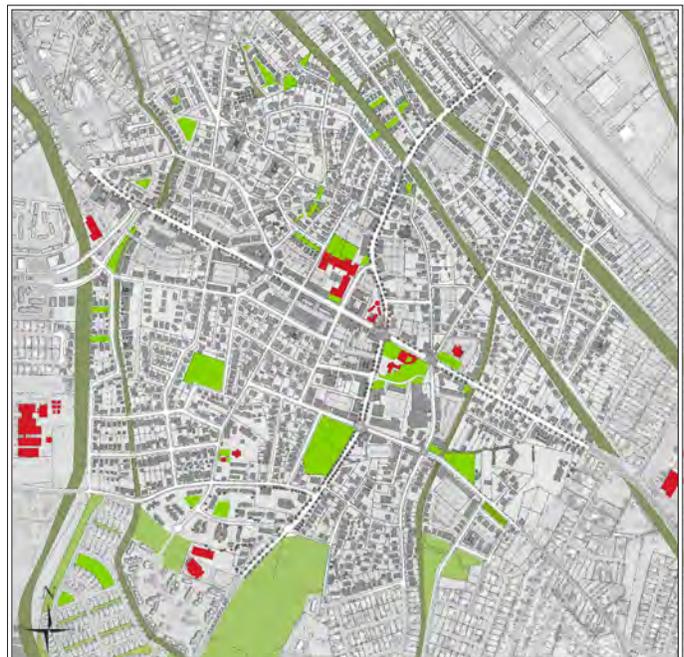
LEGEND	
—	Existing Streets
—	Proposed Streets
—	Alleys
—	Pedestrian Paths

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.

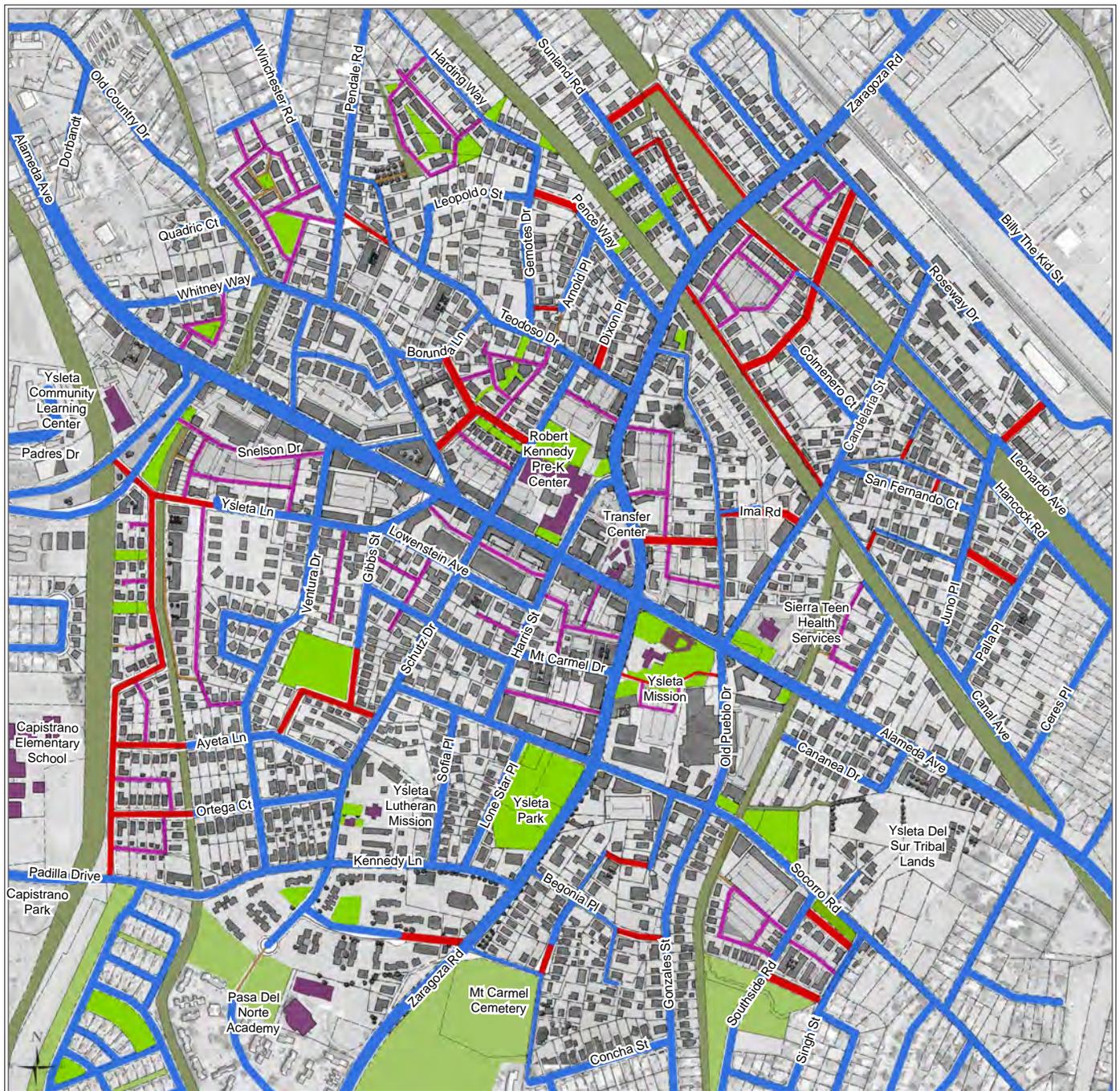
Ysleta features many civic institutions throughout and around its neighborhoods which should be preserved and enhanced. These include three elementary schools, a middle school, a high school, a Pre-K center, a senior center, Pavo Real Recreation Center, a Teen Center, several churches including the historic 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

YSLETA & MISSION VALLEY TRANSFER CENTER



Composite Map

The Composite Map shows a great deal of public investment to accomplish greater street connectivity and acquire new public lands. Ysleta will become more walkable and richer in amenities with every step of plan implementation. This program should be followed hand-in-hand with a program to rezone lands to SmartCode designations so that private sector investment enhances the area's village identity.

LEGEND			
	Existing Streets		Existing Civic Spaces
	Proposed Streets		Proposed Civic Spaces
	Alleys		Civic Buildings
	Pedestrian Paths		Canals

YSLETA & MISSION VALLEY TRANSFER CENTER

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.

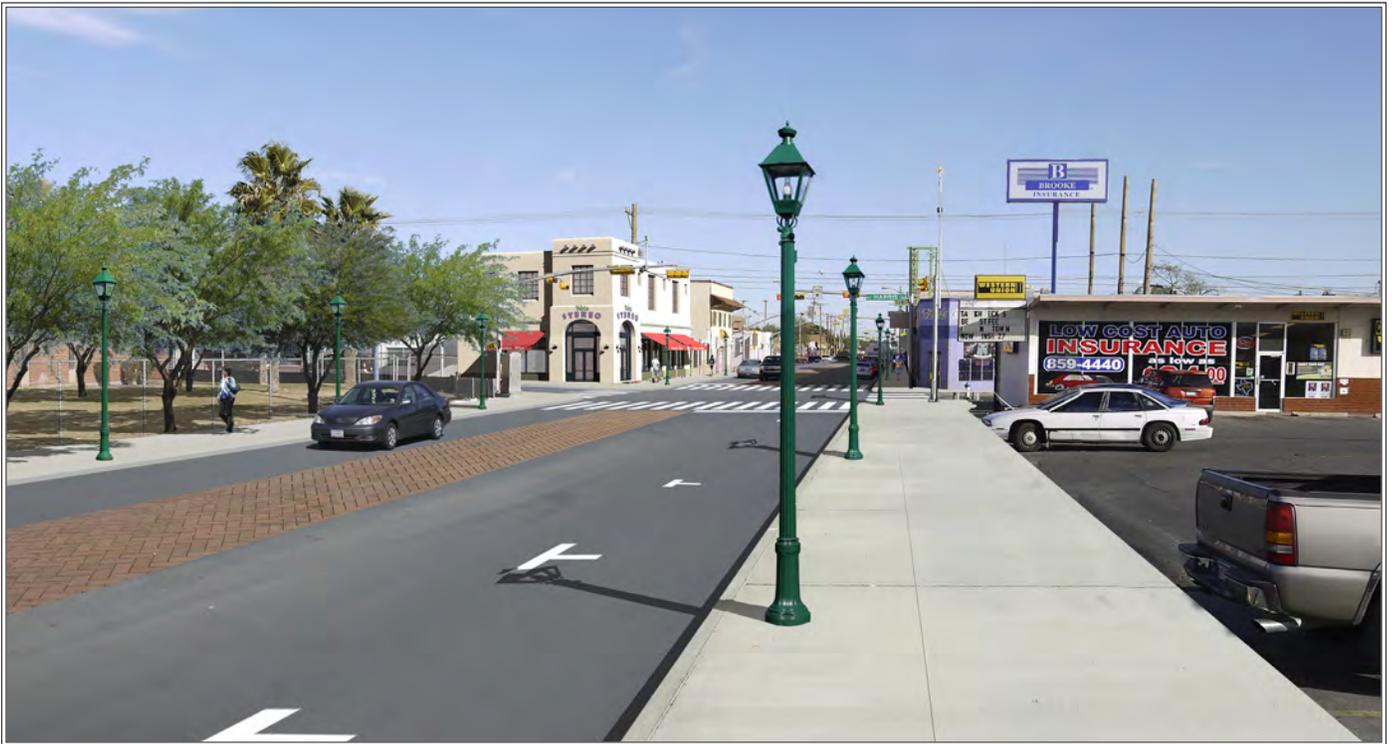


Existing Conditions: Alameda Avenue through the Ysleta area is currently not a pleasant environment for pedestrians. The roadway features two wide lanes of traffic in each direction. Sidewalks are narrow and squeezed between flowing traffic and large fields of parking with no protection from passing 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.

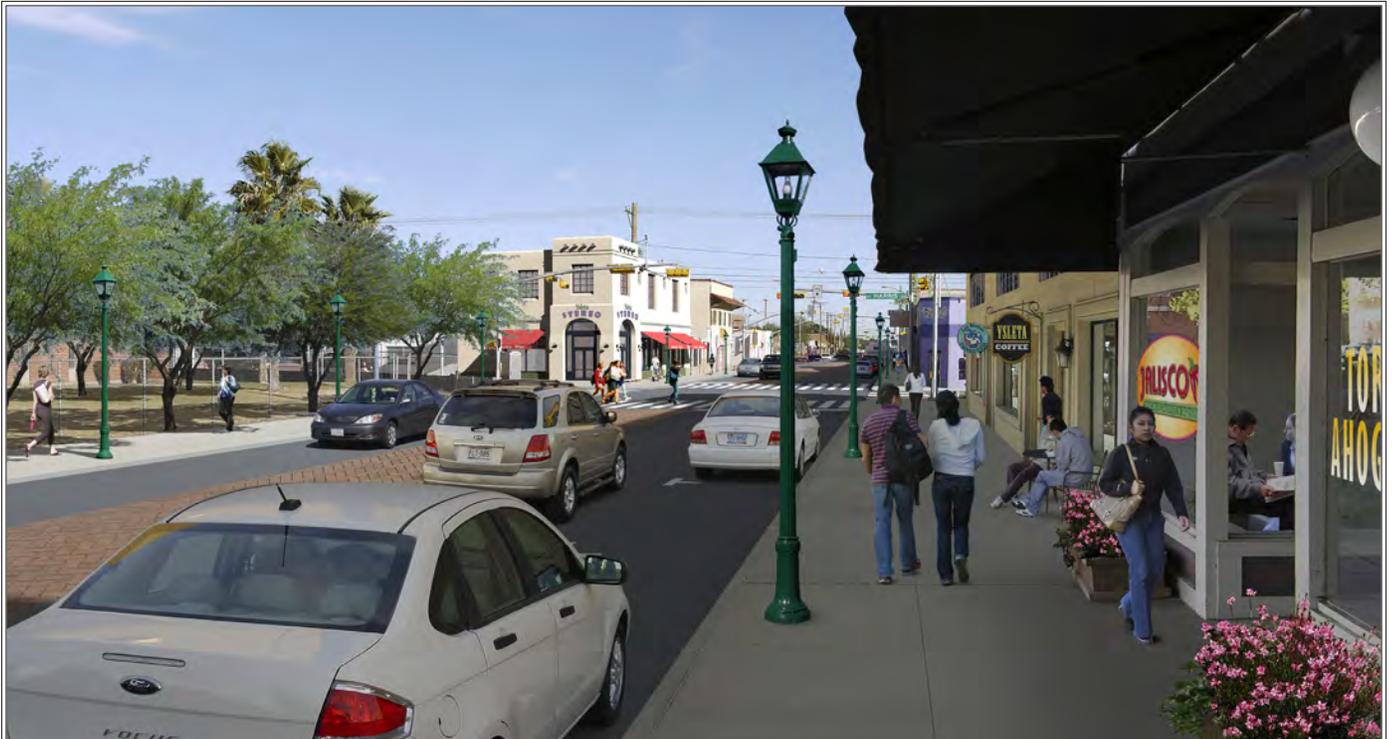


Step 1: Public improvements can be made that will enhance the pedestrian environment. Travel lanes in this section of Alameda Avenue should likely be reduced to one lane in each direction with a central left turn lane. This creates enough space within the right-of-way to add on-street parking to one 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 street 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.

YSLETA & MISSION VALLEY TRANSFER CENTER

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.



YSLETA & MISSION VALLEY TRANSFER CENTER

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.

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

Smart Location Principles

Goal 2.1: The City of El Paso will 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 will consider the following “smart location” principles when evaluating rezoning requests and subdivision plats 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 90 intersections per square mile, as measured within ½-mile of the project’s boundary.

Policy 2.1.3: Preferred locations for higher density development and redevelopment are sites within a ½-mile walk of Rapid Transit System (RTS) stops, or ¼-mile walk of bus and streetcar stops, or within Future Compact Neighborhoods as designated on the Future Land Use Map.

Policy 2.1.4: High-rise buildings should be constructed only in areas well-served by public transit.

Policy 2.1.5: Development is encouraged to integrate jobs into or near residential neighborhoods, or to re-balance existing communities by adding jobs within a ½-mile walk of residential neighborhoods or by adding residences within a ½-mile walk of concentrations of jobs.

Policy 2.1.6: Development is encouraged on brownfields if site contamination can be remediated.

Policy 2.1.7: Development is encouraged along existing or planned bicycle networks where additional segments and/or secure bicycle storage can be added to the network.

Policy 2.1.8: 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, locate development on previously developed floodplains or in nonconveyance areas without flooding potential.

Policy 2.1.9: Development is discouraged on land outside the current city limits. Policies for land with 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 2.1.10: Development is strongly discouraged within arroyos.

Policy 2.1.11: Development is discouraged on land with slopes greater than 15% and on land designated O-2 “Natural” on the Future Land Use Map.

Policy 2.1.12: Development is discouraged on sites where imperiled species or ecological communities have been identified.

Policy 2.1.13: 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 (see Policies 1.5.2 and 2.6.3).

Neighborhood Patterns

Goal 2.2: The City of El Paso will 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 will consider the following ideal neighborhood patterns when evaluating rezoning requests and subdivision plats and when locating and designing development on public land, seeking to achieve compliance with as many patterns as possible. The illustrative plans in the Urban Design Element demonstrate the application of these patterns 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 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 ¼-mile walk 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 walk of all residences.

d. Home offices and accessory dwelling units should be allowed on every lot.

Policy 2.2.3: 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 2.2.4: Neighborhoods should 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: Before beginning preliminary design, developers are strongly encouraged to meet with adjacent property owners, residents, workers, business owners, and local officials at the site to share ideas and solicit input. The best new developments are thoughtful neighbors from the beginning.

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 will consider the following street design principles when evaluating rezoning requests and subdivision plats and when locating and designing development on public land, seeking to achieve compliance with as many principles as possible. The illustrative plans in the Urban Design Element 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.

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.

d. 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 2.3.3: 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 2.3.4: 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.
- b. 70% of new non-residential and/or mixed-use streets should be designed for a maximum target speed of 25 mph.
- c. Design neighborhood streets using pedestrian-friendly street section assemblies from the City SmartCode (Title 21). Design arterials using the manual *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*.

Policy 2.3.5: The following street connectivity principles should become mandatory through amendments to Title 19 of the City's code:

- a. Increase the required link-to-node ratio for Roadway Network Connectivity from 1.4 to 1.7 to increase the density of intersections.
- b. Limit average block perimeters in new development of no more than 2,000 linear feet.
- c. The connectivity of new streets in subdivision plats must be at least 120 intersections per square mile, counting only streets that are open to the public.
- d. Dead-end streets and cul-de-sacs can be constructed only when required by topographic constraints or when conditions on adjoining property prevent existing or future connections.

Building and 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 critical 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. 90% of their principal entries to buildings should face public spaces such as streets, squares, parks, or plazas instead of facing parking lots.

- c. No more than 20% of building walls that face streets should contain garage doors or service bays.

- d. Residences may face minor and major arterials to avoid presenting blank walls to streets. Alleys may be necessary to create a vehicular entry to the lots instead of vehicular access directly from the arterial.

Policy 2.4.2: 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 2.4.3: 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 2.4.4: To achieve a sense of spacial 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 2.4.5: In non-residential and mixed-use developments, businesses and 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, instead of accessible from a parking lot.

Policy 2.4.6: 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 and to awnings, arcades, galleries, and wide balconies in areas with mixed-use and attached buildings.

Policy 2.4.7: 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.

Policy 2.4.8: 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.

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 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.

- a. A civic space, such as a square, park, or plaza, of at least 1/6 acre in size should be located within a 1/4-mile walk of 90% of dwelling units and non-residential building entrances.
- b. 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.
- c. Scale civic spaces comfortably for users, avoiding civic spaces that are too large. 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).

Policy 2.5.2: 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.

Rural and Open Space Design Principles

Goal 2.6: The City of El Paso will protect and enhance arroyos leading from the Franklin Mountains and farmlands along the Rio Grande valley.

Policy 2.6.1: The City will protect arroyos and farmland through policies of this Comprehensive Plan, 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 shall 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 homes 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 continued 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.



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**

"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 and 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 resulting plummeting Downtown population has led to a dramatically visible decrease in vitality and prosperity. 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 a variety of 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 the buildings housing these civic institutions 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.

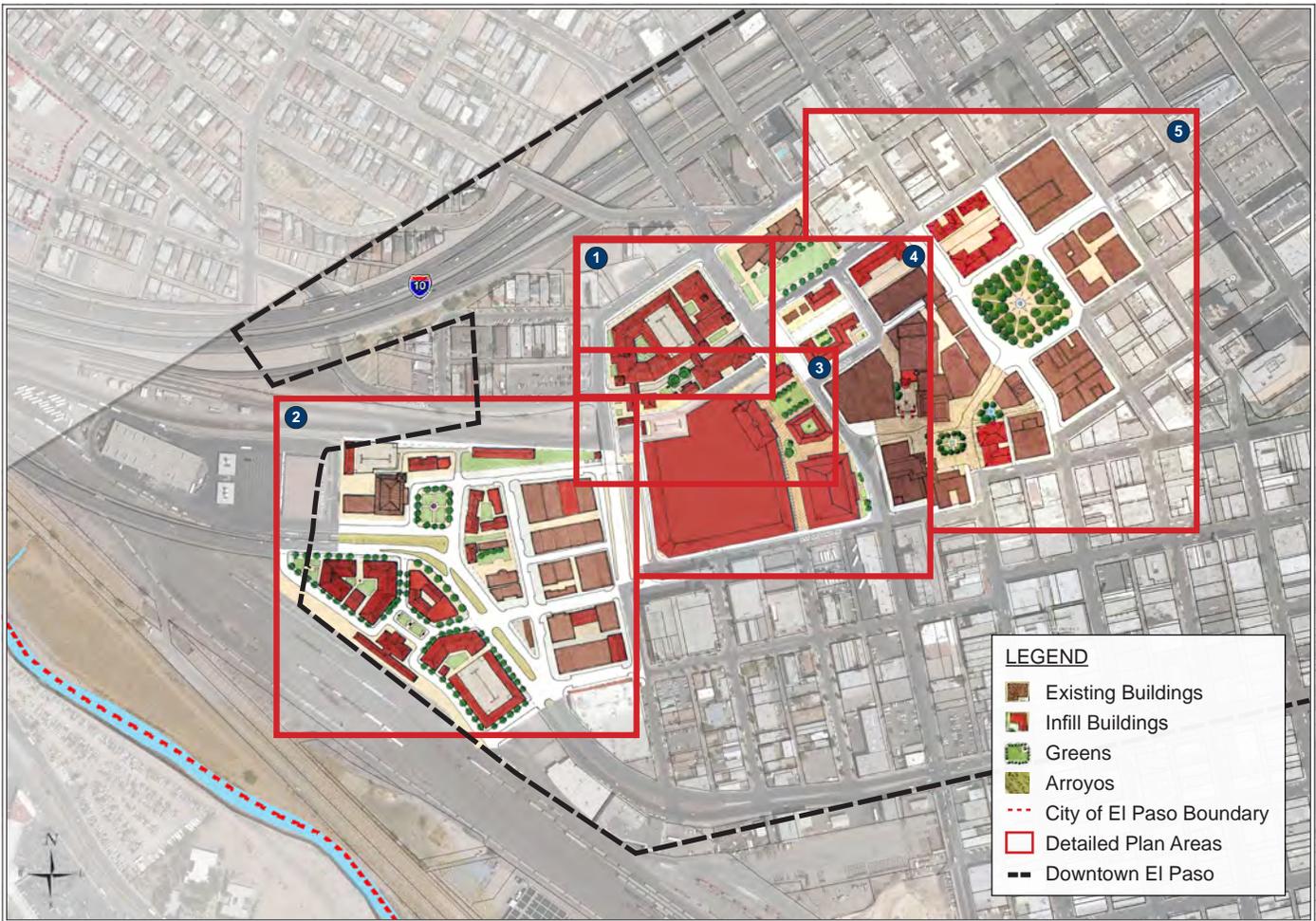
Diversify and Add Missing Uses

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 lifestyles. As the Downtown population grows, provisions for reopening 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. This has damaged the pedestrian experience. As El Paso moves forward, parking should encouraged to be located on-street and behind buildings in mid-block parking lots or 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.

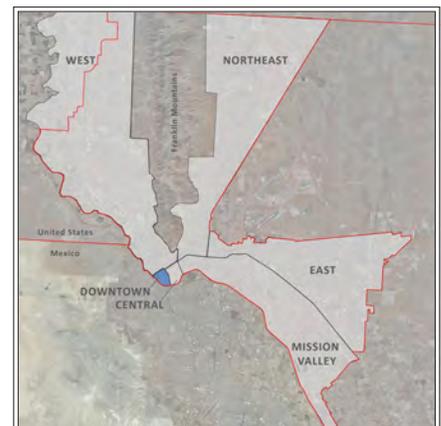
STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS



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.
- 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 address 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.



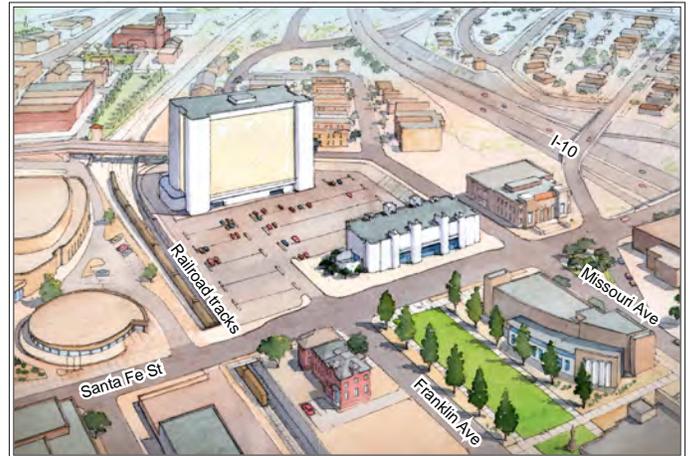
CITY HALL



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 first seeking opportunities to add 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 honorific 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, 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.

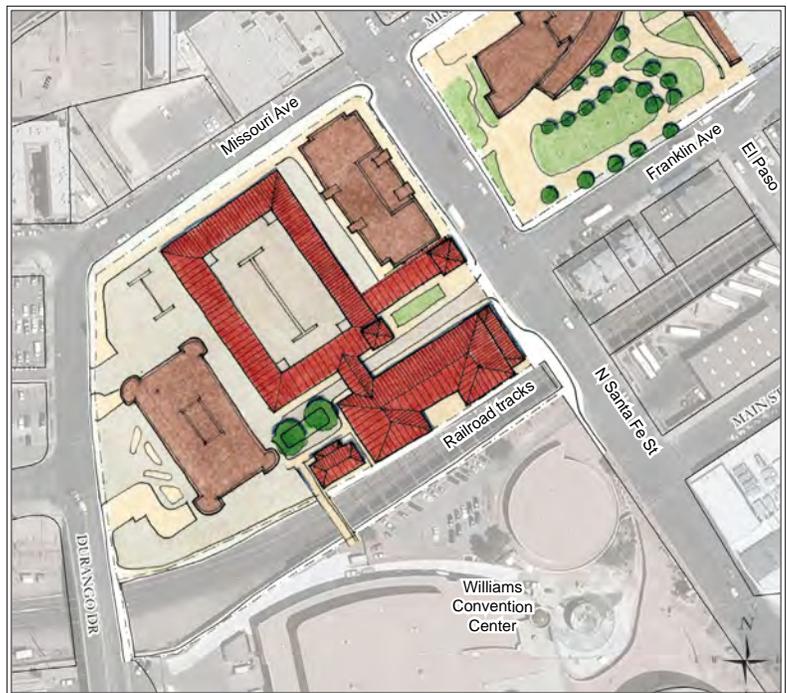
El Paso's City Hall site possesses the opportunity to evolve incrementally over time into a great example of urban walkability and civic presence.



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 replaced.

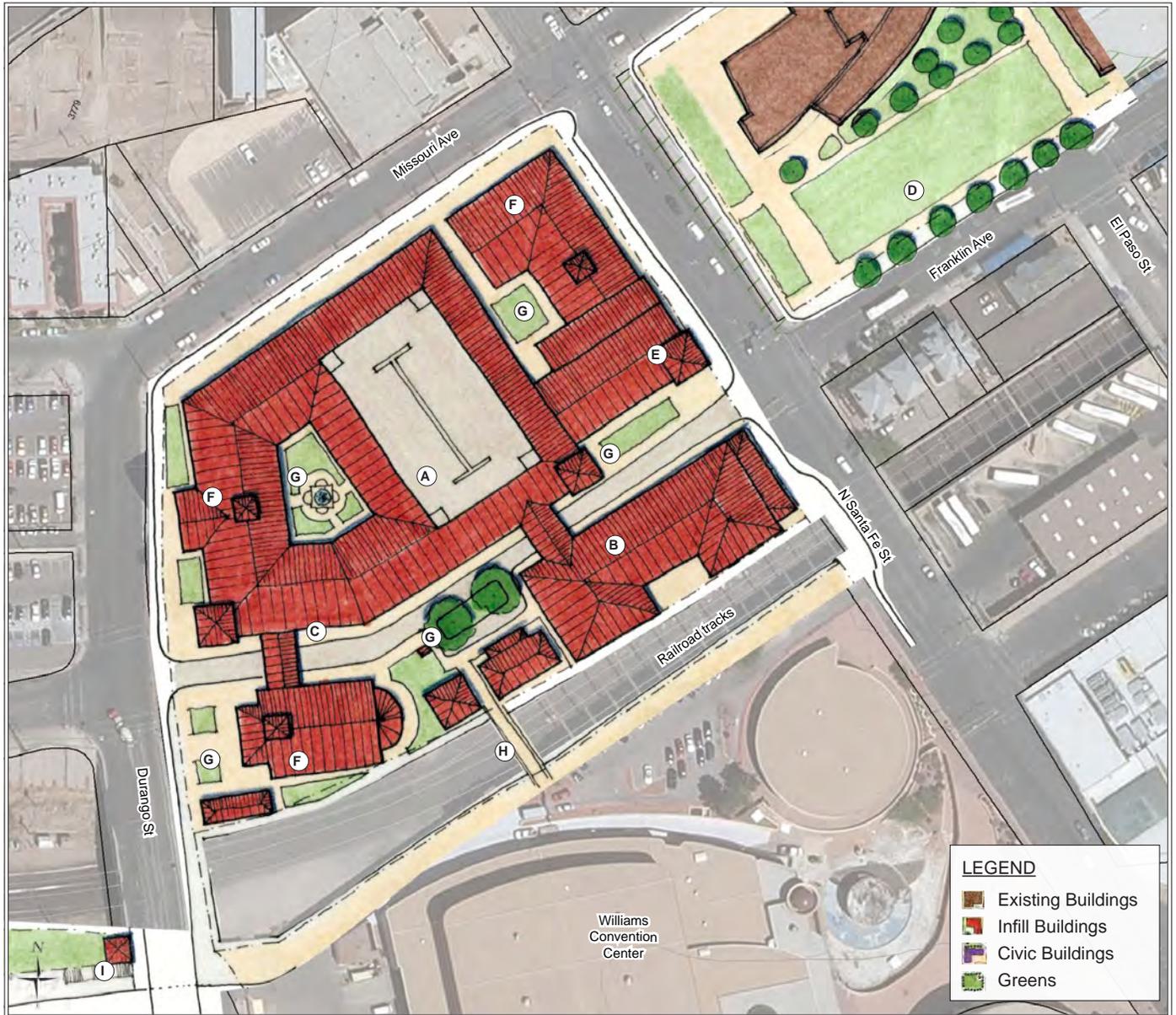


Proposed Phase 1 of City Hall redevelopment

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 is 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

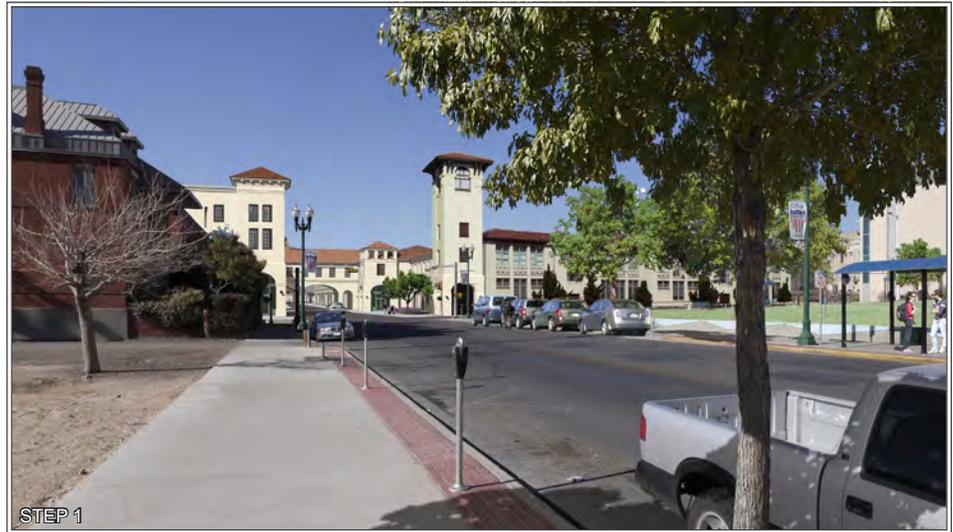


Change Over Time

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.

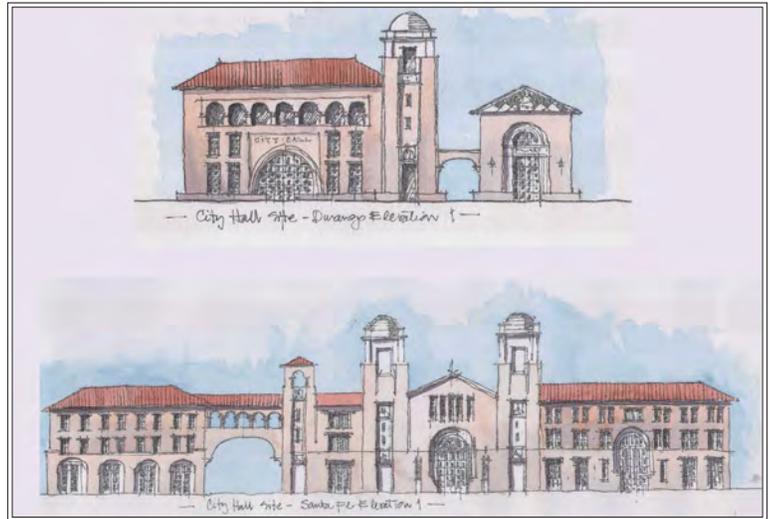
Urbanistically, the plan for City Hall must conceal its parking, reconnect Franklin Avenue, place a focal building facade facing Cleveland Square Park, and fill the edges of the block with street-oriented buildings.

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 El Paso. 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.

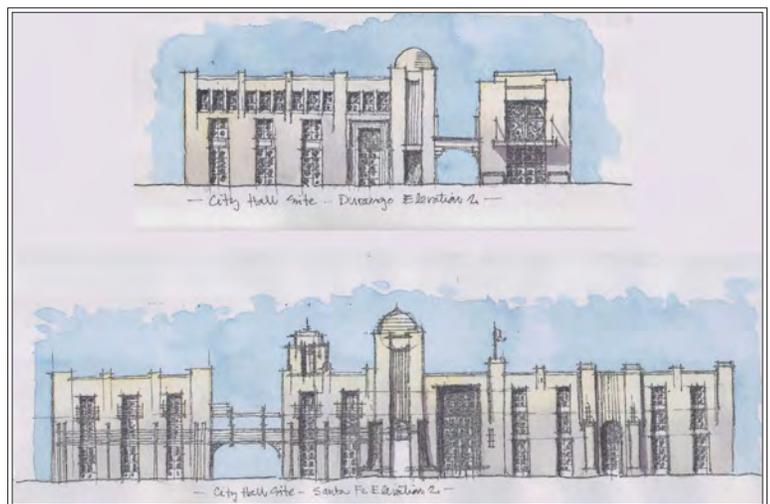
The beauty of the concept designs, regardless of style, is to be found in their simplicity, balance, order, proportional logic, and compositional harmony. The architect Christopher Wren said, “Architecture aims at eternity.” In this way a new City Hall should be stylistically capable of permanence. Even if the site for the City Hall changes these principles are still applicable.



City Hall - El Paso Mission style

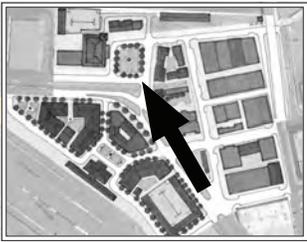


City Hall - El Paso Neo-Classical style



City Hall - Modern style

UNION PLAZA DISTRICT AS AN ENTERTAINMENT DISTRICT

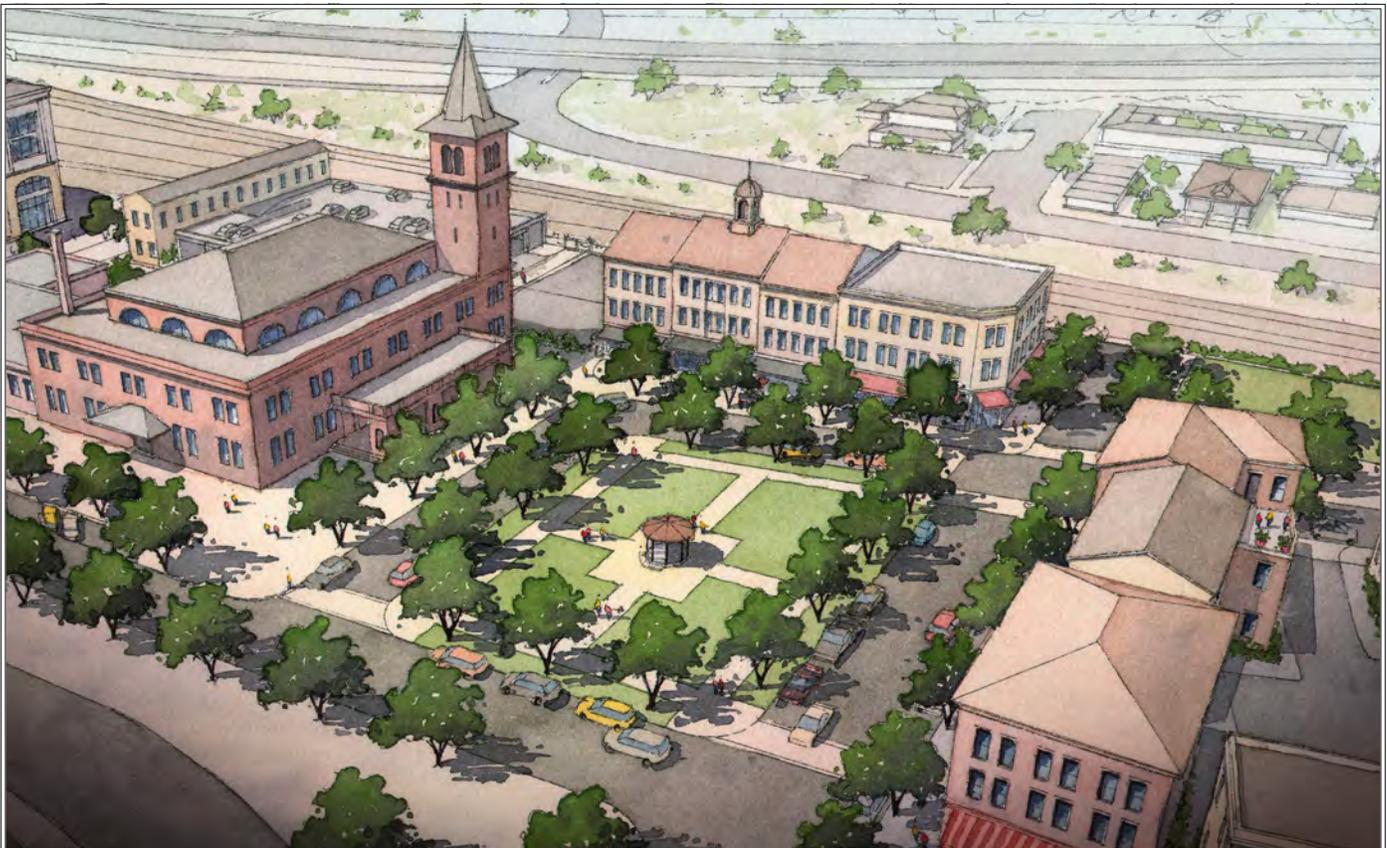


Historically, the Union Station served as a central depot for city trolleys and inter-city trains. The front portico provided a dramatic entrance to the City at a time when trains were the most common form of long distance transportation.

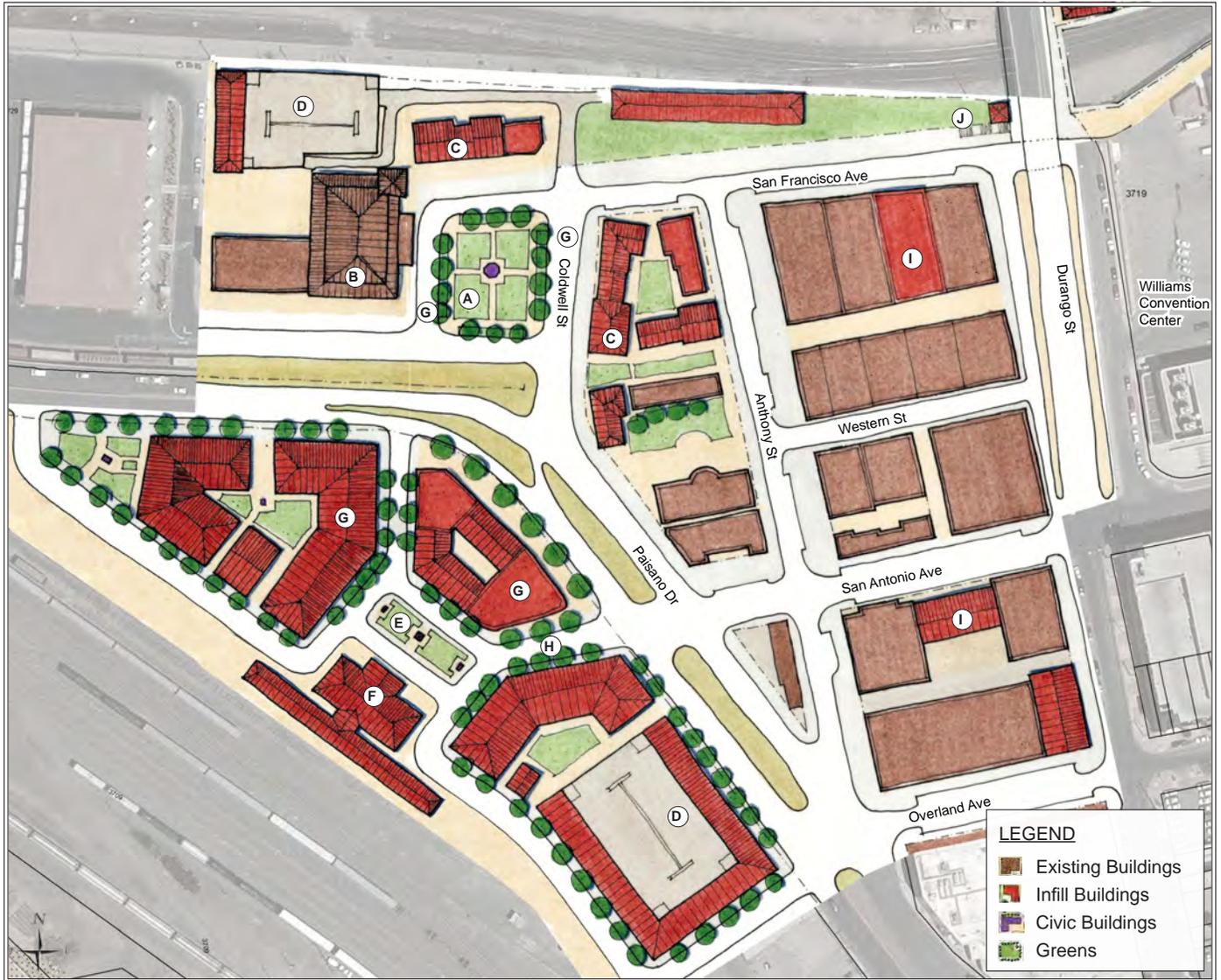
Union Square would be a place in which a visitor would be surrounded with quality urbanism and well-designed buildings in the El Paso mercantile tradition. One would know that they have arrived in El Paso and leave the space with a lasting image of the City.

A reconstructed Union Square would lend incalculable 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.

Presently, 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 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

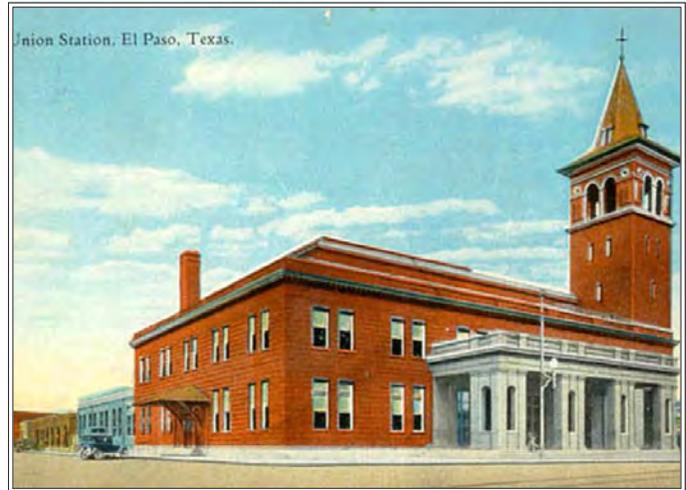
UNION PLAZA

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 Amtrack, a national train service provider, still carries passengers. 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 candidate site for a neighborhood center or other uses, such as an academic quadrangle, if a school or university located 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 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 visited by visitors to the 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 include sculptures and murals.



The Sundial - The proposed centerpiece of the new pathway will be a permanent art piece of a sundial. The sun dial connects to El Paso, the Sun City, to the movement of the sun and the shadows it creates that are ever changing throughout the day and year.



General Recommendations

- A** Santa Fe Street becomes safer for pedestrians with paving patterns at key intersections.
- B** Awnings span Santa Fe Street signaling the entrance to the art walk for pedestrians and signaling to drivers to be cautious.
- C** Awnings provide shade and relief from the sun.
- D** A permanent art piece, such as a sundial, becomes a focal piece to the park and could be surrounded by a sculpture garden.
- E** Changeable panels cover the walls in a rotating art display.
- F** Paving pattern resembles the pattern of the new civic plaza.
- G** A staircase connects the pathway to the top of the Durango Street by City Hall and access to public parking.
- H** Bright pavement patterns draw people under the Durango Street overpass and along the art walk.
- I** Trolley cars are 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 elevation of 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 the Downtown. During times when there is no event at the convention center, these on-site public spaces therefore tend to feel empty and rather 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 pedestrian-friendliness:

Blocks and Streets

Rather than thinking of the Convention Center as a single large building, this large 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.

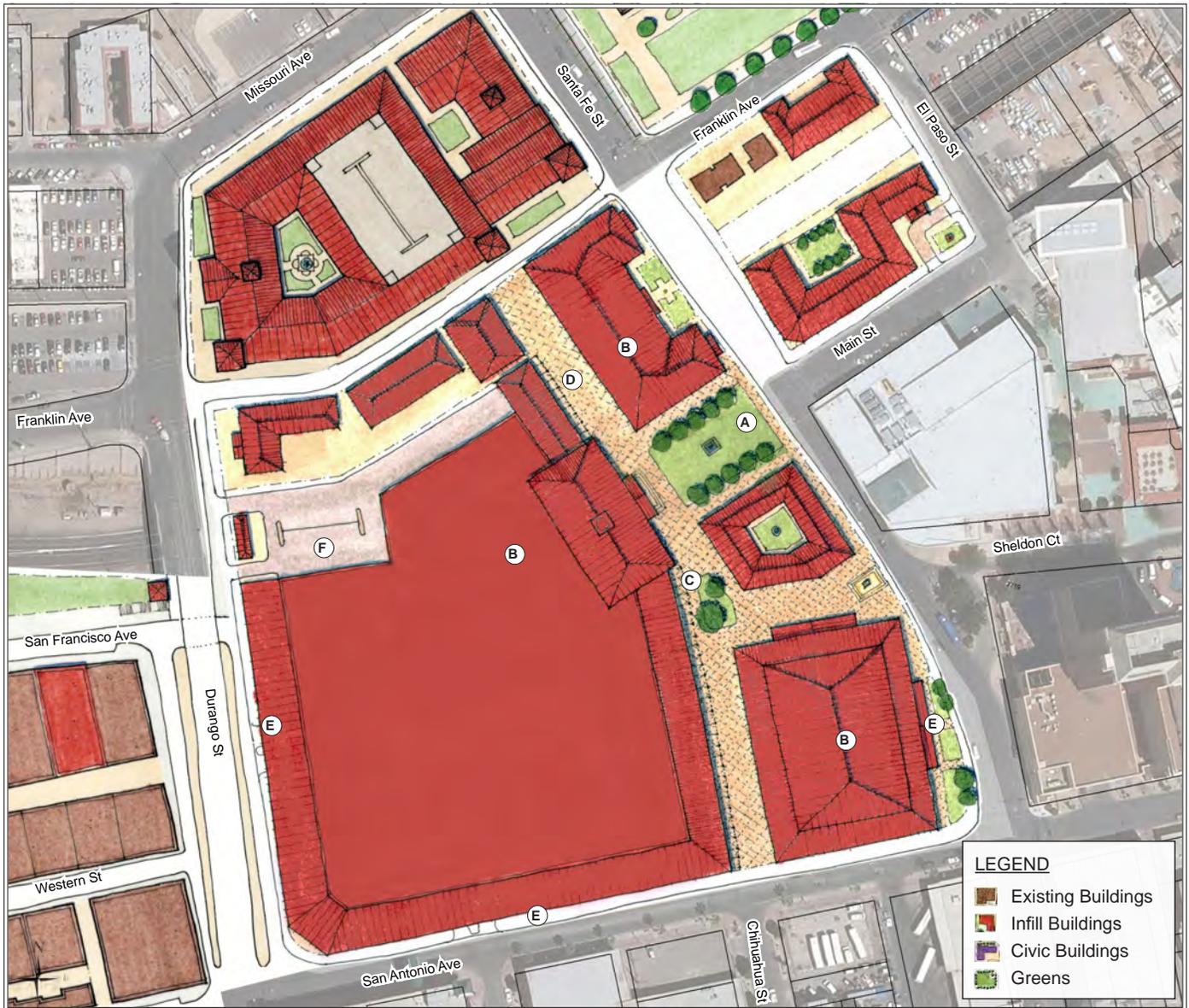
Mind the Edges

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 can additionally be detailed to 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 make crossing to the plaza 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.

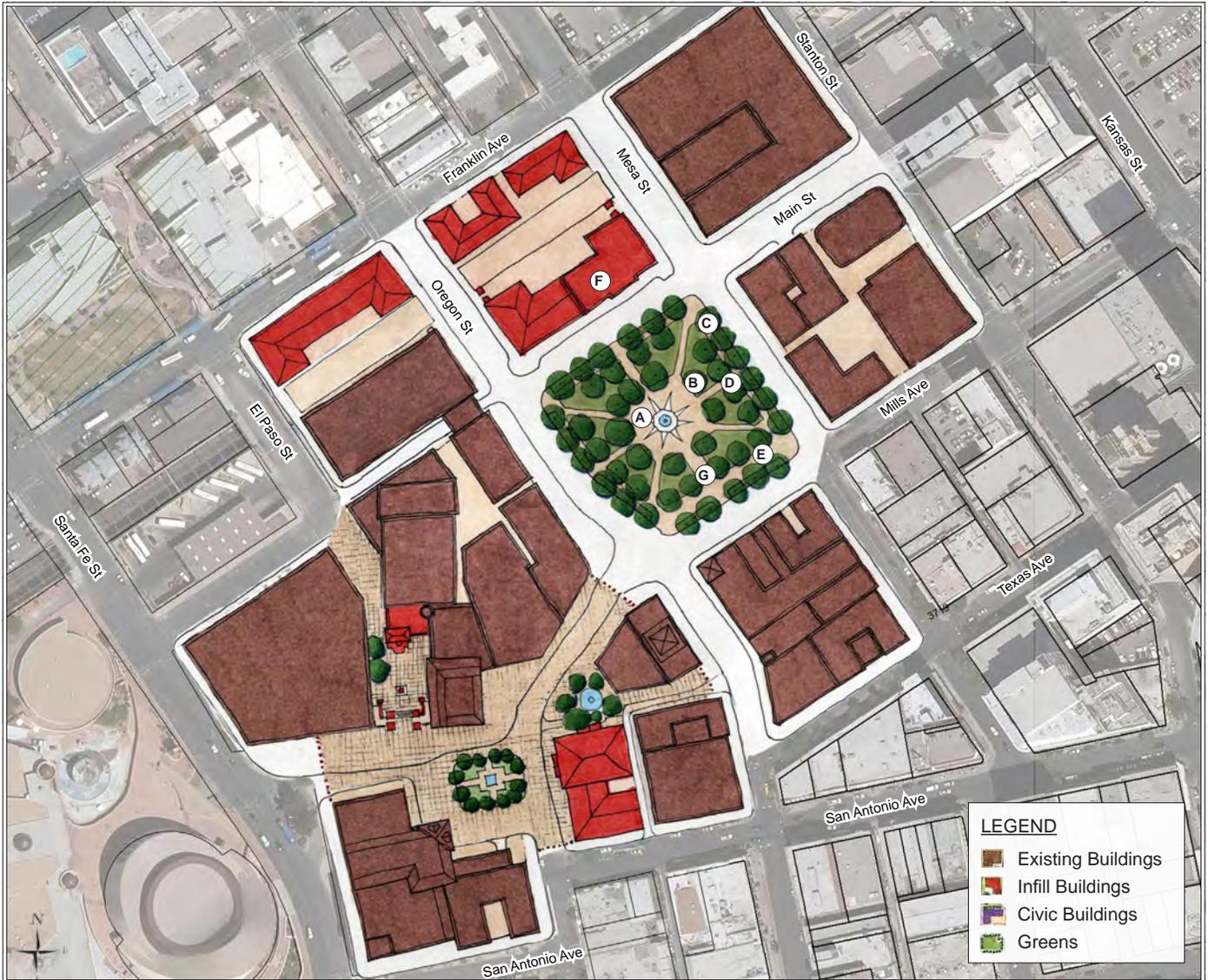
Public Investment in the Plaza

The refurbishment plan for San Jacinto Plaza should focus on several elements. Trees should be added to restore the his-



San Jacinto Plaza - restored as a signature central public space

SAN JACINTO PLAZA

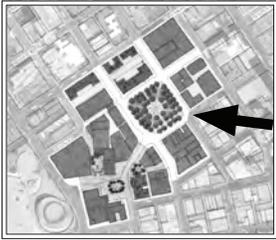


General Recommendations

- 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.



SAN JACINTO PLAZA



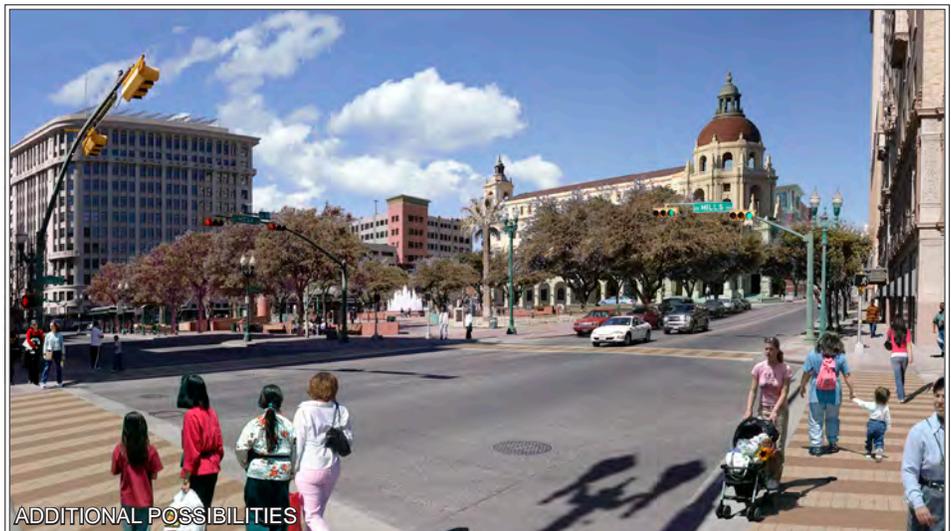
Change Over Time

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 as well as those from around the region.

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 component of an arena's implementation. All financing mechanisms should be considered to determine the true costs and benefits associated with the 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 Union Rail Yards. 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 AND 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.

Urban Design

Goal 3.1: Increase the walkability, livability, sociability, and sustainability of Downtown El Paso, while maximizing public infrastructure investment.

Policy 3.1.1: Develop and use smart design principles for the City as a guideline to evaluate rezoning requests and design public projects. Evaluate new development and infrastructure proposals based upon adherence to these goals and policies.

Policy 3.1.2: Use the illustrative plans and renderings in this Downtown element as examples to guide land use, development, and infrastructure decisions.

Policy 3.1.3: Increase overall Downtown street connectivity. Create multiple pathways for vehicular and pedestrian movement.

- a. Do not allow the permanent closure of streets. Keep block sizes small and limit the use of dead-end streets.
- b. Connect new Downtown streets to existing adjacent streets where possible.
- c. With the exception of closed streets that have become functional public spaces, look for opportunities to reopen formerly closed streets in order to bring more economic vitality to surrounding properties.
- d. Convert one-way streets to two-way streets to increase the economic viability of both sides of the street to times besides the commute hours, make the Downtown more intuitively navigable for visitors.
- e. Decrease roadway speed and allow for safe pedestrian movement.
- f. Coordinate traffic lights to reduce the number of red lights during weekends when long red light wait times on empty streets discourage Downtown visitation.

Policy 3.1.4: Amend City code to add provisions that would reestablish the relationship between the fronts and backs of buildings to ensure that public spaces have a natural surveillance from buildings and help avoid the blighting influence of the backs of buildings facing public spaces.

- a. Design buildings to have their principal entries fronting public spaces such as streets, squares, parks, paseos, or plazas (but not parking lots) and be connected to sidewalks.
- b. Fronts of buildings should face fronts, fronts can face sides where necessary, fronts should never be designed to permanently face backs.
- c. Locate parking lots out of sight at the interior of blocks or underground in structures. All vehicular entrances from a parking lot should be considered to be at the backs of buildings.

Policy 3.1.5: Scale civic spaces comfortably for users. Avoid open spaces that are too large. Enclose public spaces with building fronts to create “outdoor rooms” with a comfortable sense of enclosure.

Policy 3.1.6: Provide multimodal, pedestrian-friendly streets with ample sidewalks, on-street parking, and tree cover or shaded sidewalks.

- a. Design Downtown streets using pedestrian-friendly cross-sections from the El Paso SmartCode (Title 21) and arterials using the manual *Designing Walkable Urban Thoroughfares: A Context Sensitive Approach*.
- b. Design Downtown streets for pedestrians, bicyclists, and the automobile. Design streets to function at low vehicular speeds to improve safety.
- c. Provide street trees on both sides of at least 60% of streets, in tree wells between the vehicle travel way and walkway, at intervals averaging no more than 40 feet.
- d. 90% of Downtown streets should have sidewalks of 12 feet minimum width on retail or mixed-use frontages and 8 feet minimum width on all other streets.
- e. Design Downtown buildings to have at least 70% of the total linear feet frontages of mixed-use and nonresidential building façades within one foot of a sidewalk.

f. Design Downtown buildings to have functional entries to buildings occur at an average of 75 feet or less along nonresidential or mixed-use buildings or blocks.

g. Design Downtown projects to have on-street parking provided on a minimum of 70% of both sides of all new and existing streets.

h. Design 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. Permit and encourage the sharing of parking spaces between various Downtown uses in order to reduce the total number of parking spaces needed.

Policy 3.1.7: Encourage mixed uses to create a balance of housing, working, shopping, recreation, and civic uses. This mixing reduces traffic impacts, infrastructure costs, and later public services costs.

a. Locate and/or design Downtown projects such that 80% of its dwelling units are within a quarter mile walking distance of at least 4 diverse uses such as community-serving retail, services, civic/community facilities, and food retail.

b. Design Downtown buildings so that all ground-level retail, service, and trade uses that face a public space have clear glass on at least 60% of their façades between 3 and 8 feet above grade.

c. Design Downtown buildings such that if the façade extends along a sidewalk, no more than 30% of its length or 30 feet, whichever is less, is blank (without doors and windows).

d. Ensure that ground-level retail, service, or trade buildings windows be kept visible (unshuttered) at night; this must be stipulated in covenants, conditions, and restrictions (CC&R) or other binding documents.

e. Design projects that are nonresidential or mixed-use as follows:

i. Mixed-use buildings must include ground-floor retail, live-work spaces, and/or ground-floor dwelling units along at least 60% of the street-level façade.

ii. All businesses and/or other community services on the ground floor must be accessible directly from sidewalks along a public space, such as a street, square, paseo, or plaza.

Policy 3.1.8: Encourage a mix of residential types Downtown to allow a diversity of ages and incomes, which allows residents to trade up or downsize without having to move away. Multi-generational neighborhoods and life-cycle neighborhoods create strong social networks, avoid concentrations of poverty or wealth, and lead to safer communities.

a. Design Downtown projects to include at least three different housing types. Types may include arrangements such as: studio units, one bedroom units, two bedroom units, three bedroom units, duplexes, townhouses, multi-unit buildings, live-work spaces, accessory dwelling units, and apartment-ownership units.

b. Before commencing design, meet with adjacent property owners, residents, business owners, and workers; local planning and community development officials; and any current residents or workers at the project site to solicit and document their input. The best new developments are good, thoughtful neighbors from the beginning.

Policy 3.1.9: Amend City code to add provisions that would designate civic sites in Downtown, sited memorably.

a. Civic facilities such as schools, recreational facilities, places of worship etc. should be embedded within the urban fabric of Downtown and should, when possible, be located on high ground and at the terminal axis of streets to increase their visibility.

b. Design public facilities with civic art as a focus of community pride.

Policy 3.1.10: Amend City code to add provisions that would allow for and encourage the artful design of Downtown buildings. Encourage semi-public building elements like entrance porticos that add to the congeniality of the street. More convivial and aesthetically pleasing building design increases overall regional economic competitiveness by offering more choiceworthy places within the City to live.

- a. Allow building appurtenances above the first floor to encroach within the right-of-way, provided they have enough clear height to allow safe pedestrian passage, and they don't extend so far out as to interfere with vehicular traffic. This applies to arcades, colonnades, galleries, balconies, canopies, marquees, and awnings.
- b. Utilize artfully designed traffic calming measures Downtown to slow the movement of vehicles and, where possible, provide visual terminations to streets to make them more appealing for pedestrians. Methods include narrowing streets in segments and paving patterns.
- c. Where possible, provide rear alleys Downtown to allow walkable frontages in which the front entry is the most dominant visual image on the street.
- d. Locate utility equipment out of sight on rear alleys, in mid-block parking lots, and shielded by structures.
- e. Design parking lots to include pedestrian pathways with shade trees.
- f. Parking garages should be architecturally screened from view from public spaces such as streets, squares, and plazas.

Transit

Goal 3.2: Restore Downtown as the best transit-served area in El Paso.

Policy 3.2.1: Incentivize mixed-use development Downtown along multimodal networks such as transit routes, bike routes, and pedestrian paths.

Policy 3.2.2: Incentivize higher residential density Downtown within walking distance of transit stops.

Policy 3.2.3: Encourage Downtown projects within quarter mile of existing or planned transit service to have 40 or more dwelling units per acre.

Enhance Existing Character

Goal 3.3: Enhance and improve Downtown in accordance with its existing character.

Policy 3.3.1: Create a downtown parking strategy plan that continues to utilize and improve upon the provision of shared parking, public parking lots, and on-street parking with clear signage and mapping.

Policy 3.3.2: Adjust parking requirements to reduce car dependence. Reduce or eliminate off-street parking requirements Downtown.

Policy 3.3.3: Avoid relocating public facilities such as courthouses, post offices, schools, and administration buildings from urban centers and city neighborhoods to suburban areas.

Policy 3.3.4: Return housing to the Downtown to create a 24 hour center of activity.

Policy 3.3.5: Continue to identify, protect, and encourage the preservation and rehabilitation of El Paso's existing historic resources.

Existing Building Stock

Goal 3.4: Re-use Downtown's existing building stock to its maximum potential.

Policy 3.4.1: Adopt the International Existing Building Code as the code governing existing buildings.

TRANSPORTATION 4

Overall Goal: El Paso will strive to become the most walkable and least car-dependent City in the Southwest through sustainable mobility. The City seeks to implement a balanced transportation system with meaningful travel options to prioritize person-based mobility, and land use patterns that support walkability, livability, and sustainability. In time, El Paso will strive to join the ranks of the most walkable and multi-modal metropolitan areas in the country.

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"MAKE TRANSIT A MORE ACCESSIBLE, ATTRACTIVE, AND VIABLE TRAVEL OPTION AND TO MAKE EL PASO THE LEAST CAR-DEPENDENT CITY IN THE NATION, THEREBY LEADING TO ECONOMIC DEVELOPMENT AND IMPROVING THE QUALITY OF LIFE FOR OUR COMMUNITY."

- EL PASO SUN METRO

CURRENT CONDITIONS

INTRODUCTION

El Paso aspires to shape its destiny through transportation. One primary vision shaping this Comprehensive Plan is El Paso's aspiration to become the most walkable and least car-dependent city in the Southwest if not the entire country. To do so, the concept of transportation must be completely re-imagined from a conventional auto-only perspective towards providing travel choices for people in context with their surroundings. 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 towards person-based mobility that provides choices, balance, and connections between driving, transit, walking and bicycling in communities of lasting value, character, and sense of place.

Where Are We 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 through the City. A rapidly-expanding freeway network connects an even larger network of wide, high-speed four and six lane primary arterial roadways, along with several recent and planned freeway, interchange, and other major highway projects. Arterial and even collector roadways are designed almost exclusively for driving, with minimal, unsafe, or non-existent walking, bicycling, or transit facilities in most areas.

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 roadways lined with strip commercial development.

This development pattern – and accompanying transportation network – exclude most travel options as well as dictate reliance on having access to or owning an automobile, creating 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 roads. The result of even more traffic and congestion, as well as an ultimately limited and ineffective set of strategies to address them. The current transportation strategy dictates even more low-density, sprawling, auto-dependent land use patterns that reinforce that are simultaneously one of the causes and symptoms of the transportation strategy.

There are other important implications of the relationship between transportation and land use such as:

- Constrained and unsafe mobility for those who choose to or cannot drive or afford a car, such as children and elderly persons

- Significant personal and household expense (often on limited income) to own, operate, and maintain one or many vehicles
- Reliance on cheap oil/petroleum and gasoline for auto-based mobility
- High rates of obesity, poor health, and sedentary lifestyles
- Devalued neighborhoods, property values, and economic activity from an adverse transportation environment
- Lost opportunities for land use to be a meaningful strategy to address transportation and mobility

Another critical implication to how the region addresses traffic, congestion, and mobility is a reliance on speed as a trade-off for more frequent, longer, and farther vehicle trips. In this framework, vehicle travel and the implications discussed above are treated as givens – relatively little attempt is made to reduce vehicle trip frequency, distance, or duration through land use, travel choices, or other means. Instead, this framework relies on passively accepting traffic growth and trying to lessen the resulting congestion and air pollution through major capacity investments that facilitate high-speed travel.

Where Are We Going?

Through its transportation vision described above, the City of El Paso is charting a new transportation and land use future that emphasizes a balanced transportation network with meaningful travel choices – walking, bicycling, public transit, and driving – supporting livable and sustainable communities.

The City and Sun Metro are rapidly implementing a four-line, Citywide Rapid Transit System (RTS) with the objectives of improving mobility and travel choices, spurring economic development, enhancing Downtown revitalization, and investing in established neighborhoods. Through Plan El Paso and its companion Connecting El Paso, the City intends to reclaim the RTS roadway corridors as walkable “complete” streets, restoring their historic function as community main streets as part of revitalizing adjacent neighborhoods. The City is also investigating the potential 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.

“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**

TRANSPORTATION PLANNING

Regional Transportation Planning Process

As with other major metropolitan areas across the country, El Paso's transportation planning process is a partnership of several agencies, each with varying roles, jurisdictions, and requirements. All of these agencies collaborate to ensure a coordinated and comprehensive transportation planning process for the El Paso region. The City of El Paso is responsible for planning, funding, operating, and maintaining all non-state streets and roadways, including residential streets, collectors, and arterials. El Paso County performs similar functions for county roads and streets. Sun Metro, a part of City government, is the region's public transportation provider, operating and providing fixed route and demand response (paratransit) bus service within El Paso and several routes serving El Paso County, surrounding communities in New Mexico, and commuter bus service to and from Las Cruces. Sun Metro is also implementing and will operate the region's first Rapid Transit System, discussed further in this Transportation Element. There are three other major transportation agencies, each briefly profiled below.

El Paso Metropolitan Planning Organization (MPO)

The El Paso MPO is the federally-designated transportation planning agency for the Census-designated urbanized area of the El Paso region, which includes all of El Paso County and small portions of southern Dona Ana and Otero Counties in New Mexico. The MPO describes itself as "the regional planning and programming agency responsible for working with residents, neighborhood groups, local, state, and federal agencies, along with transportation providers in El Paso County, Texas, and southern Dona Ana and Otero Counties in New Mexico. The goal is to accomplish regional planning and programming under one voice that provides the greatest benefit while...reflecting the concerns of the community within the MPO area."

The MPO is responsible for short and long range transportation planning and programming federal and state funds for multimodal transportation projects, programs, and plans. 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 (TxDOT – discussed below), adjacent communities, and State legislators. The MPO also has several advisory and specialized committees that advise the Transportation Policy Board.

The MPO operates within a series of federal and State requirements that specify its functions, processes, and products. 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. This is the signature plan that

guides transportation decision-making for state, regional, and other major transportation strategies, actions, and investments for the El Paso region. Accordingly, the MTP is the plan for which all regionally-significant (non-local) projects and other transportation plans must be consistent with. This is critically important because the MTP also documents the region's compliance with federal air quality standards, discussed in the next section.

The MPO also produces several other important plans and documents. These include the Mission 2035 Transportation Conformity Report, which also documents compliance with the federal Clean Air Act and State air quality implementation plans, as well as the Transportation Improvement Program, a project programming document that 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, a detailed Public Participation Program, and a Congestion Management Program.

As of Fall 2011, the MPO is initiating 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 (RMA) for El Paso. RMAs are a political subdivision of the State that have the authority to "study, evaluate, design, finance, acquire, construct, maintain, repair, and operate transportation projects." RMAs may also issue bonds, acquire or condemn property, enter into contracts and agreements, collect tolls and fares, and other functions related to implementing and managing 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 major, regionally-significant transportation projects. CMP projects include the freeway buildout and extension of Loop 375, major new and enhanced interchanges, the Rapid Transit System network, and other similar major projects.

The CRRMA is specifically 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 (east), aesthetic improvements along the Interstate 10 corridor throughout El Paso, and new managed toll lanes on Loop 375 from US 54 to South Zaragoza Road. As of early 2011, these projects are programmed for near-term construction within the next five years, with several scheduled to commence within the next 1-2 years.

Texas Department of Transportation (TxDOT)

TxDOT is responsible for planning, funding, operating, and maintaining all federal and State highways within the El Paso region and across Texas. In El Paso, these include Interstate 10, Loop 375, and US 54, and also include several arterial roads 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 roadways in El Paso that function as urban arterials.

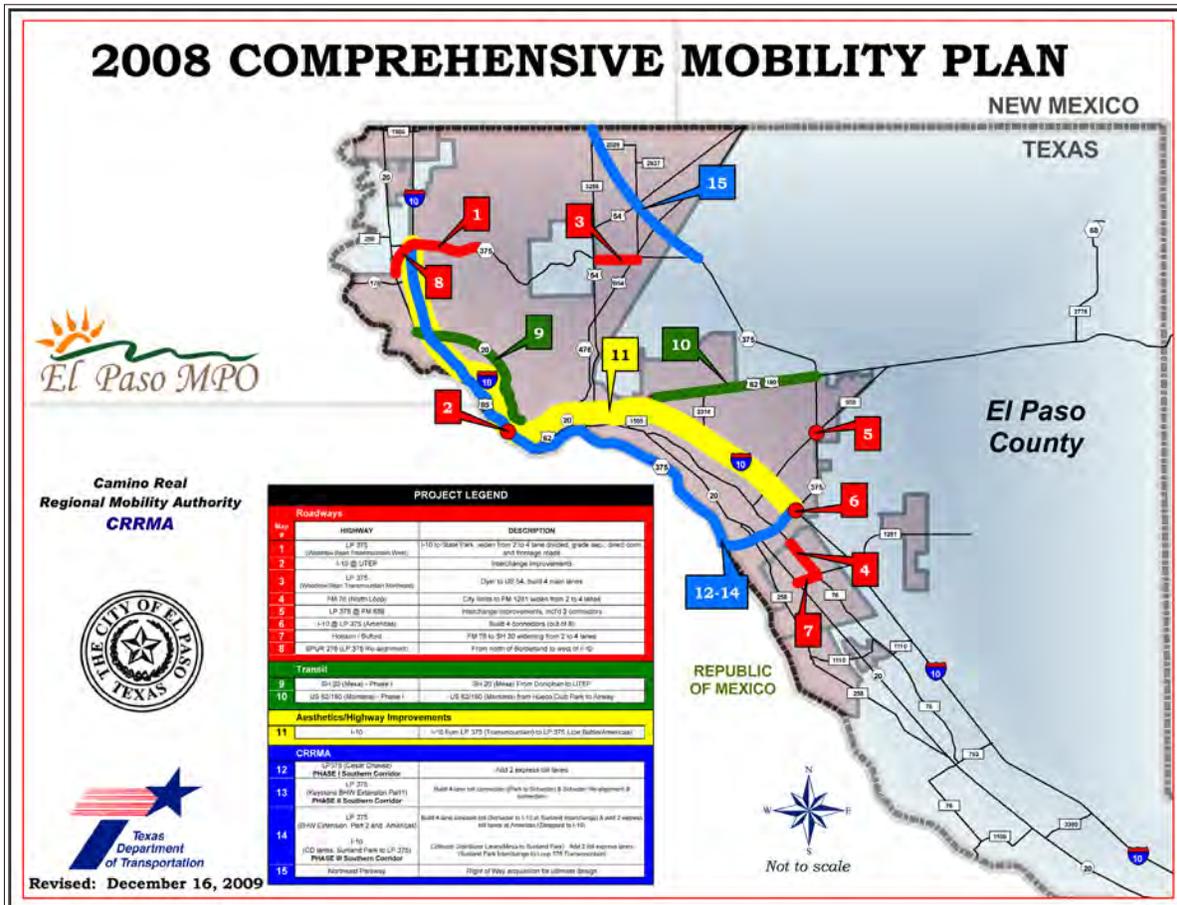
TxDOT is also responsible for or involved in planning for non-motorized transportation, rail and trucks, ports and marinas, and other elements of Texas' Statewide transportation facilities and infrastructure. Additionally, TxDOT also prepares Statewide transportation plans and project work programs; the latter is discussed in the Air Quality section.

TxDOT is engaged in studying, planning, evaluating, and constructing several major projects in El Paso. As of early 2011, TxDOT lists the following major projects in its El Paso District:

- **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 proposed 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 and evaluating two regionally-significant projects that are 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 project 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. As of early 2011, the Southern Connector is undergoing an Environmental Impact Statement process, while the Transmountain freeway project is proceeding towards construction based on agreements TxDOT reached with the City Council in fall 2010 regarding the facility's design and other implementation aspects.



The Comprehensive Mobility Plan is created through a partnership between the MPO, CRRMA, the City of El Paso, and TxDOT.

TRAFFIC

Both the City of El Paso and TxDOT collect various types of traffic counts on the region's street, highway, and freeway network. The City collects daily (24 hour) traffic counts on various roadway segments and at intersections throughout El Paso. The counts are published in list form and searchable database format on the City's website, and are also available in GIS. The City's counts are somewhat outdated (primarily 2001-2006), though some counts are more recent (2008-2010). The City also operates a Transportation Management Center (TMC). According to the City, the TMC's Computerized Signal System "includes the signal timing and coordination for approximately 500 traffic signals [as well as] remote operations from the Management Center in City Hall for 260 of these 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
- Be responsive to all neighborhoods
- Provide protection and relief from disproportionate traffic increases

The City uses a competitive application process to allocate available funding for proposed investments as part of the program.

At the State level, TxDOT collects and publishes the following types of traffic counts in PDF map-display format on its website for both 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 collected and displayed by TxDOT district for 2007 through 2009. For El Paso, these counts are the most updated, but are limited to the State highway system and to select count station locations.
- **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 roads; the trade-off is that 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 are maps that display "the total traffic and truck volume produced on TxDOT maintained roads. Counts shown are bi-directional and are based on AADT."

Additionally, Texas A&M University's Texas Transportation Institute (TTI) has created a "Regional Mobility Information System" for the El Paso region that monitors and displays various traffic information in an online, "real-time," interactive map-based format. The website (www.eptraffic.com) monitors and displays highway speed, travel times, incident locations, border crossing wait times, and other information.

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

Congestion & Performance

Traffic counts only tell half the story – that is, how much traffic is on the roadway – but not how the roadway is actually operating or performing given its capacity. Federal transportation regulations require large-city MPOs, including the El Paso MPO, to create and implement a "congestion management system" for just this purpose.

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" within the MPO's planning area.

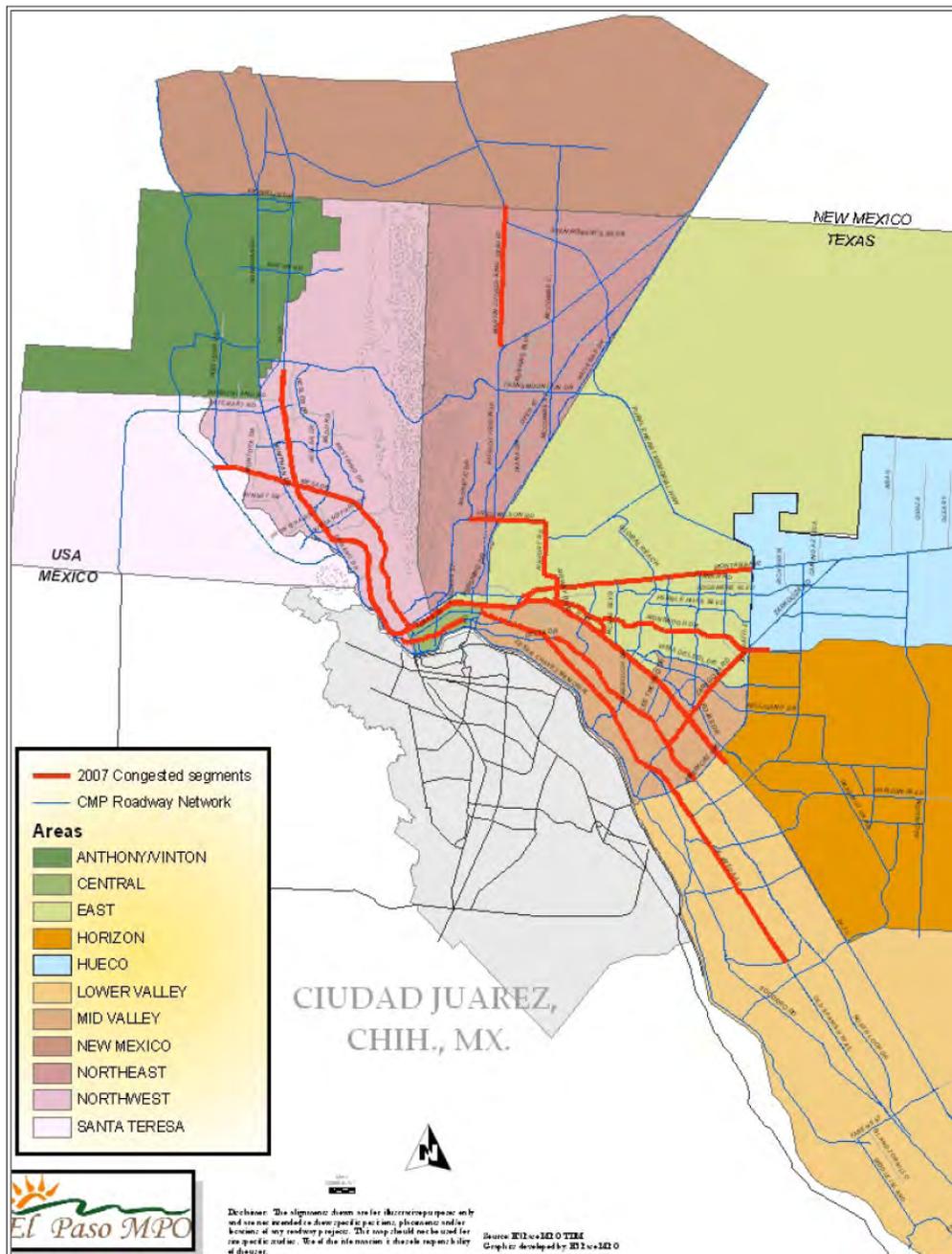
Using the MPO's travel demand (traffic) model, the CMP illustrates 2007 baseline congested roadway and highway segments, shown at the end of this section. For comparison purposes, the CMP's 2035 congestion forecast is also illustrated (though the official source for 2035 data is the MPO's Mission 2035 Metropolitan Transportation Plan). Congested roadways for both 2007 and 2035 are defined using a method that compares

the ratio of traffic volume to roadway capacity using the traffic model, known as a “v/c ratio” analysis. The CMP defines roadways as being congested when v/c ratios – the ratio of a roadway’s 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. The CMP also tracks congestion by defined study areas that are subsets of the entire MPO planning area.

the major cross-city corridors, such as Interstate 10, Mesa Street, Alameda Avenue, and Montana Avenue. By 2035, the CMP forecasts congestion on most roadway and freeway segments inside Loop 375 across the City. (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.)

Using this method, the CMP indicates 2007 congestion along

At a broader level, the CMP’s vision is to “maintain current congestion levels, and to the extent possible, manage the rate of



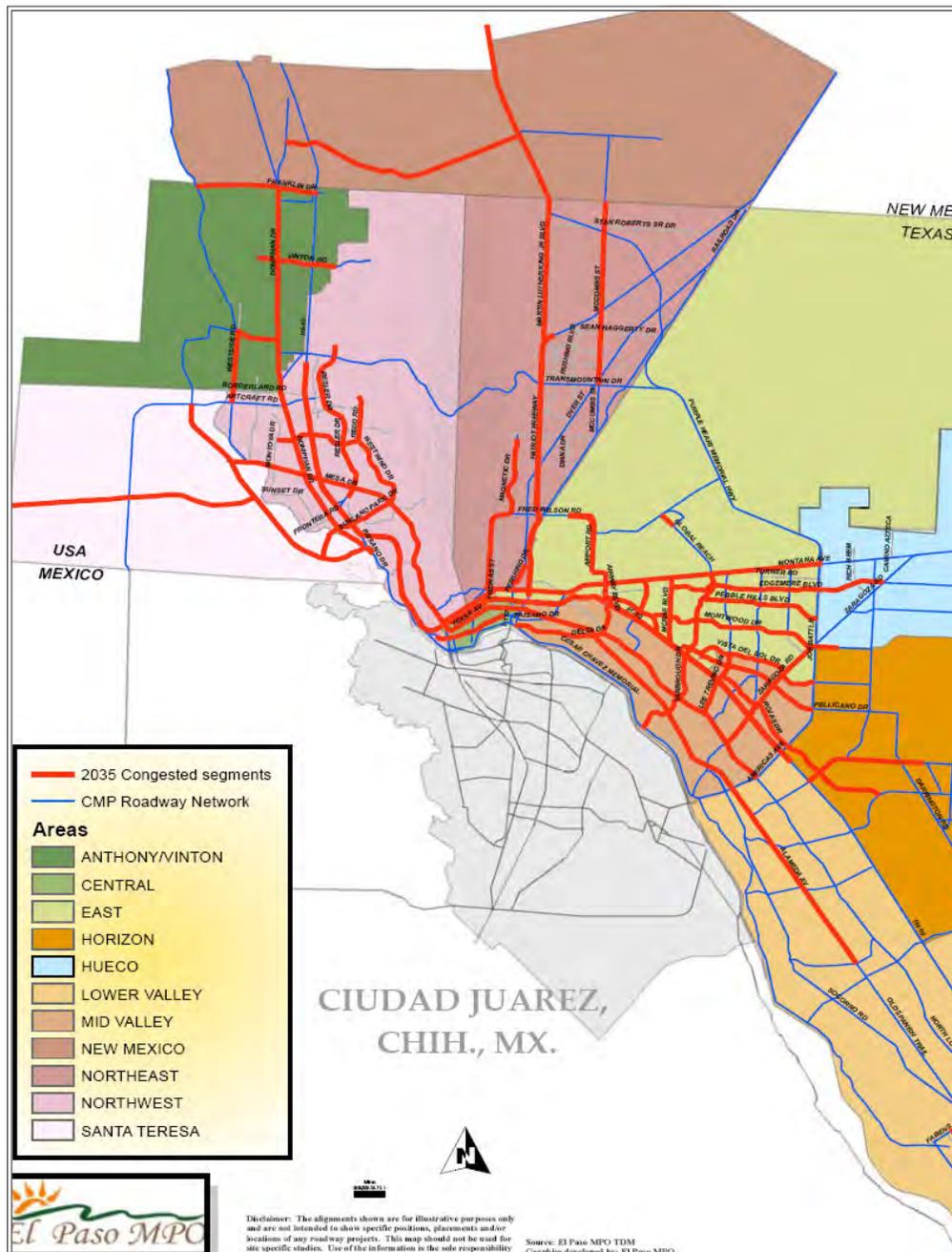
CMP Congested Segments (2007)

congestion increase over time,” and includes specific goals and objectives to do so as required by federal regulations. Along with assessing system performance via several measures, 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

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 to the El Paso region and fundamentally affects both requirements and outcomes of the regional transportation planning process. As El Paso’s 1999 Comprehensive Plan 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)...In order for projects contained in this plan to receive federal funding, the El Paso MPO must demonstrate that the plan conforms to the SIP to improve air quality in El Paso.”

There are three critical air quality elements affecting transportation planning in the El Paso region:

1. How the region is currently performing in meeting existing air quality attainment standards;
2. Demonstrating that future transportation plans, projects, and other investments will meet air quality attainment standards, known as conformity, and
3. The vital importance of consistency and coordination between local, regional, and State transportation plans that address and affect air quality.

Existing Conditions

El Paso has historically struggled with air pollution because of topography, industry, dust, urban form, and proximity to Juárez, among other factors. From a transportation perspective, the City’s 1999 Comprehensive Plan emphasizes 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 El Paso region’s current air quality attainment status. As shown in the table below, 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 that “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 re-

gion 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.

Transportation Conformity

As noted above, the concept of transportation conformity is demonstrating 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 the 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 also has ultimate approval authority for the Transportation Conformity Report after TPB approval. Importantly, it is only after FHWA has approved the conformity determination (which lasts for four years) that projects in both the MTP and TIP can proceed through the transportation planning and programming process and be funded for implementation.

This leads to the most important implication of transportation conformity, one that MPO staff also emphasized during the City’s development of this Comprehensive Plan: Conformity determination is based on a “package” of transportation projects, programs, and strategies contained in the MTP, so any change to that package outside of the formal MTP planning process risks nullifying 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) should 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, person-based travel choices, balanced transportation networks, and other policy objectives are key concepts to address and 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 roadway (and transit) projects. The MPO's current conformity determination is primarily based on modeling the MTP's regionally-significant roadway 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" (roadway 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, and the most effective means of achieving this goal is to improve walkability Citywide. “Walkability” describes the extent to which places are comfortable, inviting, safe, and useful for pedestrians, cyclists and transit users. Walkable places require a mix of uses, public spaces, a fine-grained network of connected streets that provides many options for travel, managed vehicle speeds and human-scaled development placing amenities and services within a ¼ mile radius of one’s home.

A walkable community is one that encourages the use of a mix of modes (pedestrian, bicycle, transit and motor vehicle). Walkable communities are created by a number of factors; a few are listed below:

- Connected network of streets
- Mixture of uses and densities
- Buildings fronting streets
- Narrow streets
- Streets with managed speeds
- Sidewalks
- On-street parking (for streets that have vehicular access)

An observation of the City’s existing transportation conditions will help frame a key design issue for the City. In general, travel in the City is dependent upon single-occupant automobiles and trucks, with a few exceptions where transportation options are expanded to include a great degree of walkability.

Vehicular Travel: Functional Classification

As it has been used by most traffic engineers thus far, “functional classification” defines a thoroughfare’s type in the hierarchy of the many thoroughfares that make up a network, which is based open the desired operation of the thoroughfare and which governs the selection of certain design criteria such as design speed, travel lane width, and level of land access.

Functional classification identifies two main areas where thoroughfares exist – rural and urbanized – and recognizes that these two areas have fundamentally different characteristics. Urban areas are defined in Federal-aid highway law (Section 101 of Title 23, U.S. Code) and designated by the Bureau of the Census as follows:

“The term ‘urban area’ means an urbanized area or, in the case of an urbanized area encompassing more than one State, that part of the urbanized area in each such State, or an urban place as designated by the Bureau of the Census having a population of five thousand or more and not within any urbanized area, within boundaries to be fixed by respon-

sible State and local officials in cooperation with each other, subject to approval by the Secretary. Such boundaries shall, as a minimum, encompass the entire urban place designated by the Bureau of the Census.”

Rural areas comprise the areas outside the boundaries of small urban and urbanized areas, as defined above. Conventional transportation planning and design of arterials, collectors and local streets over the last half a century has focused almost exclusively on minimizing traffic congestion, with thoroughfares functioning primarily to move automobiles quickly, efficiently and safely, without consideration for other modes of travel (walking, bicycling and transit usage). This has led to a narrow set of thoroughfares used almost exclusively in post-World War II development. El Paso’s transportation network is predominately made up of three street types, built in a suburban pattern. These three street types – arterial, collector and local, are described below.

Arterials, as defined in A Policy on the Geometric Design of Highways and Streets (The Green Book by AASHTO 2004), 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.

Local roads primarily provide access to land with little or no through movement.

This application of functional classification, along with other conventional land development policies, has led to the development of suburban, single-use developments connected by a transportation system dominated by motor vehicle travel. This has led to highly unwalkable and unsustainable growth patterns prevalent throughout the City.

Walkability Audit

As mentioned previously, most of El Paso's transportation system is designed to give vehicular travel the priority over other modes. Little priority has been given to other transportation users such as walkers, cyclists and transit-users throughout most of the City. Exceptions to this exist in El Paso's Downtown and historic neighborhoods where the thoroughfare networks were developed before automobiles became commonplace.

A walkability audit was performed for several areas of the City as part of the project's November 2010 charrette, with City Engineering and District TxDOT staff participating. The purpose of this was to gain a general understanding of El Paso's walkability, by measuring typical streets in three typical conditions within the City.



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.

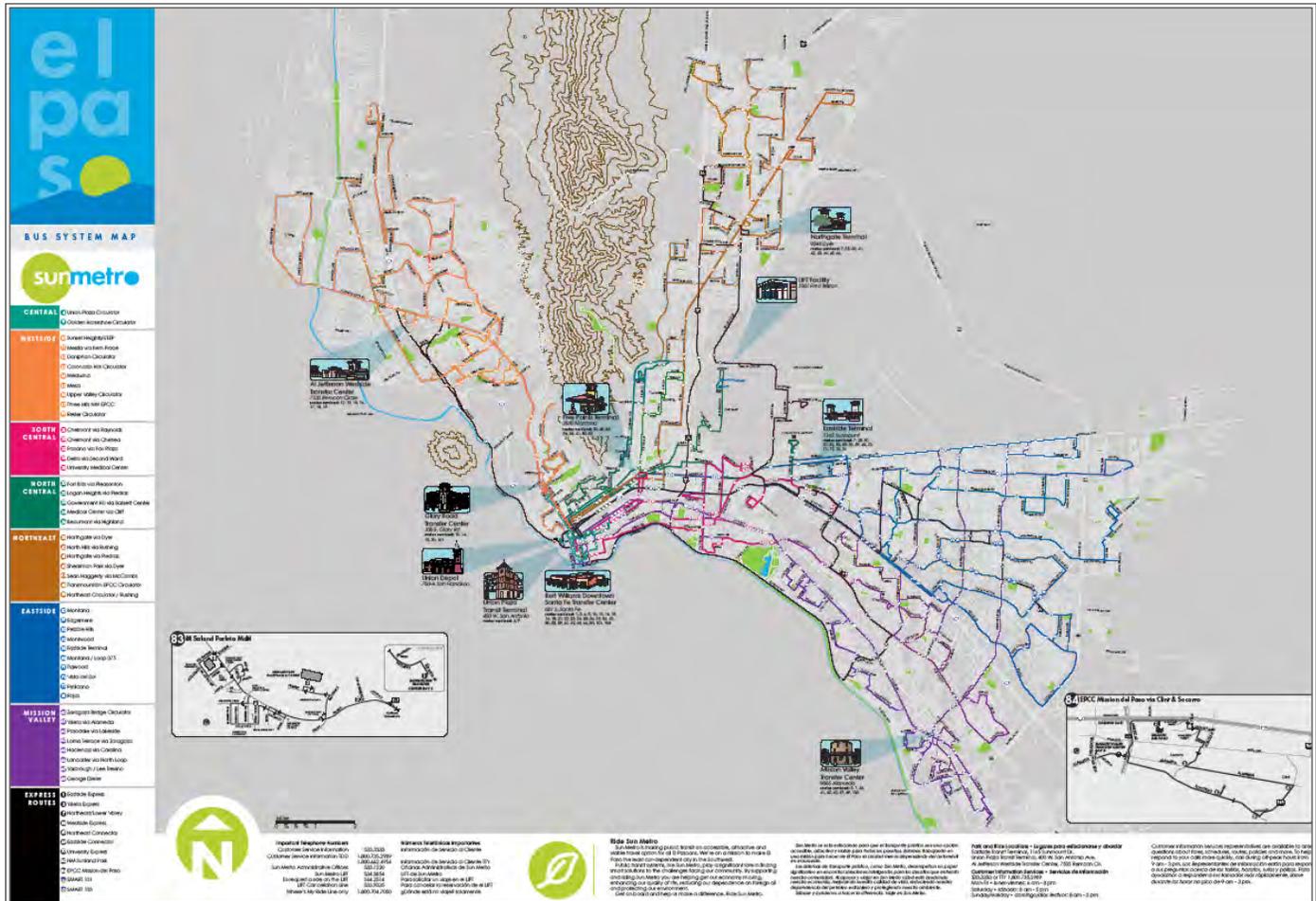
TRANSIT

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. The agency is formally known as the Mass Transit Department, and is part of the City's municipal government structure. Additionally, the Mass Transit Department Board provides direction, oversight, and approval to Sun Metro in its operations and administrative functions.

As of early 2011, Sun Metro operates 55 fixed routes in the City, six in the county, and one intercity route between El Paso, Anthony, and Las Cruces. As illustrated in Sun Metro's system map (below), the network covers a substantial geographic area to reach all sectors of El Paso. Included in this network are two "pre-RTS" routes – SMART 101 and SMART 103 – that provide fast, frequent service to a limited network of strategically-located stops along the Oregon and Alameda corridors, respectively. Another unique element of Sun Metro's bus network are the free Golden Horseshoe Circulator and Union Plaza Circulator routes serving Downtown El Paso.

Given the expansive geographic area it serves, and as part of implementing its transit vision, Sun Metro is changing from a conventional "hub and spoke" system, where routes primarily radiate to/from Downtown, to a "node" system anchored around several satellite transfer hubs to provide for shorter routes and faster travel times throughout the City. Along with "fast-tracking" its RTS (discussed below), Sun Metro is just as ambitiously building its major transfer centers. Four major transfer centers have been completed and began service between September 2009 and December 2010: Downtown (Bert Williams), Westside (Al Jefferson), Mission Valley (Nestor A. Valencia), and Glory Road. These four join another four existing terminals: Five Points, Union Depot, 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 Eastside serving the Montana RTS corridor.



Sun Metro Bus System Map - <http://www.elpasotexas.gov/sunmetro/sunroute.asp>

All of these transfer hubs share common characteristics, including:

- 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 wi-fi;
- Ticket, vending, and change machines;
- Restrooms and water fountains, and
- Other facilities and services oriented towards passenger convenience and comfort

Sun Metro's ridership increased 8% during the last two full fiscal years, from 12.6 million passenger trips in fiscal year 2008/09 to 14 million passenger trips in fiscal year 2009/10. This ridership increase is consistent with the national trend of record-high transit ridership as gas prices peaked with the beginning of the economic recession. 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, age and cleanliness of vehicles, new shelters, the significant investment in transit centers and heightened community visibility. Sun Metro's fast-track RTS implementation, and the tangible and functional progress represented by the distinct new transfer centers, are also generating highly visible and 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.

Other operational data include a fleet of 159 fixed route buses operated by 323 drivers, and 65 paratransit buses operated by 80 drivers. All fixed route buses use compressed natural gas, which, according to Sun Metro, emit 50% less pollutants than an average vehicles.

Like most transit agencies, 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, the opening of several new regional transfer centers discussed above 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 – roadway traffic volumes, signal timings, new street connections, route directness, and others – that affect route timing, alignment, safety, transfer opportunities, or other service issues. In 2011, Sun Metro will also undertake a comprehensive review of all its routes and bus stop locations to increase service efficiency and convenience.

SUN METRO'S NEW VISION: "TO MAKE TRANSIT A MORE ACCESSIBLE, ATTRACTIVE, AND VIABLE TRAVEL OPTION AND TO MAKE EL PASO THE LEAST CAR-DEPENDENT CITY IN THE NATION, THEREBY LEADING TO ECONOMIC DEVELOPMENT AND IMPROVING THE QUALITY OF LIFE FOR OUR COMMUNITY."



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 radiates from Downtown along the City’s four “main streets” – Mesa Street to the Westside, Dyer Street to the Northeast, Montana Avenue to the Eastside, and Alameda Avenue to Mission Valley.

Implementing RTS involves a collection of tasks, analysis, reports, and other work products known as the Alternatives Analysis (AA) process that is required to receive federal funding through the Federal Transit Administration. The AA process analyzes a comprehensive set of socioeconomic, technical, qualitative, and other data to determine route alignments and station stops, service and operating characteristics, vehicle technology, and other RTS elements. Because each of the four RTS lines is on a different opening time frame, each is also at a different point in the AA process. The Alameda RTS line is programmed to start service first, currently scheduled for 2013. The Mesa RTS line would follow in fall 2014, the Dyer RTS line in fall 2015, and the Montana RTS line in 2016. Associated with each RTS line are regional transfer centers, as well as the construction of an administrative, operations, and maintenance building on Montana near Lorne Road, just east of Wedgewood Drive.

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 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 ability to shorten red or lengthen green traffic signals)
- Fare prepayment (save time by paying for your fare 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>

All RTS lines will be federally-funded through the Small Starts/ Very Small Starts program except for the Alameda RTS, which 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.



The City’s proposed RTS includes branches to all four major areas of the City, with routes along the City’s four major arterials. Each RTS route terminates 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 is anticipated to share several characteristics. Chief among these is the operating characteristic known as “TSM,” or Transportation Systems Management. TSM refers to relatively low-cost and small-scale strategies used to optimize existing transportation facilities and operations to improve performance. For RTS, it is a service framework that 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 the City and Sun Metro made after technical analysis through the AA process indicated most of the ridership and mobility benefits at significantly less expense for the TSM option rather than operating in exclusive busways. Other TSM characteristics include signal prioritization and queue jump lanes where feasible to maintain bus speeds and reduce delays.

It is anticipated that every RTS line will operate at 10 minute frequencies in peak periods (6:00-9:00am and 3:00-6:00pm) and at 15 minute off-peak frequencies (all other times between 6:00am-8:00pm) Monday-Saturday, and no Sunday service. 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 as with light rail transit systems, and will operate as an overlay – meaning in addition to – existing local bus service, and will meet the Federal Transit Administration’s (FTA) requirement for no net service degradation. The buses will be 60-foot articulated vehicles with a to-be-determined special color and branding scheme. The stations and shelters will likely have a brushed or stainless steel theme, will be longer than normal bus stops, and will feature pedestal, cantilever, and/or other distinct design.

Ridership and Land Value

Investment in RTS, particularly in a system that will operate primarily in mixed traffic instead of in exclusive lanes (the TSM option described previously), 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.

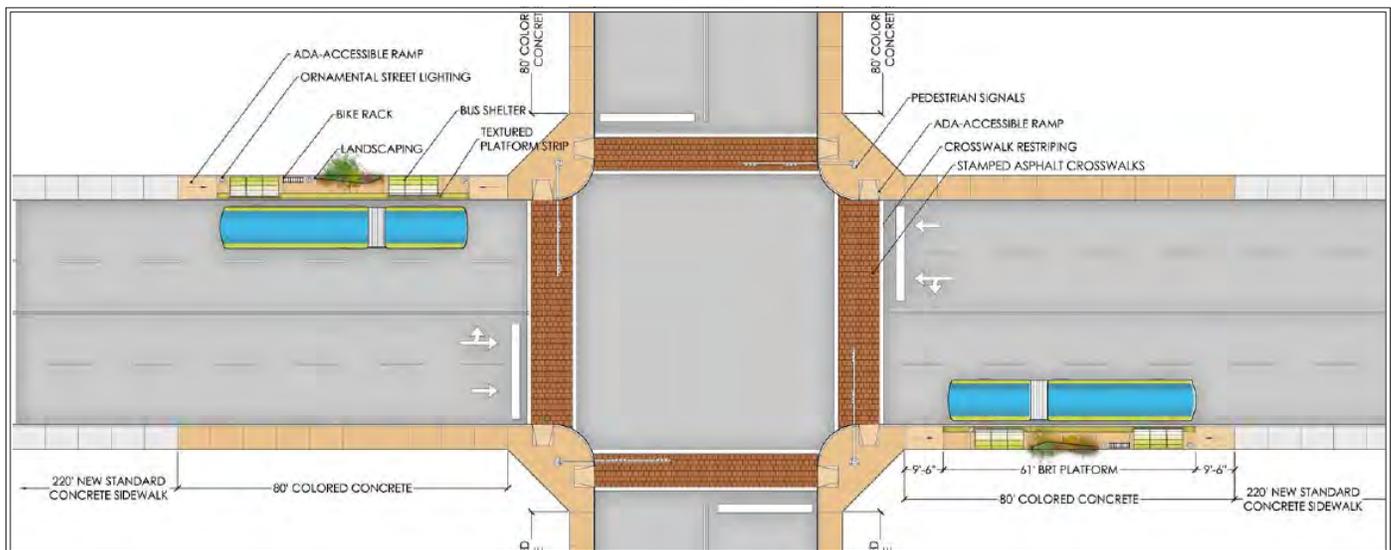
As previously discussed, Sun Metro’s detailed engineering analysis (conducted by Jacobs Engineering, a national engineering consultant) demonstrated that RTS ridership is not dependent on service technology. As shown, daily RTS ridership on all four lines for the TSM option is almost identical to that for the dedicated RTS options. This is important from a private sector perspective because it demonstrates that “TSM RTS” can create as much of a potential economic market for TOD as

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

dedicated RTS. Additionally, national research demonstrates that RTS service is effective at both increasing total transit ridership and attracting new discretionary riders. As one example, a FTA analysis found significant total and new ridership increases from several RTS systems around the country. RTS systems have also been shown to significantly increase transit ridership over a period of years, both in this country and others. As shown, these longer-term ridership trends are substantial, meaning that, like other forms of high capacity transit (HCT), RTS continues to



Planned Typical RTS Station Design

build up and expand its ridership market over time. 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.”

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

Another concern raised by the private sector in comparing RTS with fixed guideway rail transit (such as light rail or commuter rail) is that TOD is more attractive and less risky around rail stations because of the “permanence” of the fixed guideway investment as opposed to bus lines which can be 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.

For El Paso, it is important to consider that, even with the TSM option, Sun Metro is making significant “permanent” investments for RTS in terms of the transfer centers, RTS stations, and accompanying infrastructure and facilities. And, Sun Metro and the City are prioritizing transformation of the RTS corridors into walkable urban streets to support RTS service. Just as dedicated transit lanes can be easily-restriped, operating RTS without them does not reduce the system’s permanence.

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 Ventura	42 27	67 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 the City 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 0-5 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 prop-



Bogotá’s RTS system features branded buses and distinctive bus stops, and has improved land values in the areas that it serves.

erties 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.

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 September 2013, 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 2014 and will replace the existing SMART 101 service. It will begin at the Downtown Transfer Center, travel up Santa Fe Street to Franklin Avenue to Oregon Street to the Glory Road Transfer Center. From there it will travel on Mesa Street to the Westside Transfer Center. More specifically, 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 Shadow Mountain Drive
- Mesa Street and Fountain Road
- 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, and a decision is anticipated in early 2011.

Dyer RTS

The Dyer RTS line will connect Downtown, Five Points, and Northeast El Paso with RTS service anticipated to start in 2015. 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 recommended 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. 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. The Dyer RTS is continuing through the AA process described previously.



The Northgate Transit Center is planned to form the core of a transit oriented development that could become the center of Northwest El Paso.

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 between two sites. One is as part of the proposed Viramontes development north of Montana and east of Loop 375. The other proposed location is on City-owned property at Edgemere and RC Poe. Sun Metro is envisioning approximately six local bus routes connecting at the transfer center, a potential Zaragoza circulator, and other local and express connections.

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. Also as with Dyer, the Montana RTS is continuing through the AA process described previously.

High-Capacity Transit (HCT) Planning

Residents and participants in the planning process have consistently prioritized long-term investment in transit, specifically in high capacity transit, as a visionary and important element of long range transportation planning.

High-capacity transit (HCT) 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 (TOD). Accordingly, HCT includes rail-based transit (streetcars, light rail, heavy rail, and commuter rail); and other forms of what are commonly called rapid transit.

Streetcar

The City recently completed an initial streetcar feasibility study that showed both market potential and technical viability for a streetcar route between Downtown El Paso and UTEP within the Oregon-Stanton-Mesa corridor.

Commuter Rail

El Paso and Las Cruces have long-advocated (and are studying the potential) for, commuter rail service linking the two cities. A frequently-cited peer example is New Mexico's Rail Runner Express commuter rail that connects Albuquerque (from Belen) and Santa Fe.

Inter-City Passenger Rail

Two potential rail technologies exist to connect the El Paso region to others in the southwest through passenger rail – 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 for purposes of this Comprehensive Plan as the policy direction of pursuing all reasonable intercity rail opportunities. In fact, Amtrak already serves El Paso's Union Depot via the Texas Eagle (with service east to Chicago via San Antonio and Dallas) and the Sunset Limited (service between Los Angeles to New Orleans). Accordingly, a potential focus of new intercity passenger rail service in a currently un-served but important corridor is between El Paso, Albuquerque, Santa Fe, and Denver.

In summary, HCT is being explored to evolve and grow the region's transit network and implement the City's policy priorities addressing walkability, travel choices, re-investing in Downtown first, and re-shaping El Paso's urban form and economic development through public transit and TOD.

FREIGHT

Situated at the intersection of three states and two countries, the El Paso region is one of the largest international commercial and commuter ports in the Western Hemisphere. El Paso is also 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.

El Paso has rail lines running north-south and east-west through the City that are predominantly served by Union Pacific, Burlington Northern Santa Fe (BNSF) and Ferromex. The City currently has sixty-eight at-grade rail crossings.

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 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).

Commercial vehicles are restricted to the Bridge of the Americas (BOTA) and the Zaragoza Bridge. Inspection services are available from 6 AM to 6 PM at BOTA and from 6 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 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.

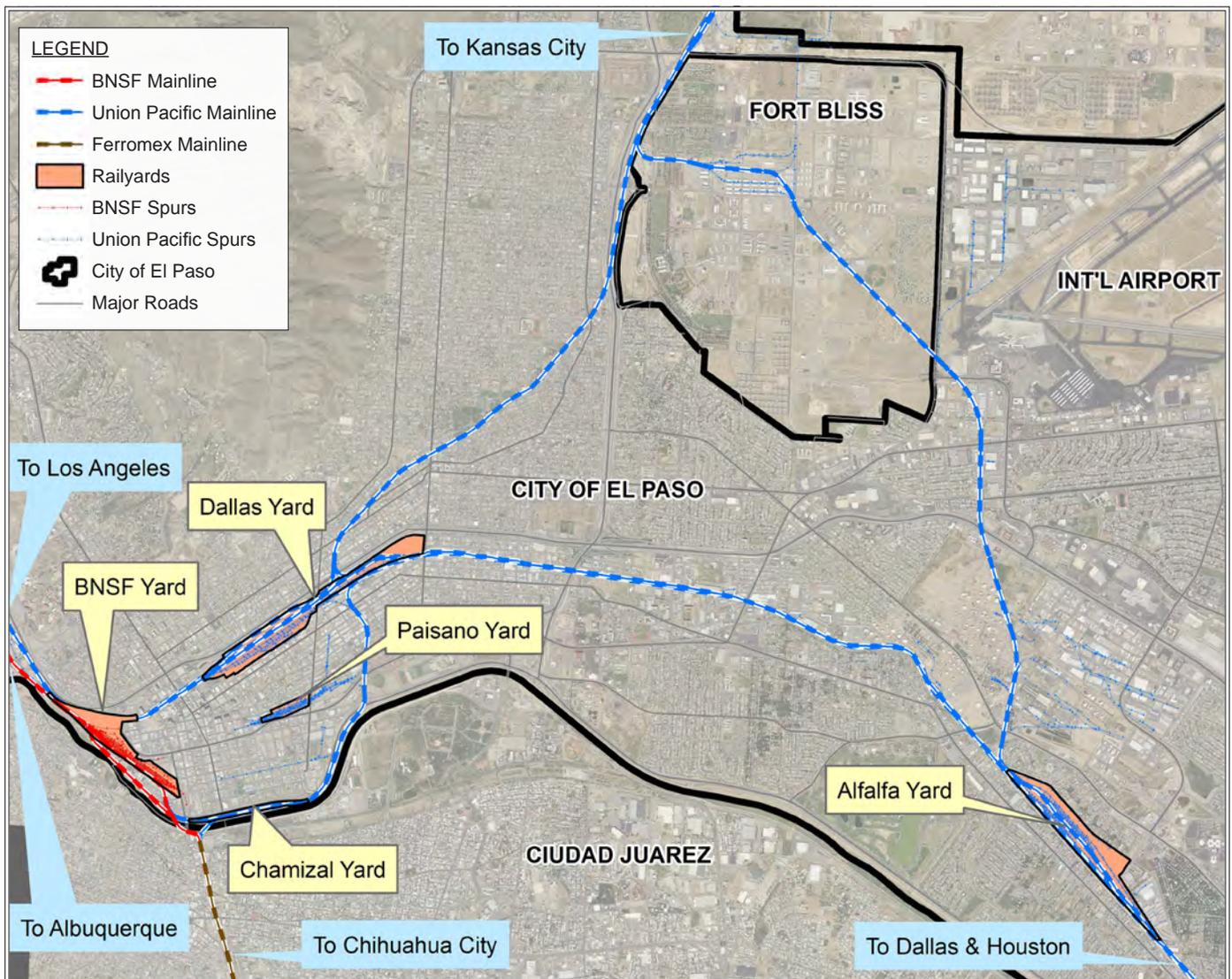
Current Railroad Operations in El Paso

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.



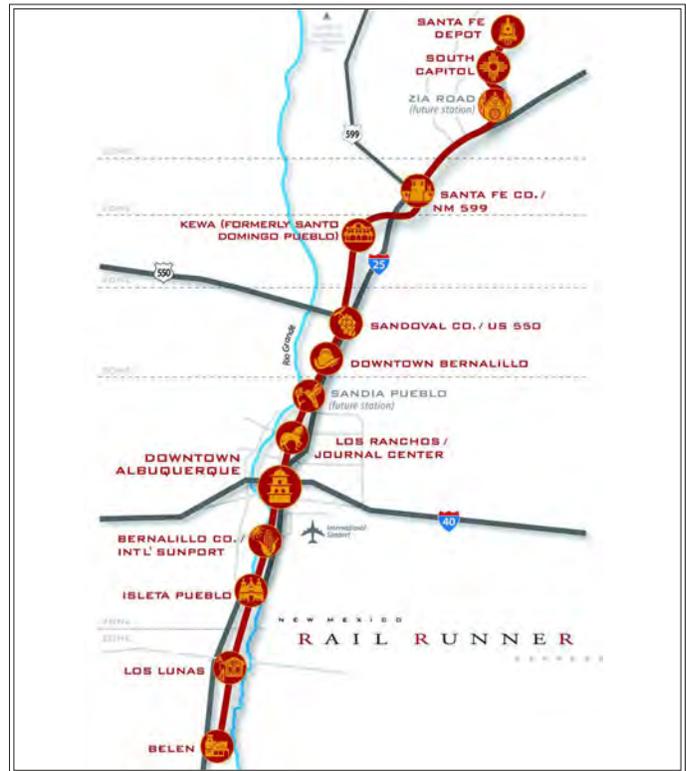
Railroads and Railyards

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.



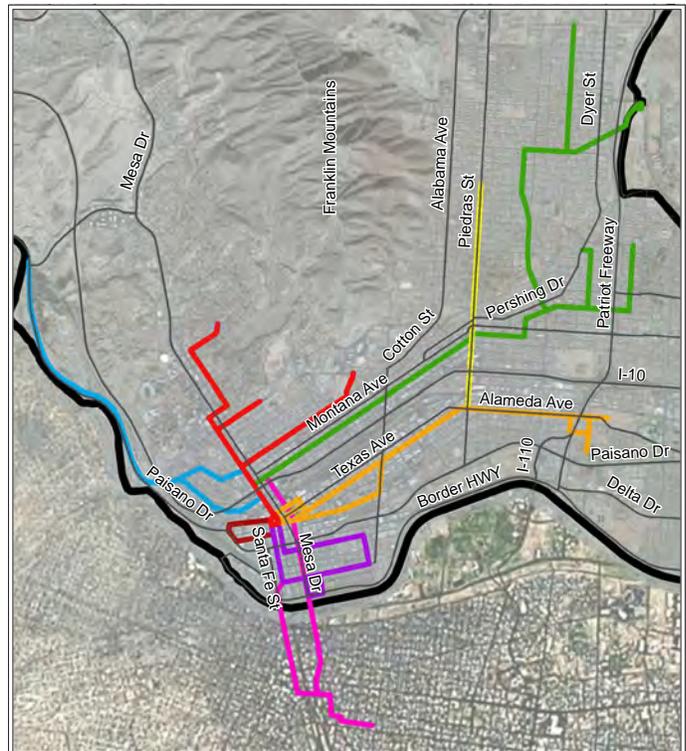
The nearest non-Amtrak passenger service is the New Mexico RailRunner Express, which runs 97 miles from Santa Fe to Albuquerque to Belen. This new diesel-powered service primarily serves commuters traveling to or from Albuquerque or Santa Fe. Much of this route uses rail right-of-way purchased by the State of New Mexico from BNSF, which continues to run freight trains when they won't interfere with commuter trains.



Railrunner Express

In addition to intercity rail service like Amtrak and commuter rail like RailRunner, many larger cities have "light rail" systems which provide more frequent all-day service to more closely spaced stops. 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.

Another rail option is the streetcar, also electric powered but running on tracks embedded in streets. Streetcars stop even 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 Juárez, ended service in 1974.



Extent of El Paso/Juárez Streetcar Network

PARKING

Parking in El Paso, like most cities its size, is characterized predominantly by plentiful free off-street parking in most areas of the City. Downtown, UTEP, and the area between them, particularly the Oregon corridor, have several parking garages (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 parking through Chapter 20 of its Municipal Code, which sets minimum standards and requirements for parking by land use, and has provisions addressing shared use parking, parking reductions, bicycle parking, and other related issues.

Parking has important, though sometimes not obvious, implications for travel behavior and mode choice in terms of how and where parking is supplied, managed, and designed. The long-standing conventional practice in El Paso and across the country of surrounding retail centers with enormous free off-street surface parking isolates them from the street and often from adjacent residential neighborhoods. These design elements have the consequence of discouraging walking, bicycling, and transit use or access because the buildings are too unsafe and impractical to reach except by car. Moreover, because almost all parking is always free, there is no reason not to drive.

Instead, having to drive becomes 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 “front-door” service 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. And development costs increase while economic activity decreases through having to devote so much land to parking that is rarely ever fully used.

The recommendations section of this Transportation Element provides a substantial 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.

AIRPORTS

The El Paso region’s airport system includes the El Paso International Airport (ELP), Biggs Army Airfield, Abraham Gonzales International Airport (Juárez), and several smaller airports (Horizon, West Texas, Fabens, and Santa Teresa).

El Paso International Airport (ELP)

El Paso International Airport (ELP) is located six miles northeast of Downtown El Paso and just south of Fort Bliss. ELP 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. Airport staff has indicated that the airport has excess capacity, specifically the terminal and concourses, and is not anticipating a significant increase in passenger traffic for the foreseeable future.

As of November 2010, the airport has seven airlines offering 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 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

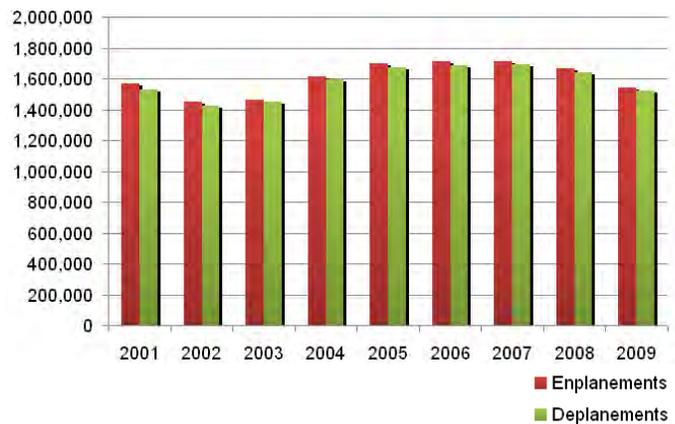
Sun Metro provides transit service to and from the airport via routes 33 and 50. Service characteristics for these routes are summarized in the next column:

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.

ELP 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.

ELP is also home to the International Trade Processing Center (ITPC), 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

Route 33					
Monday - Friday		Saturday		Sunday/Holiday	
Headway		Headway		Headway	
45 min.		45 min.		65 min.	
First Stop	Last Stop	First Stop	Last Stop	First Stop	Last Stop
5:58 AM	8:58 PM	6:43 AM	8:58 PM	7:50 AM	6:40 PM

Route 50					
Monday - Friday		Saturday		Sunday/Holiday	
Headway		Headway		Headway	
30 min.		30 min.		30 min.	
First Stop	Last Stop	First Stop	Last Stop	First Stop	Last Stop
6:16 AM	9:46 PM	6:16 AM	9:46 PM	6:58 AM	8:26 PM

Headways for Route 33 and Route 50

Growth and Redevelopment

The airport is currently targeting the following two areas for significant growth or redevelopment:

1. Science and Technology Park: This area is one hundred and fifty acres east of Global Reach Drive, south of George Perry Drive, and west of Loop 375. 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 and community college branch in the southwest quadrant of Spur 601 and Loop 375. Airport and City staff have identified transportation access and connectivity issues as very important in this area because it is undeveloped, separate from the existing urban fabric, and is currently accessible only by two access-limited freeways. The other component is the reservation of a nine-to-fifteen acre site for a potential resort hotel.

The airport is currently working through the SmartCode application process to plan and implement these projects.

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 roadway for truck traffic, and implement a TOD in phases around the Montana RTS airport station. Airport and City staff have cited this RTS station, the existing seven hotels, and the potential for future Light Rail Transit as opportunities for redevelopment. The entire area targeted for these various efforts is south and west of Airway Boulevard, north of Montana Avenue, and east of Airport Road.

Southwest of the airport, transportation access and connectivity to/from the main terminal and adjacent areas are critical issues. Airway Boulevard provides the only direct terminal and

parking access. Accordingly, traffic funnels onto Airway Boulevard – existing traffic counts exceed 40,000 daily vehicles 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.

This leads to three important implications for future redevelopment:

1. 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.
2. Without increased connectivity and access – and perhaps even with it – redesign opportunities are very constrained for Montana and Airway. While these roadways are wide and not conducive to creating a TOD or pedestrian-friendly environment, they carry so much traffic in limited ROW that alternative roadway design options may not be feasible.



ELP 2008 Land Use Plan Study Area



ELP 2008 Proposed Land Use Map

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) because of the congested and constrained roadway network.

Airport Improvements

ELP 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 sq. ft. 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 Comprehensive Plan policies focused on improving access to and from ELP 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 ELP Master Plan Update set out to accomplish several key goals:

- Ensure that the region’s future demand for aviation activity can be accommodated
- Develop a plan for long-term expansion of the terminal area
- 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

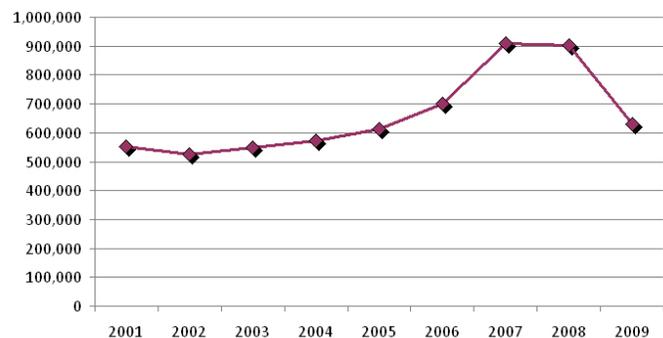
In 2008, El Paso International Airport hired consultants to develop a Land Use Plan for the non-aviation airport property in the study area.

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 and industrial uses concentrated on the current U.S. Postal Service tract.

Abraham Gonzalez International Airport (CJS)

Abraham Gonzalez International Airport is located in the south-eastern section of 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.

Based on 2009 total passenger traffic, the airport is the sixth largest of the thirteen international airports operated and managed by OMA in northern and central Mexico. It is Mexico’s sixteenth (approximately) largest airport when all major airports are included based on 2008 total passenger traffic. 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 four international border ports-of-entry (POE) with Juárez, Mexico in addition to the El Paso International Airport within City limits. There are also nearby POEs 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) and I-110. 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 two sidewalks for pedestrians. Reconstruction of all four bridges at this crossing began in July 1996 and was completed in June 1998.
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 two adjacent pedestrian walkways joining an elevated pedestrian bridge that connects to the second floor of the INS Administration Building.
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 (ICE), the Drug Enforcement Administration (DEA), and the Customs and Border Protection Agency (CBP) all have agency operations in El Paso to regulate traffic and goods through ports of entry from Mexico.

Statistics for El Paso's international crossings show that fewer people and vehicles crossed the City's border with Juárez in 2010 than in previous years. Overall economic conditions, shifting populations, U.S. Department of State travel advisories and general safety concerns may be contributing to this decline. An estimated 100,000 to 250,000 Juárez residents 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 (City of El Paso, Customs and Border Protection).

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 in the vicinity of border crossing locations.
- Understanding how the traffic associated with border crossings affects adjacent communities.

The planning process, led by Cambridge Systematics, Inc., began in the spring of 2010 and is expected to conclude in mid 2011. The plan and planning process will include 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 will focus 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 issues forums to guide the development and testing of alternatives. Outreach will span from spring 2010 to spring 2011, and will target local businesses, neighborhoods, manufacturers, and freight shippers and carriers.
- Screening and evaluation of alternatives.
- Final recommendations and implementation strategies.



Santa Fe Street Bridge

COMMUNITY CONCERNS

Local residents and stakeholders provided numerous comments and input on transportation-related topics during the various charrette activities. All comments and input were analyzed to develop the following community-based major themes, concerns, and priorities.

Expand Transportation Choices & Options

The over-arching transportation theme connecting almost all comments and community input is to expand and increase personal mobility choices and options. Throughout the entire charrette process, residents (and stakeholders) emphasized the need and desire to have greater access to convenient and safe walking, bicycling, and transit opportunities. The charrette kickoff exemplified this theme with the observation that many residents grew up in El Paso walking and riding bicycles and that this is no longer true. Instead, almost everyone must drive (usually alone) for most trips, at great time, distance, and financial expense. Driving will likely continue to be important – rather, residents advocated for greater empowerment 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 potential Alameda corridor revitalization (discussed later in this section) with the Alameda RTS line, the first of the four RTS routes to be implemented.

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 binational) rail system. El Paso and Las Cruces have long-advocated (and are studying the potential) for commuter rail 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 mentioned converting existing rail track for LRT use, or perhaps to transition the RTS to LRT long-term. Finally, the City of El Paso has been studying a potential streetcar system in the Downtown to UTEP corridor.

Expand Safe Walking & Bicycling Environments

As with transit, residents strongly supported expanded walking and bicycling for both utilitarian and recreational use. Whether for kids walking to school, safe walking and bicycling on major arterials, access to transit, or recreational trails along arroyos or easements, non-motorized transportation is highly valued in El Paso given its conducive climate and natural beauty. And, as noted above, residents indicated a sense a missed or lost opportunity in terms of the region's culture, identity, and history towards walking and bicycling, with these activities become less common and possible over time compared to the City's history. Many residents advocated, often passionately, for more walkable streets and communities and for El Paso to become more pedestrian-friendly overall. Both residents and stakeholders recognized that safe, convenient, and attractive walking (and bicycling) environments are also key to successful transit and RTS service, 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 vehicle traffic, and walking, bicycling, or using transit are unsafe or even impossible. Residents advocated for redesigning streets and highways to include all of these travel modes, and to be safe, attractive, and convenient for different types of users. Specific investments suggested include crosswalks, more and wider sidewalks, "share the road" signage, and similar strategies, 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 Roadway Corridors, Especially Alameda Avenue

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. As noted above, rather than unattractive highways for pass-through vehicle traffic, residents spoke of these corridors as place-making destinations that reflect unique community identity and character. The new Mission Valley Transfer Center exemplifies this concept of community identity and place-making with its context-sensitive architectural style and its location in the 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 route options.

Another important element of this issue is how to address difficult intersections – those with both high traffic volume and complicated geometry. Given the Eastside and Mission Valley focus of the November charrette process, 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, Paisano at Montana, and others. Roundabouts were frequently-mentioned as potential solutions, as well as alternate routes and other strategies.

Make Infill, Reinvestment, and 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 eloquently 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, strip commercial, industry, and other uses. 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. The Airport, City, and others are developing plans and concepts to redevelop areas south and west of the terminal building and for potential new development to the east at strategic transportation locations, such as at Loop 375 and Montana, and Loop 375 and Spur 601.

STRATEGIES FOR ADDRESSING COMMUNITY CONCERNS

LAND USE AS A TRANSPORTATION STRATEGY

Like most North American cities, El Paso has historically addressed traffic and congestion primarily through roadway capacity, both widening existing highways and building new highways and freeways. Put another way, this is a “supply-side” approach of trying to provide as much traffic capacity as possible to “solve” current congestion and to mitigate forecast congestion before it occurs. It does not attempt to address the demand for travel, nor the factors influencing such demand – trip distance, frequency, and duration.

A powerful and exciting opportunity for El Paso is to incorporate land use as a transportation strategy. Doing so recognizes that the core elements of land use – location, density, mix (diversity), design (character), and others – significantly affect the amount, mode, and distance of travel, particularly for what are known as “net external” car trips, or traffic generated by a project that occurs off-site and therefore affects the larger transportation network.

Research and field observation across the country is finding that smart growth development – such as TND and TOD – can reduce net external car trips by 20% to 40%. This is accomplished through a mix of the following strategies:

- **Internal Capture:** This is the concept that many trips in a vibrant, mixed use neighborhood occur entirely within the project’s boundaries and do not affect the external roadway network. Live/work units, walking to the corner store, or even driving to an on-site restaurant are all examples of internal capture trips.
- **Transit Service:** Frequent and convenient transit service, such as El Paso’s pending RTS, has been shown to contribute to vehicle trip reductions in sustainable neighborhoods. Of critical importance to El Paso, however, is that local, non-RTS service can also confer this benefit with very frequent (10-20 minutes) and convenient service. Accordingly, future growth that may not have direct RTS access can still benefit from good local transit service and other trip-reduction strategies.
- **Walking/Bicycling:** The techniques of New Urbanism or Traditional Town Planning are intended to facilitate safe and convenient walking and bicycling. In particular, much of the trip reduction attributable to sustainable projects is due to increased walking within the neighborhood. While walk trips are also important to internal capture, it is worth considering walk/bike trips as a distinct factor.
- **Street Connectivity:** Sustainable community development patterns rely heavily on achieving a dense network of well-connected streets. Setting minimum standards for street network connectivity has become a central principle in LEED-ND and in other sustainability performance systems. While connectivity does not directly affect the amount of

raw traffic generation, it has a critical bearing on traffic distribution and site-specific effects.

The implication for El Paso is that how the region grows over time will shape – if not dictate – how people travel. Much of El Paso’s recent growth has been occurring on the Eastside of the City, increasingly at its edges. This growth has been characterized by sprawling, low-density, single-use, suburban development that places additional strain on El Paso’s urban services and infrastructure, including transportation facilities. Therefore, the region’s primary transportation infrastructure investments (particularly on the Eastside) have been in new and wider roadways and freeways. This pattern of continuing to build new roads, as opposed to investing in multimodal projects along existing corridors, is intimately tied to land use and development patterns, and ultimately community character.

As growth and development continue outward at the fringes, another hidden cost is exorbitant roadway maintenance. Not only must new capacity and facilities be maintained over time, so too must existing infrastructure in the core. This leads to three difficult outcomes for the City and other transportation providers, such as the County and TxDOT. First, keeping up with life-cycle maintenance costs becomes almost impossible, as maintenance backlogs keep growing as new capacity is added to the transportation network. Second, this in turn leads to difficult funding decisions, with the trade-off increasingly becoming maintenance vs. capacity. And third, existing infrastructure – whose construction has already long since been paid for – becomes underused as growth shifts outward, yet must still be maintained. For the City, the bottom line is that it gets caught in a never-ending – and constantly worsening – cycle of trying to keep up with new growth at its edges while maintaining what has already been built, with the unfortunate reality that it can never completely do both – mitigate congestion at the fringe nor catch up with deferred maintenance in the core. The City must constantly struggle to fund new capacity to keep up with growth, while already-paid for infrastructure becomes underused.

As emphasized, low-density, segregated use development necessitates the construction of new roadways, as the distance between origins and destinations (such as home and work) becomes too far to walk or bicycle and the lack of density makes transit service impractical. These development patterns force driving, and lots of it, as the only viable option. In contrast, urbanism consisting of vibrant, mixed use communities in keeping with El Paso’s own development history provide transportation choices and options that diversify personal and regional travel opportunities and ability.

CHARACTER-BASED MOBILITY PLANNING

The question then becomes how to apply these smart growth land use concepts to strategically target multimodal transportation investment tied to land use character. Knowing that land use character and transportation change varies across El Paso now and into the future, the following simple typology is recommended as an organizing framework:

- **Areas of Stability:** These are well-developed, stable neighborhoods and areas that are not anticipated to change significantly over time. Their land use character and accompanying transportation profile are stable and are not anticipated to undergo significant transformation. Many neighborhoods in the Eastside and Mission Valley fit this profile.
- **Areas of Change:** These areas, developed to varying degrees, are either anticipated or have the potential to change over time. Change may occur through as-yet-unachieved buildout, redevelopment, or other means. They may change because of their location, economics, land availability, or for other reasons. Areas around planned RTS stations are prime examples in this category. These areas may be appropriate for expanded or new land use and transportation strategies, and will likely require some retrofitting of both within the existing community fabric.
- **Areas of Growth:** These are vacant, undeveloped, sparsely developed, or other areas anticipated or targeted for significant growth and change over time. The land use and transportation character of these areas are yet to be determined, providing the greatest opportunity and potential for change over time. For that reason, they also represent the greatest challenge to plan and implement before the opportunity is missed and lost.

The objective of this framework is to strategically target land use change and accompanying multimodal transportation investment over time in the most appropriate areas, both in terms of community support and cost-effective transportation investment. In doing so, this framework also recognizes that land use and transportation change is not and should not be uniform across the City.

The City of El Paso, in striving to become the most walkable, least car dependent city in the southwest, requires a different approach to land development and transportation design. The land use policies of the last half a century have proven ineffective in creating walkable, sustainable places. This planning effort has identified areas within the City where walkable urbanism should be enforced, in the near and long term. These places require a development and land use pattern that enhance multimodal and economic opportunities. Such policies will not only reinforce the framework of existing walkable neighborhoods, but will also provide the framework for developing new or re-developing old neighborhoods in a walkable manner.

WALKABILITY CITY-WIDE

Conventional Transportation Engineering: the Arterial System

Walkable policies often stand in sharp contrast to suburban or conventional policies that were created to serve the single use function of the automobile. The places that were created by conventional transportation and parking policies promote higher speeds (to serve the greatest need of the automobile) and are not walkable or human scale. Much of America's suburban land development pattern suffers from street and highway networks influencing its structure. Highways designated as arterials change little as they approach developed areas. Generally speeds drop from 55 to 45/35 mph, but on-street parking is usually not allowed in emerging areas and is often removed from older areas. Arterial street designs, by definition, tend to exclude intersections with side streets of limited volume, leading to longer block size (600 to 1,000 feet and higher) and higher speeds 45 mph or more, both of which cause difficulty for pedestrians.

The arterial street term appeared as early as 1919 in the "American Highway Engineers' Handbook" edited by Arthur H. Blanchard. The arterial function described therein by Nelson P. Lewis clearly anticipated that commercial streets 60 feet wide achieve greater success than those 80 or 100 feet in width (p. 369). The early planners, therefore, never intended arterial streets to have "access to land" limited by subsequent design manuals. Finer grained street networks better serve urban peak travel demand due to multiple streets serving multiple modes – walking, cycling, transit and the motor vehicle.

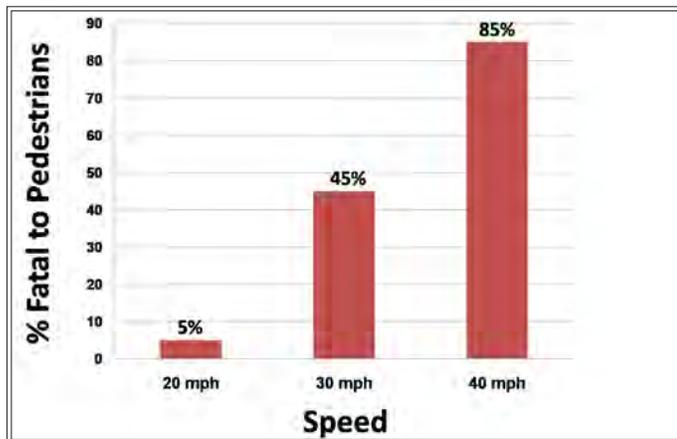
Vehicular Speed and Walkability

Vehicular speed is a key factor in urban design because it plays a critical role in the walkability of an area, due to its relationship with pedestrian fatalities. As shown in Figure 4, a pedestrian's chance of being killed in a crash is graphed against vehicle speed. The graph indicates that 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. For this reason, thoroughfares in walkable districts must be designed for a target speed of 35 mph or less, usually in the 25-30 mph range.

“Target” speed versus “design” speed is an important distinction in that design speed is defined by curvature and super-elevation where target speed incorporates and relies upon many elements of the urban street environment to achieve the resulting speed. Elements such as narrow travel lanes, on-street parking, adjacent building frontages, street trees, presence of sidewalks and short block lengths all help to inherently manage speed. These elements must be managed and coordinated on both sides of the right of way line. When these elements are present, drivers “read” a street and travel with care and caution, driving at managed speeds that are appropriate to the intended urban environment.

A New Paradigm: Land Use First, Transportation Second

Urban places with greater safety, capacity and economic viability require pedestrians, bicycles, and transit vehicles as part of the mobility mix. To achieve these places, the patterns of proposed development must be specified first, during the community planning stage. Then, transportation plans for balanced mobility can be crafted with walkability considered first and vehicle mobility second (land use first, transportation second or “LUI-TR2”). This is not to imply that motor vehicle mobility will be dramatically reduced, but that pedestrians, exposed to the open environment are more vulnerable than are drivers, and solutions for their safety and comfort are more complex. Often, greater walkability yields only small reductions in vehicle capacity, even though vehicle speeds are lower. Generally, more streets per square mile result from a more open network and drivers can avoid the degree of peak hour congestion that occurs when a limited number of large streetsexperience congestion such as repeated signal cycle failures.



Percent of Crashes Fatal to Pedestrians, Related to Vehicle Speed
 Source: U.K. Department of Transportation, *Killing Speed and Saving Lives*, London, 1987

Making the Engineering Connection – Functional Classification Augmentation

As noted under “Current Conditions”, the following issues exist within the Functional Classification system:

- all trips are by auto or truck
- no pedestrians included in functional definitions
- functional class areas are only rural or urbanized
- thus all non-rural designs are suburban
- designs are generally fast & uncomfortable for walking

To remedy this, we recommend augmentation of the system with a third area type: Compact Urban. Within Compact Urban places, walkable, multi-modal transportation design would take precedence. The following graphic illustrates several general place types for the City:

- Existing walkable neighborhoods, defined on the Future Land Use map as the G-1 “Downtown” and G-2 “Traditional Neighborhood” sectors.
- Planned walkable neighborhoods, defined on the Future Land Use Map as the O-7 “Urban Expansion” sector.
- Opportunities for redeveloped and infill walkable neighborhoods, defined on the Future Land Use Map as the “RTS” and “Future Compact Neighborhood” overlays

A major focus of the Compact Urban areas is to prioritize character and function over capacity and to size network to yield smaller blocks & more total people moving capacity. This is in sharp contrast to suburban areas, which develops land using travel models of highway capacity only and size the network per vehicle level of service to prevent “failure.” The remaining suburban area shown in the Excerpt from Future Land Use Map showing Existing and Planned Walkable Neighborhoods (similar to the “Future Land Use Map - Overlays,” found in the Regional Land Use Patterns Element) need not remain suburban. City officials can use the following guidelines to analyze Suburban neighborhoods for potential conversion to Compact Urban:

- Area has an intersection/network density of more than 150 intersections per square mile
- Area has a mix of uses or would benefit from a mix of uses
- Area has a vision that includes increased walking and bicycling.

This list is intended to serve as guidance for identifying future Compact Urban areas, not identified during this comprehensive planning effort. A major focus of the Compact Urban areas is to prioritize community character and multi-modal function over capacity and to size networks to yield smaller blocks and more total people moving capacity. This is in sharp contrast to subur-

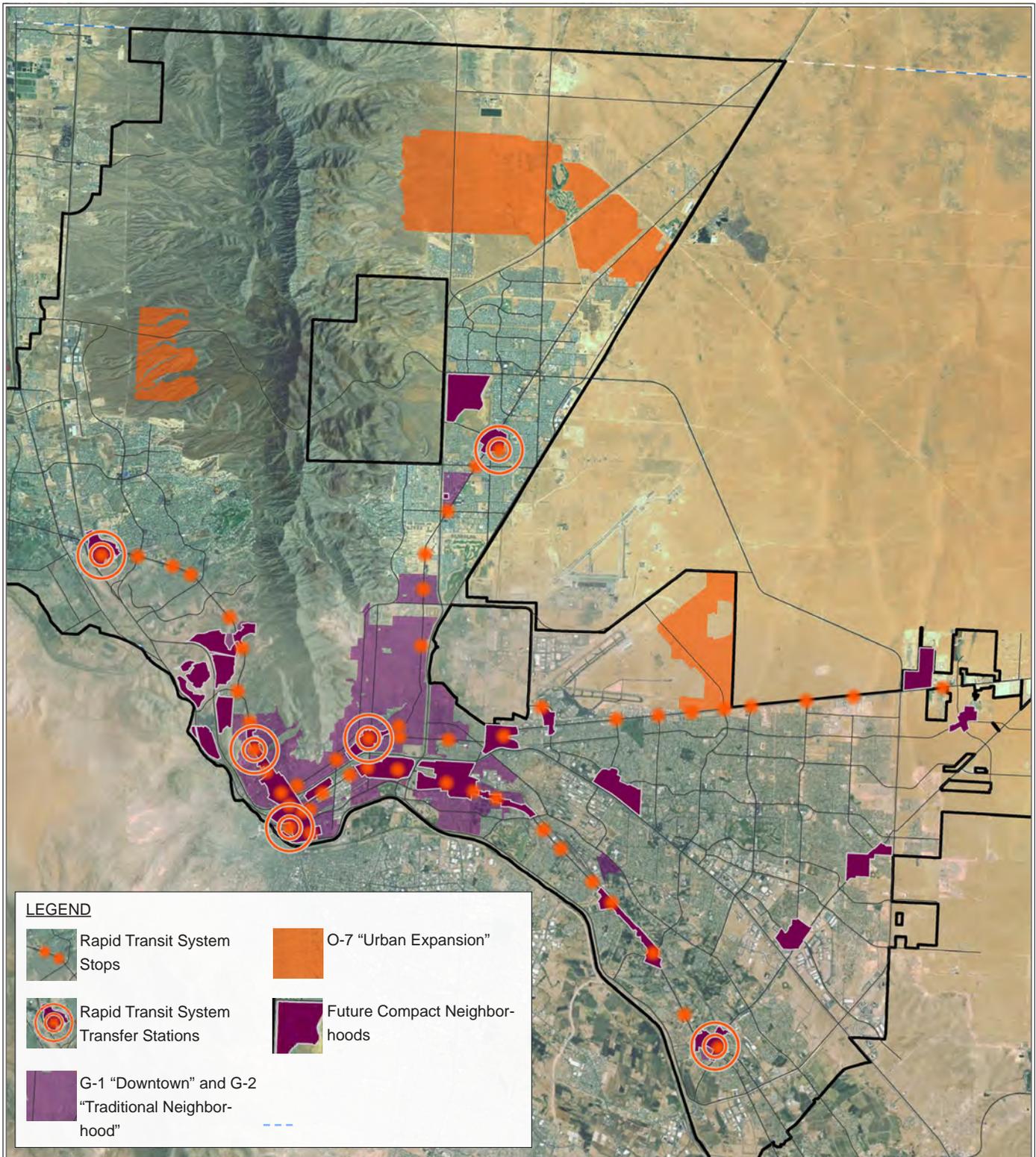
ban areas, with large, homogenous, land development patterns served by motor vehicles almost exclusively. Travel models are applied to estimate highway capacity and size the network and each arterial and collector thoroughfare is sized per vehicle level of service to prevent “failure”

Another important contribution of the Compact Urban category is the reduction of legal liability for thoroughfare designers. With the Compact Urban area specifically defined to function as a walkable, bikeable, transit friendly area, the use of calmer dimensions for thoroughfare design elements would be rooted in adopted governmental policy. Managing speeds to achieve pedestrian friendly levels, through careful application of thoroughfare design elements would become a legal and natural process, not one requiring design exceptions. The Compact Urban area map should be studied and prepared for adoption by relevant authorities such as the Metropolitan Planning Organization (MPO) and City Council. An adopted Compact Urban Map would greatly facilitate communication between the City of El

Paso, the Texas Department of Transportation and the Federal Highway Administration. It should be anticipated that debates about thoroughfare design details would shift from curb radii and lane width to designation of areas as Compact Urban or Suburban. The clear delineation between Suburban and Compact Urban would also assist vision workshops, comprehensive planning efforts, water and sewer planning, Form Based Coding and many other routine city activities and responsibilities. As a note, Rural areas are not described specifically in this effort in terms of thoroughfare design. The following table provides equivalency between seemingly contradictory thoroughfare standards. This should assist the City and Development community in applying specific thoroughfares depending on the specific area type in question. El Paso currently has two sets of thoroughfare standards: conventional sections that are identified in Title 19 Subdivision Regulations, which reference Design Standards for Construction (DSC), and Title 21 - Smart-Code. The thoroughfares within both of these standards can be equated to the general understanding of arterials, collectors and

Thoroughfare Equivalency Table- Suburban and Compact Urban Thoroughfares as they Relate to Functional Classification

	Suburban	Compact Urban (Title 21)
Arterial	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’)	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
Collector	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’)	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
Local	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’); 20’ Residential Lane No Parking (38’); Divided Mountain Residential Street (ROW varies); Mountain Residential Street 2 lanes only on M.D.A. (23’); Alley One Way 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	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



Excerpt from Future Land Use Map showing Existing and Planned Walkable Neighborhoods

PROPOSED WALKABLE ROADWAY DESIGN

Context

The previous sections describe the importance of linking all thoroughfare design standards proposed for El Paso with the desired context. The Regional Land Use Patterns Element identifies a future development pattern for El Paso that grows from its historical roots and incorporates the community’s vision for:

- Revitalizing downtown
- Living and working closer together
- Protecting historic neighborhoods
- Adding new land uses
- Growing up and not out
- Restoring connections to Juárez
- Ending sprawl

Regional Sectors- Land Use

The Regional Land Use Patterns Element describes tools that will manage El Paso’s outward growth and provides a “future land use map” as a means by which to precisely formulate city growth policy. This new future land use map will replace the “general land use map” in El Paso’s 1999 comprehensive plan.

In contrast to the 1999 general land use map, the proposed future land use map will provide a clear guide to the form, direction, and timing of future growth, using new sector designations to all land in El Paso County.

There are two types of sectors: six “O” or open sectors where growth is delayed or not anticipated, and nine “G” or growth sectors, where urban development is encouraged immediately.

The six open-space sectors are listed as:

- O-1 – Preserve
- O-2 – Natural
- O-3 – Agriculture
- O-4 – Military Reserve
- O-5 – Remote
- O-6 – Urban Reserve

The six 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.

The nine growth sectors are listed as:

- G-1 – Downtown
- G-2 – Traditional Neighborhood

- G-3 – Post-War
- G-4 – Suburban
- G-5 – Independent City
- G-6 – Rural Settlement
- G-7 – Industrial
- G-8 – Airport
- G-9 – Fort Bliss

It is important to continue to link these regional sectors to the Functional Classification augmentation of area types described above. This will provide smoother application of thoroughfare design standards in practice.

In general, the following table will describe what area types the proposed regional sectors will represent.

Context Equivalency - Regional Sectors & Functional Classification Area Types

	Regional Sectors
Rural	O-1 – Preserve O-2 – Natural O-3 – Agriculture O-4 – Military Reserve O-5 – Remote O-6 – Urban Reserve
Suburban	G-3 – Post-War G-4 – Suburban G-5 – Independent City G-6 – Rural Settlement G-7 – Industrial G-8 – Airport G-9 – Fort Bliss
Compact Urban	G-1 – Downtown G-2 – Traditional Neighborhood G-3 – Post-War G-5 – Independent City

Finer-grained Context – Transect

At a more finely grained level, the Transect is used as a framework, which organizes the natural, rural, suburban, and urban landscape into categories of compactness, richness of opportunity, and street structure. The Transect lends itself to the creation of zoning categories. One operating principle of the Transect is that elements of a certain type belong in certain environments; for example, an apartment building belongs in a more urban setting, and a house on a large lot belongs in a more rural setting. Some kinds of thoroughfares are urban (streets), and some are rural (roads). These Transect zones are briefly described as the following:

- T1 Natural Zone consists of land in a wilderness condition, including lands unsuitable for settlement.
- T2 Rural Zone represents sparsely settled lands in an open or cultivated states, which includes woodlands, agricultural land, grassland and irrigable desert. Typical buildings are farmhouse, cabins or barns.
- T3 Sub-urban consists of low density residential areas, adjacent to higher zones with some mixed use. Blocks may be large and the roads irregular to accommodate natural conditions.
- T4 General Urban consists of mixed use but primarily residential urban fabric and may have a wide range of building types: single, sideyard and rowhouses. Streets with curbs and sidewalks define medium-sized blocks.
- T5 Urban Center Zone consists of higher density mixed used buildings that accommodate retail, offices, rowhouses and apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.
- T6 Urban Core Zone consists of highest density and height, with the greatest variety of uses, and civic buildings of regional important. It may have larger blocks, streets have steady street tree planting and buildings set close to the wide sidewalks. Typically only large towns and cities have an Urban Core Zone.

Transportation Connection

The character of El Paso’s existing neighborhoods should be preserved and protected from sprawl-inducing policies. Walkable, context-based policies should be applied to the rest of the City based on its regional sector designation. Transportation facilities provide excellent tools to support the City’s future vision. What factors contribute to an excellent pedestrian experience? Observations and design know-how suggest the following characteristics:

- Narrow Streets
- Street Trees
- Lower Traffic Volumes
- Sidewalks
- Interconnected Streets
- On-street Parking
- Lower Traffic Speeds
- Mixed Land Use
- Buildings Fronting the Street with Minimized Setbacks
- Small Block Size

These parameters have proven themselves in the field. When a majority of these are combined in one location, pedestrians are routinely seen.

A one- to five-star walkability rating system can be used to describe the degree to which these parameters are applied to each area designated on the map above.

- One-star – the least amount of walkable policies are applied in highly suburban places
- Two-star – transportation-only policies are applied to achieve some walkability in drivable setting
- Three-star – minimal land use policies are applied
- Four-star – intermediate land use policies are combined with tested walkable thoroughfare design
- Five-star – maximum application of policies affecting transportation design and land use

One- or two-star walkability requires the least amount of regulation, encouraging minimal walkability. Compared to the Walkability Index assessment described above, one- to two-star walkability is similar to achieving a “D,” “E,” or “F” (basic walkability, minimal walkability and hazardous for walking respectively). Policies to achieve one- or two-star walkability take place only within the thoroughfare right-of-way and are “transportation-only” solutions.

Three- to five-star walkability applies the most sophisticated policies to land development and transportation planning, encouraging the highest degrees of walkability. These policies have land use implications and alter the built environment inside and outside of the thoroughfare right-of-way. Implementing these policies would earn higher scores on the Walkability Index; “A,” “B,” or “C” for moderately, very and highly walkable, respectively.

Design

Given the past direction and general thinking of the day, conventional zoning and engineering standards, particularly traffic engineering, tended to focus on minimizing automobile delay. Emphasis on creation of a pedestrian environment emerged more recently. Automobile movement and pedestrian comfort are not mutually exclusive goals, but a lack of pedestrian-oriented design allows motor vehicle speed to prevent pedestrian activity. The thoroughfare types and other design elements described in this report are intended for both automobile and pedestrian efficiency, with narrow lane widths, on-street parking, and shorter curb radii, in contrast to conventional streets.

Following the paradigm of LU-1 TR-2, or Land Use First/Transportation Second, the project team created specific urban design concepts for new and redevelopment areas. Walkable thoroughfares were then created or adapted from existing street sections to serve these areas with appropriate vehicle speeds. The target speed for a walkable thoroughfare is 30 mph or less. The vast majority of streets can be retrofit within the existing curb lines to promote these lower speeds, while reducing the costs of redevelopment.

As a note, all street widths are measured curb-face to curb-face. This “curb face” convention matches the practice of traditional street designers and stems from the majority of urban streets having on-street parking. Street lanes without parking are still measured to the face of curb, including the gutter pan. This does not assume vehicles will routinely travel in the gutter; just that the convention is uniformly applied in traditional street design.

The *Excerpt from Future Land Use Map showing Existing and Planned Walkable Neighborhoods Map*, shown previously, identifies areas within the City limits that should be served by walkable roadways.

Existing Walkable Neighborhoods

The first areas are those 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. They are designated as G-1 “Downtown” and G-2 “Traditional Neighborhood” on the Future Land Use Map. These areas are well-suited for redevelopment in a compact urban manner, continuing with a mix of uses and transportation options. Some of these locations are expected to redevelop because they are economically depressed or their existing walkable neighborhood structure has already attracted residents who are comfortable with walking and transit.

These are the neighborhoods or communities where the City should focus their efforts to create the highest degree of walkability, creating three-five star walkability. Doing so will make it

“probable” that travelers will opt for an alternative mode of transportation, such as walking, bicycling, or transit.

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 roadways 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 walkable neighborhoods

This Comprehensive Plan 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. The Urban Design Element provides conceptual physical designs for many of these areas. They are identified on the Future Land Use Maps as “RTS” and “Future Compact Neighborhood” overlays.

Drivable suburban

Other sections of the City will likely remain more suburban in nature, maintaining a predominately automobile-dependent development pattern, without on-street parking, with separated bike lanes, and with a target speed of 30-35 mph. These sections 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 urbanized areas with sidewalks and bike lanes. TxDOT policies toward complete streets and implementation of sidewalks and bike lanes should continue to be applied in these locations, making it possible to walk and bike, though not as “probable” as in areas with three-five star walkable design.

Proposals to begin to introduce more walkable elements could include:

- narrowing of travel lane widths to 11’
- introduction of the safety strip/flush median and
- widened, tree-lined sidewalks.

The streetside features, such as widened sidewalks and planted buffers may require easements from property owners, who witness the redevelopment occurring in other parts of the City and see the added benefits to their business by an increase in pedestrian and transit traffic.

ZARAGOZA ROAD RETROFIT

Currently, Zaragoza Road consists of two travel lanes in each direction, making a four-lane street with a two way left turn lane and a cross section of 68 feet and mega-blocks. Buildings are set back from the street in excess of 300 feet, with some outparcels set back 80 feet.

High free-flow speeds were observed along Zaragoza Street, frequently in excess of the posted speed of 45 mph due in great part to the wide travel lanes and lack of enclosure. This yields an incredibly uncomfortable environment for pedestrians and serves the automobile user exclusively.

Proposed Design

The planning team proposes the use of a multiway boulevard design to manage vehicular speeds, while achieving the greatest multimodal capacity possible for Zaragoza Road. The proposed multiway boulevard section is designed to streamline, and possibly even improve, traffic flow along Zaragoza Road by providing new side medians and limiting driveway connections to Zaragoza Road to new or existing intersections.

Description of Multiway Boulevards

The multiway boulevard is an innovative design to carry significant regional traffic, separate local traffic, and create a multimodal complete street with attractive and lush landscaping. Several examples exist across the country, with many more planned and proposed, all of which are major arterials, freeway replacements, parkways, or other grand boulevards. Like El Paso's major arterials, they carry significant regional traffic volumes, but do so in a context-sensitive way that complements their surrounding neighborhoods. The primary characteristics and elements of a multiway boulevard include:

- Multiple center/through lanes for regional/commuter traffic (typically two lanes in each direction).
- A landscaped central median; if the central thoroughfare is narrow enough, the median may be eliminated.
- Landscaped side medians, typically with street trees and bus stops/shelters.
- Two parallel, one way, one lane streets for local traffic and local business access including:
 - Striped on-street parking
 - Bicycle sharrows
 - Planting strips separating sidewalks from on-street parking and access lanes
 - Wide sidewalks

An example of a multiway boulevard cross-section is San Francisco's Octavia Boulevard, perhaps the country's most



Zaragoza Road Existing Conditions



Zaragoza Road Proposed Multiway Boulevard Condition

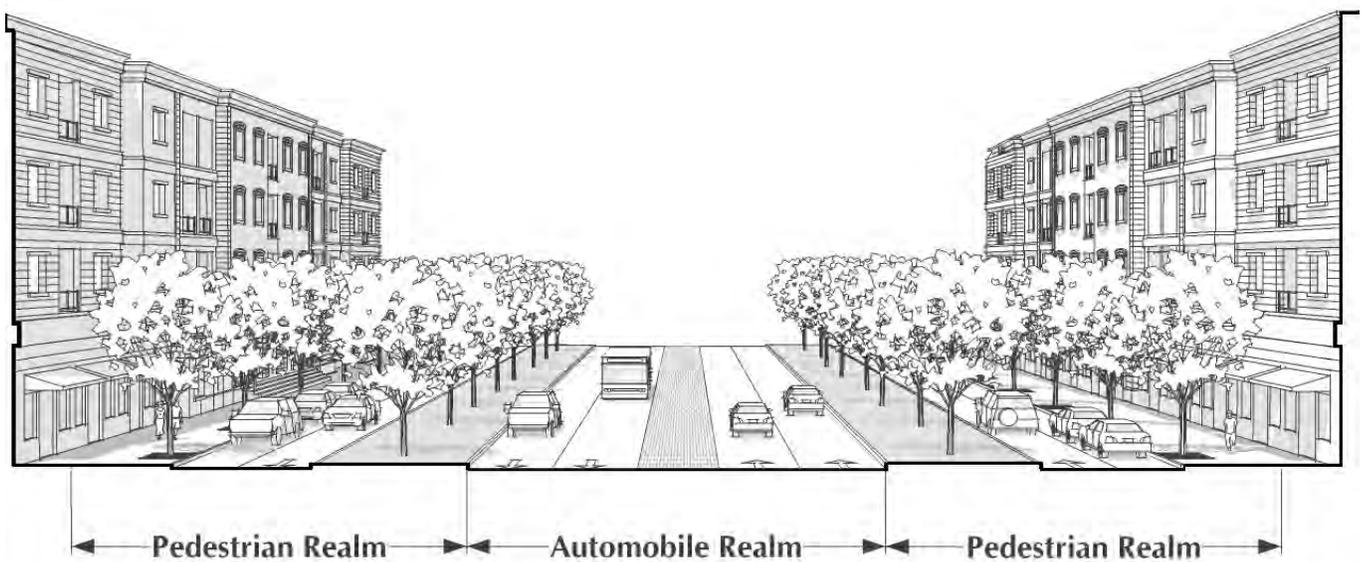
famous new multiway boulevard.

Application:

A multiway boulevard treatment is typically applied in one of three scenarios:

1. As a retrofit of an existing multi-lane roadway
2. When widening is proposed of an existing roadway (i.e. from four to six lanes)
3. When building a new roadway with relatively high capacity needs and the desire to promote a more multimodal, urban environment.

Multiway boulevards are uniquely able to handle large volume of through traffic without imposing on the local environment. Through capacity is increased because driveway and parking conflicts are removed from main travel lanes; therefore multiway boulevards can increase traffic capacity while also enhancing opportunities for walking, bicycling, and transit,



General Multiway Boulevard Structure. Buildings may exhibit varied height, style, or setbacks.

and improving safety for all travel modes. Native landscaping in medians and planting strips help create a parkway feel for the corridor that enhances neighborhood character, supports quality development, raises adjacent property values, and increases economic development and revenues. The presence of the landscaped medians, access lanes and on-street parking also buffer pedestrians and adjacent land uses from the higher speed, higher volume traffic in the center/through lanes. Therefore, multiway boulevards can help 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 the ITE/CNU Recommended Practice “Designing Walkable Urban Thoroughfares: A Context Sensitive Approach,” Chapter 6. Multiway boulevards are not a theoretical or conceptual thoroughfare design – examples were built at the end of the 19th century in New York, and new multiway boulevards exist in San Francisco and other locations. This report describes the general design and function of a multiway boulevard, describes how one might function as part of the Zaragoza Road corridor and describes how staging can blend the four-lane Zaragoza Road to allow a multiway boulevard to develop in the future.

Structure of a Multiway Boulevard

The generic section of a multiway boulevard is shown above. The center of a multiway boulevard is usually 4 to 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 thoroughfares are considered the “automobile realm” and all design considerations on these lanes 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 either side of the center lanes, moving away from the thoroughfare centerline, are a wide park-like median with a shared-use path, a single one-way access lane, a lane of on-street parking (some variations have parking on both sides of the one-way travel lane, depending on development intensity), a wide sidewalk and street-front development. The one-way access lane is designed for speeds of 15-20 mph. This area, from the inner edge of the median adjacent to the center travel lanes to the front of the buildings, is considered the “pedestrian realm.” Within this area, all design considerations place the pedestrian first, with great walkability as the primary major design goal.

What is not shown in the thoroughfare section, but is illustrated on the previous page in a perspective view, is the network of thoroughfares behind the buildings that provides local circulation. This is a town center thoroughfare network design that is essential to the healthy operation of the multiway boulevard.



General Multiway Boulevard Function and Sample Dimensions. Buildings may exhibit varied height, style, or setbacks.

Function of a Multiway Boulevard

Each element of the multiway boulevard is illustrated in figure above and the function is described below.

1. Center Through (Travel) Lanes: Allows large volumes of traffic to pass through the area. Also bring potential customers within viewing distance of the shops and storefronts built along the edge.
2. 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. Also provides 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, GA.
3. One-way Access Lanes: In plan view, the one-way access lanes of the multiway boulevard are revealed to provide access to parking. These lanes parallel the arterial road and provide connections between the local town center network thoroughfares, which are oriented generally perpendicular to the arterial thoroughfare. These one-way connections serve the following functions:
 - Provide a quiet thoroughfare for the store fronts facing the arterial, analogous to a park view main street, thanks to the wide median,

- Provide vital on-street parking and pedestrian connections between blocks
 - Allow locally circulating traffic to make easy right-hand turns while circling the block, looking for parking and window shopping
4. Wide Sidewalk: Allows pedestrian traffic to circulate back and forth freely between the store fronts and the median park area. The wide sidewalks provide necessary space for pedestrian shopping and travel needs and still leave room for a few sidewalk café tables, a sidewalk sale rack of clothes or table of used books, and of course, street trees and plantings.
 5. Store fronts: Provide economic viability for the town center. 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, all of which are beyond the means of local businesses. The store fronts along the 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 the old traditional Downtown park thoroughfare. The store fronts also send a clear message that this is the town center, a message that is difficult to convey with conventional arterial design.

Improvements to Walkability

The following Figures provide “before” and “after” images of Zaragoza Road. Again, the proposed recommendations for Zaragoza Road are to transform the thoroughfare into a multi-way boulevard with four through travel lanes (two in each direction), one-way access lanes with on-street parking, wide sidewalks, street tree plantings and traditional mixed-use buildings fronting the access street. Implementing the changes illustrated above will have a significant effect on the vehicular speeds and walkability of Zaragoza Road.

Zaragoza Road’s proposed design was measured according to the Walkability Index and given a new grade. This “proposed design” grade was then compared to the street’s “existing condition” grade, which would range from “0” as described earlier for the block from New World to Picasso. This comparison was used to determine the degree to which the proposed design will improve the conditions for pedestrians, bicyclists and transit users. The proposed street design was broken into two phases of implementation, described below.

Phase I: Streetscape Improvements

Phase I includes streetscape improvements only. The streetscape improvements to Zaragoza Road were used to recalculate the original “existing condition” grade. The recalculation was based

on the assumption that the redevelopment of Zaragoza Road would transform the blocks into a T4 context. Phase I improvements include:

- Managing of vehicular travel speed to 15-20 mph on the side access lanes; 35 mph on the middle through-lanes
- Inclusion of on-street parking on the access lanes
- Inclusion of street trees on all medians
- Widened, 12’ sidewalks
- Addition of pedestrian features such as benches, trash cans and ensured ADA compliance
- Addition of bicycle racks.



Zaragoza Road Existing Condition



Zaragoza Road Proposed Condition

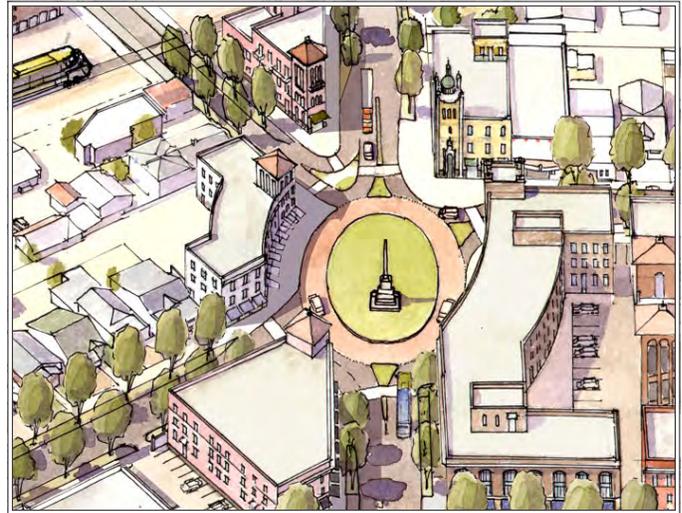
After applying these streetscape-only improvements, Zaragoza Road's walkability score increased from a 0-23 to a 72 or "B," for very walkable.

Phase II: Long-Term Urban Design Changes/Redevelopment

Phase II was measured by including longer-term land-use and urban design changes, such as buildings set closer to the street, an increase in land uses and improvements to façade design. Assuming those changes, in addition to the streetscape improvements measured in Phase I, Zaragoza Road's walkability improves greatly to a grade of 96 or "A" for high walkability.

Roundabouts

Modern roundabouts on Zaragoza Road and at the key intersections elsewhere in the City could benefit drivers, pedestrians, and cyclists. A modern roundabout accommodates traffic flow and capacity while creating a greater sense of place and allowing safer conditions for pedestrians. Walkability at a roundabout is increased because traffic speeds are lower as vehicles approach and exit the roundabout, and 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 the roundabout. Roundabouts are designed to achieve a consistent, low vehicle speed (15 to 25 mph) to minimize crash potential; and this by nature renders them pedestrian-friendly. When traffic volumes are light, many gaps are available for pedestrian crossing. A modern roundabout is not the same as the traffic circles common in the northeastern United States. Traffic circles do not contain many of the pedestrian-friendly elements of the roundabout.



A conceptual roundabout design for Five Points

TRAFFIC CIRCLES VS. ROUNDABOUTS



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

TRANSFER CENTERS/SMALL AREA PLANS

Common Elements

The following elements are commonly found in the walkable thoroughfares proposed for El Paso.

Safety Strip

A “safety strip” is a tool used by traffic engineers to manage vehicular speed while providing flexibility for atypical vehicle movements on a narrow thoroughfare, such as carefully passing a parking vehicle, or for emergency vehicle access. Safety strips are made of a cobbled texture and should be laid with vertical offsets of ¼-inch to 1-inch making it possible, but uncomfortable, to drive on for long periods of time. Safety strips are placed between two lanes of opposite direction, and can function as an informal left-turn lane. The safety strip may also be used for temporary deliveries to adjacent businesses without stopping the flow of traffic.

Street Trees

The section diagram indicates that trees should be planted opportunistically, in 4’-6’ tree wells within the parallel parking lane, approximately every two spaces. This is a short-term opportunity to provide the much needed shade and protection for pedestrians, without the expense and time needed to remove the power lines interrupting the sidewalk and prime planting space. These trees and planters could be moved to the widened and cleared sidewalk in the long-term, once power lines have been buried. This will also provide additional parking spaces as redevelopment continues to occur.

On-Street Parking

As a note on parallel parking, studies have shown that a single parking space in front of a business can yield significant sales annually to that business. Bob Gibbs, considered one of the leading American urban retail planners, estimates that one parallel parking space can yield \$125,000-250,000 annually in gross annual sales for the adjacent business, depending on the number of daily turnovers. Gibbs states that each stall directly supports one small, urban business. Therefore, these spaces will provide great economic opportunities for local businesses and the City.



Safety Strip on Main Street, Columbia, SC



Safety Strip on Main Street, Columbia, SC

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. It was 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, alongside 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), whereby 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 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 El Paso MPO Comprehensive Plan included broad policy language referencing and supporting the 1997 Bikeways Plan. It is clear that some of the objectives put forth in the 1997 Regional Bikeways Plan and the 1999 El Paso MPO Comprehensive Plan 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

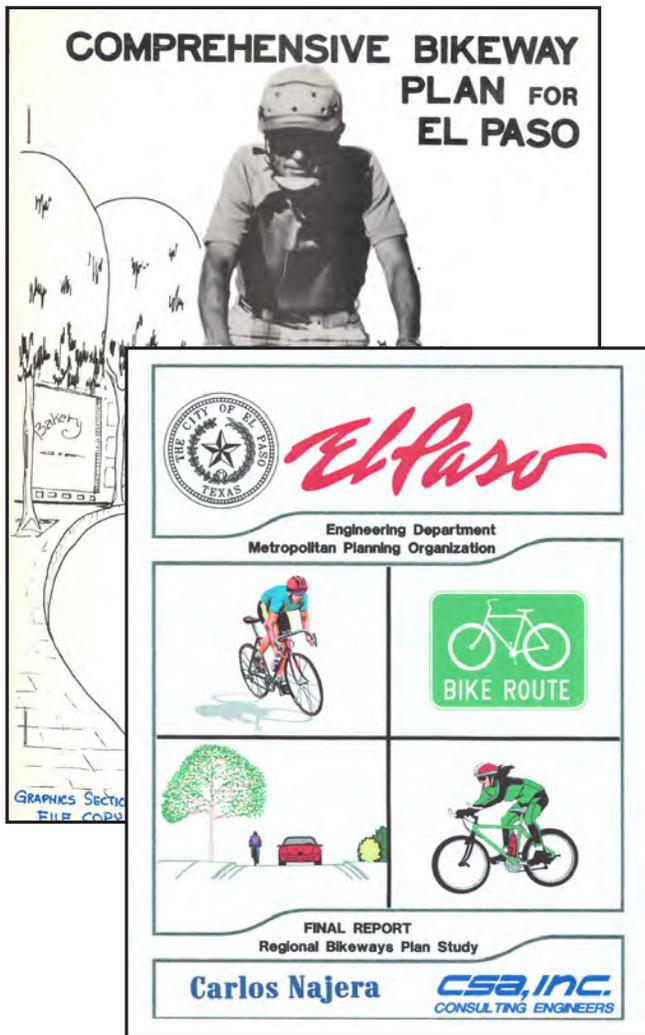
However, a few of the Plan’s most crucial objectives have yet to be met. These include:

- 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 sub-division design regulations.

Evaluating Existing Conditions: the Handlebar Survey

The design team bicycled large portions of the City of El Paso while undertaking what is known as a “Handlebar Survey.” This was done in advance of any planning work so that the City’s 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: design team members 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.

PLAN EL PASO

Strategies for Addressing Community Concerns

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. These include:

- 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, but concerned about their safety. 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 adjacent to high volume 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 many neighborhoods. Furthermore, the normative local-collector-arterial 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 roadway design are typical of areas outside the Central Valley and Downtown.



Traffic calming measures such as this traffic circle in Manhattan Heights can help create neighborhood Bicycle Boulevards.



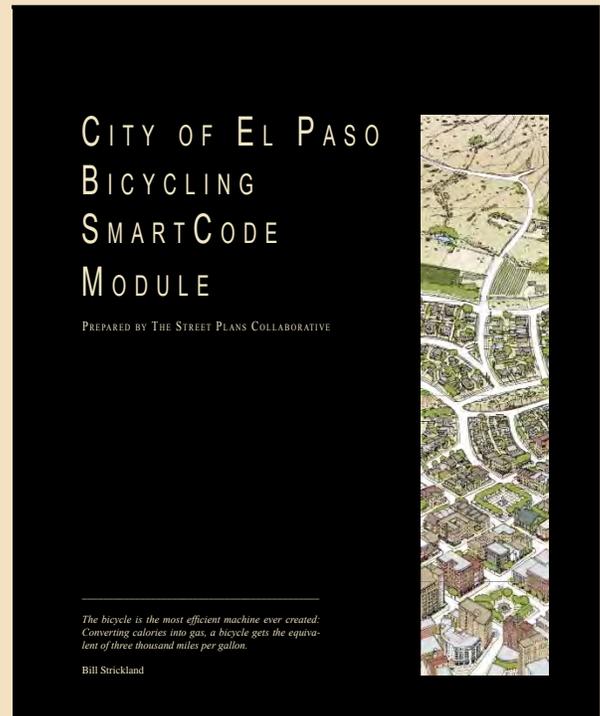
Signed routes are a common facility type throughout the City.



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 approved El Paso Smart-Code.



EXPANDING THE BICYCLE NETWORK

To better link El Paso's existing bikeways, and to build from the wisdom of the 1997 Bikeways Plan, the Proposed Bicycle Network seeks to create a blueprint from which the City may work to implement a full network of connected, safe, and attractive bikeways.

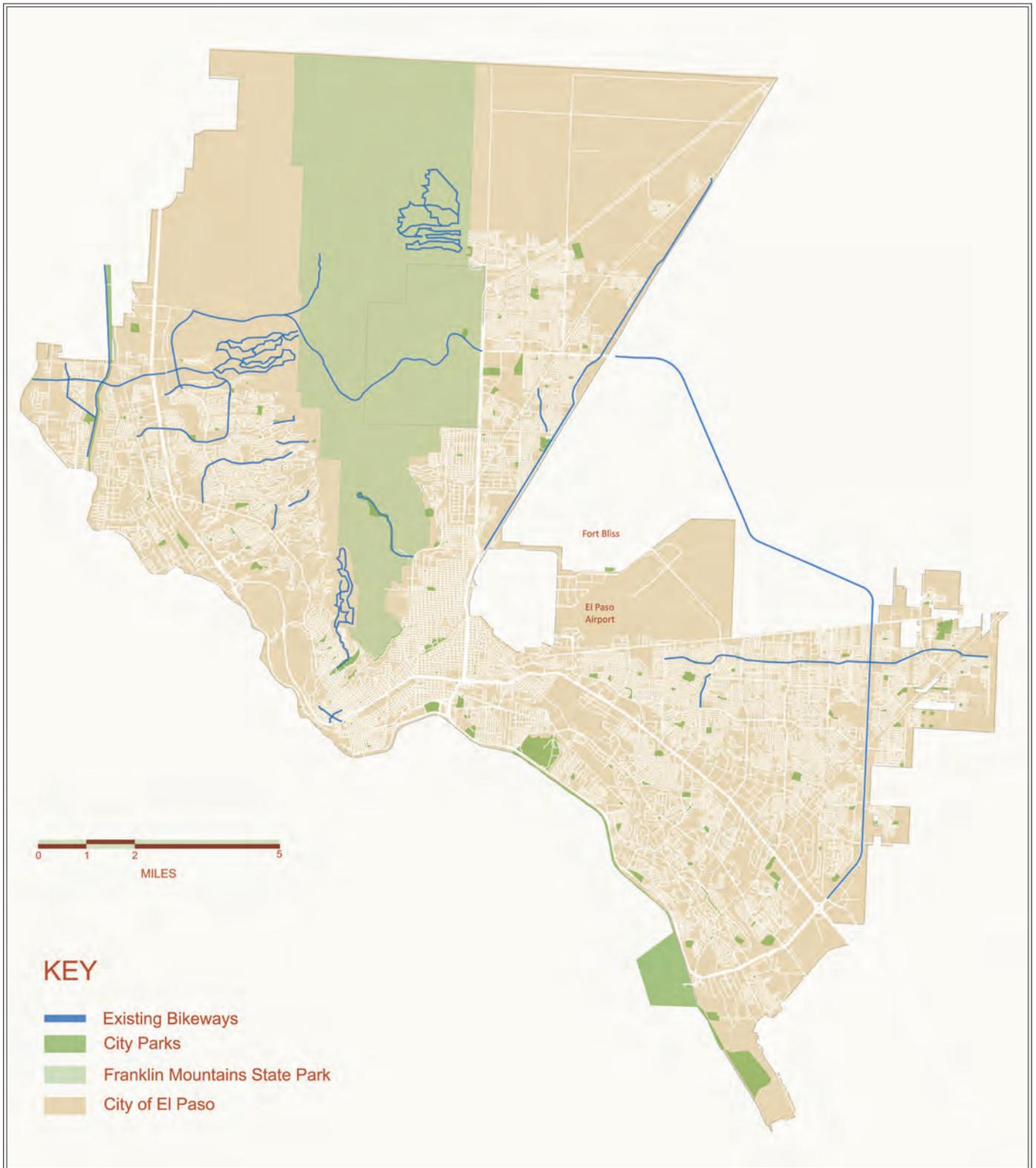
While individual links within the proposed bikeway network should be detailed in an update to the bicycle master plan, the integration of the following bikeway and countermeasure types may be used, where contextually appropriate, to further the visibility and function of the bikeway network:

- Signed Bike Routes
- Shared Use Markings (Sharrow)
- Bicycle Boulevards (Neighborhood Greenways)
- Buffered Bicycle Lanes
- Advisory Bicycle Lanes
- Physically-separated Bicycle Lanes (Cycle Tracks)

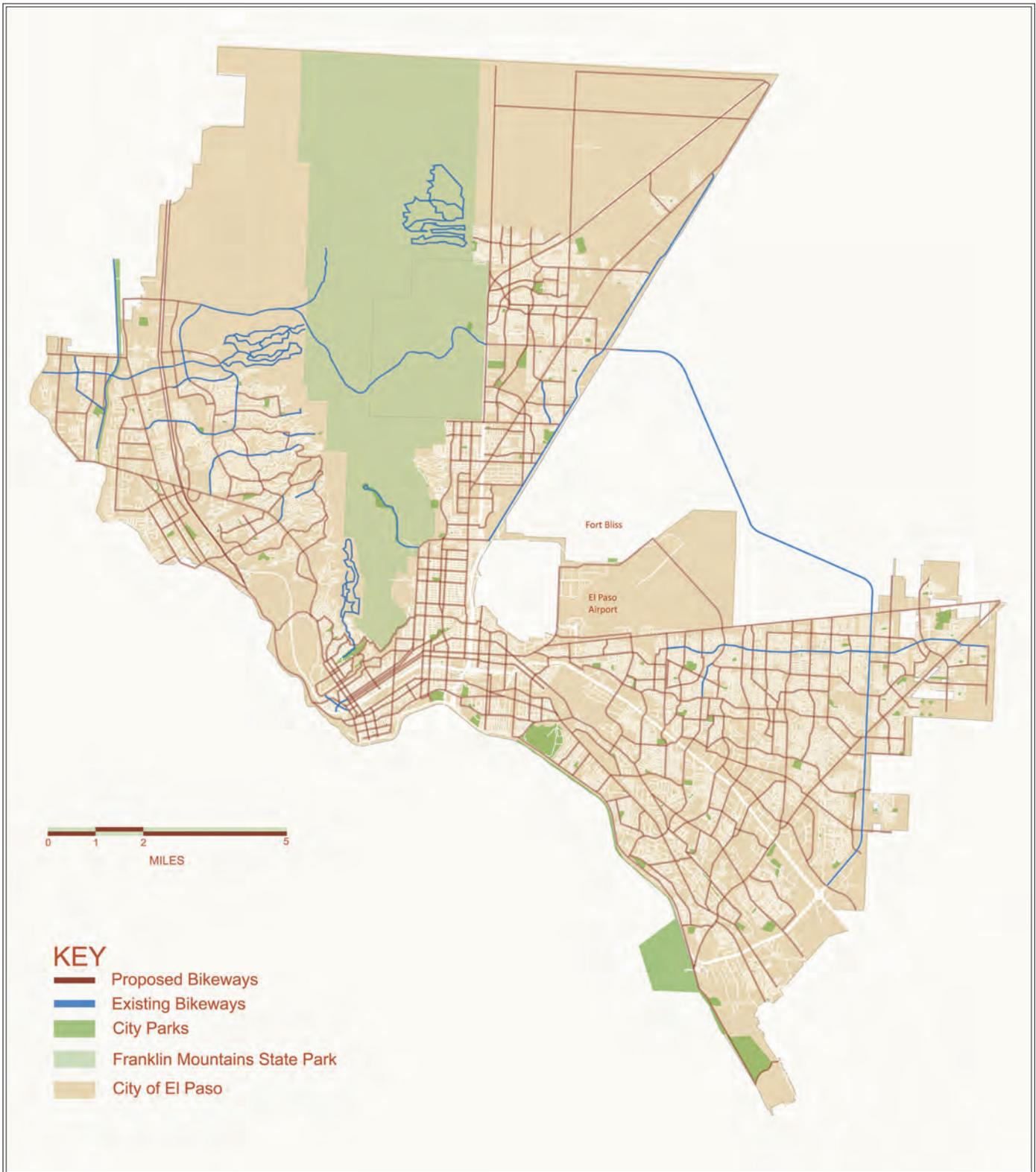
Additionally, numerous design countermeasures may be applied to increase the visibility and safety of existing and proposed bikeways. These include, but are not limited to bicycle boxes, peg-a-tracking, bicycle detection and signal heads, wayfinding and informational signs, and bicycle refuge islands.

Designing and implementing a contextually appropriate bikeway network effort should not only be done with a strong correlation to existing land use characteristics, but more importantly, with the desired development or preservation goals for each neighborhood in the City of El Paso.

On the following pages is the proposed El Paso Bicycle Atlas, a vision of a complete bicycle network that builds on the work of the 1997 Master Plan, and takes current and future land use patterns into account. This view should be fine-tuned at the block scale with a Master Plan update that incorporates this effort and the latest advancements in bicycle planning.



Existing Bicycle Facilities



Proposed Bicycle Atlas

BICYCLE NETWORK & TRANSIT INTEGRATION

The type and quality of transit service aside, planners generally accept that the average person will walk up to half a mile to transit if the environment is safe, convenient, and interesting. This radial distance is most often referred to as the “pedestrian shed.” After this approximate radial limit is reached, however, it is assumed that the ability to attract ridership decreases as distance from the station increases.

Yet, if one considers that the average bicyclist can travel three times faster than the average pedestrian, 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.

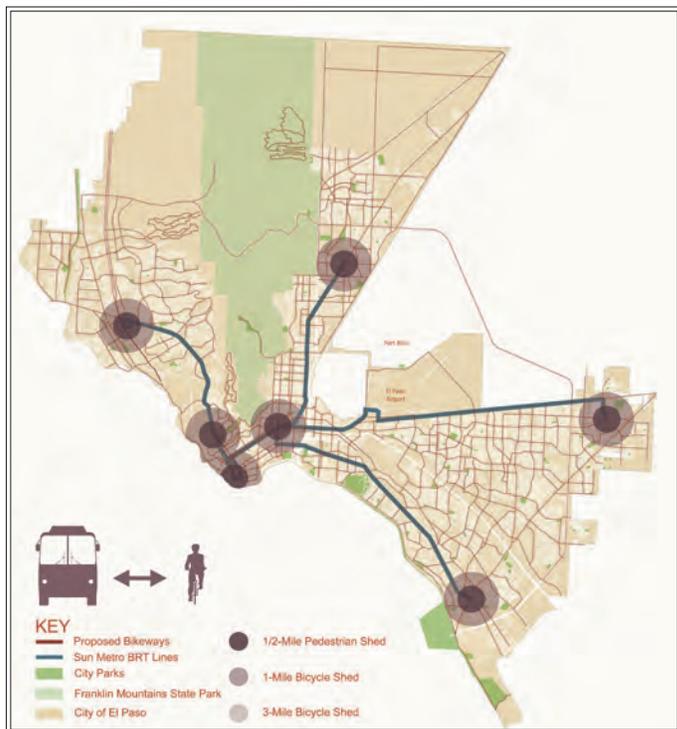
While the bicycle shed is an important conceptual planning tool, it is meaningless without the physical development of bicycle infrastructure that further supports bicycling. Each “bicycle shed” should not be conceived in isolation, but as part of a regional bikeway network. This network should be designed to connect people to important destinations—schools, neighborhood and regional employment centers, open space, and of course, local and regional transit systems.

The adjacent bike/transit shed maps demonstrate the reach of the existing and proposed and existing Sun Metro Bus Rapid Transportation transfer center hubs.

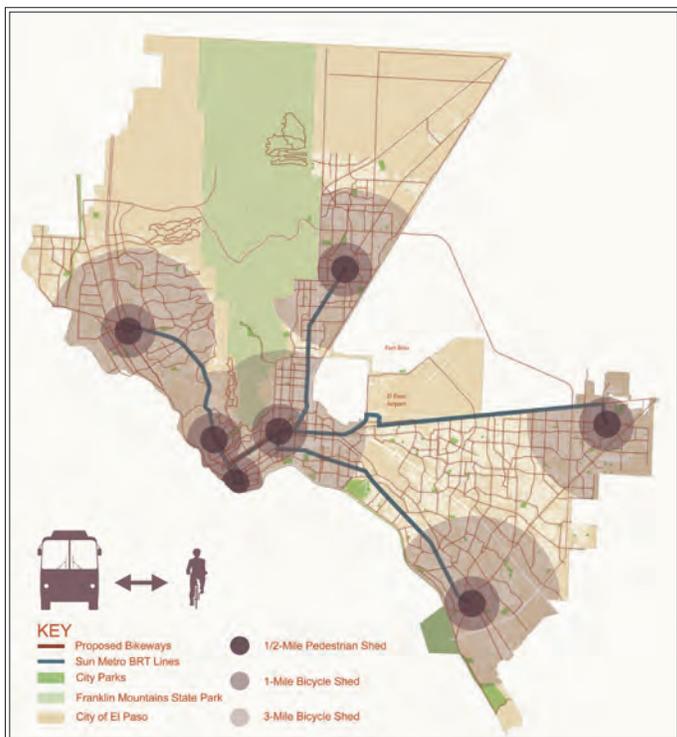
Station Area Plans

In order to leverage existing and future transit investments with better cyclist connections, the following pages detail station area networks within the one-mile 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 roadway width, volume and speed, and the corresponding range of appropriate bicycle facility.

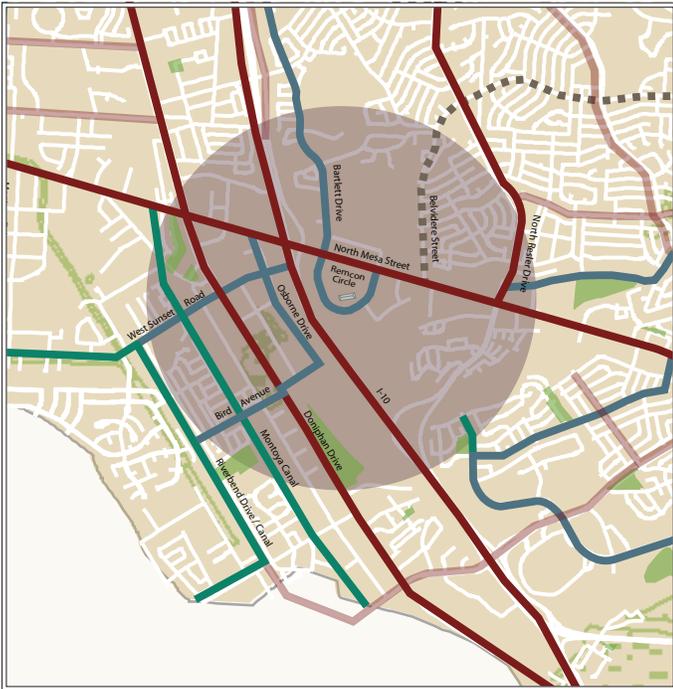
-  CLASS 1: Cycle Track, Buffered Bike Lane, Conventional Bike Lane, Wide Shoulder
-  CLASS 2 : Buffered Bike Lane, Conventional Bike Lane, Sharrow
-  CLASS 3 : Conventional Bike Lane, Bike Boulevard, Signed Route, Shared-use Path, Sharrow



1-mile RTS/Bicycle Shed



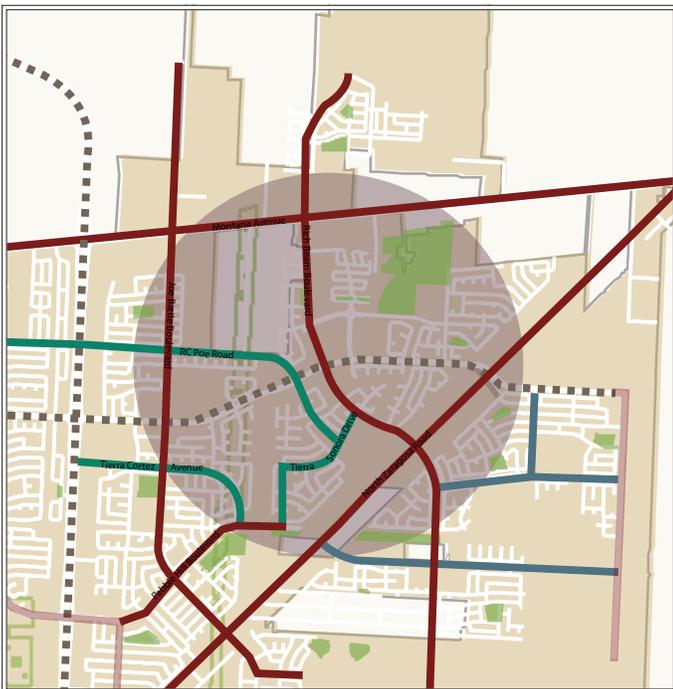
3-mile RTS/Bicycle Shed



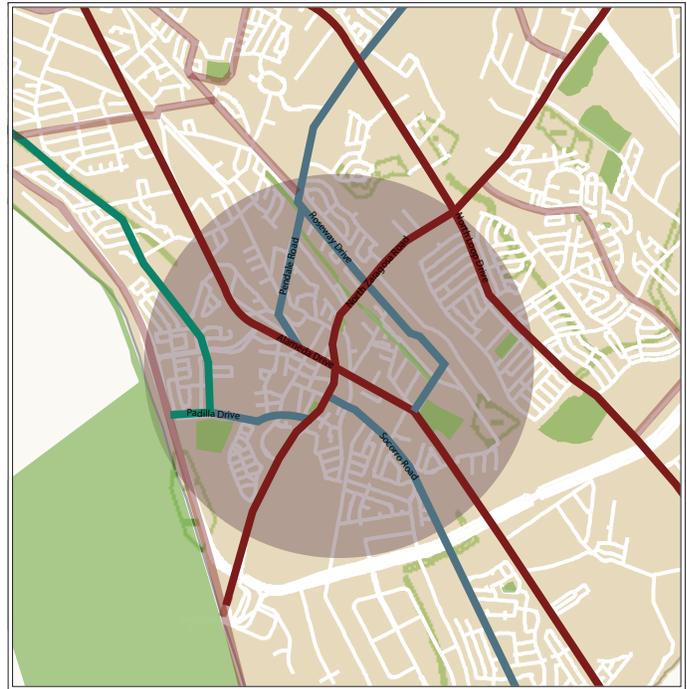
Station Area Plan: Remcon Circle



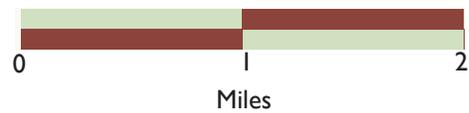
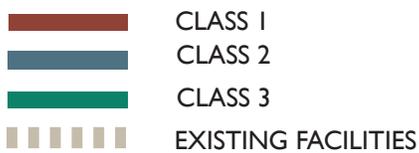
Station Area Plan: Northgate Terminal

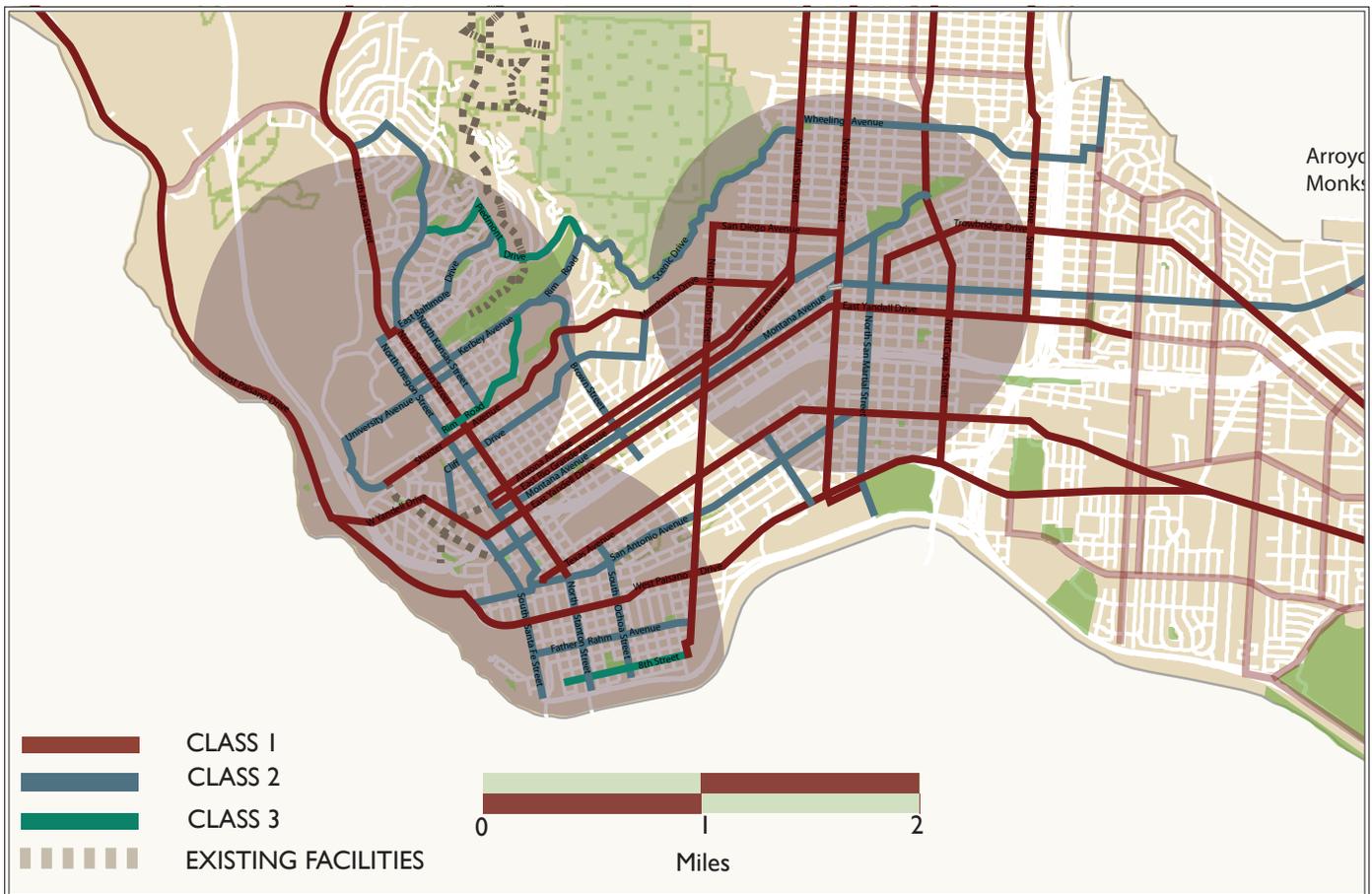


Station Area Plan: Eastside



Station Area Plan: Mission Valley





Station Area Plan: Central Valley and Downtown

Central Valley 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 /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

El Paso has the potential to become one of the premier bicycling destinations in the United States with strategic policy changes and infrastructure investments. Abundant opportunities exist 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 to as if auto-mobility were the 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 and with skill, are particularly interested in the development of physically separated bikeways, or off-street paths; 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.

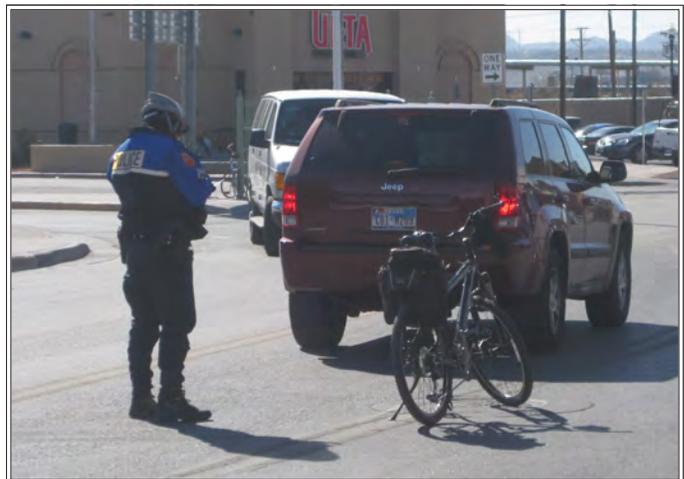
One major concern is the challenge presented by the City’s topography, which is a deterrent to less advanced cyclists. Overcoming this challenge will partially require bikeway facilities that make novice users comfortable riding more frequently so that topography previously deemed too challenging becomes 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 the Central Area were singled out as ‘treacherous,’ as 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



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.

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.

Education, Encouragement and Enforcement

The City has relatively few education, encouragement and enforcement initiatives. Yet, those that have been implemented are highly visible and have been effective. Namely, El Paso's Scenic Sundays open streets initiative, which takes place seasonally on a car-free Scenic Drive during. 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 small bicycle patrol unit 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. At present, no such distinction is made within 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 Building Function (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.

BICYCLE PROVISION OPTIONS: EAST YANDELL

As with other infrastructure projects, when it comes to bicycle facilities, one size does not fit all. The adjacent sections illustrate how one roadway 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: Yet another intervention in the design of East Yandell could envision 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 will be sure to attract a greater number of cyclists, and would be appropriate on major routes.



Step 4A future East Yandell that envisions a cycle track, covered transit stop and bicycle box.

ONE-WAY STREETS AND CIRCULATION

Bicycle Circulation

In terms of bicycle circulation, one-way streets present greater difficulty for cyclists than almost any other user group. A bicyclist provides his or her own power for vehicle operation 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 does not encourage or support bicycling as a transportation mode.

Consequently, one-way streets encourage wrong-way and sidewalk riding, as these may provide the most direct route to a destination. These are common causes of bicycle crashes, and 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 and cut in-half the distance required to reach many destinations by bicycle.

Transit Circulation

Transit 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 on-

coming 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 great 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 high 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 vehicle operators to focus on their environment (including any pedestrians in the intersection). In situations where higher speed street design (such as twelve foot 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.

Also, as pointed out by Walker, Kulash, and McHugh in “Downtown Streets: Are We Strangling Ourselves on One-Way Street Networks?” 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:

1. 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).

These four conflicts, in this sequence, are the only ones the pedestrian will experience; they will be exactly the same at every two-way intersection. They are of course reversed for pedestrians traveling the opposite direction, so a pedestrian on a two-way street network has exactly two conflict sequences to consider, and they are mirror images of each other. Once the 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.

Consider a pedestrian walking in the direction of traffic approaching the intersection of two two-lane, one-way streets. The cross street is approaching from the pedestrian's left. The following conflict sequence could occur:

1. Cars approaching from behind and turning right may turn across the sidewalk, so the pedestrian must be aware of a conflict from the rear left.

2. Cars traveling on the cross street, in the nearer lane, may run a stop sign or signal, so the pedestrian must look carefully to ensure the lane is clear.
3. Cars traveling on the cross street, in the further lane, may run a stop sign or signal, so the pedestrian must look carefully to ensure the lane is clear (and that a car in the nearer lane is not obscuring a car in the further lane).
4. The pedestrian must also look for wrong-way driving traffic on the one way street, as this does happen on one-way street systems.

This is the first conflict sequence for this intersection. Now consider a pedestrian approaching from the opposite direction. The following conflict sequence could occur:

1. Cars approaching from ahead could turn left across the crosswalk, so the pedestrian must look for nearside approaching vehicles making a left turn.
2. Cars traveling on the cross street, in the nearer lane, may run a stop sign or signal, so the pedestrian must look carefully to ensure the lane is clear.
3. Cars traveling on the cross street, in the further lane, may run a stop sign or signal, so the pedestrian must look carefully to ensure the lane is clear (and that a car in the nearer lane is not obscuring a car in the further lane).
4. The pedestrian must also look for wrong-way driving traffic on the one way street, as this does happen on one-way street systems.

This is the second conflict sequence for this intersection, and it is not simply a mirror image of the first sequence, but has different approaches and turning movements (approaching car turning left, instead of car from the rear turning right).

If one of the approaching streets is a single lane one-way street (something that is not possible on a two-way street system), a new and different conflict sequence is presented. And if a one-way street is intersecting a two-way street, yet another completely different conflict sequence is introduced.

So while the assertion that conflicts are reduced at one-way street intersections is true for some very simple one-way intersections, the assertion that one-way street systems are easier for pedestrians to understand and cross is not true. In fact, one-way street system intersections are much more complex – the simple examples here indicate at least two different conflict sequences for each intersection type, and at least three differ-

ent intersection types (there are conceivably many more). This compares only two conflict sequences for two-way operations, and those same two conflict sequences can be used over and over at each two-lane, two-way intersection.

So in practice, one-way operation does not provide an advantage for pedestrians. Pedestrians in walkable areas do a complete scan of every intersection, regardless of street type. Even on one-way streets, kindergarten traffic safety instructs pedestrians to look both ways before crossing the street (after all, people sometimes go the wrong way on a one way street, whether from confusion, frustration, or emergency response).

Pedestrians who do not scan an intersection for conflicts are going to have conflicts, regardless, no matter the intersection type. Pedestrians who are drunk, 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.

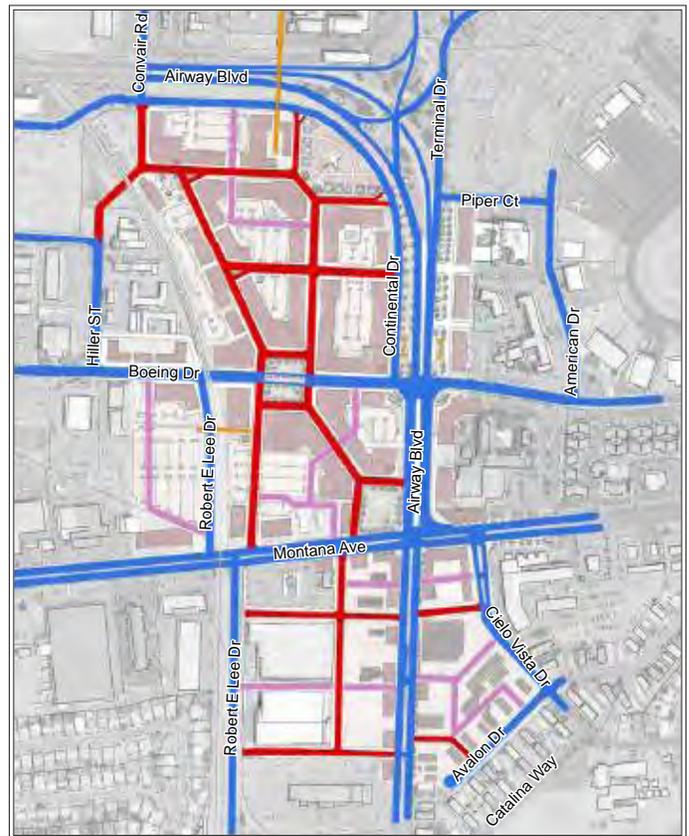
Conversion to Two-Way Operations

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-users included. Converting to two-way operations would:

- be helpful in Compact Urban areas – walkable 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 and
- reduce confusion for visitors.

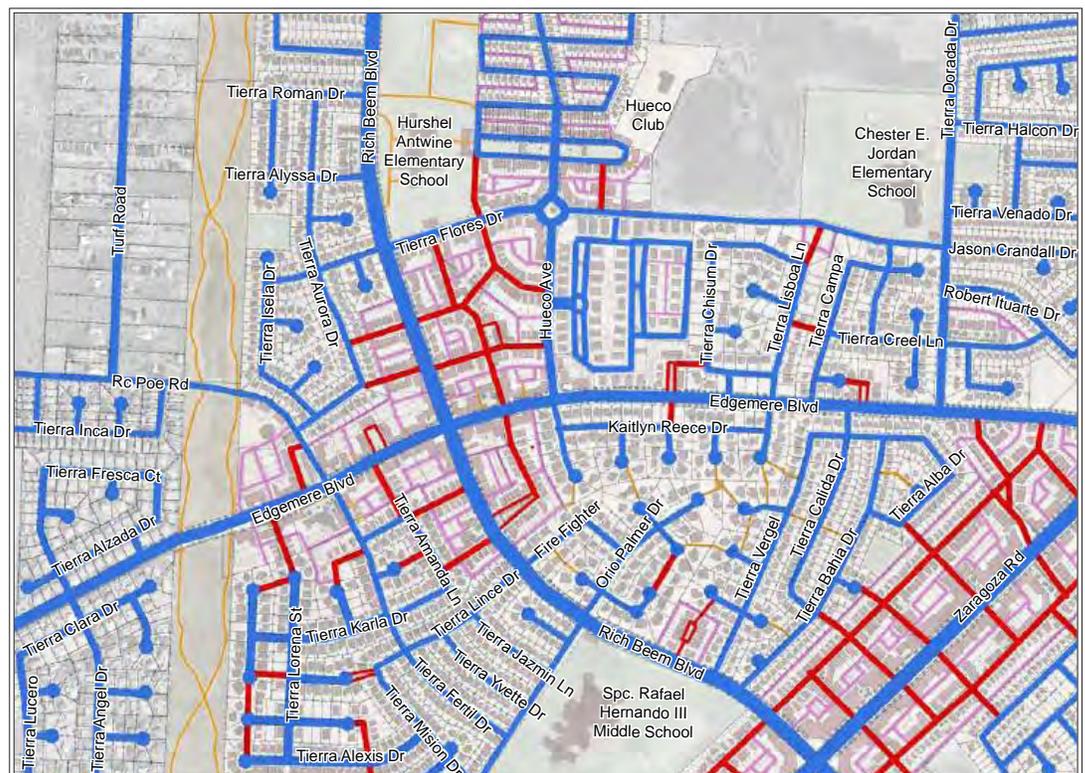
EXPANDED STREET NETWORK

In addition to the designs proposed above, the team proposes an expansion of the current street network in strategic locations in El Paso, such as part of the small area plans and Transfer Center neighborhoods. Figures 16 and 17 below provide examples for the Airport Transfer Center and Eastside Transfer Center. Existing street network is shown in blue, highlighting potential connections for new streets, as those parcels redevelop (shown in red). Alleys are shown in purple. Some of these new connections occur in existing parking lots, where it is feasible to do so. The expanded street network will 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

CNU/ITE STANDARDS FOR WALKABLE URBAN THOROUGHFARES

Despite citizen support, the dynamic new streets described above have not been implemented previously due to conflicting design guidance from transportation agencies at the federal, state and local levels. These transportation agencies have traditionally focused on accommodating high-speed, vehicular traffic only and are only recently taking pedestrian, bicyclist and transit user needs into consideration. A new paradigm is emerging.

Design elements for any thoroughfare should respond to both its intended function and its surrounding context. The Federal Highway Administration (FHWA), American Association of State Highway Transportation Officials (AASHTO) and many other transportation agencies and organizations are adopting Context Sensitive Design solutions to provide a greater balance between transportation and community needs. In addition to fulfilling the State’s policies regarding regional motor vehicle circulation and mobility, City streets must be compatible with the context envisioned by the community. The overarching functional basis of walkable street design is greater walkability through management of vehicle speed.

To achieve the City’s multiple goals of job creation, revitalization and walkability, the City will need to establish and adopt a new category of streets with the following features:

- Lower target speed
- Shorter curb radii,
- On-street parking and
- Narrower travel lane widths.

The justification for the creation of these new streets is the City’s desire and support for creating traditional, walkable places. Critical to creating this type of context is the need to manage vehicular travel speeds to promote a safe environment for other modal users, such as pedestrians, bicyclists and transit users. Thus, based on proven research, the target speed for the City’s designated walkable neighborhoods should be set at 30 mph or lower, lower than speed designed for in State manuals.

Context

The design recommendations for El Paso’s near term walkable, compact urban places are consistent with recent policies promoting context sensitive solutions (CSS) to thoroughfare design. Context (or transect) zones describe the physical form and characteristic of a place, interpreted on a block-by-block basis for thoroughfare design.

The newly published Institute of Transportation Engineer’s Recommended Practice, Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (ITE Practice) uses context zones as the primary consideration in selecting the design pa-

rameters of urban thoroughfares. This process is intended to refine the “rural” and “urban” classifications that are used in selecting design criteria in The AASHTO Green Book.

This ITE Practice was prepared to advance the use of CSS in planning and designing or major urban thoroughfares for walkable communities. Context based transportation projects serve all users and are compatible with the adjacent surroundings. Specifically the techniques in this document were prepared to be applied where community objectives support new urbanism and smart growth: walkable, connected neighborhoods, mixed land uses, and easy access for pedestrians and bicyclists.

In 2009 Texas Department of Transportation (TxDOT) adopted the ITE Practice as accepted thoroughfare design guidance for the state. Specifically, it has been added to TxDOT’s Project Development Process Manual.

Context

The plan and vision proposed for the City of El Paso identifies a number of nodes or areas that will or should redevelop in a walkable Compact Urban manner (both in the near and long term), with the remaining portions staying suburban in context and function for the foreseeable future (City-wide Context Map).

Those areas of redevelopment are identified as “C5/Urban Core Zones” and “C4/General Urban Zones” for context and described in greater detail below. All other portions of the corridor are “C3/Suburban Zones”, also described below, as indicated by the following equivalency table.

The highest intensity node within the City is the Urban Core. Urban Core places

- are high intensity areas, with high-density residential and workplace uses, entertainment, civic and cultural uses
- include attached buildings forming sense of enclosure and continuous street wall landscaping within the public right of way with the highest pedestrian and transit activity and
- are designed with small or no setbacks, with 4 or more storied buildings oriented to the street

General Urban places,

- have a mix of housing types including attached units, with a range of commercial and civic activity at the neighborhood and community scale,
- are marked by predominantly detached buildings, balance between landscape and buildings, presence of pedestrians, and

- are designed with shallow to medium front and side yard setback and 2 to 3 story buildings with some variation and few taller workplace buildings.

Other portions of the City will likely maintain suburban characteristics, identified as a Suburban Zone (C3) in the ITE Practice. Suburban zones:

- are primarily single-family residential with walkable development pattern and pedestrian facilities,
- have scattered commercial uses that support the residential uses,
- are marked by detached buildings with landscaped yards, and
- are designed with varying front and side yard setbacks and 1 to 2 story buildings.

For consistency and clearer understanding of different terminology, the following table illustrates context equivalency, building upon the table described above comparing regional sectors and functional classification area types. This table shows how the contexts described in the ITE practice relate to the proposed regional sectors for El Paso and augmentation of the Functional Classification area types.

Thoroughfare Design Manual

The manual provides great detail for designing several different types of thoroughfares for each for the described contexts (suburban through urban core). They are separated by commercial and residential thoroughfares, as well as context, and are described in detail below.

The tables that follow build upon the previous thoroughfare equivalency table adding the ITE Practice’s sections, for further clarity.

**Context Equivalency
Regional Sectors, ITE Practice Context Zones and
Functional Classification Area Types**

	Regional Sectors	ITE Context Sensitive Solutions Context Zones
Rural	O-1 – Preserve O-2 – Natural O-3 – Agriculture O-4 – Military Reserve O-5 – Remote O-6 – Urban Reserve	N/A
Suburban	G-3 – Post-War G-4 – Suburban G-5 – Independent City G-6 – Rural Settlement G-7 – Industrial G-8 – Airport G-9 – Fort Bliss	G3 Suburban
Compact Urban	G-1 – Downtown G-2 – Traditional Neighborhood G-3 – Post-War G-5 – Independent City	G4 General Urban G5/6 Urban Center Core

Thoroughfare Equivalency Table - Functional Classification Comparison

	Suburban	Compact Urban (Title 21)	ITE Context Sensitive Solutions
Arterial	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')	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	Commercial Boulevard Residential Boulevard Commercial Avenue Residential Avenue Commercial Street Residential Street
Collector	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')	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	Commercial Avenue Residential Avenue Commercial Street Residential Street
Local	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'); 20' Residential Lane 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	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	Commercial Street Residential Street

Street Design Characteristics

Street Designation	Commercial Thoroughfares				
	Urban Core C5 Commercial Boulevard	Urban Core C5 Commercial Avenue	Urban Core C5 Commercial Street	General Urban C4 Commercial Boulevard	General Urban C4 Commercial Avenue:
Building Orientation and Parking Access	Buildings oriented to the front of the street with rear access only to off-street parking	Buildings oriented to the front of the street with rear access only to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking
Minimum Sidewalk Width	10'	9'	6'	8'	6'
Pedestrian Buffer / Tree Planting	7' Tree Wells	6' Tree Wells	6' Tree Wells	7' Tree Wells	6' Tree Wells
Target Speed	25 - 35 MPH	25 - 30 MPH	25 MPH	25 - 35 MPH	25 - 30 MPH
Number of Lanes	4 - 6 lanes	2 - 4 lanes			
Lane Width	10' - 11'	10' - 11'	10' - 11'	10' - 12'	10' - 11'
On-Street Parking	8' Parallel	8' Parallel	7' - 8' Parallel	8' Parallel	7' - 8' Parallel
Medians	4' - 18'	Optional 4' - 18'	No Medians	4' - 18'	Optional 4' - 18'
Curb Radii	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections

Street Designation	Commercial Thoroughfares			
	General Urban C4 Commercial Street	Suburban C3 Commercial Boulevard	Suburban C3 Commercial Avenue	Suburban C3 Commercial Street
Building Orientation and Parking Access	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear access only to off-street parking
Minimum Sidewalk Width	6'	6'	6'	6'
Pedestrian Buffer / Tree Planting	6' Tree Wells	7' Tree Wells	6' Tree Wells	6' Tree Wells
Target Speed	25 MPH	25 - 35 MPH	25 - 30 MPH	25 MPH
Number of Lanes	2 - 4 lanes	2 - 6 lanes	2 - 4 lanes	2 through lanes
Lane Width	10' - 11'	10' - 12'	10' - 11'	10' - 11'
On-Street Parking	7' - 8' Parallel	8' Parallel	Optional	7' - 8' Parallel
Medians	No Medians	4' - 18'	Optional 4' - 18'	No Median
Curb Radii	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections

Street Design Characteristics

Street Designation	Residential Thoroughfares				
	Urban Core C5 Residential Boulevard	Urban Core C5 Residential Avenue	Urban Core C5 Residential Street:	General Urban C4 Residential Boulevard:	General Urban C4 Residential Avenue:
Building Orientation and Parking Access	Buildings oriented to the front of the street with rear access only to off-street parking	Buildings oriented to the front of the street with rear access only to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking
Minimum Sidewalk Width	10'	9'	6'	8'	6'
Pedestrian Buffer / Tree Planting	7' Tree Wells	6' Tree Wells	6' Tree Wells	8' Planting Strip	8' Planting Strip
Target Speed	25 - 35 MPH	25 - 30 MPH	25 MPH	25 - 35 MPH	25 - 30 MPH
Number of Lanes	4 - 6 lanes	2 - 4 lanes	2 - 4 lanes	4 - 6 lanes	2 - 4 lanes
Lane Width	10' - 11'	10' - 11'	10' - 11'	10' - 11'	10' - 11'
On-Street Parking	7' Parallel				
Medians	4' - 18'	Optional 4' - 18'	No Medians	4' - 18'	Optional 4' - 18'
Curb Radii	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections

Street Designation	Residential Thoroughfares			
	General Urban C4 Residential Street:	Suburban C3 Residential Boulevard:	Suburban C3 Residential Avenue:	Suburban C3 Residential Street:
Building Orientation and Parking Access	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear/side access to off-street parking	Buildings oriented to the front of the street with rear access only to off-street parking
Minimum Sidewalk Width	6'	6'	6'	6'
Pedestrian Buffer / Tree Planting	6' Planting Strip	8' Planting Strip	8' Planting Strip	5' Planting Strip
Target Speed	25 MPH	25 - 35 MPH	25 - 30 MPH	25 MPH
Number of Lanes	2 through lanes	4 - 6 lanes	2 - 4 lanes	2 through lanes
Lane Width	10' - 11'	10' - 11'	10' - 11'	10' - 11'
On-Street Parking	7' Parallel	7' Parallel	7' Parallel	7' Parallel
Medians	No Medians	4' - 18'	Optional 4' - 18'	No Median
Curb Radii	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections	Small curb radii to shorten distance pedestrians must cross at intersections

SMARTCODE THOROUGHFARE STANDARDS

High Capacity Transit (HCT) Planning & Opportunities

As discussed in the Strategies to Address Community Concerns section, residents and participants in the planning process consistently prioritized long-term investment in transit, specifically in high capacity transit, as a visionary and important element of long range transportation planning.

High capacity transit (HCT) 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 (TOD). Accordingly, HCT includes rail-based transit (streetcars, light rail, heavy rail, and commuter rail); bus rapid transit (BRT); and other forms of what are commonly called rapid transit. El Paso's expanded and improved bus system is referred to as "Rapid Transit System (RTS)" because it does not have all of the attributes that BRT systems have.

As discussed in other sections, El Paso is prioritizing RTS as the foundation of its future transportation system to improve mobility and travel choices, stimulate economic development, enhance Downtown revitalization, and re-invest in established neighborhoods. The City and Sun Metro are working so quickly to implement RTS that the entire four-line, Citywide network is intended to be operational in 2016. Given this fast-track schedule, what future HCT investments should be made over the long range planning horizon of this Comprehensive Plan?

Based on the community's transportation vision, and as reflected in the Strategies to Address Community Concerns and Goals and Policies, the region should continue to evolve and grow its transit system by assessing the feasibility of, and planning for the following HCT investments:

- **Potentially Converting All or Part of the RTS Network to Light Rail Transit (LRT) Over Time:** As RTS is implemented and begins to transform the City's land use patterns through station-area TODs and reclaiming the RTS corridors as walkable urban streets, there may be an opportunity in the future to convert part or all of the RTS system to LRT. An LRT system has even more capacity than RTS and may accelerate TOD, but does require higher land use density and other thresholds to be viable. Also, because the RTS corridors have been carefully and strategically chosen as the primary corridors for HCT transit, it may be redundant to implement a separate LRT network. However, there may be opportunities to implement LRT in certain areas not served by RTS that could create new transit markets, economic development opportunities, and ultimately strengthen both transit modes.
- **Expanding the Streetcar Network to Connect Downtown El Paso With Other Major Destinations Within the City:** The City recently completed an initial streetcar feasibility study that showed both market potential and technical viability for a streetcar route between Downtown El Paso and UTEP within the Oregon-Stanton-Mesa corridor. While it will be important to resolve its potential conflicts with the RTS's Oregon corridor, implementing this initial streetcar route is a critical element of "re-investing in Downtown first," a foundational policy direction of this Comprehensive Plan. As such, building this route as a modern streetcar line is itself a major recommendation of the Comprehensive Plan. Over time, there may be opportunities to add additional streetcar routes to other major destinations within the City, in a sense recapturing El Paso's historic and extensive original streetcar network.
- **Extending the Streetcar, RTS, And/or LRT to Juárez as Feasible:** As that historic streetcar system once did, re-establishing transit connections to Juárez was emphasized by the community throughout the Comprehensive Plan development process. While the exact transit technology, timing, location, and other elements of doing so are currently unknown, its transformative vision should be carried forward in future transit and Port of Entry planning and implementation efforts.
- **Establishing Commuter Rail Service, First Between El Paso and Las Cruces, and Expanding Over Time as Feasible:** All HCT strategies discussed so far are largely internal to El Paso or its immediate metropolitan area (including Juárez). However, the community strongly supports, and El Paso and Las Cruces have long-advocated (and are studying the potential) for, commuter rail service linking the two cities. A frequently-cited peer example is New Mexico's Rail Runner Express commuter rail that connects Albuquerque (from Belen) and Santa Fe. Another important reason to "re-invest in Downtown El Paso first" is because doing so will be important to the viability of commuter rail. However, commuter rail is an important opportunity to strengthen regional travel and economic development in a way that complements the City's planned RTS network, recommended streetcar investment, and the other HCT opportunities described above.

- **Exploring Opportunities For Intercity Passenger Rail (High-Speed or Otherwise) to Other Southwestern Metropolitan Areas:** The ultimate evolution of HCT investment from within the City to across the region is to connect this region with others in the Southwest through some form of passenger rail. There are two potential rail technologies to do so – conventional intercity passenger rail, similar to Amtrak service, and high-speed rail. While the former is currently more likely than the latter, the technology is not as important- for purposes of this Comprehensive Plan- as the policy direction of pursuing all reasonable intercity rail opportunities. In fact, Amtrak already serves El Paso’s Union Depot via the Texas Eagle (with service east to Chicago via San Antonio and Dallas) and the Sunset Limited (service between Los Angeles to New Orleans). Accordingly, a potential focus of new intercity passenger rail service in a currently un-served but important corridor is between El Paso, Albuquerque, Santa Fe, and Denver.

HIGH CAPACITY TRANSIT (HCT) PLANNING AND OPPORTUNITIES

In summary, these recommended HCT strategies are intended to evolve and grow the region’s transit network and implement the City’s policy priorities addressing walkability, travel choices, re-investing in Downtown first, and re-shaping El Paso’s urban form and economic development through public transit and TOD.

Passenger Rail Service

Existing rail corridors can be used for passenger service provided they connect places that passengers want to go and that the rail corridor is either no longer needed for freight trains or can be made compatible with 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 intercity service could be provided between El Paso, Las Cruces, and Albuquerque, it could use the existing BNSF tracks and terminate at the Downtown transfer center on Santa Fe Street or at Union Depot.

The New Mexico Railrunner Express operates much more frequently than Amtrak and must meet strict schedules to be useful for daily commuters. As discussed earlier, the BNSF rail corridor was purchased so that commuter trains would have priority, even though freight trains still use the tracks.

“Light rail” trains operate within cities to provide frequent all-day service to more closely spaced stops. Light rail vehicles are electric-powered and usually run on their own tracks; there are several exceptions including 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 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.

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 Juárez offers significant opportunities for light rail service. One would be resumption of international service between the two cities; the original international service was a streetcar line that ended at a racetrack in southeast Juárez. 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.

PARKING RECOMMENDATIONS

The issue of parking is becoming increasingly important in El Paso. As the City prioritizes implementing the Rapid Transit System (RTS), creating Transit-Oriented Development (TOD), revitalizing Downtown, and transforming highways to walkable urban thoroughfares, the way parking has been regulated, provided, and managed, must change accordingly. The past practice of plentiful free parking that separates buildings from each other and from the street has been one of the primary causes across the country of auto-dependent sprawl, low property values and revenues, economic and neighborhood disinvestment, and inhospitable conditions for walking, bicycling, and transit use.

In El Paso, there is significant opportunity 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 significantly influence travel behavior, economic activity, and community character.

There are three primary categories of strategies to more effectively manage parking demand: increasing parking supply; improving access to alternative transportation modes; and increasing parking turnover in high-demand areas, such as business districts and commercial corridors, through paid parking. Paid parking is controversial, and the recommendations presented below are designed to maximize other strategies in the parking management toolkit 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. **Mode shift:** 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 the day.
4. **Encourage shared parking:** Ensure that existing parking spaces are utilized to their maximum potential throughout the day and evening.

1. 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, benefit-

ing 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 to the street and without generating additional shopping trips (economic activity). Employees and employers parking in front of their businesses impede the access of customers to their stores, making Downtown shopping less attractive.

ii. Eliminate 2-hour 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 within the same time zone.

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." 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 could make parking enforcement officers more effective. Handheld computerized machines record the parking history of each vehicle ever entered. 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 are 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 and courteous, and adequate to maintain a high level of compliance. Special care must be taken to ensure the right balance of leniency and enforcement for patrons.

2. Mode Shift

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 free 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 parking supply issues. 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.

- Clustered land use, 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 transportation demand management (TDM) 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).

As noted above, 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, increased police protection or other programs. 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 can often help bring merchants, residents and other stakeholders on board with pricing programs.

4. Encourage Shared Parking

Often 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 and TOD 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 supply. In El Paso, better management could reduce the need for additional surface lot or structured parking. Parking management in El Paso should include setting appropriate time limits for store-front parking, overseeing directional signage to parking facilities, creating and managing new employee parking facilities, creating and managing neighborhood permit programs and, in the future, potentially implementing and regulating paid parking.

Neighborhood Parking Permit: Shifting parking policies in El Paso will likely affect the demand for on-street spaces in the adjacent residential neighborhoods. Policies that increase turnover of Downtown spaces, such as increased enforcement and paid parking, could shift parking demand into adjacent areas. 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 avoid the risk of spillover parking into the 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 upon showing verification of residence in that zone (i.e. utility bill). Generally, residents pay 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 re-development.

- Ensure on-street parking:** On-street parking is the most valuable type of parking for several reasons. First, it creates a physical and psychological buffer 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. Off-site parking facilities use valuable land, require additional curb cuts through the pedestrian realm for access, and present 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.
- Place parking behind buildings:** Fronting streets with buildings improves the pedestrian environment. Placing parking behind buildings also allows for the access points (i.e. driveways) 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.
- 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 Anecdotally, most 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 much of the year. An innovative approach taking hold across the country is to regulate parking through specifying maximum allowable supply, rather than minimum.
- 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.

PLAN EL PASO

Strategies for Addressing Community Concerns

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) only 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, and visitors. It should also be noted that other recommended strategies (such as park-and-rides) depend on implementing this strategy and creating at least some level of parking restrictions. 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.

REGIONAL RAIL ISSUES

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.

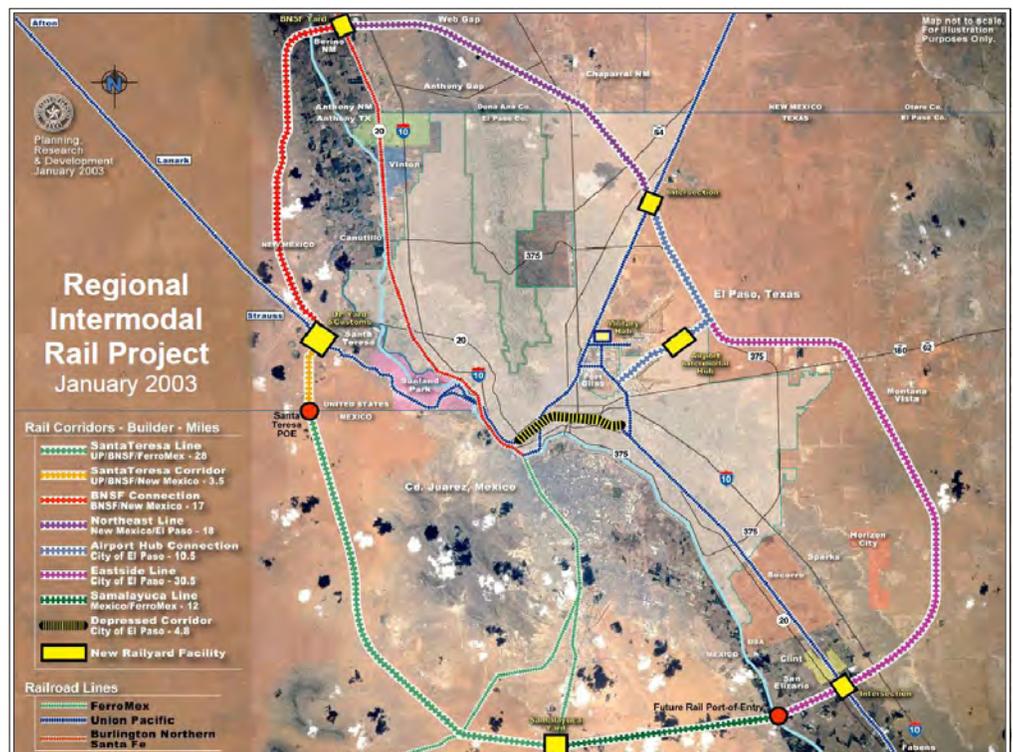
In 1999, the El Paso Metropolitan Planning Organization (MPO) considered the potential for a new intermodal hub. “Intermodal” means freight that is transported in standardized shipping containers by two or more travel modes, such as rail, trucking, and aircraft. Five sites were evaluated:

- 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 analysis 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 trackage 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 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 still at a 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.

PASSENGER RAIL / DRAINAGE / CIVIC SPACES

Arena / Sports Venue

El Paso’s Downtown 2015 Plan envisioned a major entertainment area along Santa Fe Street that would include a new arena just south of the El Paso convention center. This arena, with 15,000–18,000 seats, could become a hub for sporting events, trade shows, and entertainment.

This arena was intended to energize the western side of Downtown, but a similar facility could be built at other locations near Downtown. For instance, if the BNSF railyard on Santa Fe Street were relocated to Santa Teresa, it could provide a site for a Downtown arena either next to the Downtown transit center or across Paisano Drive from Union Depot. An arena could also become part of a new central park on Union Pacific’s Dallas Yard.

Parks & Civic Spaces

The El Paso public has expressed a need 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 informal and active 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 further below.



El Paso Central Park bounded by interstate 10 (roadway on left) and an extended East Mills Avenue (on right).

Drainage Improvements & Linear Parks

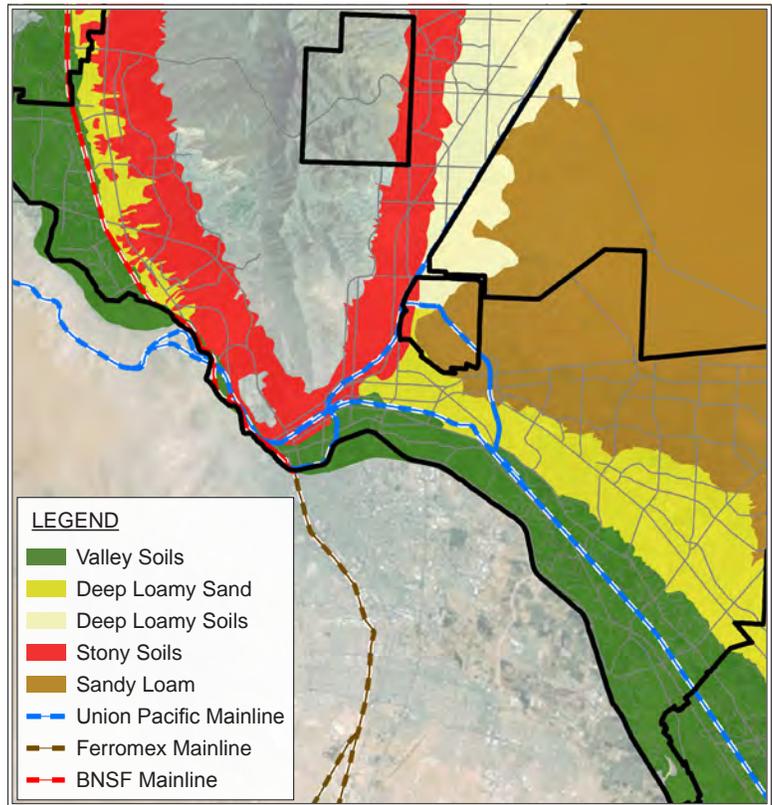
The reconfiguration of railroad and railyards would present opportunities to address flooding in El Paso. The maps on this page show the railroads superimposed on maps of natural features. The first map shows soil types, generalized from Soil Conservation Service maps. The second shows contour lines 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:

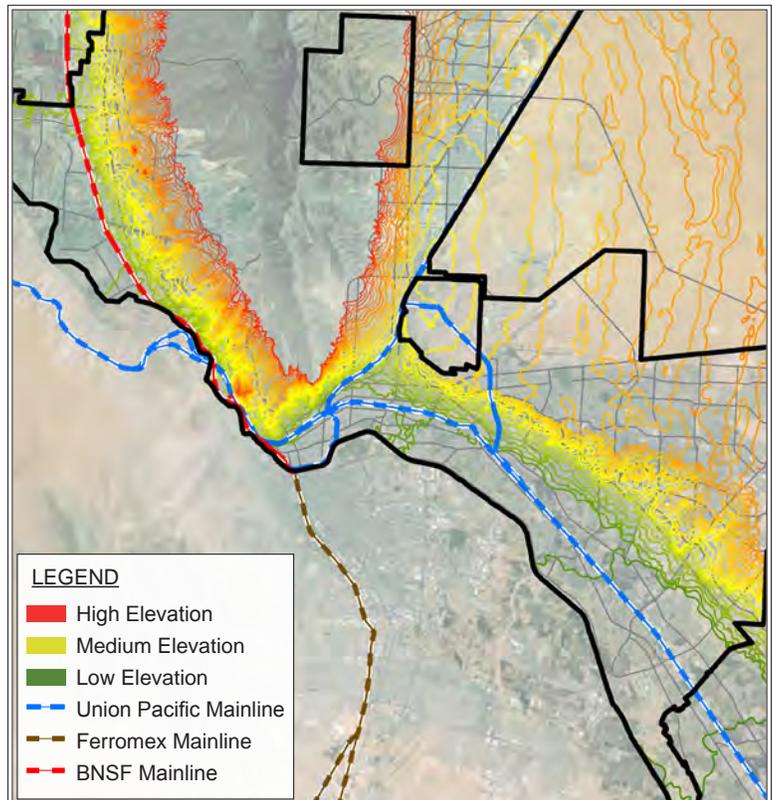
- Valley soils, in green, emerged from Rio Grande sediments. Valley soils vary in character but are extremely flat, as shown on the contour map, and are very prone to flooding after heavy rains.
- Deep loamy sand, in dark yellow, is found in the escarpment zone that rises from the valley floor. These 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 upper 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 northEastSides. 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:

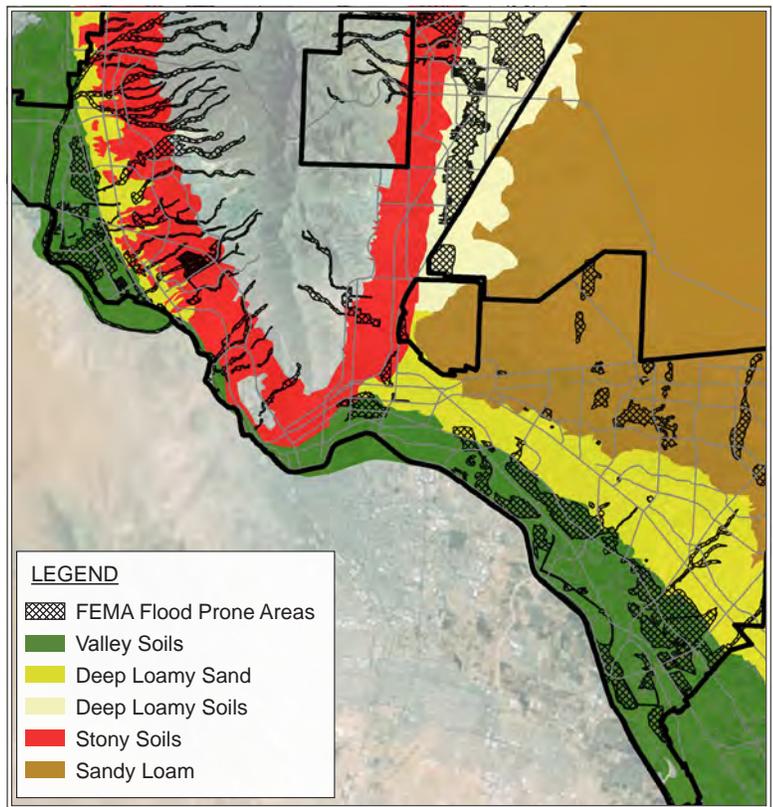
- Adopted a Drainage Design Manual to keep new development from increasing flood risk.
- Prepared a Stormwater Master Plan that identified high flood risks in already-developed areas and proposed capital improvements to reduce those risks.
- Created a stormwater utility, funded by all landowners and operated by El Paso Water Utilities, to maintain the drainage system and carry out the Stormwater Master Plan. Stormwater fees will fund 10% of the improvements during the first three years.

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.

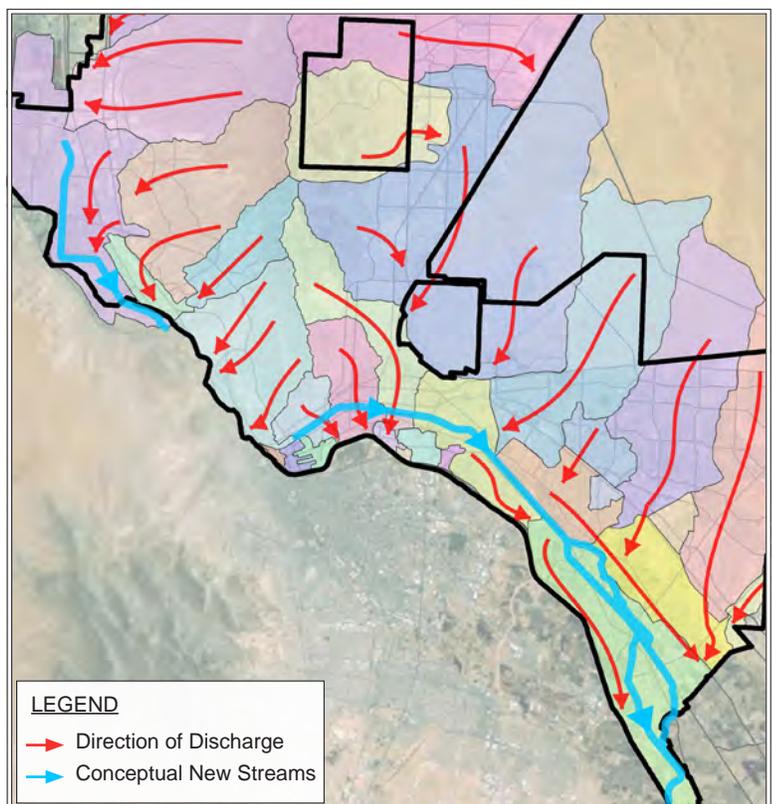
An advisory committee that guided the stormwater plan recommended using natural arroyos wherever possible and using natural materials in drainage improvements. The final master plan document supported these ideas, yet the proposed improvements rely heavily on the opposite: engineered basins, concrete-lined channels, and pumped discharges.

The proposed improvements 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 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.



FEMA Flood Areas on Soil Map



Existing Stormwater Basin

GOALS & POLICIES

Overall Goal: El Paso will strive to become the most walkable and least car-dependent City in the Southwest through sustainable mobility. The City seeks to implement a balanced transportation system with meaningful travel options to prioritize person-based mobility, and land use patterns that support walkability, livability, and sustainability. In time, El Paso will strive to join the ranks of the most walkable and multi-modal metropolitan areas in the country.

Street Network

Goal 4.1: Develop a well-connected network of complete streets that support a multimodal transportation network. The street network should enable safe, efficient, accessible, and comfortable travel for driving, transit, walking, and bicycling.

Policy 4.1.1: The City shall use LEED-ND as the basis for developing street connectivity standards for all new subdivision and land use development and redevelopment. No-outlet, dead-end, culs-de-sac, and other non-through streets shall be prohibited unless deemed necessary by City staff to accommodate specific site conditions. If a cul-de-sac or dead-end is unavoidable, it should be designed to resemble a “close” and should feature a pedestrian connection to areas beyond the dead-end.

Policy 4.1.2: The City shall identify corridors of critical significance to transit operations, walking, and bicycling, and coordinate with the El Paso MPO and TxDOT to prioritize travel choices and a balanced transportation network as the primary objective in planning, design, implementation, and operation of these corridors.

Policy 4.1.3: Implement access management strategies to increase safety for all travel modes, balance efficient traffic flow with land use access and multimodal travel, and to optimize route options and connections between individual land uses, such as through shared driveways, side street access, and other strategies.

Policy 4.1.4: Include alleys into 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.

Policy 4.1.5: Provide non-motorized connections to improve route directness and reduce walking and bicycling trip lengths.

Policy 4.1.6: Adopt a City-wide context Map that augments the Functional Classification area types, used by Engineering Departments to assign thoroughfare standards, to include a “Compact Urban” area for walkable thoroughfare design.

Sustainable Mobility Plan

Goal 4.2: Transform the Major Thoroughfare Plan into a Sustainable Mobility Plan that integrates all major travel modes with land use character and urban design, as well as multimodal, federal-compatible, functional classification.

Policy 4.2.1: Rename the Major Thoroughfare Plan as the Sustainable Mobility Plan (SMP).

Policy 4.2.2: Integrate land use character and urban design within the SMP to distinguish existing and future:

- a. Urban and rural areas
- b. Smart growth (SmartCode, TOD, TND, walkable, historic) neighborhoods and conventional suburban areas
- c. Areas of growth and areas of preservation

Policy 4.2.3: Update the SMP’s functional classification designations to conform to those used by the MPO to meet federal funding requirements.

Policy 4.2.4: Expand the functional classification to emphasize SmartCode, smart growth, multimodal travel, and similar concepts.

Policy 4.2.5: Update the SMP to revise the location of future facilities and functional classification (existing and future facilities) to address the City’s growth and infill objectives, topography, vested development rights, and related considerations.

Policy 4.2.6: Evolve the SMP to incorporate major transit infrastructure (RTS lines and transit trunk line corridors), major bikeways and pedestrian sheds, and freight, aviation, and Port of Entry infrastructure.

Policy 4.2.7: Designate those corridors with a specific and unique regional mobility purpose, such as the RTS corridors as Transit Boulevards.

Policy 4.2.8: Use the updated SMP as the basis for new, revised, and updated SmartCode- and complete street-based cross-section designs that integrate travel choices and land use/urban design context.

Policy 4.2.9: Implement place type-specific design standards to regulate the following elements of the pedestrian environment:

- a. Sidewalk presence and width
- b. The presence and location of street trees, on-street parking, pedestrian-scale lighting, pedestrian-oriented signage (wayfinding), street furniture, and other amenities.
- c. The location and design of crosswalks
- d. Building heights and setbacks

Policy 4.2.10: Ensure that the City’s street system is compatible with adjacent land uses and not “over-designed” in a way that will change the character of areas to be protected.

Policy 4.2.11: Implement the Major Streets Plan in a way that adds character, rather than just vehicle capacity. When seeking to expand capacity, consider the potential increase in capacity that can be gained by activating modes of mobility other than automobile capacity.

Policy 4.2.12: Use the updated SMP as the basis to prepare a regional Transportation Master Plan (TMP) that transitions the Comprehensive Plan towards multimodal project-based implementation. The TMP’s objective is an integrated, project-based multimodal transportation plan that becomes a regional transportation planning, project, and priority compact between the City, MPO, TxDOT, and others, similar to the role served by the 2008 Comprehensive Mobility Plan (CMP).

Street Design & Parking

Goal 4.3: The City will “design from the outside in,” rather than “from the inside out” for all new City streets – local and functionally-classified streets – to assess equally all major travel modes in street design, function, and operation.

Policy 4.3.1: Further, the City adopts this direction in collaborating with TxDOT, MPO, CRRMA, and other regional transportation partners for all transportation infrastructure planning and projects within or affecting El Paso.

Policy 4.3.2: Invest in the ongoing maintenance and refinement of the street system to adequately serve all users: drivers, transit riders, bicyclists and pedestrians.

Goal 4.4: The City establishes maximum landscaping and aesthetics on state and federal highways and freeways (existing and future) as a priority throughout El Paso to address effects upon traffic and facilities, pedestrian safety, noise, pollution, stormwater, and related issues.

Policy 4.4.1: Adopt the ITE Recommended Practice “Designing Walkable Urban Thoroughfares: A Context Sensitive Approach” as a tool for providing a range of street types and travel modes to allow increased design in neighborhoods and along corridors that desire enhanced neighborhood character, safety or walkability.

Policy 4.4.2: Adopt a Complete Streets ordinance to allow SmartCode and complete street cross-sections to be used to address the planning, design, and implementation of new streets and retrofit/reconstruction of existing streets.

Policy 4.4.3: Street design shall optimize safe, accessible, and meaningful travel choices – driving, transit, walking, and bicycling – and shall prioritize walkability through wide, buffered sidewalks, shade, and street-facing access to adjacent land uses.

- a. Widen sidewalks where appropriate and feasible, and plant regularly-spaced trees along streets according to standards.
- b. Provide streetlights that improve safety for drivers, cyclists, and pedestrians while maintaining a dark sky.
- c. Curb and gutter construction should be used to prevent flooding on streets and sidewalks where appropriate.
- d. Curb radii should be small to discourage drivers from turning corners quickly.
- e. Provide safe and convenient crosswalks at intersections, and mid-block crossings, where feasible and needed.
- f. 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.

Policy 4.4.4: The City will make safety for all travel modes and users the priority, especially for the most vulnerable users (pedestrians, children, and those physically impaired) as a primary element in designing, building, and operating all streets.

Policy 4.4.5: Ensure the most efficient use of transit by creating a set of context-sensitive street design criteria to evaluate specific roadway design and encourage walking and biking to transit stops.

Policy 4.4.6: Develop a Citywide plan that establishes priority locations for sidewalks and sidewalk improvements. Establish priorities for sidewalk improvements in the vicinity of schools, parks, transit routes, high density residential and commercial areas, and other areas with high (or potentially high) levels of pedestrian activity.

Policy 4.4.7: The City shall implement multiway boulevard street where feasible along major corridors that must balance regional through traffic, multimodal travel, and adjacent land use access and where other SmartCode street designs are not feasible.

Policy 4.4.8: The City shall study the possible advantages of converting one-way street couplets in Downtown to two-way operation.

Policy 4.4.9: To the maximum extent feasible, the City shall require new and retrofitted streets to incorporate Low-Impact Development (LID) and “Green Streets” principles regarding stormwater, drainage, retention, infiltration, and landscaping.

Policy 4.4.10: The City shall utilize 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.)

Policy 4.4.11: As part of a long-term strategy, land devoted to surface parking lots in existing, developed areas, should be reduced through the construction of structured parking and the use of infill development, to the greatest extent practical.

Policy 4.4.12: Parking garages should of an appropriate size and lined with habitable or storefront space to provide a safe, interesting environment for pedestrians.

Goal 4.5: Employ design-based speed management measures to reduce speeds and protect drivers, cyclists and pedestrians, while creating great public spaces.

Policy 4.5.1: New streets or redesigned streets in Compact Urban areas should be two-way (unless they are designed as a narrow, slow-speed, one-way streets) and have on-street parking in order to increase access to properties while calming traffic.

Policy 4.5.2: Encourage the use of roundabouts to calm traffic, increase safety, diminish the need for traffic lights, and create sites for public art and monuments.

Public Transportation and Transportation Demand Management

Goal 4.6: El Paso shall have a safe, convenient, and viable mass transit system that optimizes personal mobility, strengthens community character and economic vitality, and seamlessly integrates with other travel modes.

Policy 4.6.1: Evolve the existing transit network to a multi-faceted regional transit network through implementation of the Rapid Transit System (RTS) and, over time, other potential forms of high capacity transit service.

Policy 4.6.2: As part of its strategy to “re-invest in Downtown first,” the City shall expedite implementation of a modern streetcar network within and/or serving Downtown El Paso to catalyze economic revitalization and expanded travel mobility.

Goal 4.7: The City’s highest priority mobility investments are regional RTS and Downtown streetcar implementation. Accordingly, the City and Sun Metro shall also make Transit-Oriented Development (TOD) a priority along all planned and future High Capacity Transit corridors (beginning with RTS and streetcar corridors) to leverage transit investment to create mixed use and income, walkable, livable communities. The City and Sun Metro shall collaborate with the El Paso MPO, TxDOT, and other stakeholders to prioritize TOD as both land use and transportation strategies in conjunction with RTS and all future high capacity transit investments.

Policy 4.7.1: The City and Sun Metro shall continue to invest in and optimize its network of bus service to serve neighborhoods, commercial and employment centers, major travel sheds and corridors, other major origins and destinations, and to connect to planned (RTS) and future high capacity transit service. Transit investment should

be used to provide mobility across El Paso, especially in areas planned for walkable, mixed use development or redevelopment.

Policy 4.7.2: The City and Sun Metro shall continue to prioritize implementation of its RTS network, in terms of the service itself, as well as efforts to create TODs around the stations and to retrofit the RTS street corridors as walkable and complete streets.

Policy 4.7.3: In addition to the RTS and streetcar investments already cited, the City and Sun Metro shall continue to evolve the region's public transportation system by assessing the feasibility of, and planning for, the following regional and intercity high capacity transit investments:

- a. Potentially converting the RTS network, in whole or part, over time, to Light Rail Transit (LRT);
- b. Establishing LRT within other corridors and areas as technically feasible;
- c. Expanding the streetcar network to connect Downtown El Paso with other major destinations within the City;
- d. Extending the streetcar, RTS, and/or LRT to Juárez as feasible;
- e. Establishing commuter rail service, first between El Paso and Las Cruces, and expanding over time as feasible, and
- f. Exploring opportunities for intercity passenger rail (high-speed or otherwise) to other Southwestern metropolitan areas (El Paso-Albuquerque-Denver and El Paso-Tucson-Phoenix).

Policy 4.7.4: The City and Sun Metro shall collaborate with the El Paso MPO, TxDOT, and other transportation partners to advocate for planning, funding, and building these high capacity transit investments, as well as for preserving the opportunity and ability to do so over time. This is particularly important regarding corridor and ROW preservation in terms of other potentially-conflicting transportation investments, new land development, and other precluding barriers.

Policy 4.7.5: All bus stops shall be safe, attractive, and pedestrian-accessible. Link sidewalks and bicycle routes/trails with transit stops.

Policy 4.7.6: The City shall require major commercial and residential development to provide areas for public transit stops, bicycle storage, and adequate sidewalks.

Policy 4.7.7: Public and private Transportation Demand Management (TDM) strategies, such as car- and van-pooling, telecommuting, transportation allowances, and others, should be implemented as part of an integrated approach to managing travel demand.

Air Quality

Goal 4.8: Improve the El Paso region's air quality through more sustainable and energy-efficient transportation and land use practices.

Policy 4.8.1: Implement land use patterns and urban design (locally-appropriate higher densities, compact mixed uses) that increase travel choice options, reduce the need for single-occupant vehicle travel, and reduce overall VMT.

Policy 4.8.2: Make travel choices, mode share, mode shift, TDM, and related strategies a priority in transportation planning and performance measurement to reduce GHG emissions by providing meaningful options to single-occupant vehicle travel.

Policy 4.8.3: Make bus transit, high capacity transit, and other transportation investments a priority in order to reduce pollution and greenhouse gas (GHG) emissions through transportation technology and infrastructure.

Policy 4.8.4: Reduce single-occupant vehicle travel frequency, distance, and duration in transportation planning and performance measurement.

Policy 4.8.5: Implement intelligent transportation systems (ITS) to reduce congestion. Target points of entry for initial/pilot ITS programs.

Policy 4.8.6: Support the production and distribution of alternative energy sources.

Bikability

Goal 4.9: Accommodate bicyclists through the ongoing development of a context-sensitive bicycle network and infrastructure.

Policy 4.9.1: Coordinate planning, design, and implementation of bicycle improvements within the City, surrounding municipalities, and El Paso County, and the State in order to effectively promote regional connectivity.

Policy 4.9.2: Utilize the Proposed Bicycle Atlas to guide network connectivity.

Policy 4.9.3: Utilize the Comprehensive Plan to guide planning, design and implementation of bicycle infrastructure in conjunction with other City plans and projects.

Policy 4.9.4: Enhance the bikeway network by adopting additional bikeway design standards that include advanced bikeway types and countermeasure treatments.

Policy 4.9.5: Use physical design (i.e. bikeway width, type, signing) to promote safer bikeways and increased awareness of bicycle-related traffic laws.

Goal 4.10: Increase the availability and quality of bicycle parking and support facilities (i.e., showers and lockers) at destinations across the City.

Policy 4.10.1: Update bicycle parking requirements to include a Citywide bicycle parking and facilities plan.

Policy 4.10.2: Update bicycle parking requirements to include short-and long-term parking facilities and standards.

Policy 4.10.3: Update bicycle parking requirements to include graphic standards depicting bicycle parking type, placement and location standards.

Policy 4.10.4: Update bicycle parking requirements with refined bicycle parking ratios.

Goal 4.11: Increase bikeway, safety, and wayfinding signing.

Policy 4.11.1: Enhance the safety and visibility of the bicycle network through the implementation of safety and wayfinding signing improvements.

Policy 4.11.2: Install safety and wayfinding signs along all current and future bikeways.

Goal 4.12: Develop and implement a process to collect, review, and improve bicycle initiatives.

Policy 4.12.1: Implement a system for tracking and mapping installed bicycle infrastructure and facilities to be available in print and online for the general public.

Policy 4.12.2: Develop a strategy to acquire designation as a Bicycle-Friendly Community by the League of American Bicyclists by 2015.

Policy 4.12.3: Monitor bicyclist traffic statistics on a bi-annual basis and publish data in print and on the City website.

Goal 4.13: Develop a framework and implementation plan for the routine accommodation of bicyclists in the City of El Paso's capital projects and programs.

Policy 4.13.1: Update the 1997 Regional Bikeways Plan.

Policy 4.13.2: Fund a bicycle and pedestrian coordinator position to be the steward of the bicycle master plan and all of its individual components.

Policy 4.13.3: Coordinate with other municipal departments and El Paso MPO to ensure bicycle infrastructure is included in capital improvement and the TIP.

Goal 4.14: Improve the safety of cyclists through education and community outreach.

Policy 4.14.1: Increase awareness of bicycle options and safety through trainings, public events, public service announcements, educational materials, and partnerships.

Policy 4.14.2: Create and distribute print and online version of the El Paso Bikeways map an annual basis. Include wayfinding, safety, and facility type information.

Policy 4.14.3: Create and implement a partnership with the Safe Routes to School program.

Policy 4.14.4: Train select City staff to design bikeways consistent with best practices.

Goal 4.15: Encourage increased bicycling by promoting health, recreation, transportation, tourism opportunities, and environmental benefits.

Policy 4.15.1: Develop a City of El Paso bicycle programs website to house and store all bicycle-related information.

Policy 4.15.2: 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 4.15.3: Continue to support, fund, and expand Scenic Sundays.

Goal 4.16: Make El Paso a safe city for all modes of transportation.

Policy 4.16.1: Work with the El Paso Police Department to address bicycle-vehicle safety measures through enforcement of the laws in partnership with the City of El Paso Police Department.

Policy 4.16.2: Provide on-going training for City of El Paso police officers regarding bicycle safety laws and issues.

Policy 4.16.3: Maintain the number of bicycle patrol officers and consider the possibility of expanding the force.

Policy 4.16.4: Identify the most common conflicts between bicycle and motor vehicle users and create strategies to educate all roadway users.

Goal 4.17: Ensure bicycling is safe and accessible for all people in the City of El Paso.

Policy 4.17.1: Establish as a priority the development of bicycle facilities, policies, and programs that address geographic, racial, economic, environmental and public health disparities.

Goal 4.18: Develop and maintain a citywide network of safe, connected, attractive and appropriate bicycle facilities to facilitate and encourage bicycling for transportation and recreation.

Policy 4.18.1: Develop and maintain a system of bicycle lanes, bicycle routes and multi-use pathways in accordance with the City's Bicycle Master Plan and Bicycle Facilities Design Manual.

Policy 4.18.2: Make non-motorized connections the most important type of connection to major transit stops and stations.

Policy 4.18.3: Provide an adequate quantity of secure, properly positioned bicycle parking at key trip attractors and generators throughout the community. Design should be in accordance with the City's Bicycle Facilities Design Manual.

Policy 4.18.4: Implement a regular street sweeping program, with priority given to bicycle lanes and primary bicycle routes.

International Transportation & Ports of Entry (POEs)

Goal 4.19: Strengthen multimodal connections with Juárez for binational mobility, economic development and commerce, familial bonds, tourism, and other travel objectives and connections between the two cities and countries.

Policy 4.19.1: Continue to manage the Ports of Entry as an integrated network to balance travel needs (employment, commerce, tourism, and others), traffic demand and flows, and to minimize traffic in surrounding areas.

Policy 4.19.2: Make multimodal travel a priority – facilities, opportunities, and convenience – at all Ports of Entry as meaningful alternatives to single-occupant vehicle travel.

Policy 4.19.3: Assess the feasibility of and strive to implement a new non-vehicle (pedestrian) Port of Entry in conjunction with redevelopment of the ASARCO area.

Policy 4.19.4: Within the confines of applicable laws and regulations, assess the feasibility of and strive to implement innovative strategies that optimize cross-border travel convenience, especially for transit, pedestrian, and bicycle travel.

Policy 4.19.5: Redevelop El Paso's side of the Rio Grande as a waterfront park and public space, and strive to eventually integrate it as part of a binational park with Juárez.

Policy 4.19.6: As discussed in the Public Transportation & TDM section, invest in binational transit service to reconnect El Paso and Juárez via transit.

Aviation

Goal 4.20: Maximize the use of airports as intermodal hubs to efficiently and safely move people and goods, increase "airfront" and "aerotropolis" economic development of areas adjacent to and surrounding airports, and serve as a welcoming gateway to the El Paso region.

Policy 4.20.1: Coordinate the development of airport infrastructure with intermodal facilities and compatible land uses.

Policy 4.20.2: Support new mixed-use, walkable development and redevelopment improving access to and services within airport lands and economic vitality around airports.

Policy 4.20.3: Use street network connectivity, RTS, and multimodal strategies to improve travel access, modes/options, and quality to and from airports.

Railroads and Freight

Goal 4.21: Improve, maintain, and manage freight-related infrastructure to ensure timely and efficient delivery of goods to/from and through the El Paso region.

Policy 4.21.1: Coordinate the development of railroad infrastructure with intermodal facilities and compatible land uses.

Policy 4.21.2: Encourage greater use of freight rail for the regional and international transportation of goods in order to reduce truck traffic on the interstates.

Policy 4.21.3: Relocate railyards away from developed areas of El Paso, reclaiming this land for parks, public space, redevelopment, or other locally-supported investment.

Policy 4.21.4: Preserve the ability and opportunity to transform unused or potentially “shared-use” railroads and railroad ROW for other transportation uses.

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 abilities 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

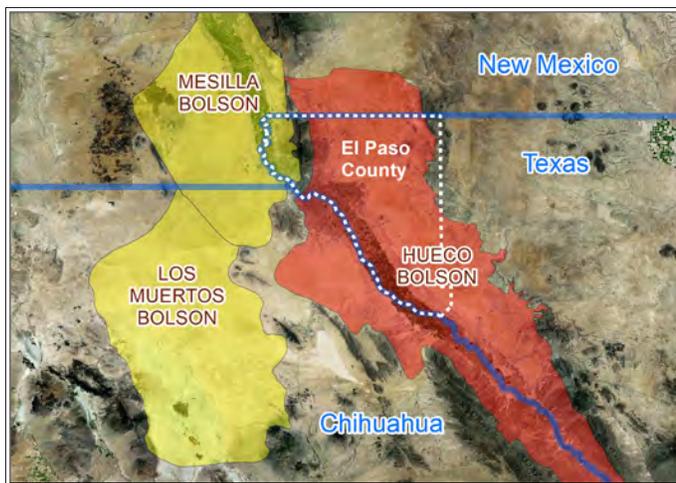
Whether it flows in rivers or percolates through the ground, water sustains life and thus is our most important natural resource. In El Paso's Chihuahuan desert environment, evaporation far exceeds rainfall. Careful planning is required to efficiently manage limited water supplies.

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 (EPWU) currently supplies about 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 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 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:

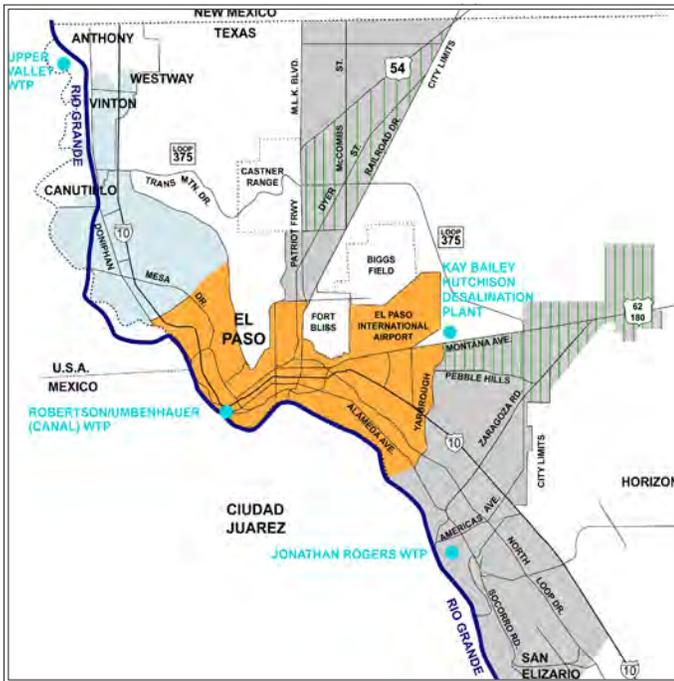
1. Increase the use of Rio Grande water when it is available.
2. Decrease groundwater pumping except when Rio Grande water is limited.
3. Increase the per-gallon cost of water for high users as a conservation incentive.
4. Encourage desert plants that require little or no irrigation.
5. Expand the reuse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

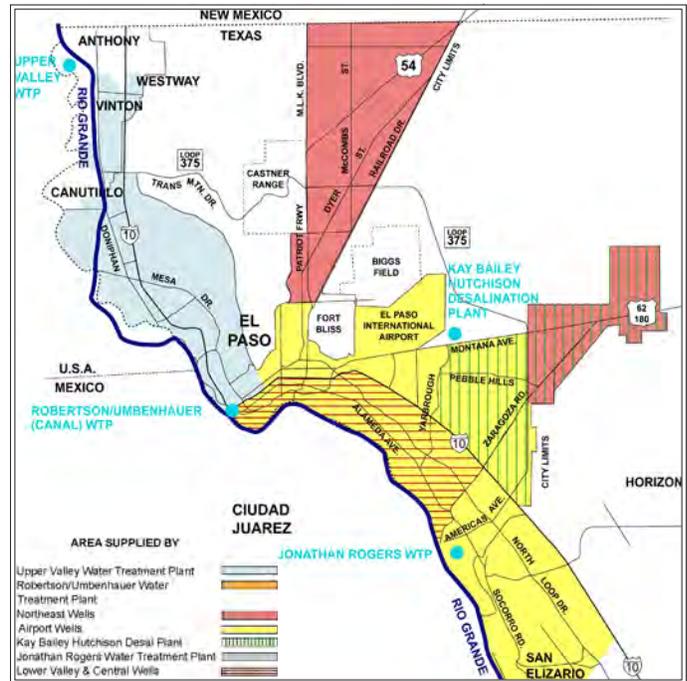
EPWU supplies potable water from seven distinct sources:

- **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 29 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 38 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 29 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 above, 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 #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 two 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

El Paso Water Utilities also operates the City’s wastewater (sanitary sewer) system, which also serves Fort Bliss. EPWU 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 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

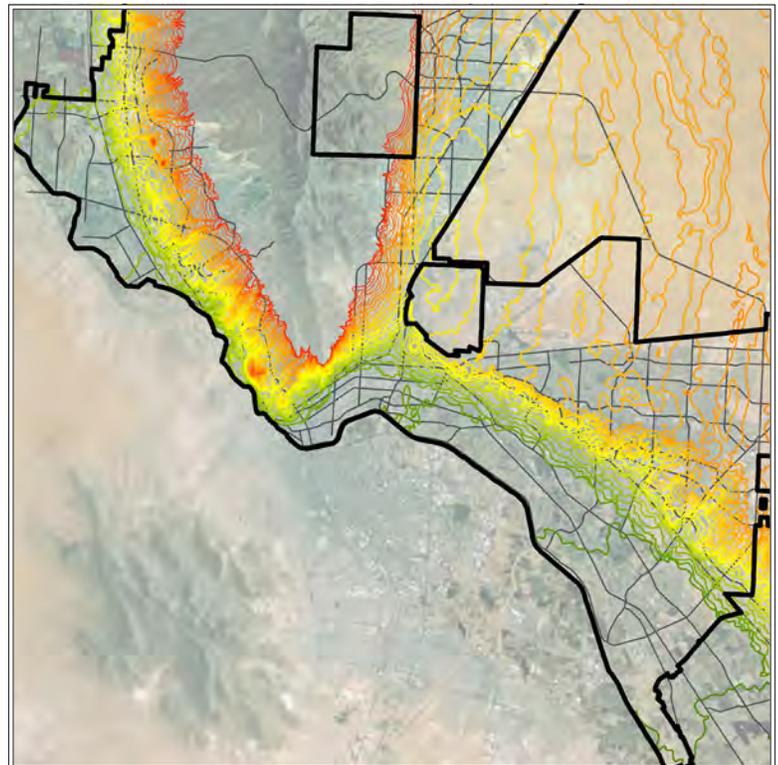
Despite El Paso's arid climate with only eight inches of rain each year, flooding occurs after heavy summer rains. Flood-prone areas have been identified by the federal government on FEMA floodplain maps (see page ___ in the Transportation Element).

The maps on this page identify key natural features that affect how stormwater flows through El Paso.

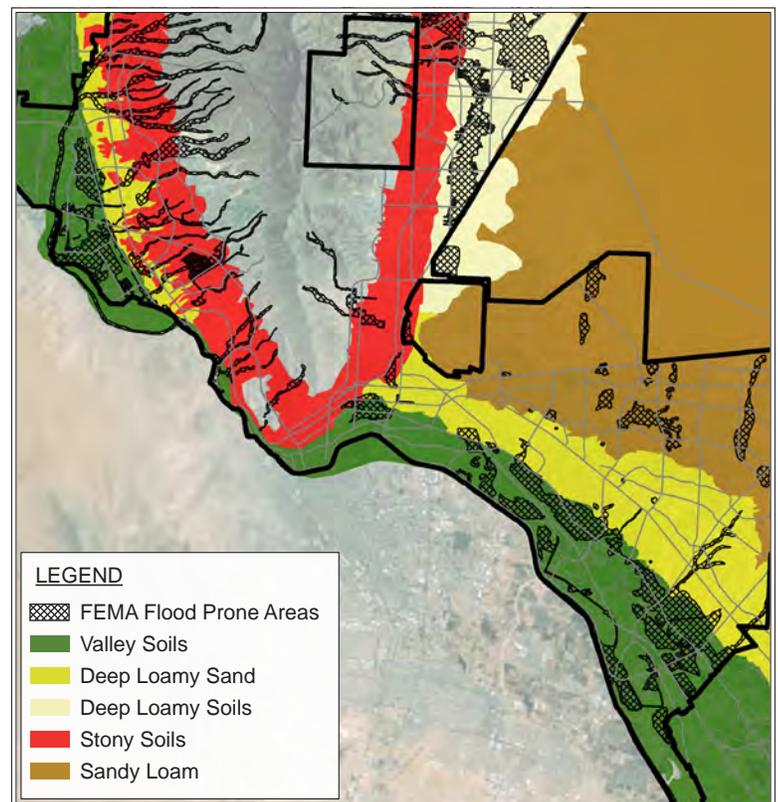
The top map shows contour lines that indicate ground elevation changes in 20-foot increments, with reds showing the highest elevations and greens the lowest. Where contour lines are close together, land is noticeably sloped. Flooding occurs on slopes when rushing floodwater exceeds the capacity of its conveyance, which might be a pipe, culvert, ditch, or roadside gutter. 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:

- Adopted a Drainage Design Manual to keep new development from increasing flood risk.
- Prepared a Stormwater Master Plan that identified high flood risks in already-developed areas and proposed capital improvements to reduce those risks.
- 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. Stormwater fees will fund 10% of the improvements during the first three years.

ENERGY

Electricity

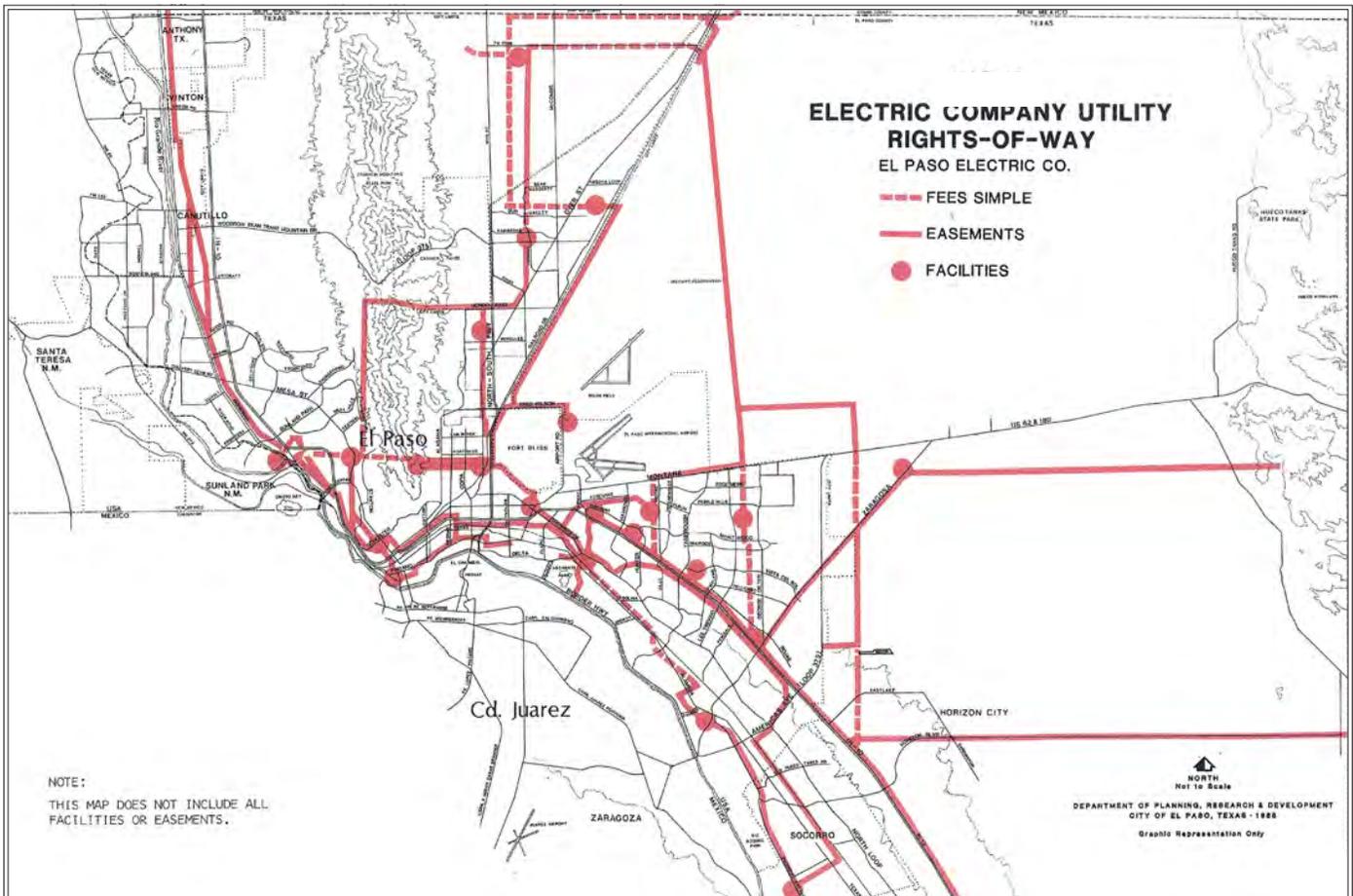
El Paso Electric Company generates and distributes electricity to about 380,000 customers in west Texas and southern New Mexico. El Paso Electric operates three local power generating facilities, with capacities measured in megawatts (MW):

- 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 two 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.

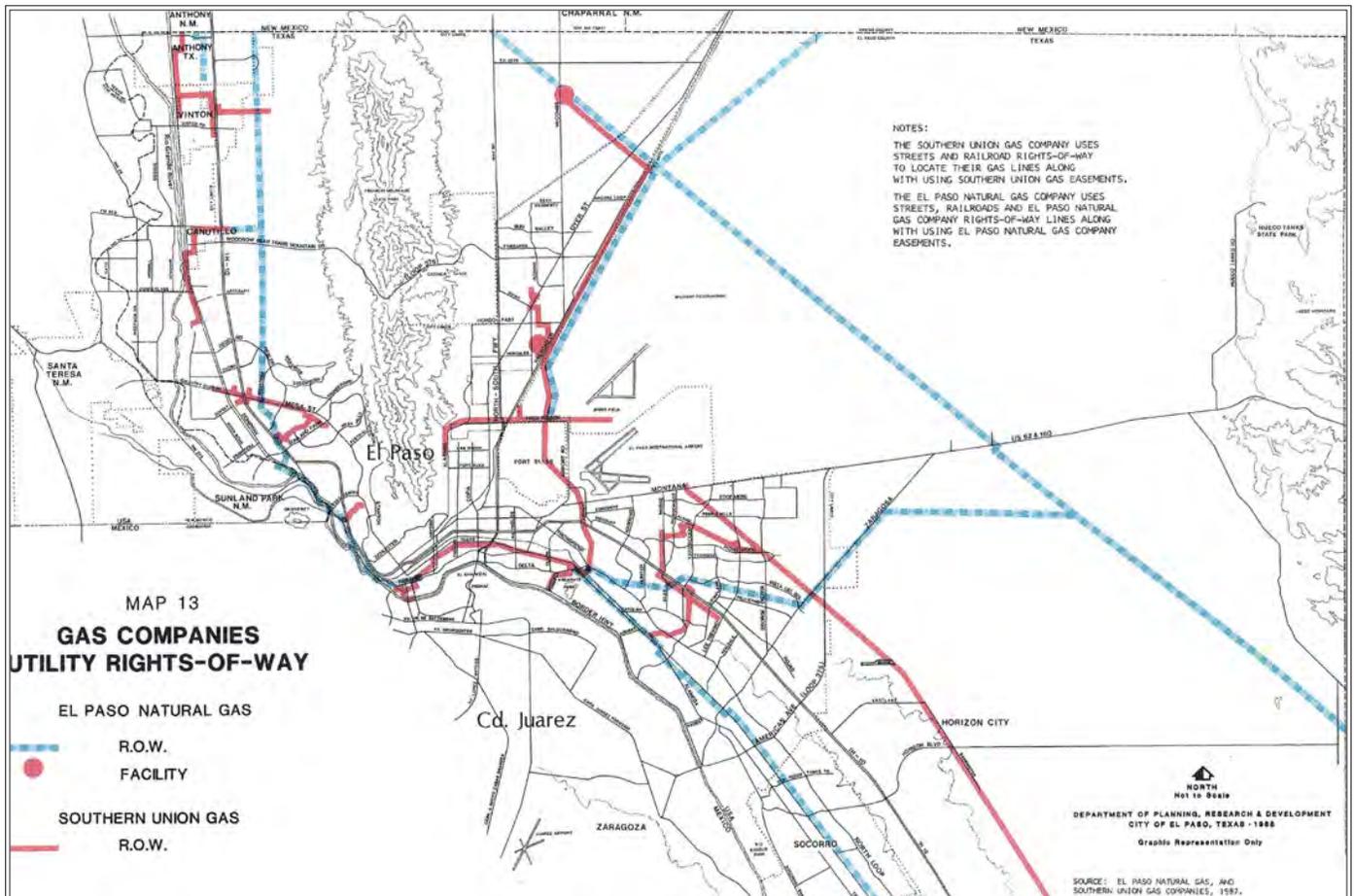


Natural Gas

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 begin 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 inactive since 2005 but permits are being sought to reopen it to replace capacity that would be lost at the Camino Real Landfill.

PARKS & RECREATION

Inventory

The City of El Paso currently owns and manages 211 parks that include 2,800 acres of turf, 7,878 trees and 113 playground structures. Within the community there are ten skate parks, nine senior centers, and two sports centers. Athletic practice facilities are in high demand, however, El Paso provides twenty-eight softball fields, thirty-two baseball fields and thirty-three 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 \$50 million towards parks improvements. The public overwhelmingly approved the bond package and authorized an additional five million dollars 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 three 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 2007, per capita spending on parks was well below almost every other one of the fifty largest cities in the United States.

The City adopted an updated Parks Plan in 2007 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 thirty five-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 American Zoo and Aquarium Association (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 ten 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.

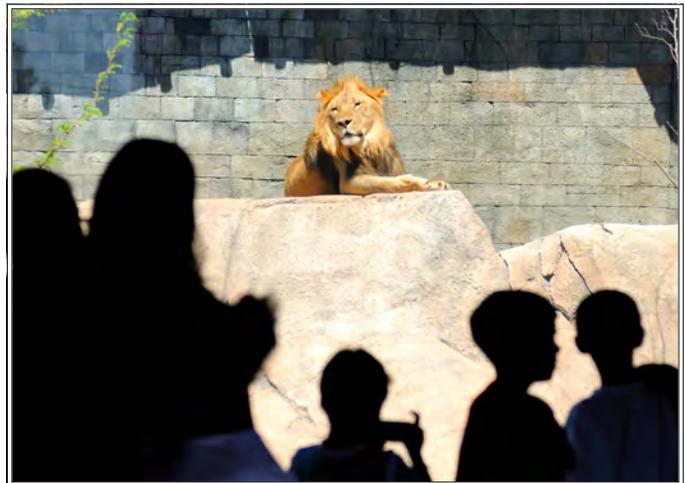
LIBRARIES

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 fourteen 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.



El Paso Zoological Park



El Paso Museum of Art

SCHOOLS

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 is currently served by four public independent school districts (ISD); El Paso ISD, Ysleta ISD, Canutillo ISD and Socorro ISD. The community is also served by several colleges and two 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.

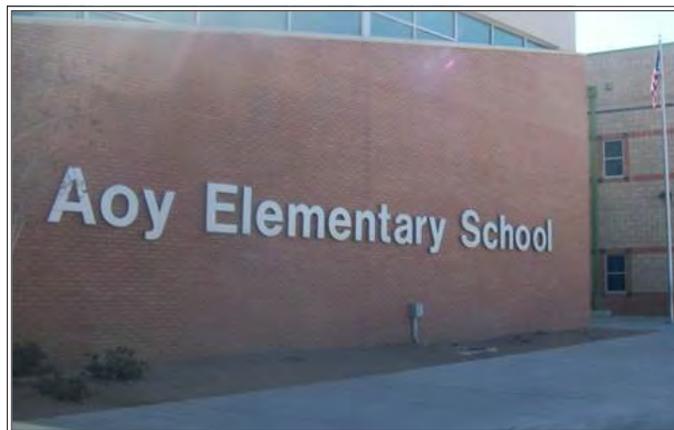
The redevelopment of Aoy Elementary School in Segundo Barrio is a recent example of a more urban-format, walkable school that functions as the heart of a neighborhood. The school is built within close proximity to other amenities such as Armijo Park, the Boys and Girls Club and the Armijo branch of the 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



Aoy Elementary School features a slightly more compact design than the conventional prototypes, allowing it to be sited in an established neighborhood.

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.

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 thirty 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 comple-



El Paso High School



Del Valle Elementary School under construction

tion 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 three miles. This equates to having a fire station within one and a half miles of every home. The cost of providing this service 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. Previously it had been providing a seemingly perpetual supply of high quality water. Decisive action by water managers has averted that crisis, but concerns remain that the continuing growth of El Paso, plus that of Juárez, will 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 homesites as well. El Paso Water Utilities 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 that single purpose.

Hiking and 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 dramatic failure during a period of extreme need has raised serious questions about local reliance on the El Paso Electric Company.

PARKS & RECREATION

Provide a Greater Inventory and Variety of Parks and Recreation Spaces

There was an overwhelming concern that El Paso needs more park lands, both those 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.

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. Focus on improvements to the Rio Grande river and its connection to the Mission Valley area into Socorro and Fabens.

Improve the Design Standards for Parks

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 1/2 acre park pond is a passive park space for neighborhood residents.

MUSEUMS & CULTURAL AFFAIRS

Locations for Displaying Public Art

There is strong community support for the museum 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 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 (and 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.

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 horse 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 and 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 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 also expressed that schools should be multi-use facilities used every day, all day by a wide range of groups. The City and school districts should share facilities and the costs of operation and maintenance 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 joint use of facilities it was commented that in Socorro ISD even though a central sports stadium was built for all schools to use, each school 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 & 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 and 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 and Buildings in Specific Locations

The idea of public spaces excites people and comments were made regarding improvements to the senior center in Ysleta to include a public cafe 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 was mentioned.

Incorporate Art and 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 this comprehensive plan also provide strategies for potable water.

The Regional Land Use Patterns element provides a map showing areas in El Paso County, primarily in northeast El Paso, where groundwater from 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.

Despite the successful efforts to diversify El Paso’s water supply that were described earlier, additional water will need to be transferred from outside El Paso County to accommodate population growth between 2030 and 2040.

The Far West Texas Water Plan, updated in 2011, considered the unique challenges facing El Paso County and recommended an integrated approach for the long-term water supply:

- 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)
- Importation of groundwater from the Bone Spring-Victorio Peak Aquifer in the Dell City area (Hudspeth County)

Surface water from the Rio Grande is shared by three states and two 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.

Future supplies for Juárez are anticipated from four “imported” groundwater sources. Plans are also being developed to convert over half of the surface water from the Rio Bravo (Rio

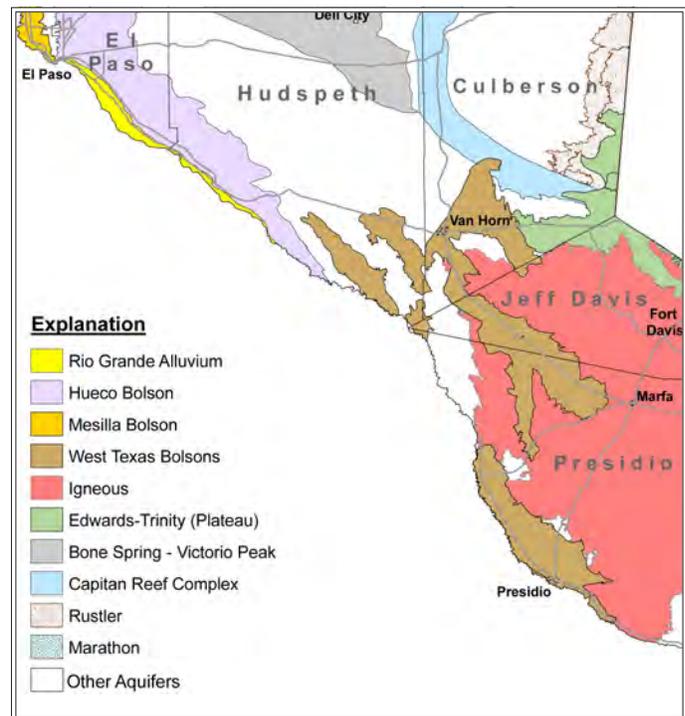
Grande) for municipal supply use; currently, this entire allocation is used for irrigated agriculture. The conversion would involve supplying treated wastewater to farmers in exchange for rights to raw surface water.

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. Also, 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 or 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 the native cottonwood-willow habitats and provide food for migrating waterfowl.



Aquifers in Far West Texas

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 El Paso Water Utilities could also provide exceptional wildlife habitat and recreational opportunities.

Wastewater & Reclaimed Water

El Paso Water Utilities 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, yet many of the proposed improvements rely heavily on the opposite: engineered basins, concrete-lined channels, and pumped discharges.

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.

The Downtown element of this comprehensive plan proposes a new Central Park, a very 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) 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.



Saipan-Ledo Park/Pond in central El Paso



Van Buren Dam in central El Paso

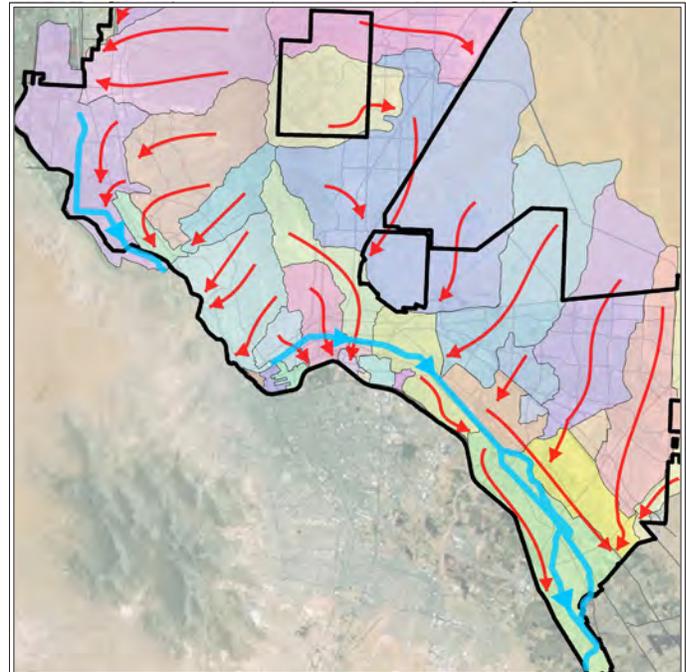
Conventional stormwater infrastructure uses bare-earth detention basins and concrete-lined channels, which consume land and hinder infiltration. Increased runoff and higher stormwater velocities can cause erosion problems downstream; it can damage property and create safety hazards. GID techniques such 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'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 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 map to the right 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/equestrian trails and other civic spaces, as discussed in the Sustainability element of this comprehensive plan.



Drainage basins, with existing drainage flows in red



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 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 failures of the public water supply, and causing the bursting of frozen water pipes throughout the region.

This dramatic failure during a period of critical need for power has increased public scrutiny of El Paso Electric and could result in reexamination of the company's rates and profitability.

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 this comprehensive plan 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 five 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 reopening the McCombs Landfill would be a waste-to-energy plant that would burn solid waste and use the heat to generate electricity. If such a plant were constructed, reopening 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 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.

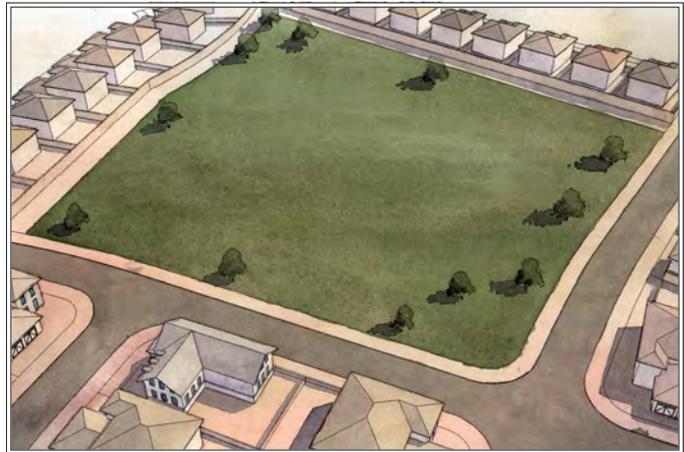
Recent City initiatives have begun reversing that trend. To improve the usability and attractiveness of neighborhood parks created while land is being subdivided, the City now allows multiple smaller neighborhood greens or parks that can be reached by more people on foot or by bicycle. Amenities such 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 next 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 uses 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 and 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 floodprone 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 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.

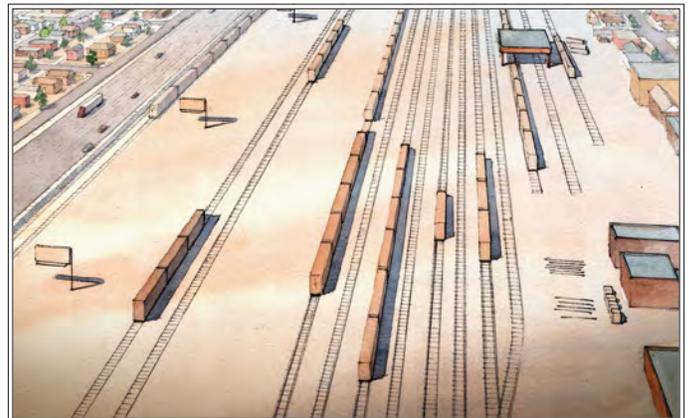
Central Park

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 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 park/pond



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 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, quoted below.

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

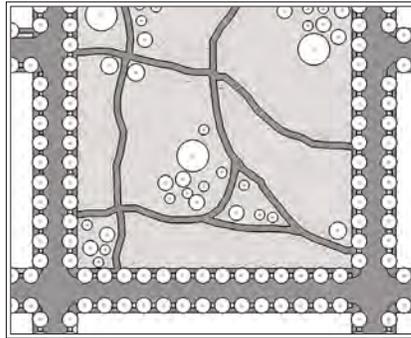
The Franklin Mountains and the Rio Grande River Corridor will be at the heart of a densely interconnected network of trails, parks and natural areas covering our entire City. Arroyos, irrigation canals and drainage features will serve as “green infrastructure” arterials with links to neighborhoods, schools, 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.



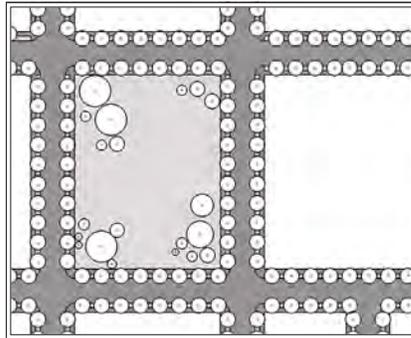
CIVIC SPACES

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.

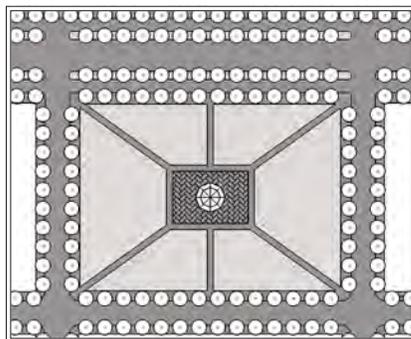
A **park** is a natural preserve that serves environmental goals such as the preservation of habitat or filtration of water. It may also be available for active recreation. The shape of the park may follow the boundaries of natural features. Parks may contain trails, arroyos, bosques, rock escarpments, water bodies, woodlands and meadows. A park may also contain orchards or food gardens.



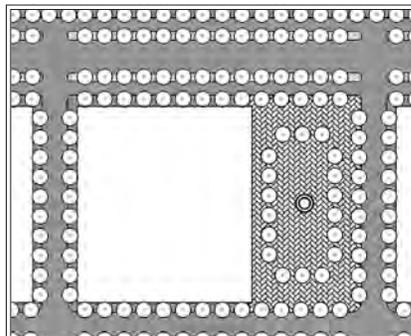
A **green** is available for structured or unstructured recreation. A green may be spatially defined by landscaping rather than by buildings. Trees can be formally or naturalistically planted. A green contains lawns, trees, pavilions, memorials, benches and playground equipment. A green may also contain 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 this comprehensive plan describes an interim strategy to accomplish that goal.

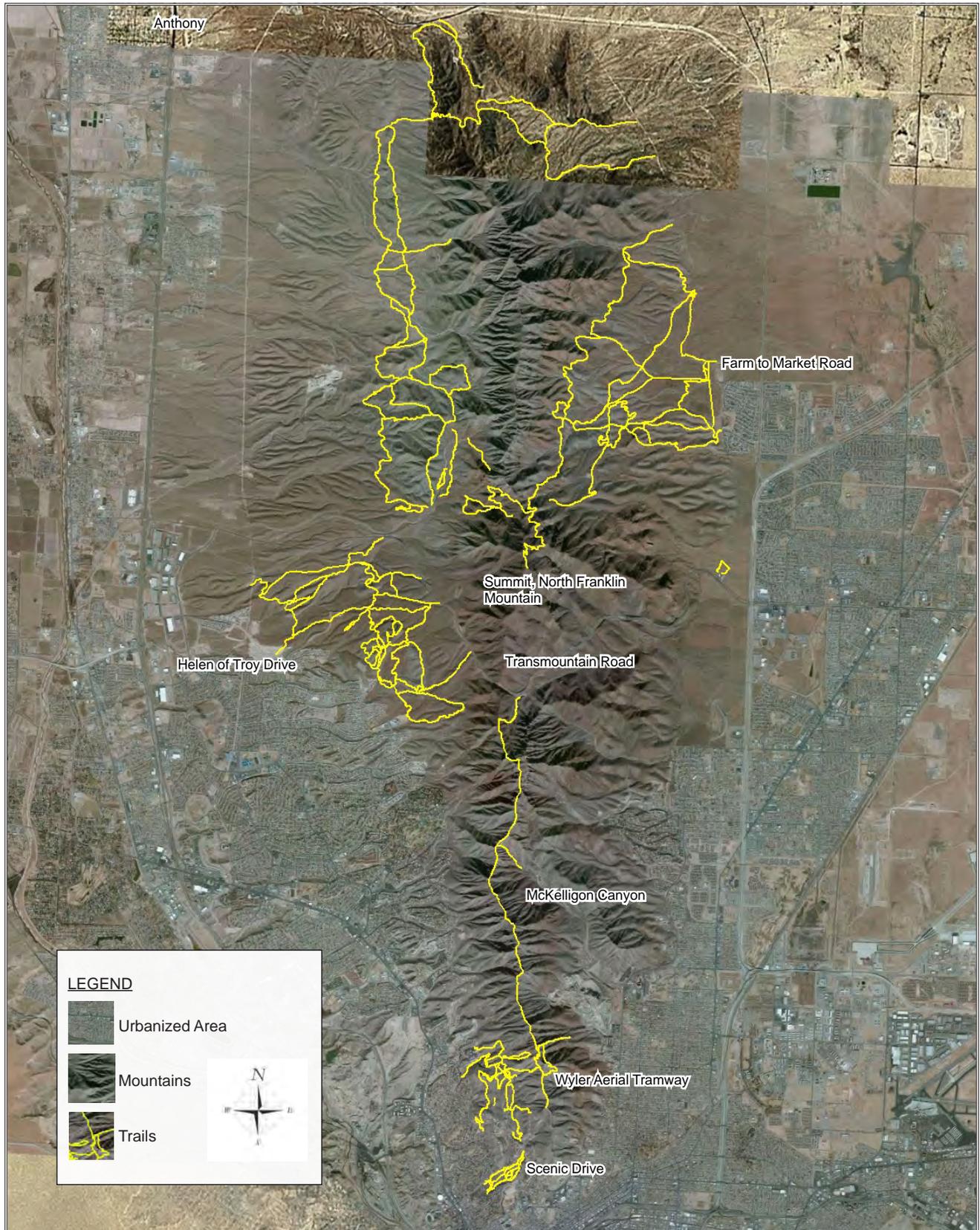
In addition, the lower reaches of the Franklin Mountains just above Scenic Drive, although undevelopable, are still largely in private ownership, as are other lands along the fringes of the park. These lands are shown on this plan's Future Land Use Map in the O-2 open space sector, which indicates important 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 this comprehensive plan.

Valley Trails & Parks

The Sustainability element of this comprehensive plan describes an ambitious riverpark and trails system for El Paso County. The northwestern portion of the trail is already built, passing through Anthony, Vinton, and Canutillo. The central portion will be the most difficult due to rugged terrain and lack of unbuilt land. The southeastern portion is partly in place and has tremendous potential due to the extensive network of irrigation canals and drains. The existing canals are shown in the Sustainability element; some additional routes that could be added are shown in the stormwater section of this element. The Franklin Mountains portion of the City's trail system is shown on page 9.24 of this element.

The Rio Bosque Wetland Park is a restoration effort near Socorro that seeks to reestablish the native cottonwood-willow habitat along the Rio Grande. At present, the park receives irrigation water only when surplus effluent is available from the adjoining wastewater treatment plant. The Bosque del Apache National Wildlife Refuge in New Mexico illustrates the value of valley habitats to migrating birds. With a regular supply of irrigation water, the Rio Bosque Park and the large farms in the upper valley acquired by El Paso Water Utilities would provide exceptional wildlife habitat along with recreational and eco-tourism opportunities.

TRAIL SYSTEM: FRANKLIN MOUNTAINS



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 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 ecotourism 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. Goals of the Plan should include, at a minimum, those listed on page 8.16.

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, forests, and is 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 through 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 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 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.

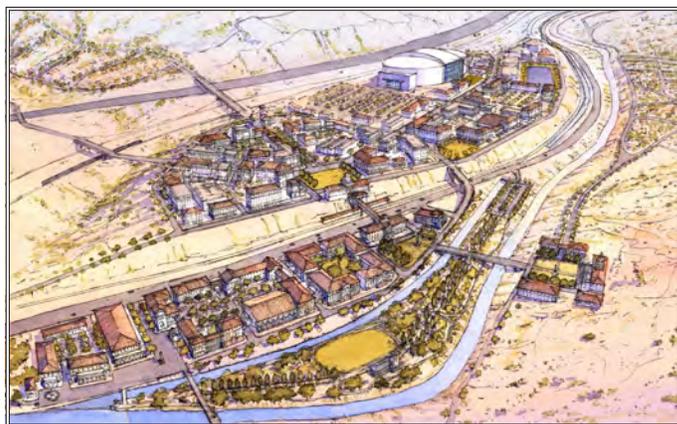
The trail would provide improved non-vehicular access between the Zaragoza International Port of Entry, Sun Metro’s Mission Valley Transfer Center, and the Alameda RTS system. With the City’s investment in RTS on the nearby Alameda Corridor, it is especially important that the area have safe pedestrian 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 five elementary schools. Within a half mile of the Drain the number grows to 261 bus stops, 7 parks, and 24 schools including four 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. The creation of a Green Infrastructure Plan will help to guide the community towards the donation, conservation, or acquisition of the most critical areas.

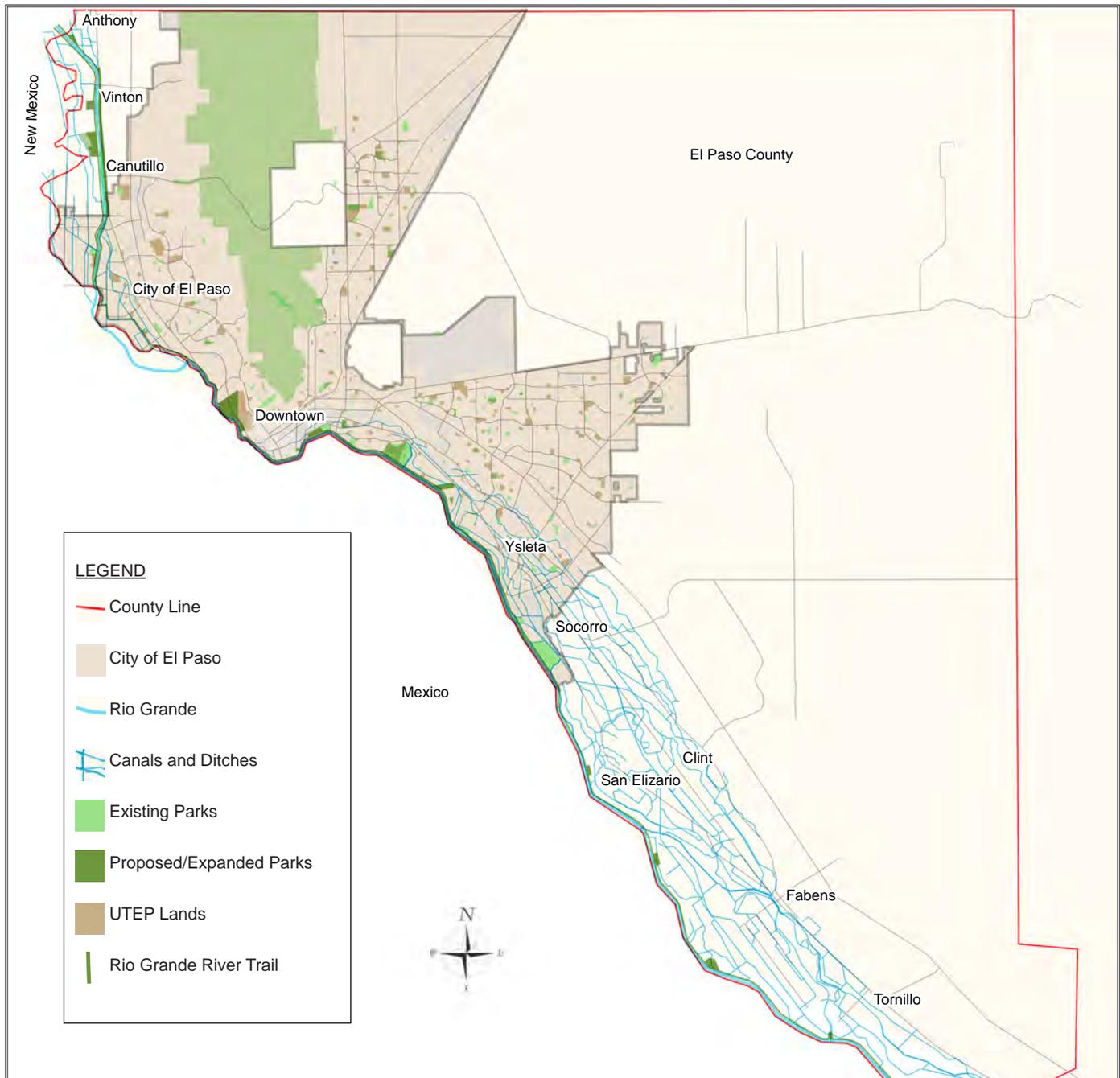


Central El Paso: In the future, some stretches of the River or the channels that run to and from the main watercourse could be lined with buildings and public pathways like this example from Downtown Indianapolis.



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.

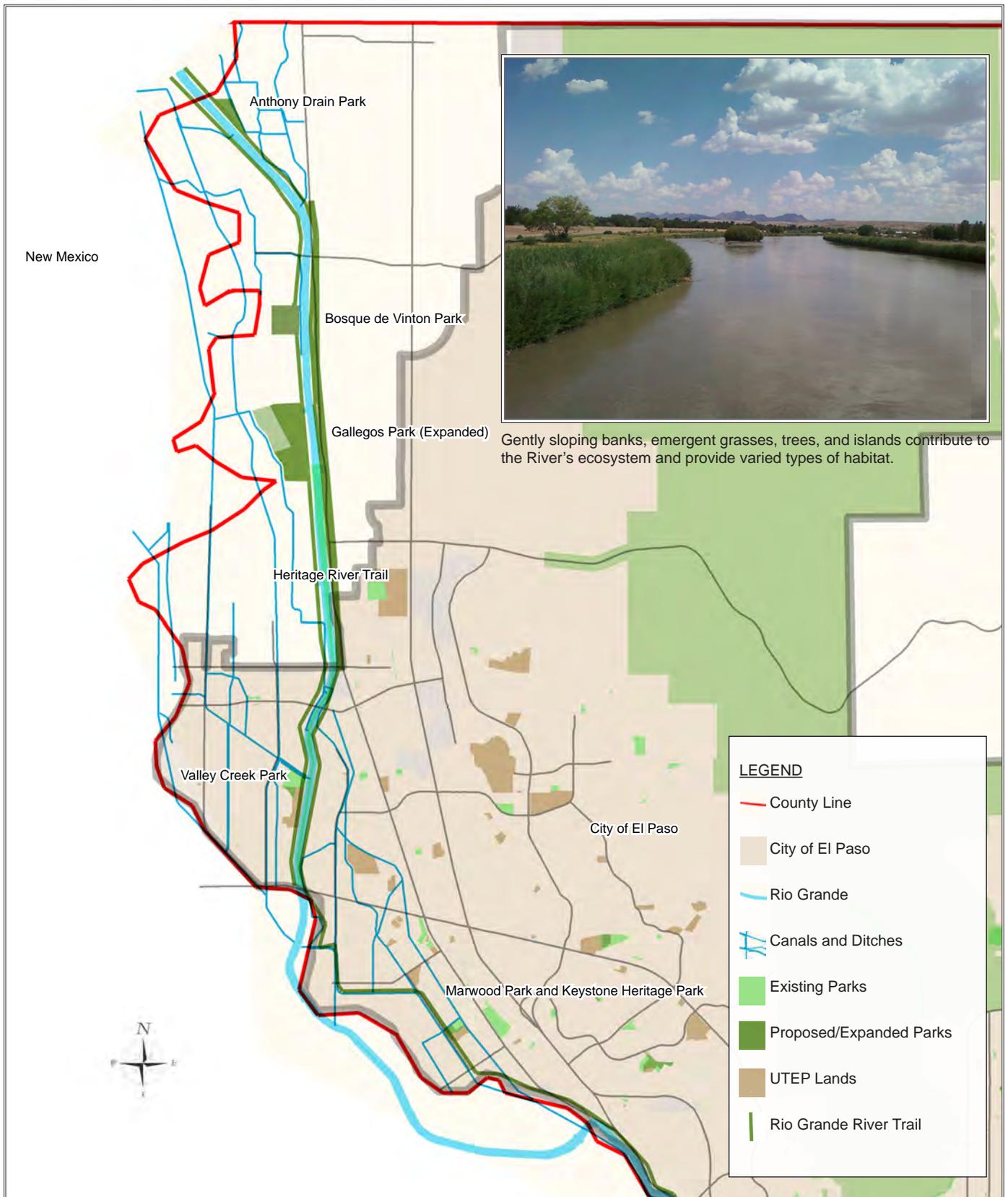
RIVERPARK AND TRAIL SYSTEM



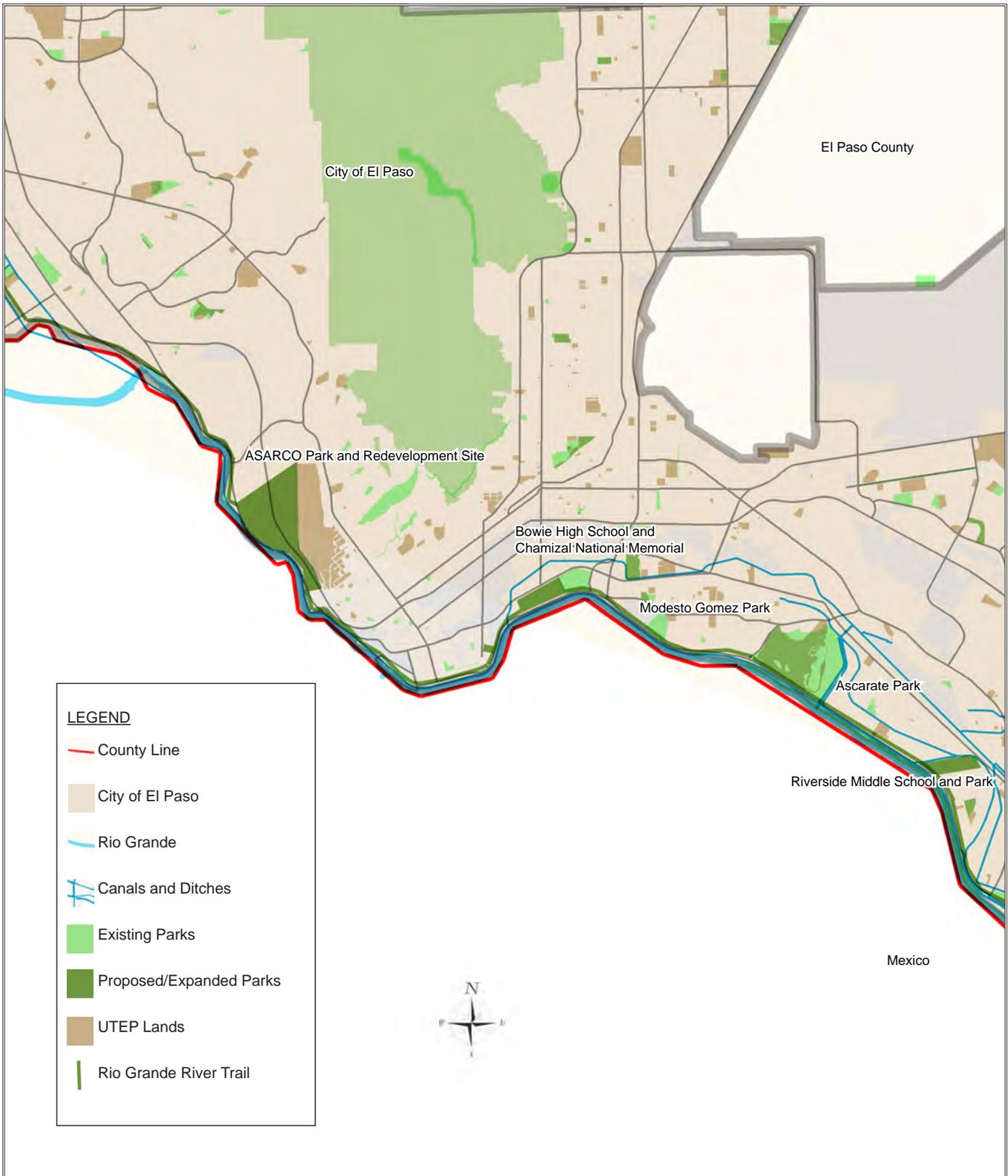
Goals of the Plan

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 ecotourism 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.

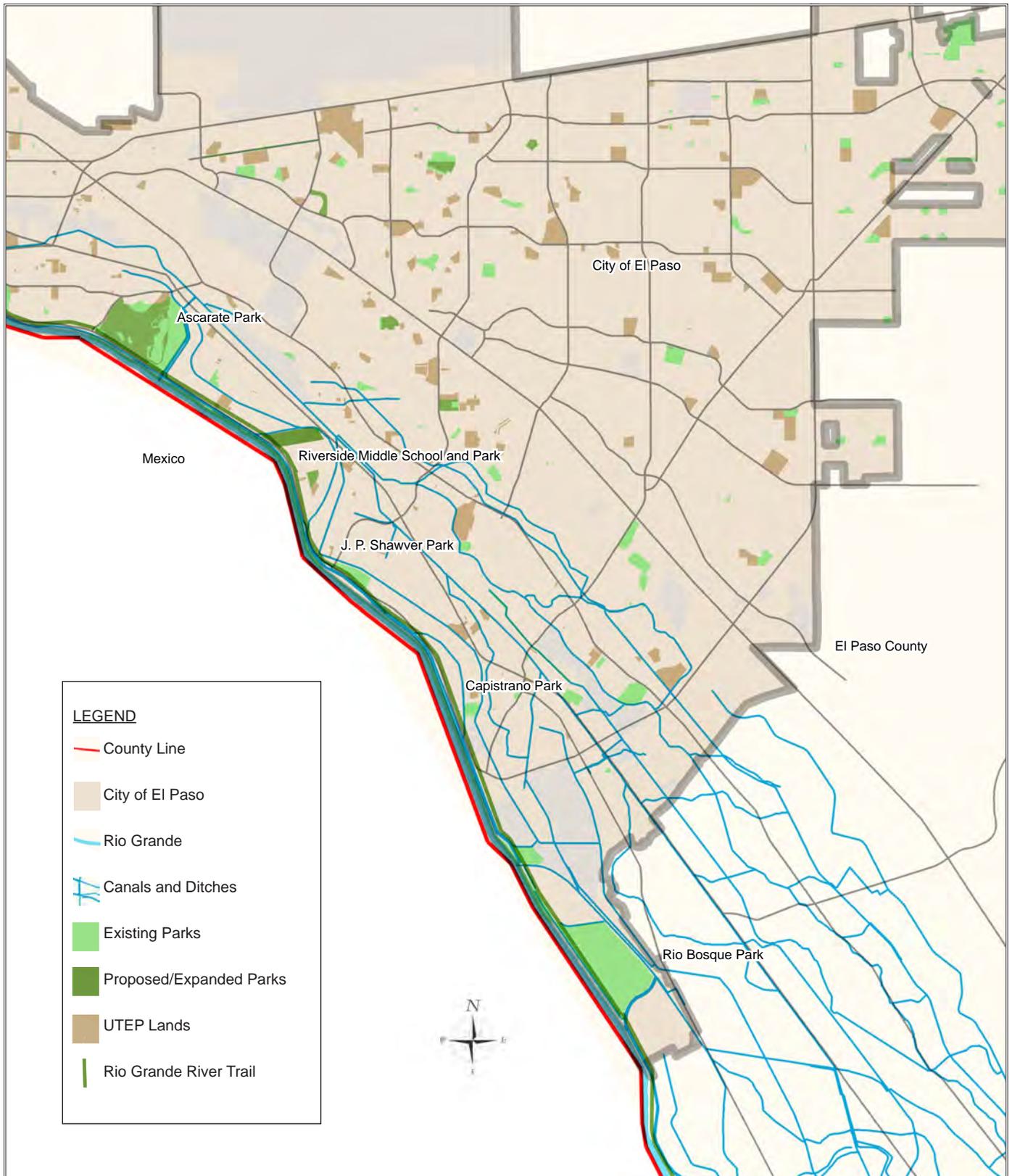
RIVERPARK AND TRAIL SYSTEM: NORTHWESTERN PORTION



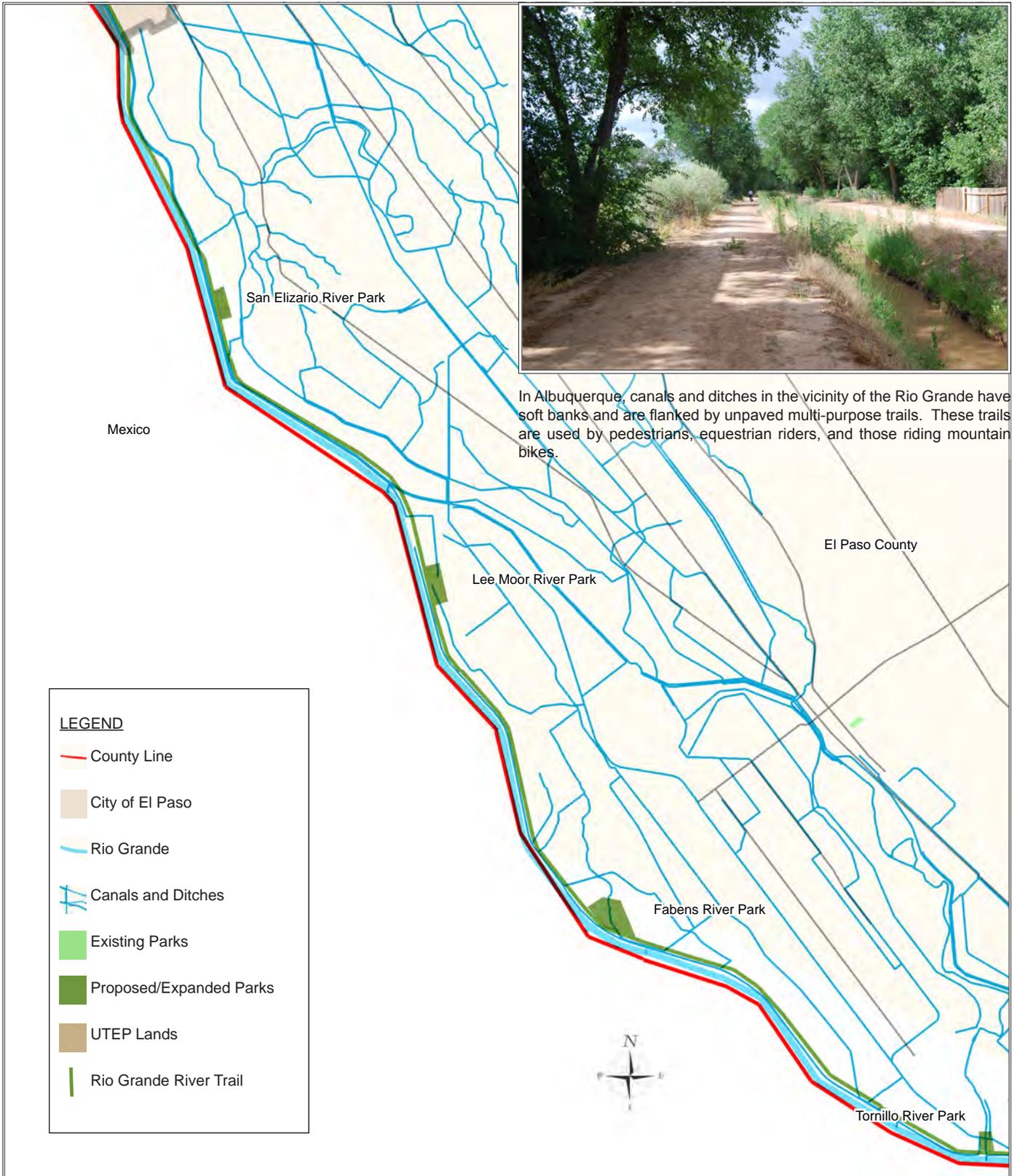
RIVERPARK AND TRAIL SYSTEM: CENTRAL PORTION



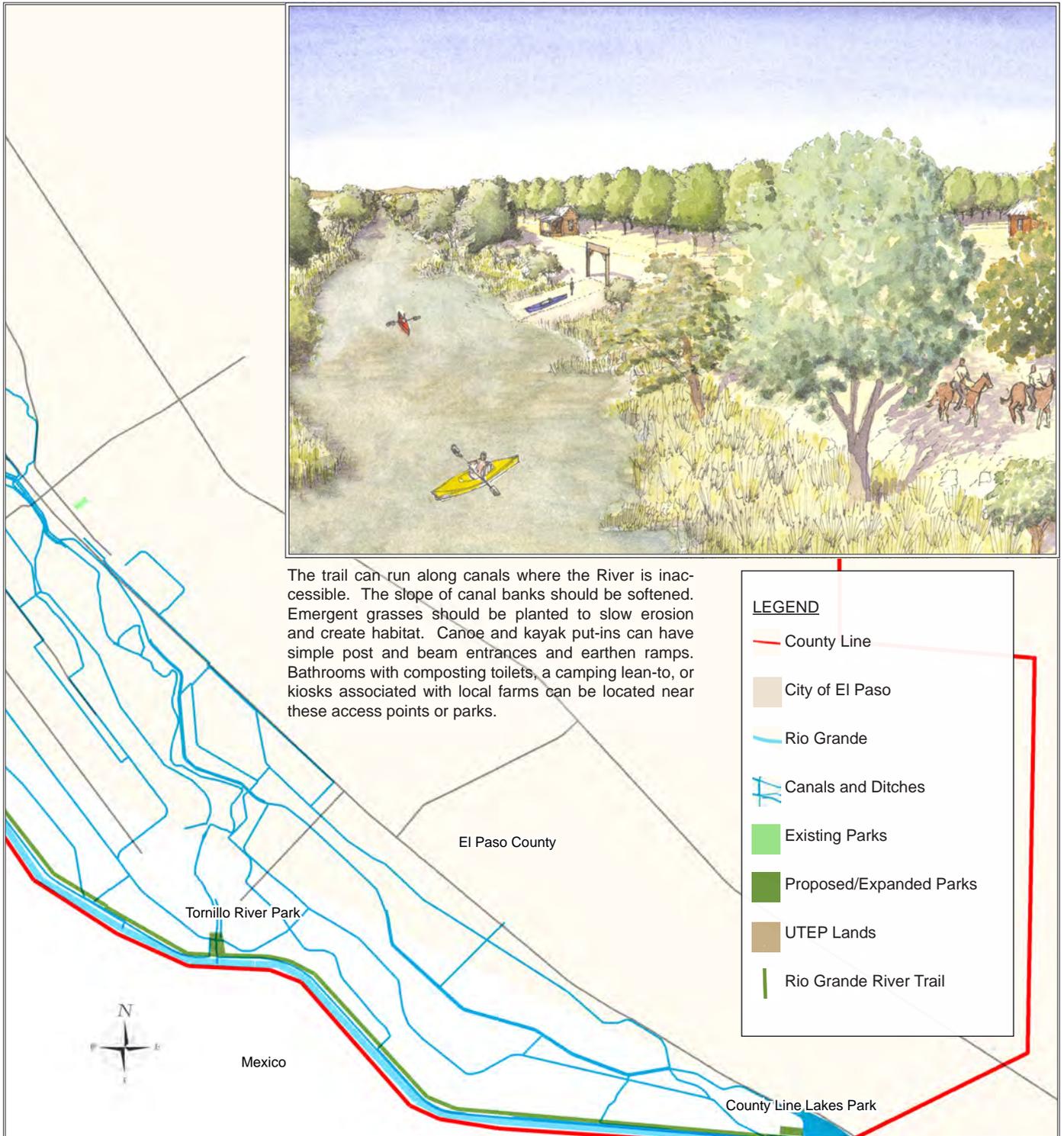
RIVERPARK AND TRAIL SYSTEM: SOUTHEASTERN PORTION



RIVERPARK AND TRAIL SYSTEM: SOUTHEASTERN PORTION



RIVERPARK AND TRAIL SYSTEM: SOUTHEASTERN PORTION



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.
- 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.



Del Valle Elementary School has some joint-use amenities and sustainable architectural features and landscaping. Source: Del Valley Elementary Website.

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.

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.

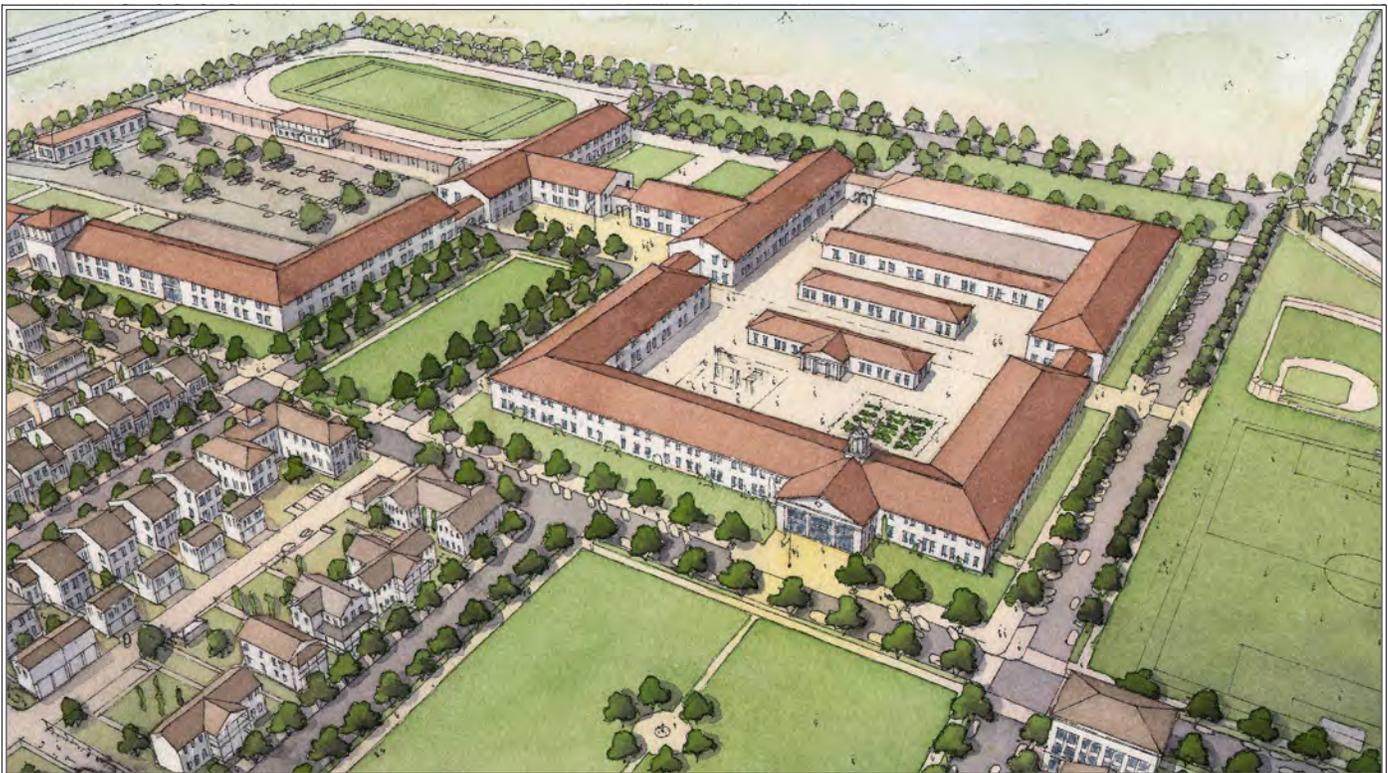
Prominent site. Is the school sited in a prominent location so that it communicates the importance the school has in the culture of the community? Neighborhood schools should be located within the heart of the area they serve rather than at its periphery. A school can be at the center of the neighborhood, 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.



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.

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.

Connected learning environment. Does the school connect itself to effective distance learning opportunities? Is the school 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 (ISDs) 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 the 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 face 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: Misu Overstreet



"Los Lagartos" in San Jacinto Square. Artist: Luis Jimenez



Corner of Copia Street and Pershing Street. Artist: Werk



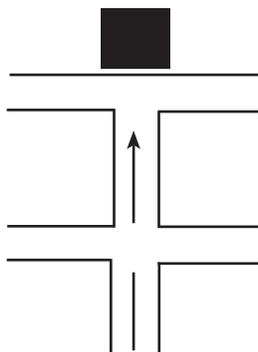
Arizona Ave

CIVIC BUILDINGS

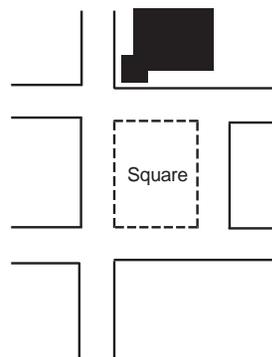
Civic buildings should be placed prominently and should have grander proportions and materials than their surrounding urban fabric. Approaches include locating public buildings at the ends of streets, across greens, or at the center of greens. Public buildings can be relatively small if placed strategically 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.



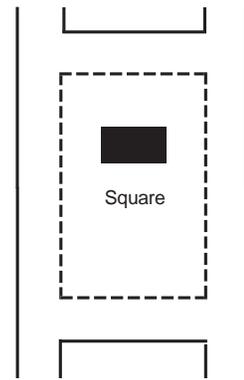
As a Terminated Vista



Across a Green

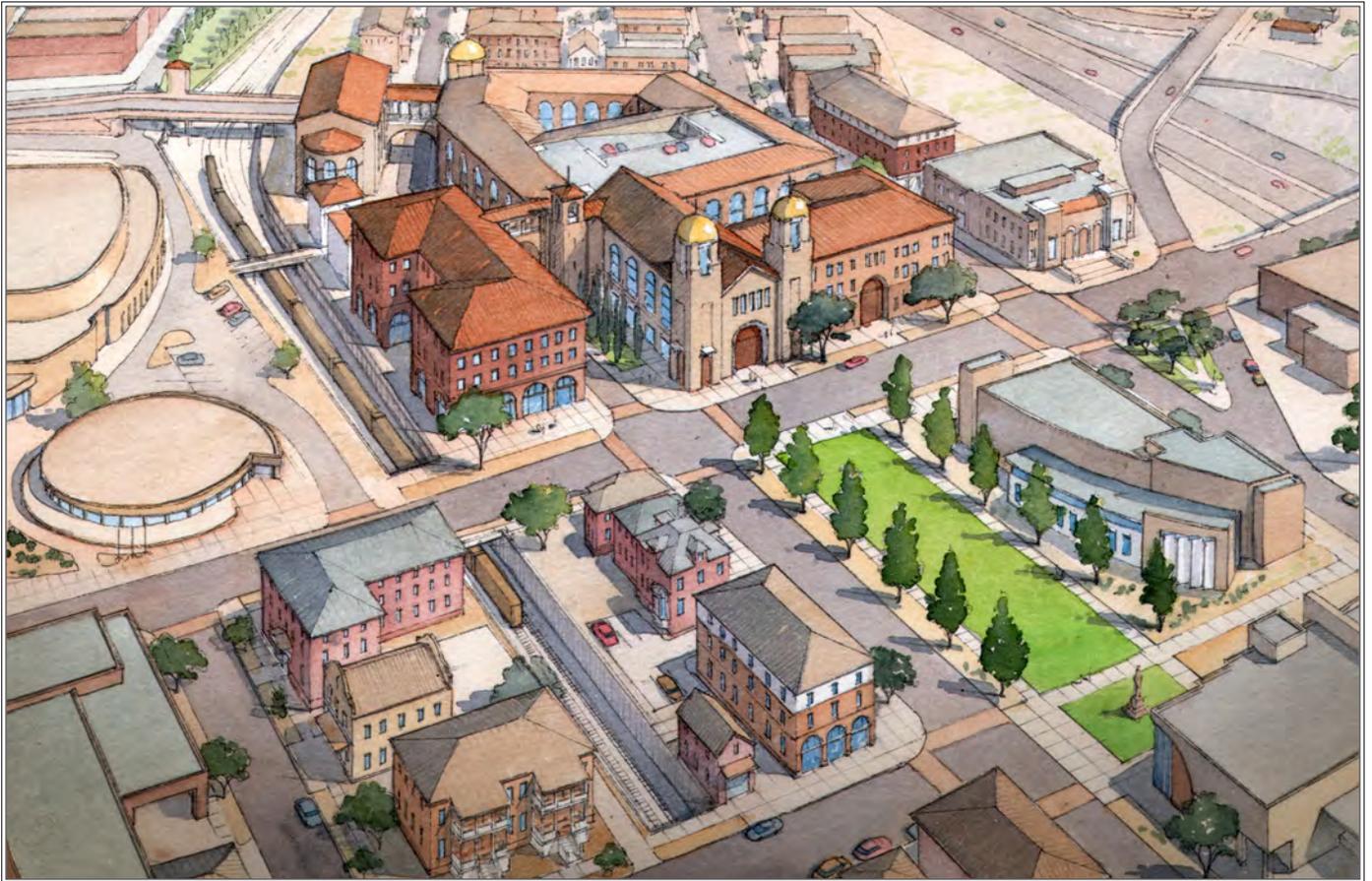


At the Center of a Green





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 Goal 10.1 on long-term water supply, Goal 10.5 on groundwater, and Goal 10.6 on 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 El Paso Water Utilities 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 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 while relieving chronic flooding along I-10 (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.

Policy 5.5.6: Cooperate with El Paso County and other governmental entities in regional stormwater planning.

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 is put back into service.

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.

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 will create extraordinary parks that express the natural beauty and cultural diversity of El Paso and will 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 this comprehensive plan and to establish new short- and mid-term objectives.

Policy 5.8.4: The City will 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.

Policy 5.8.6: The City shall create a program by which Park Credits shall 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 homes along the dedicated portions.

Policy 5.8.7: The City shall map priority arroyos for protection and guarantee Park Credit and City maintenance for priority arroyos. These arroyo parks shall also meet the design requirements of Policy 5.8.6.

Policy 5.8.8: 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.

Regional Parks

Goal 5.9: Significantly expand 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 relieve severe flooding around I-10 while providing 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: 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: Preserve all sides of the Franklin Mountains as El Paso's signature physical feature. Mountain lands not yet protected 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 12.1.3).

Policy 5.11.3: Preserve at least 75% of all remaining arroyos in El Paso, either in their natural state or modified to also serve as parks and stormwater detention areas. Remaining arroyos are shown as an overlay on the Future Land Use Map.

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: Detailed strategies to carry out these policies are found in El Paso's 2007 open space master plan.

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 I 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

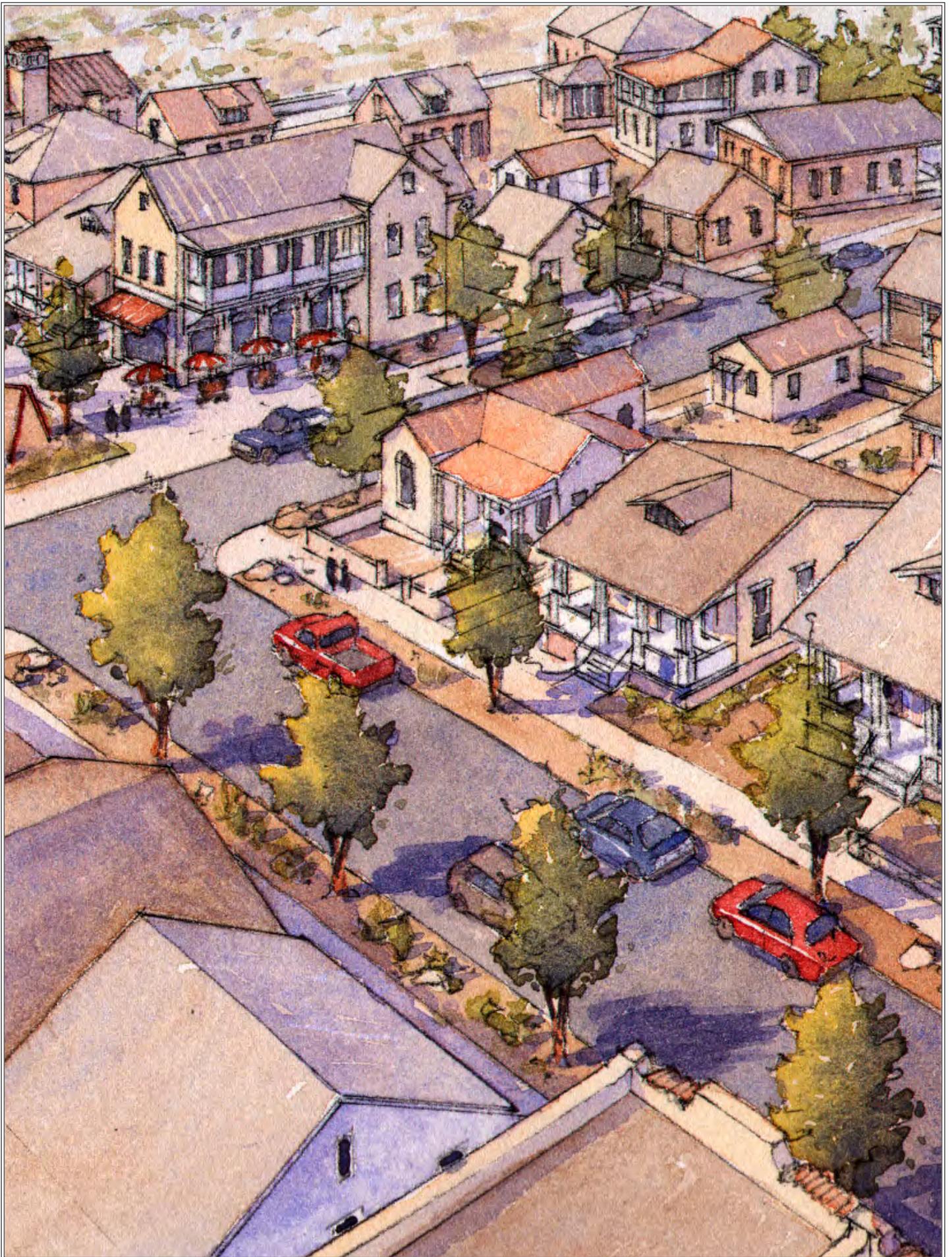
Goal 5.18: Continue to support the local arts community in El Paso with the encouragement of murals, sculpture, and other outdoor art installations.

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: 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 5.18.4: 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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"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.

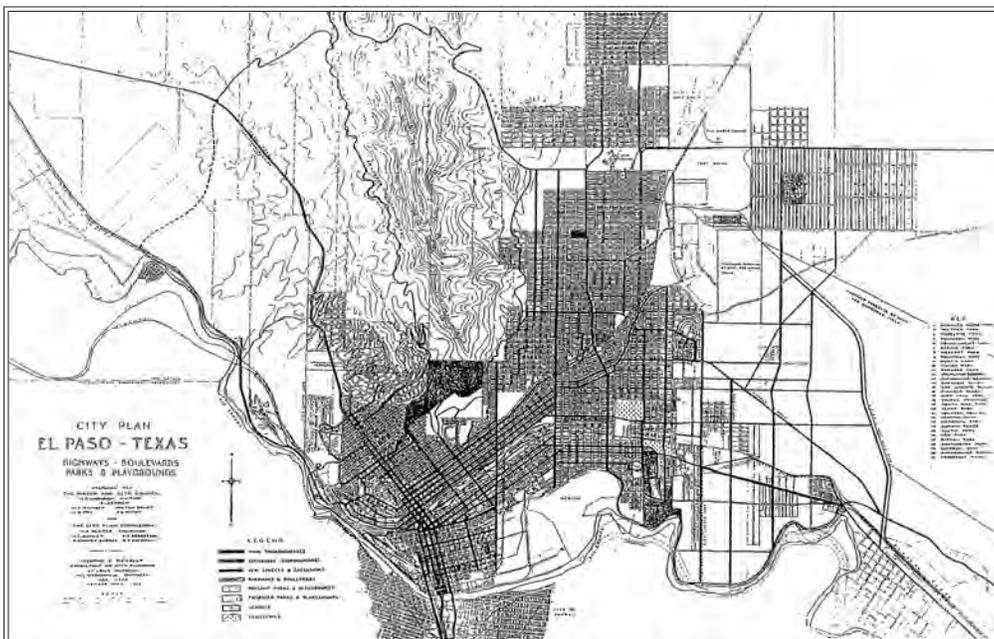
The original street grid system in the Downtown area was extended into residential areas such as Sunset Heights and Kern Place. These traditional neighborhoods near Downtown provided a variety of housing types to allow for a balanced neighborhood for residents of varying ages and incomes. Lot sizes varied 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 further and further 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%

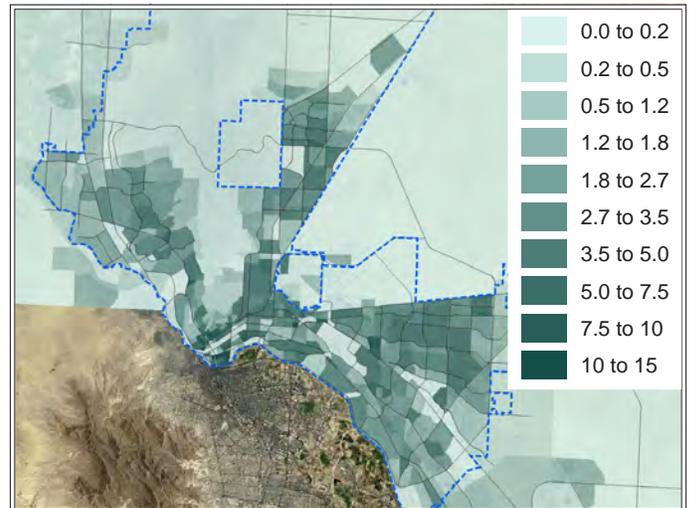
As determined by the target market methodology—which accounts for household mobility within the City of El Paso as well as migration and mobility patterns for households currently living in all other cities and counties—up to 38,950 households represent the annual potential market for new and existing 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 indicate that approximately 38.1% El Paso households are renters while 61.9% are homeowners.

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. However, 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

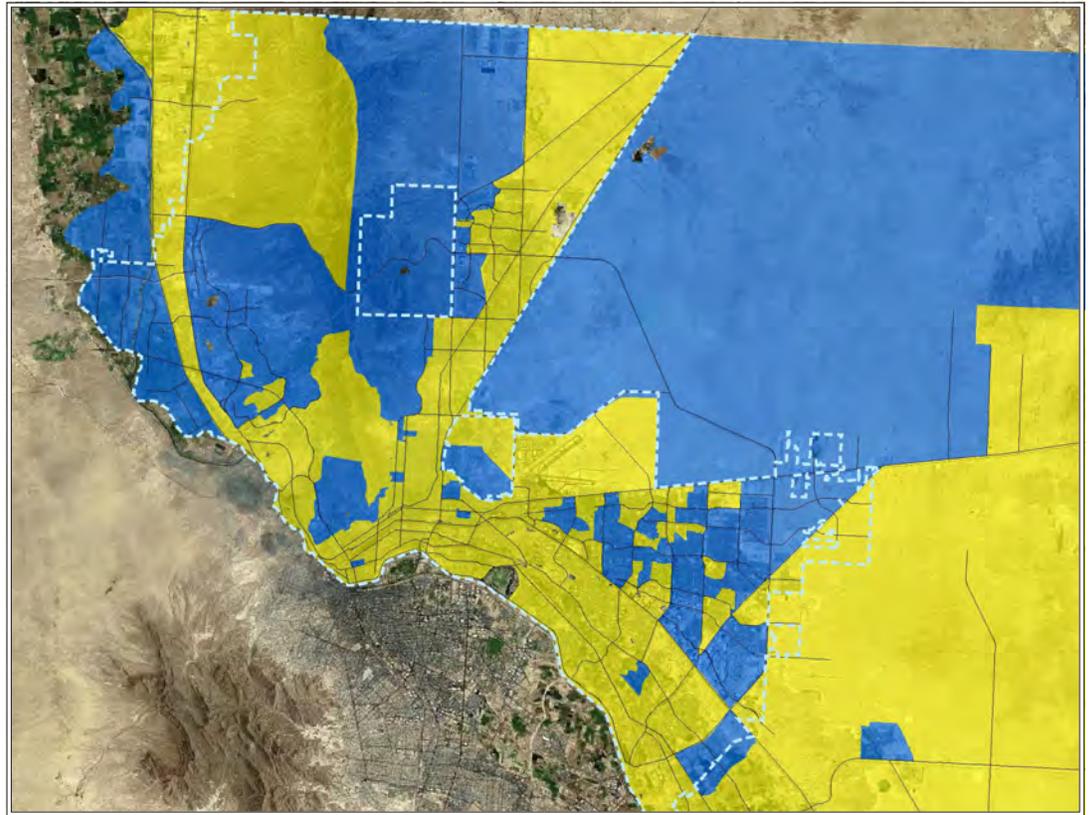
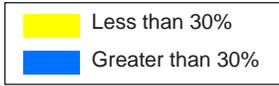
Housing and Transportation Affordability

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

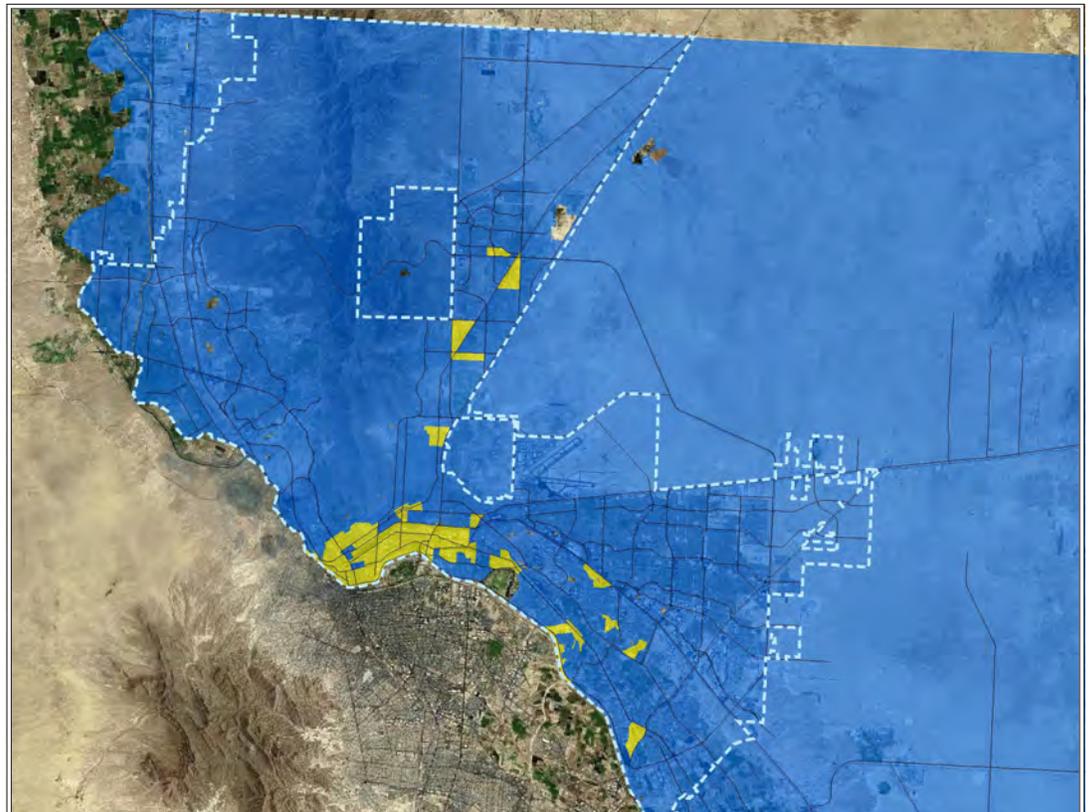
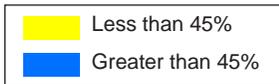
⁴ Zimmerman/Volk Associates, Inc., An Analysis of Residential Market Potential, 2011, complete report available in Appendix C.

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

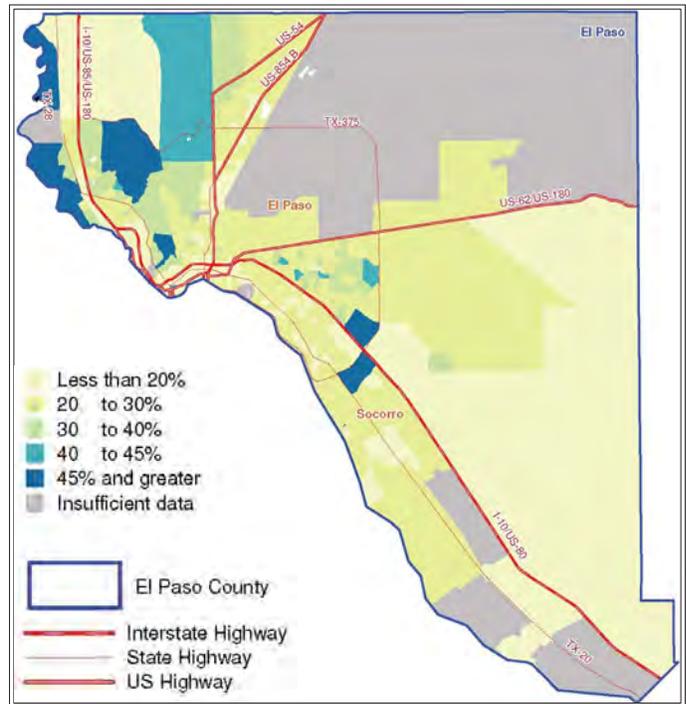
Housing Demand & Permitting

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.

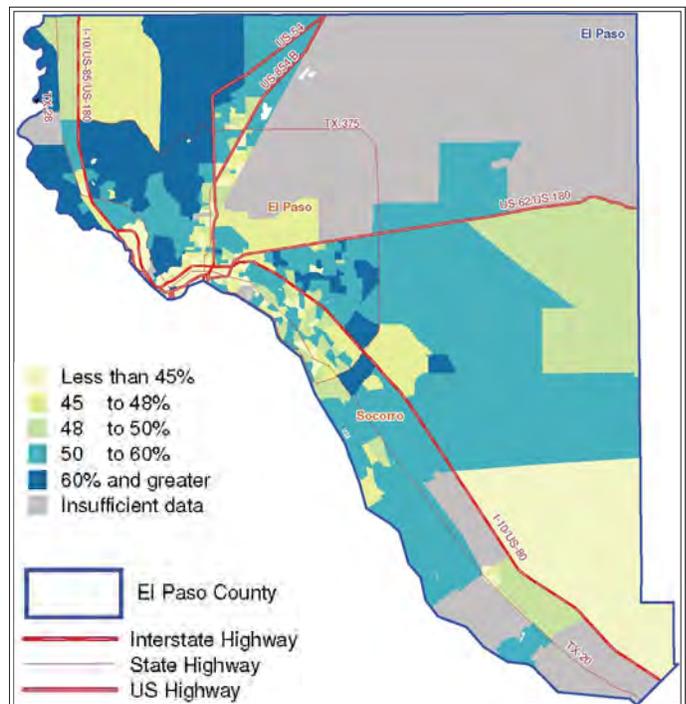
Housing Trends

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 has 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 and 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

HOPEVI 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 AND 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: 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. 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.

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 the Appendix D of this plan.

Existing Neighborhoods

Goal 6.2: Preserve and revitalize El Paso's existing neighborhoods.

Policy 6.2.1: Retrofit suburban subdivisions to improve connectivity, add high quality parks, and introduce limited commercial uses where possible.

Policy 6.2.3: Develop programs to focus on infill and rehabilitation of existing neighborhoods.

Policy 6.2.4: 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 will become the most connected and walkable in the southwest.

Policy 6.3.1: The City should require all new residential developments to be complete, compact, and connected, using the design principles under Goal 2.1 through 2.6 or a City-developed rating system as tools to assess the design of proposed developments.

Policy 6.3.2: Require 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.