

ELEVATE LAS CRUCES

COMPREHENSIVE PLAN

Volume III: Scenario Planning Initiative

ADOPTED FEBRUARY 18, 2020

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VOLUME III: SCENARIO PLANNING INITIATIVE



ELEVATE LAS CRUCES IS A FOUR-VOLUME DOCUMENT.

VOLUME III OUTLINES THE PROCESS USED TO GENERATE A “PREFERRED” SCENARIO FOR FUTURE GROWTH WITHIN AND AROUND LAS CRUCES. THE RESULTING CONSENSUS [GROWTH] SCENARIO IDENTIFIES WHERE PROJECTED RESIDENTIAL AND NON-RESIDENTIAL GROWTH SHOULD OCCUR OVER THE NEXT 25 YEARS.

ELEVATE LAS CRUCES COMPREHENSIVE PLAN
ADOPTED FEBRUARY 18, 2020





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GLOSSARY OF ACRONYMS



AARP - American Association of Retired Persons
ACS - American Community Survey
Adm - Avenida de Mesilla Gateway Overlay
ALTSD - Aging and Long-Term Services Department
APA - American Planning Association
BLM - Bureau of Land Management
BNSF - Burlington Northern Santa Fe Railroad
CBD - Central Business District
CE - Community Environment
CIP - Capital Improvement Program
CL - Community Livability
CNG - Compressed Natural Gas
CP - Community Prosperity
CPAC - Comprehensive Plan Advisory Committee
CPTED - Crime Prevention Through Environmental Design
DAC - Doña Ana County
DACC - Doña Ana County Community College
DAMDWCA - Doña Ana Mutual Domestic Water Consumer Association
DU - Dwelling Units
EBID - Elephant Butte Irrigation District
EPA - Environmental Protection Agency
ESRI - Environmental Systems Research Institute
ETZ - Extraterritorial Zone
FAR - Floor Area Ratio

FEMA - Federal Emergency Management Association
FHWA - Federal Highway Administration
GIS - Geographical Information Systems
GRT - Gross Receipt Tax
HOA - Homeowners Association
HUD - Department of Housing and Urban Development
ITE - Institute Transportation Engineers
JHWWTF - Jacob Hands Water Treatment Facility
LCAR - Las Cruces Association of Realtors
LCMC - Las Cruces Municipal Codes
LCPS - Las Cruces Public Schools
LCPCS - Las Cruces Partnership for Community Schools
LEED - Leadership in Energy and Environmental Design
LEP - Limited English Proficient
LRGRWP - Lower Rio Grande Regional Water Plan
MF - Multi-Family
MPO - Metropolitan Planning Organization
MVEDA - Mesilla Valley Economic Development Alliance
MVMPO - Mesilla Valley Metropolitan Planning Organization
MVPHA - Mesilla Valley Public Housing Authority
MWC - Moongate Water Company
NACTO - National Association of City Transportation Officials

This glossary is a composite list of acronyms found in Volumes 1 through 4 of Elevate Las Cruces. This Volume may not contain all acronyms listed.

GLOSSARY OF ACRONYMS



NAICS - North American Industrial Classification System
NAMI - National Alliance on Mental Illness
NRHP - National Register of Historic Places
NMCYFD - New Mexico Children, Youth & Families Department
NMDFA - New Mexico Department of Finance & Administration
NMDOH - New Mexico Department of Health
NMDOT - New Mexico Department of Transportation
NMHSD - New Mexico Human Services Department
NMPED - New Mexico Public Education Department
NMSU - New Mexico State University
NWIC - National Wraparound Implementation Center
OS-NC - Open Space -Natural/Conservation District
OS-R - Open Space-Recreation
PRC - Policy Review Committee
PUD - Planned Unit Development
QOZ - Qualified Opportunity Zones
SCRTD - South Central Regional Transit District
SCSWA - South Central Solid Waste Authority
SF - Single-Family
SLO - State Land Office
TBL - Triple Bottom Line
TDR - Transfer of Development Rights

TIDD - Tax Increment Development District
UD - University District
USDOT - U.S. Department of Transportation
USGBC - U.S. Green Building Council
USGS - United States Geological Survey
UTEP - University of Texas El Paso
WIC - Special Supplemental Nutrition Program for Women, Infants, and children
WMIP - West Mesa Industrial Park

This glossary is a composite list of acronyms found in Volumes 1 through 4 of Elevate Las Cruces. This Volume may not contain all acronyms listed.

SCENARIO PLANNING INITIATIVE



An essential task of any comprehensive planning effort is to establish clear policy on how and where a community will develop and grow as it adjusts to evolving economic, environmental, and social conditions. Comprehensive plans typically describe a community's preferences for the future distribution of land uses; location of roadways and other infrastructure; and intensity, form, and character of new development. These combined "future development plans" form the foundation upon which many of a community's subsequent policies on economy, environment, housing, infrastructure, land use, transportation and quality of life are prepared.

In the comprehensive planning tradition, a future development plan is included in the Elevate Las Cruces Comprehensive Plan. This plan is found in **Volume I: Elevate Las Cruces**, and corresponds with the community's vision of sustainability (below) identified through the planning process.

To arrive at the City's preferred plan for future development, the comprehensive planning process included a scenario planning initiative. This initiative measured and estimated the degree to which various development models would promote the community's long-term vision of fiscal, environmental, and social sustainability.

WHY SCENARIO PLANNING?

Scenario planning is a quantitative process used to contemplate ways a community could grow. Scenario planning can answer questions such as "How should we grow?" "Where do we grow?" and "How much will growth cost?" Resulting development models represent hypothetical stories about a community's future using data measuring growth estimates, development constraints, land suitability, and fiscal health.

A scenario planning process generates possible futures that could occur based on what exists, emerging trends, or the community's desires for long-term sustainability. The essential requirement of an effective scenario planning initiative is that a final development model be plausible - within the realm of what exists or could be.

The Elevate Las Cruces scenario planning initiative was conducted using CommunityViz - an extension of ESRI's ArcGIS desktop software that relies on spatial and fiscal data to facilitate the visualization of alternative development scenarios. Data used for the Elevate Las Cruces scenario planning initiative was provided by the City of Las Cruces, Doña Ana County, other public agencies, and the plan consultant team.

"Las Cruces is an inclusive community of choice that is recognized for its cultural diversity, enchanting natural amenities, and vibrant quality of life. We are driven to elevate our city's prosperity and livability in a fiscally, environmentally, and socially sustainable manner for the shared benefit of our current and future generations."

Elevate Las Cruces Vision Statement (2019)

A SCENARIO PLAN FOR LAS CRUCES

A total of four growth scenarios were prepared for the Elevate Las Cruces comprehensive plan. The approach for the scenario planning initiative is summarized within this plan volume. Each development scenario presented herein was assessed and refined to generate a final “consensus scenario” that serves as the basis for the Elevate Las Cruces Future Development Map and Major Thoroughfare Map.

The four Elevate Las Cruces growth scenarios represent alternative futures of Las Cruces’ development footprint at build-out in the year 2045. The models include:

- **Trend Scenario.** Represents what Las Cruces would look like if current development patterns continue into the future.
- **Alternative Scenario - Compact Centers.** Emphasizes growth within the existing developed footprint of Las Cruces and promotes conservation of undeveloped land.
- **Alternative Scenario - Centers & Corridors.** Evaluates development within a series of dispersed activity centers and connecting corridors in strategic areas of the city.
- **Consensus Scenario.** Represents desirable elements from each of the other scenarios and is used to generate the Elevate Las Cruces Future Development Map and Major Thoroughfare Map.

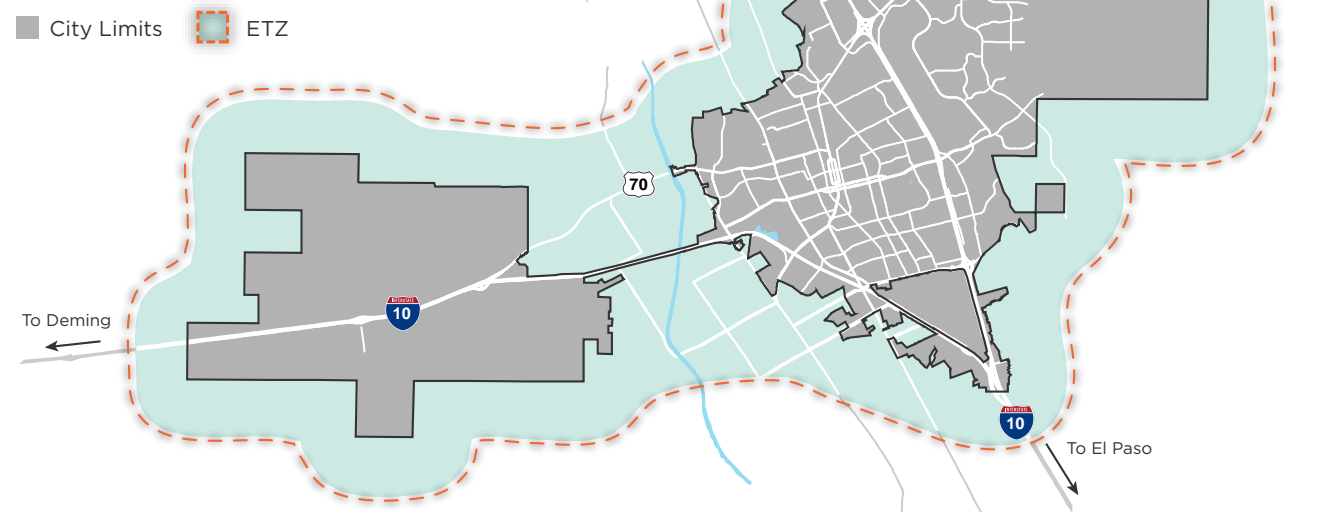
BASE SCENARIO INPUTS

The scenario planning process first requires a base (or “trend”) model to be created incorporating various data. Essential base model inputs include: development status, development constraints, land suitability, and population/employment forecasts.

To establish these key base scenario inputs, additional data related to parcels, infrastructure, community services, future land use, and environment/hazards was collected. Key data sources include: the City of Las Cruces, Doña Ana County Assessor’s Office, Mesilla Valley MPO, ESRI, U.S. Census, and the New Mexico Workforce Commission.

For this scenario planning initiative, the analysis area included all areas within the existing municipal limits plus a one to three mile buffer extending into the Las Cruces extra-territorial zone as shown in **Figure 3.1, Scenario Planning Analysis Area.**

FIGURE 3.1. SCENARIO PLANNING ANALYSIS AREA



The scenario planning process considers the development status of new subdivisions such as Metro Verde (above), including the status of “entitled” lots which may be platted but do not yet contain homes or other buildings

DEVELOPMENT STATUS

Development status sets the foundation for the overall scenario analysis and acts as a simplified existing land use map. Five categories were used to create the base model:

- **Developed.** Parcels containing permanent buildings or structures.
- **Undeveloped or Underdeveloped.** Parcels that are vacant or lacking permanent buildings or structures (undeveloped); and, parcels containing permanent buildings or structures that occupy only a small portion of the property (underdeveloped).
- **Agriculture.** Parcels actively used for irrigated agriculture such as pecan orchards, hay crops (e.g., alfalfa), or row crops (e.g., peppers, corn) This category does not include ranching or grazing areas.

- **Open Space.** Lands usually under government ownership dedicated to recreation or conservation. Includes City parks, US Bureau of Land Management (BLM) land, etc. Some private parcels are included, especially where the primary use is recreation (e.g., golf courses).
- **Civic.** Lands that are typically under government ownership including schools, universities, institutional uses, and rights of way.

The categories listed in this section do not measure development intensity. Rather they establish a baseline - identifying parcels upon which varying levels of residential and non-residential development potential (land use projections) may be calculated. The 2019 development status of property within the scenario planning analysis area is presented in **Table 3.1** (page 4).

TABLE 3.1, SCENARIO PLANNING ANALYSIS AREA, DEVELOPMENT STATUS AND CONSTRAINTS (2019)

DEVELOPMENT STATUS (BY PARCEL ¹)			DEVELOPMENT CONSTRAINTS ²	
CATEGORY	AREA (ACRES)	PERCENT (%) OF ANALYSIS AREA	CONSTRAINED AREA (ACRES)	PERCENT (%) OF ANALYSIS AREA
DEVELOPED	29,875	9	259	1
UNDEVELOPED/UNDERDEVELOPED	32,400	10	455	1
AGRICULTURE	22,397	7	422	2
OPEN SPACE	215,102	68	148,162	69
CIVIC	15,801	5	12,139	77
TOTAL ANALYSIS AREA	315,575	100	161,437	51

Sources: 1. Doña Ana County Assessor's Office; 2. City of Las Cruces (All calculations prepared by City Explained.)

DEVELOPMENT CONSTRAINTS

There are some areas of Las Cruces that will never develop due to constraints such as open water, rights-of-way, steep slopes, and federal lands. An additional input into the base model is identification of the development constraints that exist in Las Cruces today.

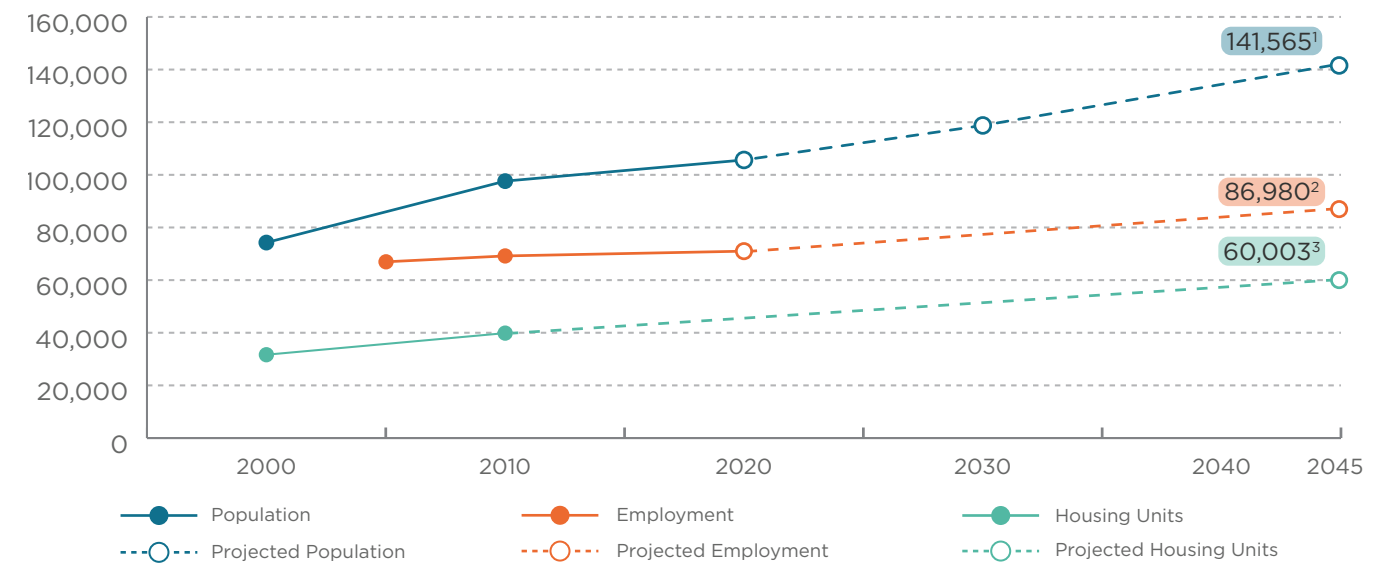
In total, approximately 161,437 acres in the analysis area are considered constrained for this analysis, which amounts to approximately 51 percent of the total analysis area. The 2019 development constraints of property within the scenario planning analysis area is presented in **Table 3.1** (above)

LAND SUITABILITY

A land suitability analysis measures the appropriateness of an area for a specific condition or use. For Las Cruces, it was used to identify locations attractive for future growth. A series of standard measures to determine the perceived suitability of land for residential and non-residential use were identified including:

- Parcel shape;
- Parcel overlap with floodplain;
- Parcel development status (developed vs. undeveloped);
- Proximity to roads and interchanges;
- Proximity to water lines, sewer lines;
- Proximity to open space;
- Proximity to existing and recent commercial or residential areas;
- Neighborhood intersection density; and,
- Neighborhood age

FIGURE 3.2, LAS CRUCES GROWTH FORECASTS



Source: 1. ESRI; 2. New Mexico Workforce Commission; 3. US Census Bureau, American Community Survey (Note: Calculations prepared by EPS.)

GROWTH FORECASTS

Population and household forecasts provide the basis for estimating housing unit demand and the amount of land required to accommodate estimated residential growth. Employment forecasts are likewise used as the basis for estimating non-residential development demand including office, industrial, retail and institutional space, and associated land requirements. Las Cruces' anticipated growth forecasts are summarized in **Figure 3.2, Growth Forecasts**.

POPULATION AND HOUSING GROWTH

Housing demand for Elevate Las Cruces was estimated using the Mesilla Valley MPO population projection for Doña Ana County (showing an annual County growth rate of 1.2 percent to 2040). Applying this growth rate to Las Cruces for the 25+ year planning period, the City is expected to add approximately 38,350 new residents between 2018 and 2045 - population growth of roughly 37 percent.

Assuming Las Cruces' current average household size of 2.46 persons, an estimated 15,350 households will be added between 2018 to 2045. An estimated 16,100 housing units will be required to accommodate this growth (applying a 5 percent city-wide vacancy factor).

For the initial "trend" growth scenario, projected housing units were distributed according to the city's existing mix of housing unit by type. This translates to approximately 9,800 single family detached units, 3,300 single family attached units, 1,600 multi-family units, and 1,500 mobile homes. The assumed distribution of housing units by type was adjusted for subsequent growth scenarios.



EMPLOYMENT GROWTH

The Doña Ana County wage and salary workforce grew from 65,200 persons to 71,100 persons between 2005 and 2017, which equates to an annual growth rate of 0.7 percent. The New Mexico Workforce Commission projects this trend to continue through 2026. Based on these trends, and using the County’s 2017 wage and salary employment of 71,100 persons as a base, Doña Ana County is projected to add 15,880 jobs between 2018 and 2045 for a total of 86,980 jobs. These employment projections were apportioned to match Doña Ana County’s 2017 employment by NAICS industry sectors, assuming that total employment will remain constant across all industry sectors.

According to data from the Bureau of Economic Analysis, approximately 27 percent of total private employment in Doña Ana County are sole proprietors (and are not counted New Mexico Workforce Commission wage and salary workforce figures). Assuming that this rate remains constant moving forward, the County will add 5,875 sole proprietors by 2045 resulting in total sole proprietor employment of approximately 21,750 persons.

Although New Mexico State University (above) provides for a reliable local job base, economic growth forecasts for Las Cruces during the 25+ year planning period are modest.

Las Cruces own and operate a significant number of small retail, personal, and professional service businesses (below), including sole proprietorships and home-based businesses.



LAND USE PROJECTIONS

Projecting future land uses by type and intensity is an essential step in the scenario planning process. While a review of the development status of land establishes the baseline of ‘what exists’ on individual parcels today (see ‘Development Status,’ page 3), the application of future land use categories to property is essential in forecasting tomorrow’s future growth patterns. Growth scenarios can change by varying degrees depending on how each land use category is defined and measured.

COMPREHENSIVE PLAN 2040

Parcel-based future land use data was not maintained by the City of Las Cruces prior to the Elevate Las Cruces comprehensive planning effort. Instead, Comprehensive Plan 2040 included a conceptualized ‘Future Concept Map’ which described seven general development areas (**Figure 3.3**). The Future Concept Map was intended to guide subsequent land use planning efforts to be conducted at a future date.

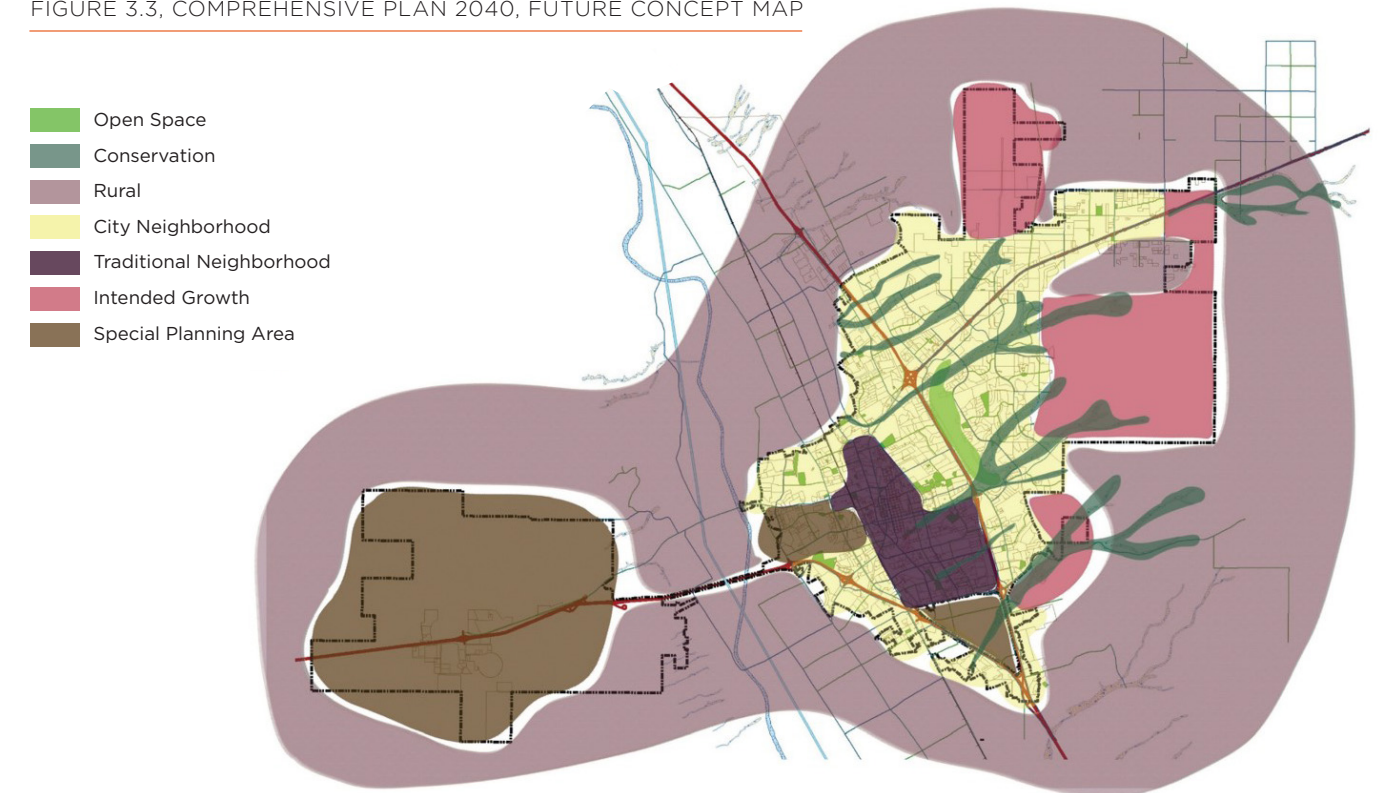
ELEVATE LAS CRUCES PLACE TYPES

Absent pre-existing data, parcel-based future land use categories were created as part of the Elevate Las Cruces scenario planning initiative. Future land use data was used to generate ‘place types’ for application within each growth scenario model. Ten initial place types were created based on a consolidation of zoning districts, predominate existing land use types, parcel arrangements, development status, and an analysis of aerial maps.

Initial place types were applied to the resulting trend scenario model. Many of these place types were subsequently modified for the alternative development scenarios discussed later in this volume.

The ten initial place types used for the trend scenario model are described on pages 8 and 9. Four additional place types prepared at a later point during the scenario planning initiative are located on page 15.

FIGURE 3.3, COMPREHENSIVE PLAN 2040, FUTURE CONCEPT MAP



The Comprehensive Plan 2040, Future Concept Map, was a reference point for the future development maps in Elevate Las Cruces.

FUTURE LAND USE CATEGORIES (PLACE TYPES)¹



Open Space Preserve encompasses land that is intended to be maintained in a natural state and remain primarily undeveloped. The place type includes public property and other areas set aside for habitat preservation or passive recreation. **No measure of development intensity was prepared for this place type.**



Rural Reserve includes a mix of land uses such as farming, ranching, and other agriculture related services; supporting farmsteads; and, limited residential estate development. The expectation of suburban or urban development within the place type is limited and the future provision of supporting urban infrastructure is not projected. **This place type assumes a gross density of 1 DU per acre.**



Rural Neighborhoods are intended for low-density residential and limited agricultural land uses including ranchettes, themed subdivisions, large-lot single family subdivisions, and conservation subdivisions. The expectation of suburban or urban development within this place type is limited. **This place type assumes a gross density of 2 DUs per acre.**



Suburban Neighborhoods are intended for low-to-moderate density residential land uses. The predominant land use is single-family detached dwellings, but limited areas may be developed for multi-family dwellings and other ancillary institutional and public uses such as schools, parks, and places of worship. **This place type assumes a gross density of 8 DUs per acre.**



Urban Neighborhoods include a variety of residential housing types at medium-to-high densities. This place type includes single-family detached, single-family attached, and multi-family dwelling types, and contains many of the City's established neighborhoods and historic residential areas closer to center city. **This place type assumes a gross density of 15 DUs per acre.**

¹. Initial future land use categories applied to the trend scenario as 'place types.' Additional place types created for subsequent growth scenarios (see page 15).

FUTURE LAND USE CATEGORIES (PLACE TYPES)¹



Business Park & Industrial accommodates warehousing, trade, transportation, research and development, manufacturing, and industrial uses allowing for the development of supporting infrastructure for freight traffic, water and sewer services needs. Residential land uses should be excluded from these areas as this would create a conflict between user groups. **This place type assumes a floor area ratio of .15.**



Civic & Institutional is defined by large public or private facilities and complexes. Large tracts of land may support primary schools campuses, colleges, hospitals, convention centers, libraries, and government buildings. Smaller parks and schools that are integrated into a neighborhood setting are not included in this place type. **No measure of development intensity was prepared for this place type.**



Corridor Commercial supports a wide variety of non-residential land uses including retail, services, and office establishments. The commercial uses on these corridors can serve either a single neighborhood or multiple neighborhoods. Multi-family development may be permitted at selected neighborhood gateways, but residential land uses are not predominant. **This place type assumes a floor area ratio of .5.**



Regional Commercial is defined by large retail and professional service uses, often located in multi-tenant shopping centers and office buildings, as well as hotels, restaurants, and other services. Regional Commercial land uses are of a scale and character to serve as a city wide and regional draw. **This place type assumes a floor area ratio of .5.**



Downtown includes a mix of residential and non-residential land uses that are associated with a thriving and vibrant central business district. The place type supports institutional, cultural, entertainment, shopping, and entertainment uses while also providing high-density residential living options to create an energized environment to live, work, and play. **This place type assumes a floor area ratio of 1.0.**

¹. Initial future land use categories applied to the trend scenario as 'place types.' Additional place types created for subsequent growth scenarios (see page 15).

FIGURE 3.4, FUTURE LAND USE MAP

- Business Park and Industrial
- Civic and Institutional
- Corridor Commercial
- Regional Commercial
- Downtown
- Undeveloped/Open Space Preserve
- Rural Reserve
- Rural Neighborhood
- Suburban Neighborhood
- Urban Neighborhood

A future land use map was created using the land use categories described on pages 8 and 9. Application of the future land use categories to property within and around Las Cruces enabled scenario models to anticipate future development intensities.

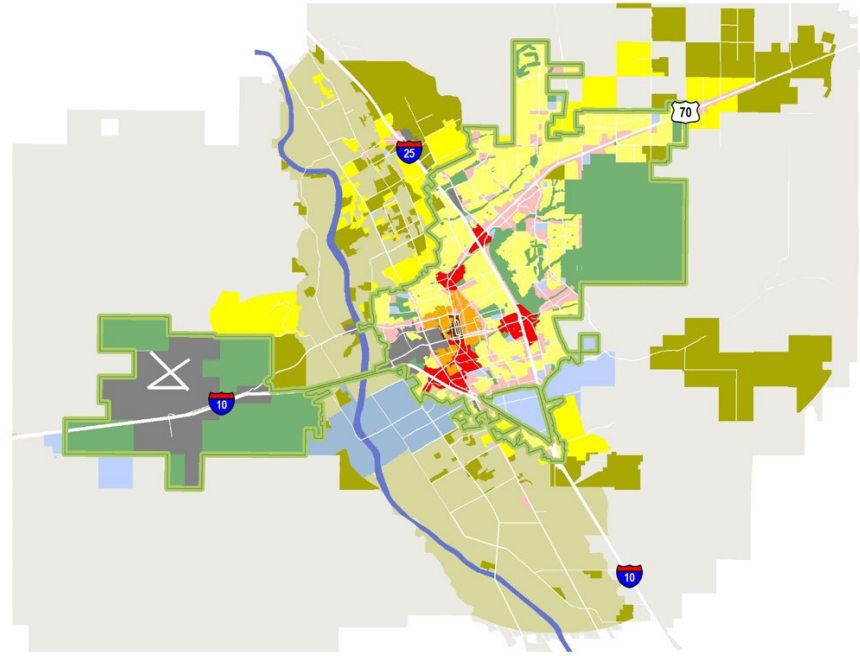
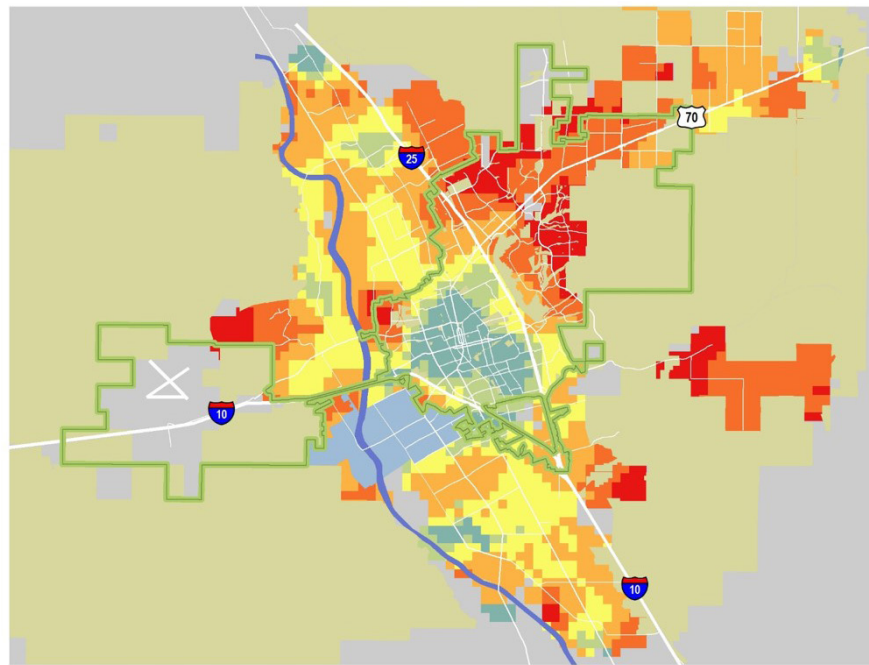


FIGURE 3.5, HISTORIC RESIDENTIAL DEVELOPMENT PATTERNS

Average Structure Build Date

- No Data
- 1930 - 1965
- 1966 - 1975
- 1976 - 1985
- 1986 - 1995
- 1996 - 2005
- 2006 - 2017

An assessment of residential development trends allows for the development of growth scenarios that anticipate the location of near-term development activity.



Figures 3.4 and 3.5 are graphical representations only. Full maps are available in the Elevate Las Cruces Appendix III-A.

FIGURE 3.6, RESIDENTIAL DEVELOPMENT INTENSITY (2019)

Existing Base Dwelling Units

••• 1 Dot Equal 5 Units

An understanding of residential land use densities aided in the creation of future land use categories for subsequent scenario planning.

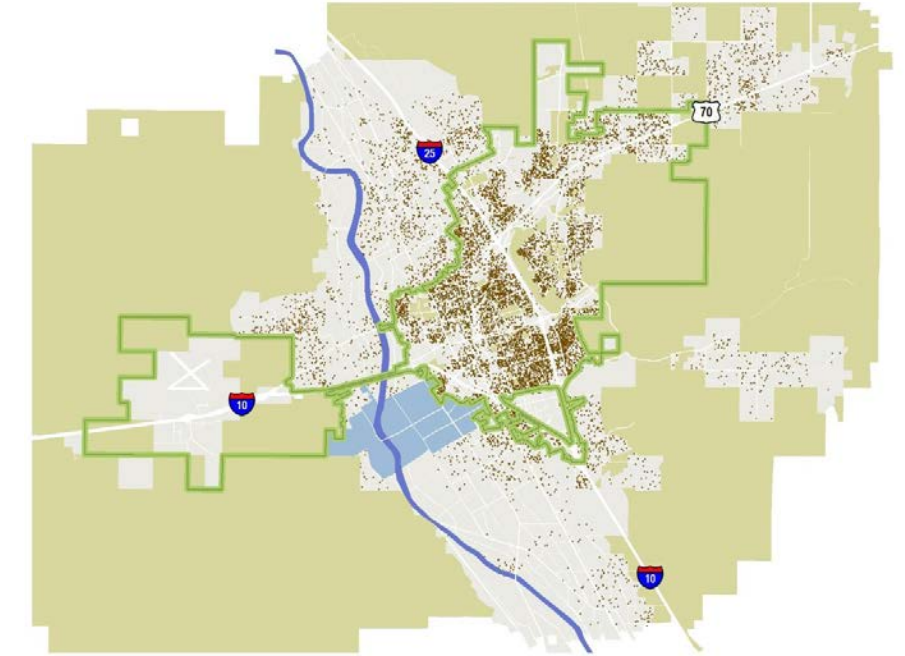
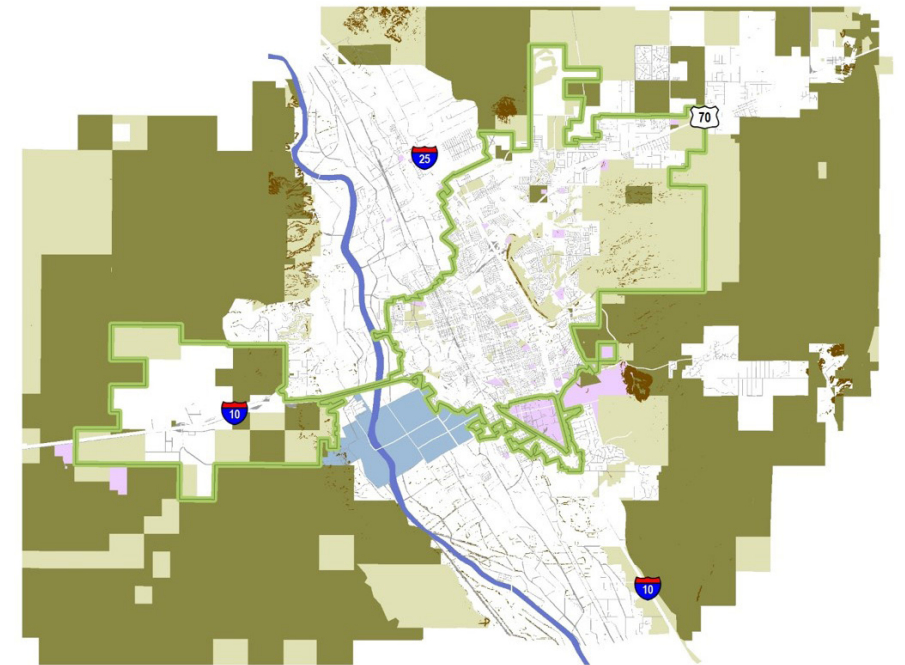


FIGURE 3.7, DEVELOPMENT CONSTRAINTS (2019)

- Federal Land
- Right-of-way
- Steep Slopes
- Civic or Institutional Land
- Other Undeveloped or Protected Open Space

Development constraints data (see page 4) was used in conjunction with future land uses to guide the anticipated location of new development within each growth scenario.



Figures 3.6 and 3.7 are graphical representations only. Full maps are available in the Elevate Las Cruces Appendix III-A.

BASE CONDITIONS

A SNAPSHOT OF LAS CRUCES TODAY

The base conditions map represents the current build footprint of the city. Existing growth patterns reflect single-use, low-density development patterns and intensities, which promote travel by car because of the distance and general isolation between complementary land uses. Farms, orchards and undeveloped desert areas have steadily been consumed by suburban development patterns.

Commuters help determine land use patterns. A significant number of workers leave the city every day, driving or taking the bus to jobs at White Sands, El Paso and Santa Teresa. In recent decades, the city has grown beyond its cradle in the Rio Grande Valley and onto the east and west mesas.

While the city's downtown was substantially affected by urban renewal efforts in the 1960s, it continues to serve as the administrative and cultural center of town. The downtown, along with historic neighborhoods such as Mesquite and Alameda Depot offer the largest concentrations of mixed-use and walkable development.

To the east of Las Cruces, the dramatic Organ Mountains dominate the skyline, rising to over 9,000 feet in elevation. The mountains are part of the 496,000 acre Organ Mountains-Desert Peaks National Monument. The monument protects almost 500,000 acres of Chihuahuan desert, forested uplands and mountains. The area had been drawing locals with hiking trails and freshwater springs long before the creation of the Monument in 2014.

A college town, New Mexico State University (NMSU) serves as a significant educational and economic center. While most of the university is not incorporated, it provides the anchor for the southern end of the city.

MAP 3.1. BASE CONDITIONS MAP



SCENARIO DEVELOPMENT PROCESS

INITIAL SCENARIO DEVELOPMENT

The four growth scenarios introduced on page 2 were developed using a combination of technical analysis and stakeholder engagement. This section describes the process the project team underwent to develop and refine each of the scenarios.

TREND SCENARIO DEVELOPMENT

The Trend Scenario was prepared using the base scenario inputs referenced on pages 3 and 4. The Trend Scenario assumes a continuation of the low-density, single-use development pattern that is prevalent in Las Cruces today. Additional description and performance metrics for the Trend Scenario are found on pages 18-21.

“ALTERNATIVE” SCENARIO DEVELOPMENT

To show different ways Las Cruces could grow and redevelop, two alternative growth scenarios were developed. The first alternative scenario emphasizes growth within the existing developed footprint of Las Cruces and promotes the conservation of undeveloped land. The project team and city staff worked together to identify strategic centers that might support infill development. This scenario, called the “Compact Centers” growth scenario is described in more detail on pages 22-25.

The second alternative growth scenario focuses on promoting development within a series of dispersed activity centers and corridors in strategic areas of the city. This scenario includes the centers identified in the Compact Centers scenario, as well as others in outlying areas. This scenario, called the “Strategic Centers and Corridors” growth scenario is described in more detail on pages 26-29.

DEVELOPMENT CHIP GAME

A joint City Council/Comprehensive Plan Advisory Committee (CPAC) work session was held in February 2019 to seek feedback on the Trend Scenario and two alternative scenarios. The comprehensive planning project team led interactive exercises to seek feedback on preferred development types, patterns, and intensity within Las Cruces.

Workshop attendees were split into five groups and asked to select one of the three growth scenarios to use as a base from which to make suggested changes. All five groups selected the Strategic Centers and Corridors Scenario as a preferred starting point. Workshop participants placed “chips” on a work map that represented how development might occur in their preferred growth scenarios. Each table received the same number of chips that represented the place types previously described on pages 8 and 9, plus the additional place types for the alternative scenarios as described on the facing page.

All groups also used markers to draw proposed conservation areas, future roads, transit routes, or greenways. Workshop participants shared their work maps with all attendees at the end of the event. **Figures 3.8** through **3.11** on pages 16 and 17 represent key results of this exercise.

CREATING THE CONSENSUS SCENARIO

Development chip game results were summarized after the work session. Key results included:

- Most participants agreed on intensities of development in the central part of the City, but there was less consistency in areas to the north and northeast.
- All participants proposed a significant amount of development in downtown and in areas east of I-25 and south of Highway 70. A majority of tables put development north of Highway 70, including the Red Hawk area.
- Most participants directed non-residential development to the city center, near the airport, Red Hawk, South Solano Avenue, and Telshor Boulevard.

Workshop results were used to build consensus on a final development scenario. The resulting “Consensus” growth scenario is presented on pages 30-33.



ALTERNATIVE SCENARIO PLACE TYPES¹



Conservation Neighborhood supports moderate to high density residential land uses on smaller lots or parcels surrounded by land preserved as open space. This place type supports single-family residential land uses (attached and detached), but may permit some multi-family dwellings. Clustered land development patterns are augmented by low-impact development practices. **This place type assumes a maximum gross density of 6-12 DUs per acre.**



Mixed Neighborhood Center includes a mix of residential and non-residential land uses that provide nodes of community activity. The walkable activity centers provide local employment, shopping, and entertainment opportunities and a diverse mix of residential living options. These place types are located at key neighborhood intersections and provide a transitional buffer between single-family residential dwellings and areas of higher development intensity. **This place type assumes a floor area ratio of 2.0.**



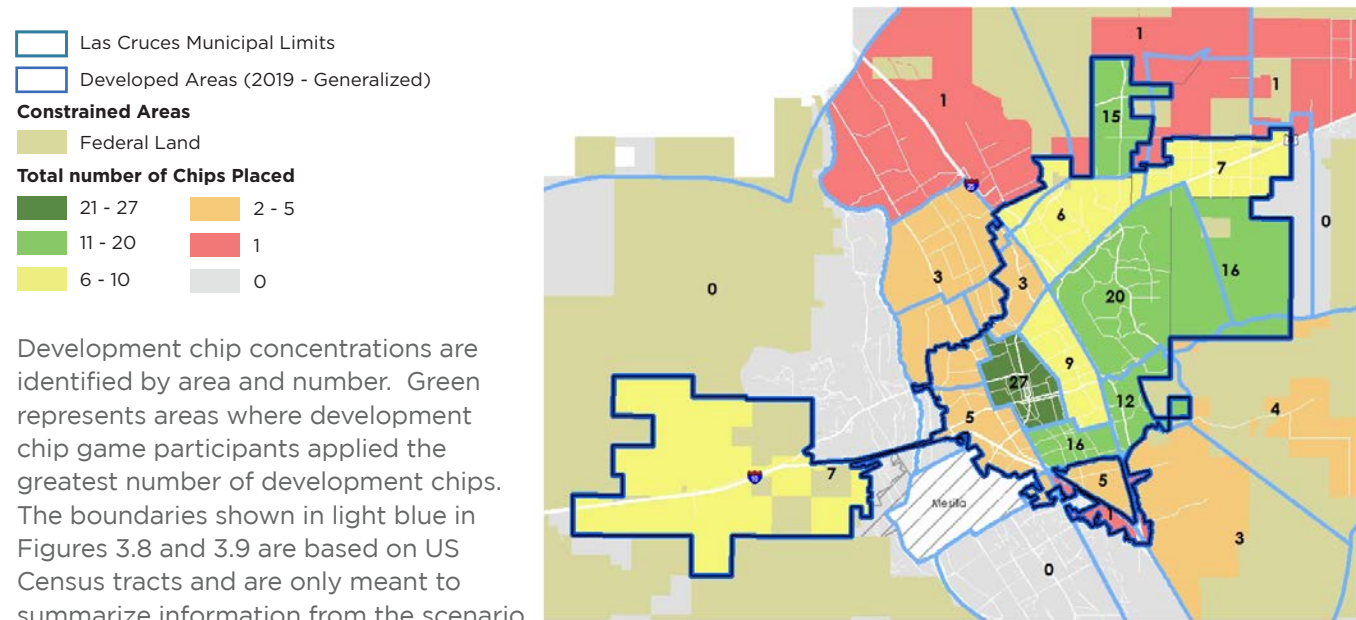
Mixed Town Center includes a mix of residential and non-residential land uses that collectively create a vibrant and walkable activity center. This place type supports institutional, cultural, employment, shopping, and entertainment uses while also providing high-density residential living options to create an energized environment to live, work, and play. **This place type assumes a floor area ratio of 3.0.**



Urban Corridor supports a mix of residential and non-residential land uses along roadway or trail corridors. This place type mimics the built environment of a central business district or other mixed-use activity center by combining residential and non-residential land uses within buildings or on shared parcels, but arranges such uses in a linear manner along established thoroughfares. **This place type assumes a floor area ratio of 3.0.**

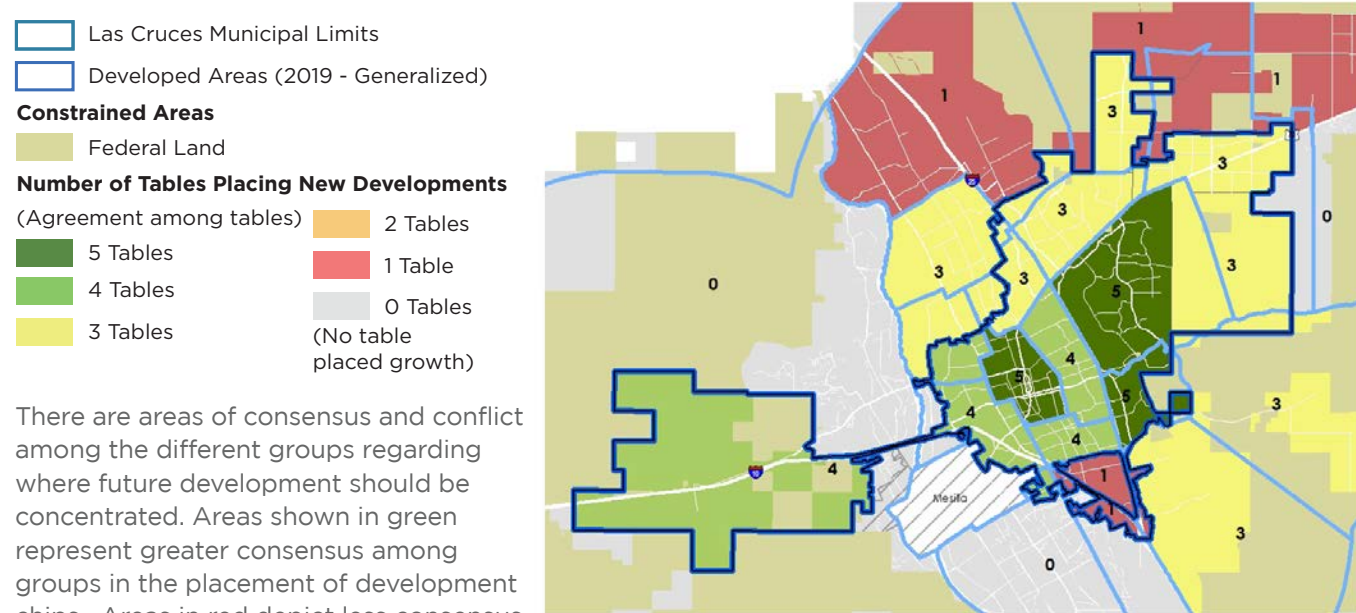
¹ Additional place types created for the alternative growth scenarios. The place types included in all of the scenarios are shown on pages 10-11.

FIGURE 3.8, DEVELOPMENT CHIP GAME¹ - TOTAL NUMBER OF CHIPS PLACED



Development chip concentrations are identified by area and number. Green represents areas where development chip game participants applied the greatest number of development chips. The boundaries shown in light blue in Figures 3.8 and 3.9 are based on US Census tracts and are only meant to summarize information from the scenario work session.

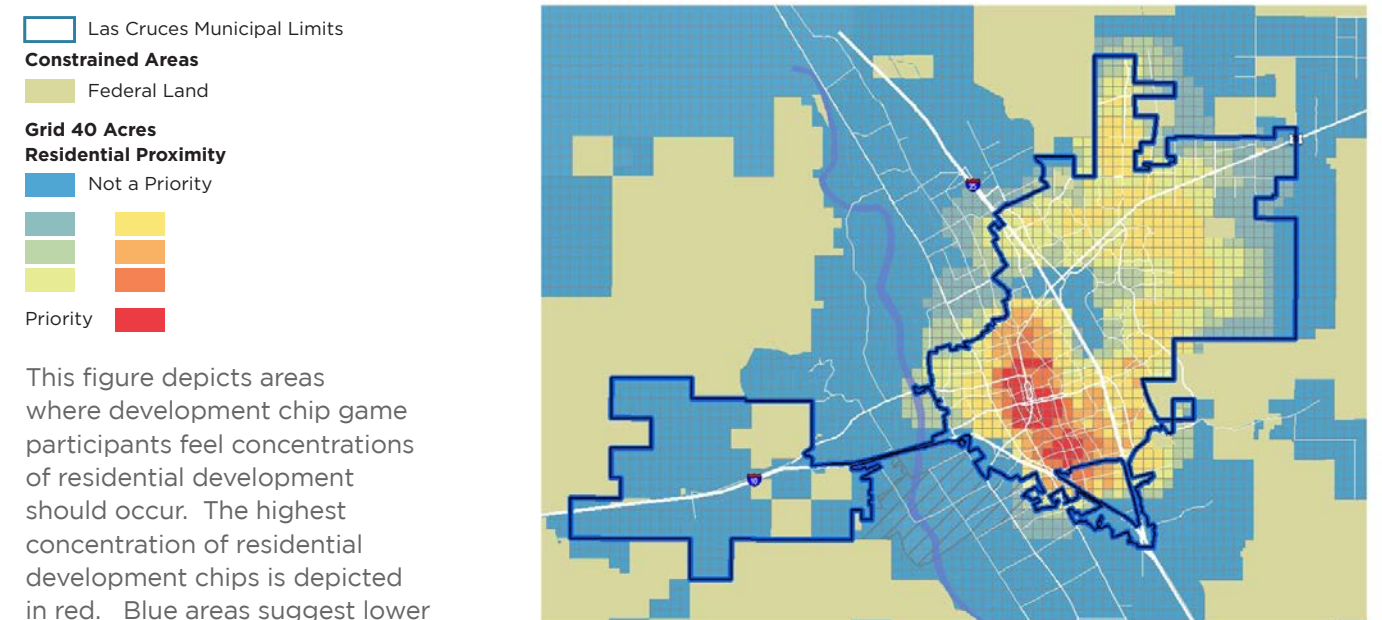
FIGURE 3.9, DEVELOPMENT CHIP GAME¹ - COMPATIBILITY & CONFLICT MAP



There are areas of consensus and conflict among the different groups regarding where future development should be concentrated. Areas shown in green represent greater consensus among groups in the placement of development chips. Areas in red depict less consensus between groups regarding the amount of potential development in certain areas.

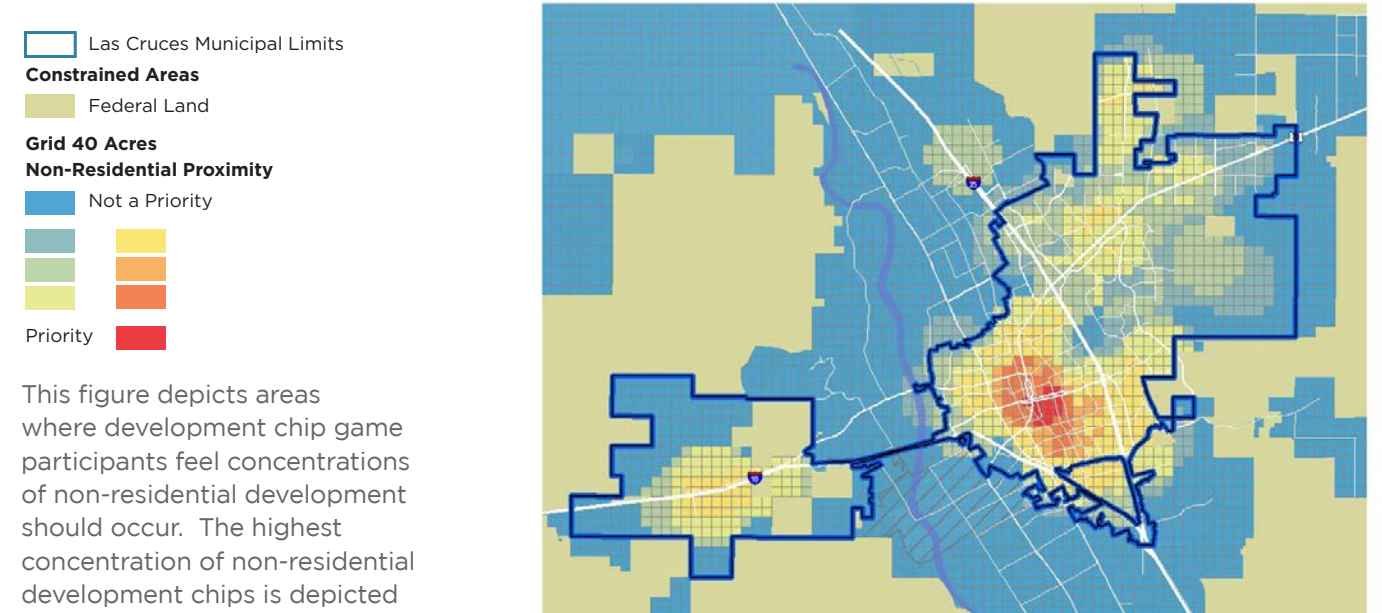
Figures 3.8 and 3.9 are graphical representations only. Full maps are available in the Elevate Las Cruces Appendix III-B.1. The development chip game is described on page 14.

FIGURE 3.10, DEVELOPMENT CHIP GAME¹ - RESIDENTIAL HOTSPOTS



This figure depicts areas where development chip game participants feel concentrations of residential development should occur. The highest concentration of residential development chips is depicted in red. Blue areas suggest lower concentrations of residential development chips.

FIGURE 3.11, DEVELOPMENT CHIP GAME¹ - NON-RESIDENTIAL HOTSPOTS



This figure depicts areas where development chip game participants feel concentrations of non-residential development should occur. The highest concentration of non-residential development chips is depicted in red. Blue areas suggest lower concentrations of non-residential development chips.

Figures 3.10 and 3.11 are graphical representations only. Full maps are available in the Elevate Las Cruces Appendix III-B.1. The development chip game is described on page 14.

TREND SCENARIO

A CONTINUATION OF TODAY'S DISPERSED, LOW-DENSITY DEVELOPMENT PATTERN

The Trend Scenario considers how the City of Las Cruces might develop if a dispersed pattern of growth - consistent with recent development patterns - was to spread throughout the analysis area. Future growth would continue to favor single-use, low-density development patterns and intensities expanding from existing suburban development. Infrastructure investments - water, sewer, roads, schools, parks, etc. - to serve an expanding service area may require the expenditure of significant financial resources.

The scenario applies the future land use categories introduced on pages 10 and 11 to undeveloped or underdeveloped property. Most land would develop as large-lot, single-family detached neighborhoods at the edges of town. Very little residential development occurs within the city's urban context. Slightly less than half (48%) of new residential growth occurs in areas outside of the city limits. Most non-residential development occurs along suburbanizing freeways and major thoroughfares to the north and east, or along Interstate 10 between NMSU and the Las Cruces Airport.

Key features of the trend growth scenario include:

- Low-density, single-use development patterns spread throughout the planning area.
- Outward expansion of infrastructure to serve newly developed areas.
- Reliance on cars for most trips in the planning area (very little regional bus transit service).
- Loss of the rural landscape (including farms, orchards, and undeveloped desert land) to accommodate new land uses.

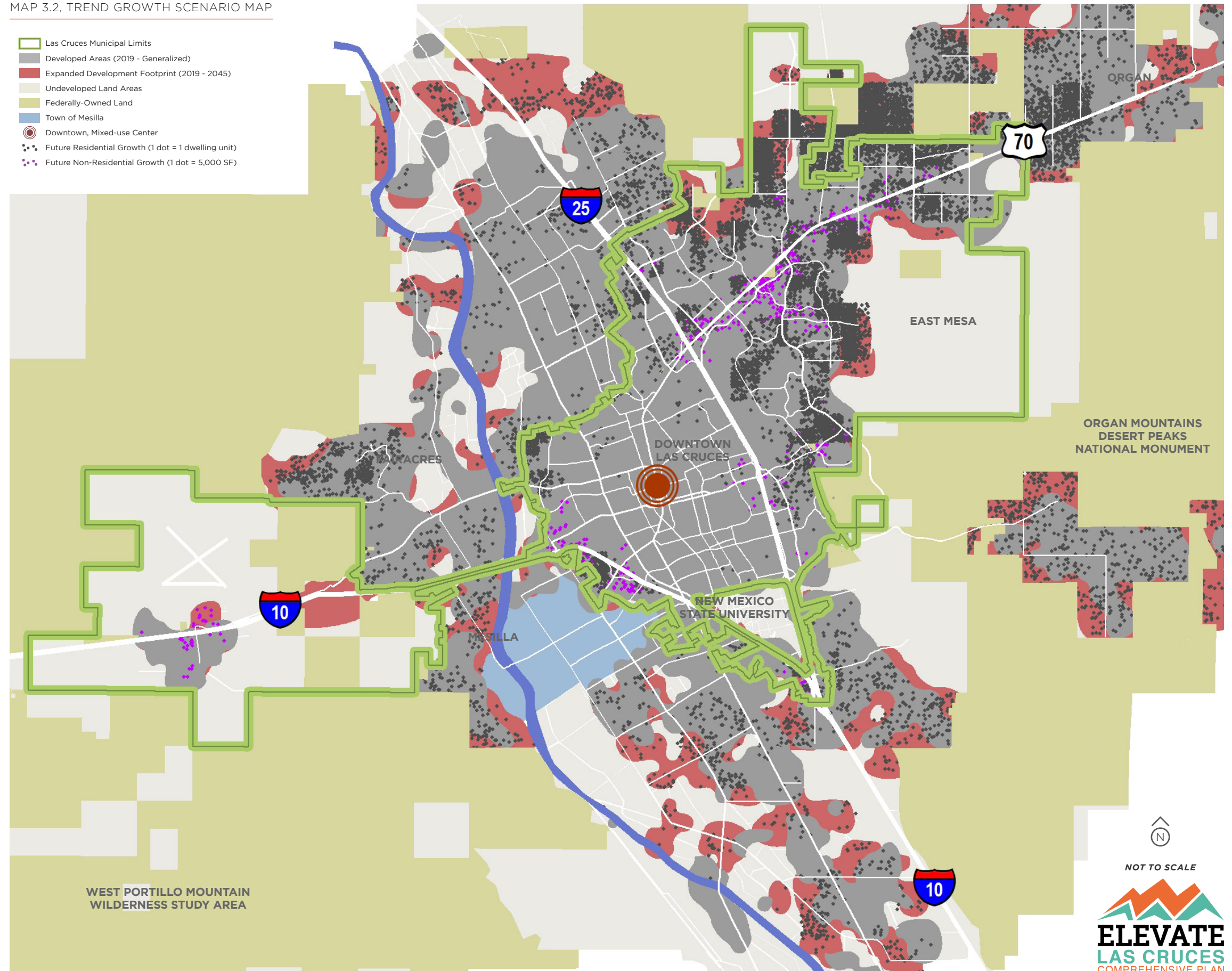
Additional Trend Growth Scenario features are presented on pages 20 and 21.

TABLE 3.2, TREND SCENARIO DEVELOPMENT CHARACTERISTICS

DEVELOPMENT TYPE	NUMBER (2019-2045)
SINGLE-FAMILY DWELLING UNITS	13,043 ADDITIONAL UNITS
MULTI-FAMILY DWELLING UNITS	1,560 ADDITIONAL UNITS
INDUSTRIAL BUILDING SQUARE FEET	559,348 ADDITIONAL SF
OFFICE BUILDING SQUARE FEET	1,103,257 ADDITIONAL SF
RETAIL BUILDING SQUARE FEET	1,464,500 ADDITIONAL SF
NATURAL AREA CONSUMED	6,567 ADDITIONAL ACRES

Source: City Explained

MAP 3.2, TREND GROWTH SCENARIO MAP



TREND SCENARIO DASHBOARD

The Trend Scenario presented on pages 18 and 19 assumes that recent and current development patterns continue in the future. More specifically, the trend scenario follows a decentralized pattern of development that mimics the City's current land use characteristics, regulatory structure, population and job growth projections, utility locations, and the presence of sensitive environmental or restricted lands. Ultimately, the trend scenario provides a baseline for comparison against other alternative scenarios.

The following presents an overview of expected trend growth scenario development outcomes, including a summary presented in **Figure 3.12** (facing page).

KEY LAND USE CONSIDERATIONS

In the trend scenario, Las Cruces' development footprint continues to expand, particularly in the East Mesa area, along US Highway 70, and just northeast of the West Mesa Industrial Park. Very little of this area includes state or federally held land as there appears to be sufficient developable acreage in private ownership to meet the city's projected growth in population, housing, and jobs.

RESIDENTIAL LAND USES

Most new residential dwelling units would develop as large-lot, single-family detached neighborhoods at the edges of town - with very limited residential infill activity. Significant areas of growth occur east of town including: the East Mesa, Hornada Road, North Sonoma Ranch Road and Soledad Canyon areas.

NON-RESIDENTIAL LAND USES

Strip commercial development would remain concentrated in the eastern part of the city along the US 70 corridor, near the major interstate interchanges and along Sonoma Ranch Boulevard - supporting new residential development. Warehousing and logistics facilities would develop along the southwestern parts of the city, and in the vicinity of the Las Cruces Airport and West Mesa Industrial Park.

OPEN SPACE

As development continues eastward, the trend scenario predicts some gradual encroachment on state and federally held lands in the East Mesa area. Overall the trend scenario does not emphasize the preservation of open space beyond sensitive environmental areas such as wetlands, floodplains, and arroyos.

TRANSPORTATION IMPACT

Changes to the transportation network such as new transit services, roads, or interchanges are not incorporated into the trend scenario. (The City's Capital Improvements Program and the Mesilla Valley MPO's long range transportation plan reveal only a limited number of new capital projects that would increase roadway or transit system connectivity.) Nonetheless, continuing patterns of low-density development and little expansion to the City's transit network favors more commuting by automobile even with possible investments in bicycle and pedestrian infrastructure.



Building and development patterns mimicking recent investment are projected into the future in the Trend Scenario model.

SUPPORTING INFRASTRUCTURE

Additional water and waste water system extensions would be required to support the additional 14,830 single-family units and 1,270 multi-family units projected by 2045 (see **Table 3.2**, page 18). The trend scenario does not prioritize reinvestment in existing infrastructure because recent growth patterns do not suggest that there has been significant residential infill activity in the city's older neighborhoods.

HOUSING CHOICE

In the trend scenario, rural neighborhoods and suburban neighborhoods continue to be developed with few geographic or fiscal constraints. Additionally, very little residential development occurs in the city center and a very modest amount of infill occurs within vacant areas in the center of the city. Overall, about 48 percent of new residential growth occurs outside of the core city in this scenario.

FIGURE 3.12, TREND SCENARIO DASHBOARD

The Trend Development Scenario assumes that recent and current development patterns in Las Cruces will continue in the future. **Figure 3.12** presents a generalized summary of probable development outcomes that may be expected as a result of a decentralized low-density future development pattern in Las Cruces.



COMPACT CENTERS SCENARIO

EMPHASIS ON GROWTH THROUGH INFILL DEVELOPMENT

The Compact Centers Scenario represents how the City of Las Cruces would grow if infill development represented the predominant growth pattern. Future growth would favor compact, mixed-use centers within and close to center city. This would minimize the amount of new development occurring outside of previously developed areas and in turn, minimize infrastructure demands.

This scenario was generated by first identifying six centers within which to focus new growth - primarily through infill. These six centers include: Downtown Las Cruces, Apodaca, Aggie Uptown, Amador Proximo, Arrowhead, Mesilla Valley Mall, and the West Picacho corridor. Some centers are existing activity nodes but would become denser as more infill development occurs. Most land support higher densities of residential and non-residential uses to support more walkable environments.

Key features of the Compact Centers Scenario include:

- Strong emphasis on infill development throughout the city center.
- Six mixed-use centers.
- Minimal development outside of center city neighborhoods.
- Minimal new infrastructure to serve newly developed areas.
- Improved conservation of the rural landscape to accommodate new neighborhoods and nonresidential uses.

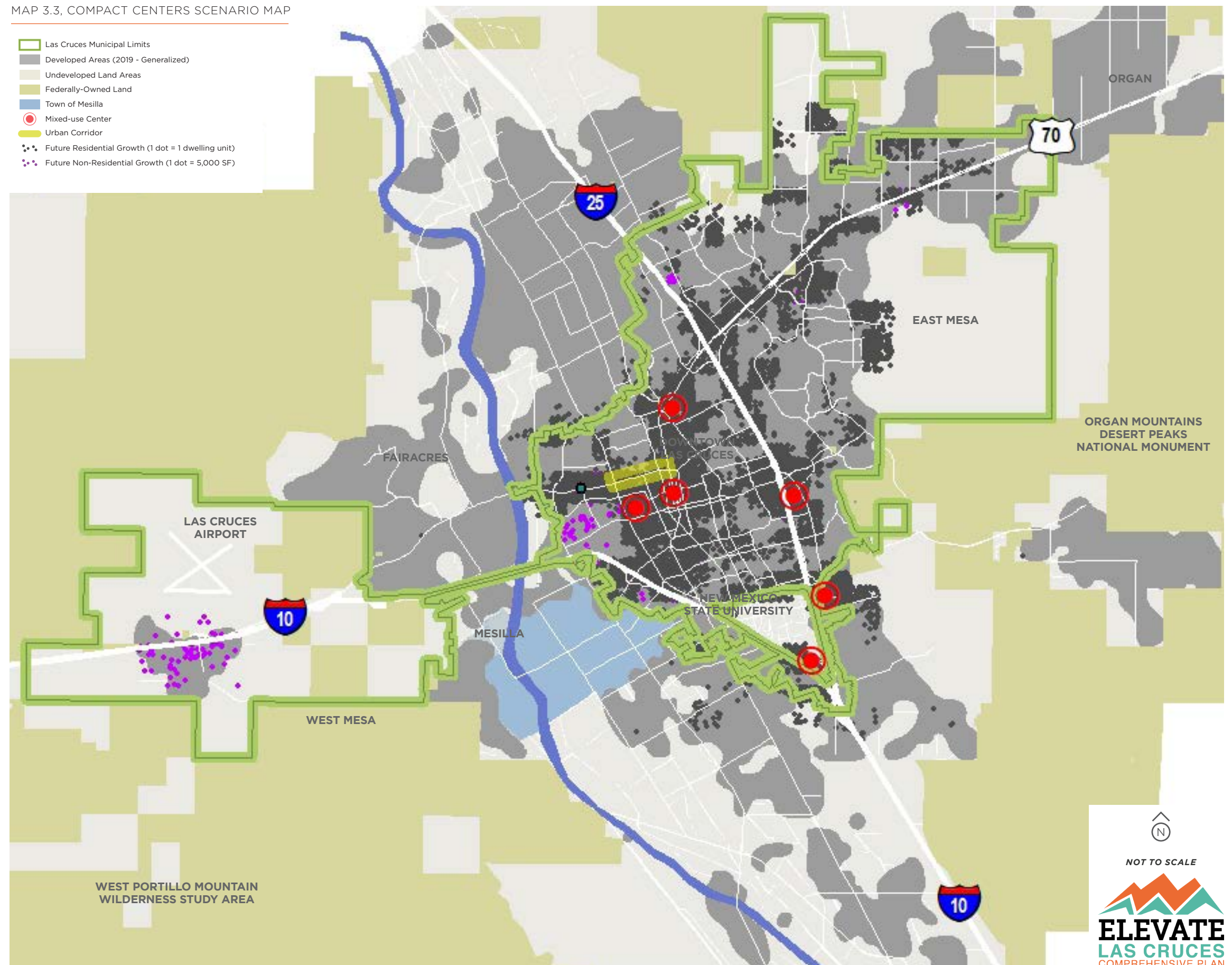
Additional Compact Centers Growth Scenario features are presented on pages 24 and 25.

TABLE 3.3, COMPACT CENTERS SCENARIO DEVELOPMENT CHARACTERISTICS

DEVELOPMENT TYPE	NUMBER (2019-2045)
SINGLE-FAMILY DWELLING UNITS	6,620 ADDITIONAL UNITS
MULTI-FAMILY DWELLING UNITS	9,480 ADDITIONAL UNITS
INDUSTRIAL BUILDING SQUARE FEET	559,000 ADDITIONAL SF
OFFICE BUILDING SQUARE FEET	1,103,000 ADDITIONAL SF
RETAIL BUILDING SQUARE FEET	1,607,000 ADDITIONAL SF
NATURAL AREA CONSUMED	714 ADDITIONAL ACRES

Source: City Explained

MAP 3.3, COMPACT CENTERS SCENARIO MAP



COMPACT CENTERS SCENARIO DASHBOARD

The Compact Centers Scenario presented on pages 22 and 23 assumes that future development will primarily occur as infill development. In contrast to the Trend Scenario, the majority of growth is contained within the existing city limits and is concentrated around the defined centers near the central core of the City (both existing and in areas of planned redevelopment).

The following presents an overview of expected consensus scenario development outcomes, including a summary presented in **Figure 3.13, Compact Centers** (facing page).

KEY LAND USE CONSIDERATIONS

In the Compact Centers Scenario, future development is primarily contained within the existing City limits. Key land use considerations include:

- Infill development would create a compact city center containing dense development nodes.
- Emphasis on mixed uses and housing choice.
- A large concentration of job opportunities in the downtown or near the downtown area.
- The smallest projected increase in development area and building footprints of all scenarios.

RESIDENTIAL LAND USES

In contrast to the Trend Scenario, nearly 60 percent of new residential dwelling units would occur as multi-family dwelling units. This would provide for a combination of attached single-family, duplexes, townhomes, or apartments. Approximately 84 percent of new residential development that is built would be near commercial centers, further supporting walkability. Significant areas of growth occur within the central core of the City west of Interstate 25, north and east of Interstate 10, and south of Main Street.

NON-RESIDENTIAL LAND USES

Most commercial development in this scenario would be concentrated within mixed-use centers, with retail, restaurants, offices, and residential all in close proximity. Similar to the Trend Scenario, warehousing and logistics facilities would develop along the southwestern parts of the city, and in the vicinity of the Las Cruces Airport and West Mesa Industrial Park.

PLACE TYPES

This scenario relies on the inclusion of mixed-use and conservation place types defined on page 15, and would require significant changes to the City's future development regulations.

OPEN SPACE

The Compact Centers Scenario presents the greatest potential to preserve substantial amounts of open space, as it is projected to include the smallest increase in developed area. Arroyos would be preserved and avoid development pressure. Infrastructure and development toward the Organ Mountains-Desert Peaks NM and BLM holdings would be minimized or could be dis-incentivized completely. Of all four growth scenarios presented in this report, the Compact Centers Scenario would consume the least amount of natural area acreage for new development (approximately 36%).

TRANSPORTATION IMPACT

This scenario may illustrate a reduction in geographic scope of the City's pending Future Thoroughfare Map in contrast to the Mesilla Valley MPO's Major Thoroughfare Map – particularly in those areas where open space preservation might be promoted.



Conservation neighborhoods present a way for developers to exceed standard net development densities to increase density while conserving open space.

SUPPORTING INFRASTRUCTURE

The Compact Centers Scenario presents the fewest demands for new infrastructure (including transportation). Infrastructure investment is focused on upgrading/up-sizing existing utilities in this growth scenario.

HOUSING CHOICE

Housing choice increases significantly in the Compact Centers Scenario with an increase in more compact and attached housing options. More so than the other scenarios, new residential development would occur as infill development in vacant areas of the city center.

FIGURE 3.13, COMPACT CENTERS SCENARIO DASHBOARD

The Compact Centers Scenario assumes that new development will occur primarily within the core of the City as infill or mixed-use centers. **Figure 3.13** presents a summary of probable development outcomes that may be expected as a result of more centralized, higher density development patterns in Las Cruces.



STRATEGIC CENTERS & CORRIDORS SCENARIO

AN EMPHASIS ON STRATEGIC INVESTMENTS TO GUIDE GROWTH

The Strategic Centers & Corridors Scenario represents how the City of Las Cruces would grow if strategic investments directed growth toward specific centers and corridors throughout the City. This would result in some development occurring outside the existing urban context, but near the designated centers and corridors.

This alternative scenario includes the mixed-use centers presented in the Compact Centers Growth Scenario (page 22), but also includes additional centers located further away from center city. Additional infrastructure investments would likely be needed to serve increased development intensities in these new centers. The additional centers identified in this scenario include the intersections of: Engler/Mt. Baldy, Engler/Rinconada, Lohman/Sonoma Ranch, and Rinconada/Sonoma Ranch.

This scenario also directs growth along defined corridors, including Solana Drive, S. Telshor Drive, Avenida de Mesilla, and S. Valley Drive. The character of these corridors would be more urban than they are today, with multi-modal transportation options and denser commercial development.

The key feature of the Strategic Centers and Corridors Scenario is:

- Strong emphasis on infill development throughout the city center, in the East Mesa and along key corridors.

Additional Strategic Centers & Corridors Growth Scenario features are presented on pages 28 and 29.

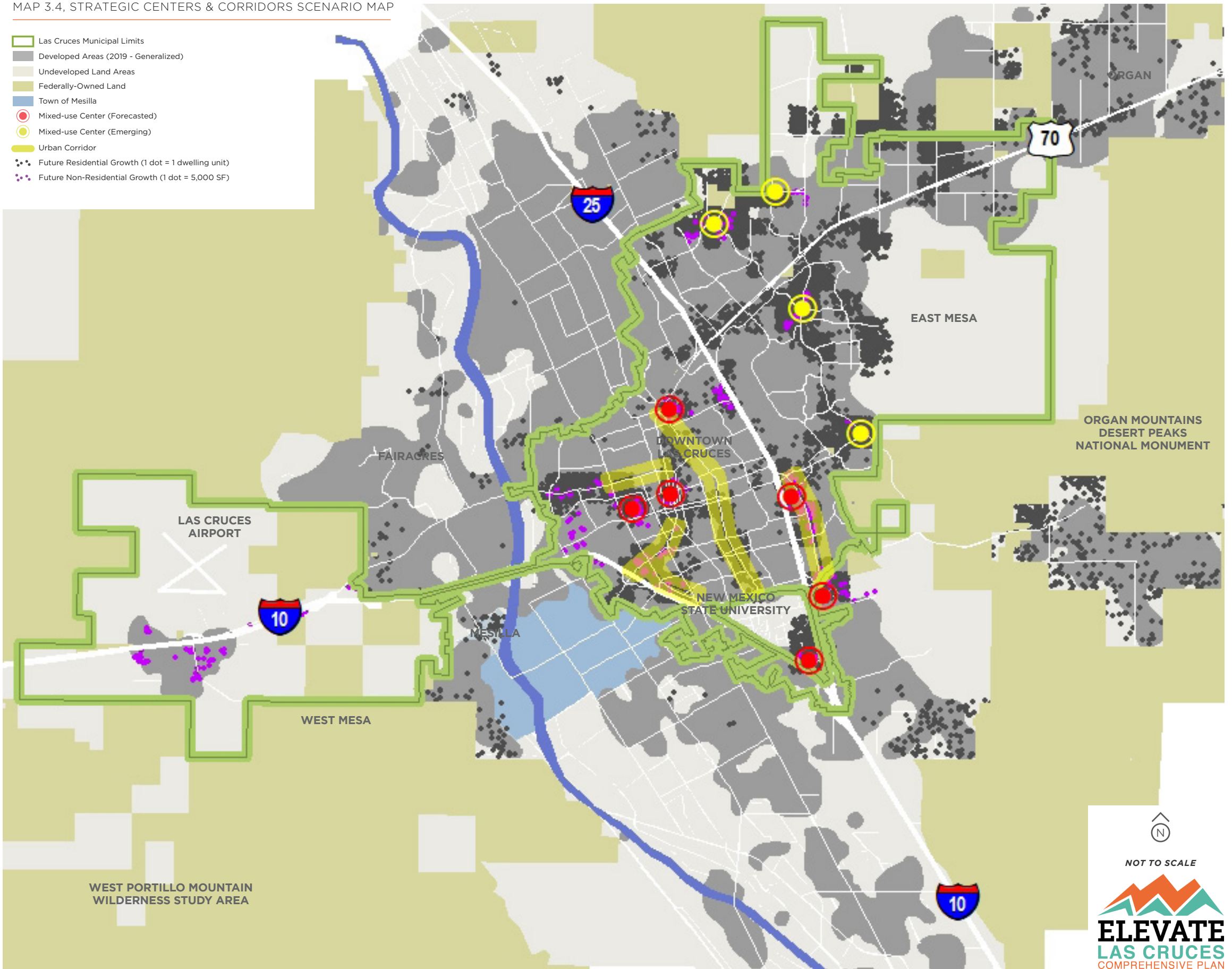
TABLE 3.4, STRATEGIC CENTERS & CORRIDORS SCENARIO DEVELOPMENT CHARACTERISTICS

DEVELOPMENT TYPE	NUMBER (2019-2045)
SINGLE-FAMILY DWELLING UNITS	6,430 ADDITIONAL UNITS
MULTI-FAMILY DWELLING UNITS	9,670 ADDITIONAL UNITS
INDUSTRIAL BUILDING SQUARE FEET	559,000 ADDITIONAL SF
OFFICE BUILDING SQUARE FEET	1,103,000 ADDITIONAL SF
RETAIL BUILDING SQUARE FEET	1,607,000 ADDITIONAL SF
NATURAL AREA CONSUMED	2,377 ADDITIONAL ACRES

Source: City Explained

MAP 3.4, STRATEGIC CENTERS & CORRIDORS SCENARIO MAP

- Las Cruces Municipal Limits
- Developed Areas (2019 - Generalized)
- Undeveloped Land Areas
- Federally-Owned Land
- Town of Mesilla
- Mixed-use Center (Forecasted)
- Mixed-use Center (Emerging)
- Urban Corridor
- Future Residential Growth (1 dot = 1 dwelling unit)
- Future Non-Residential Growth (1 dot = 5,000 SF)



STRATEGIC CENTERS & CORRIDORS SCENARIO DASHBOARD

The Strategic Centers & Corridors Scenario presented on pages 26 and 27 assumes that strategic investments within defined centers and corridors will guide future growth. This scenario features more infill development than the Trend Scenario, but less than what is assumed in the Compact Centers Scenario.

The following presents an overview of expected consensus scenario development outcomes, including a summary presented in **Figure 3.14, Strategic Centers & Corridors Scenario Dashboard** (facing page).

KEY LAND USE CONSIDERATIONS

This scenario focuses on the continued development of existing or proposed urban centers and corridors of activity, as well as the creation or investment in new centers and corridors in newer portions of the City. Key land use considerations include:

- Compact mixed-use centers that provide both housing and job opportunities.
- Land adjacent to these centers would transition between higher development intensities and surrounding to single-family residential areas.
- Reduction in the rate of expansion for Las Cruces' developed area footprint.
- Increased building height dispersed within activity centers.

RESIDENTIAL LAND USES

In this scenario, about 60 percent of new residential dwelling units would occur as multi-family, which is similar to the Compact Centers Scenario. This would result in a blending of attached single-family, duplexes, townhomes, or apartments across development tracts. Approximately 66 percent of new residential development would be near commercial centers, providing more walkable areas than the Trend Scenario, but less than the Compact Centers Scenario. Significant areas of growth occur in the city center area but also areas to the north and east.

Urban Corridors can support mixed use or contemporary single use development subject to design characteristics that make the area enticing for pedestrian activity.

NON-RESIDENTIAL LAND USES

New commercial development would mostly occur near the defined mixed-use centers, neighborhood centers, and urban corridors. Similar to the other two scenarios, warehousing and logistics facilities would develop along the southwestern parts of the city, and in the vicinity of the Las Cruces Airport and West Mesa Industrial Park.

PLACE TYPES

This scenario relies on the inclusion of mixed-use and conservation place types defined on page 15, and would require significant changes to the City's future development regulations.

OPEN SPACE

This scenario would promote open space preservation, but in a manner where it is being integrated into new development areas. The preservation of arroyos remains essential, but integration into active spaces is more typical and may be developed as part of neighborhood open space.

TRANSPORTATION IMPACT

This scenario has the greatest potential to reduce commute times through increased housing choice and access to job centers. Transit would be effective in this scenario but would not be supported by the same level of a critical mass of a denser growth scenario. Consistent with the Compact Growth Scenario, this scenario may illustrate a reduction in geographic scope of the City's pending Future Thoroughfare Map in relation to the Mesilla Valley MPO's Major Thoroughfare Map.



SUPPORTING INFRASTRUCTURE

This scenario presents targeted and predictable investment around the proposed centers and corridors of activity - include both the investment into new infrastructure for new activity centers as well as reinvestment in existing activity centers.

HOUSING CHOICE

The Strategic Centers & Corridors Scenario would provide a variety of housing types throughout the overall community. The mix would see a moderate increase in attached housing types but continues to have a significant role for detached single-family.

FIGURE 3.14 STRATEGIC CENTERS & CORRIDORS SCENARIO DASHBOARD

The Strategic Centers & Corridors Scenario assumes that development will generally follow strategic investments in activity centers and along targeted corridors. **Figure 3.14** (below) presents a generalized summary of probable development outcomes that may be expected as a result of this mixed-use center and corridor-focused development pattern in Las Cruces.



CONSENSUS SCENARIO

A BALANCED GROWTH SCENARIO

The Consensus Scenario represents a combination of the Trend Scenario and two alternative growth scenarios to reflect preferred future growth patterns. This scenario limits centers and corridors only to those that would account for projected growth and also limits new development in currently undeveloped areas. There is some development occurring outside the urban context, but primarily near the defined centers and corridors.

The consensus scenario identifies both “Forecasted” and “Emerging” town centers and urban corridors. Forecasted centers and corridors are already developing or likely to be developed in the near future and account for most of the growth in this model. Emerging centers and corridors are not as likely to be developed in the immediate future and may not be entirely built out by year 2045. Therefore the emerging centers and corridors account for moderate concentrations of growth.

Key features of the Consensus Scenario include:

- Continued focus on the centers and corridors approach.
- Modest infill more prevalent in proximity to town centers, urban corridors, and major intersections.
- Limited residential development on the East Mesa, mostly confined to conservation neighborhoods.
- Preservation of all arroyos as open space.
- Accounts for currently entitled lots.
- Continued office and residential development in the West Mesa/Airport area.

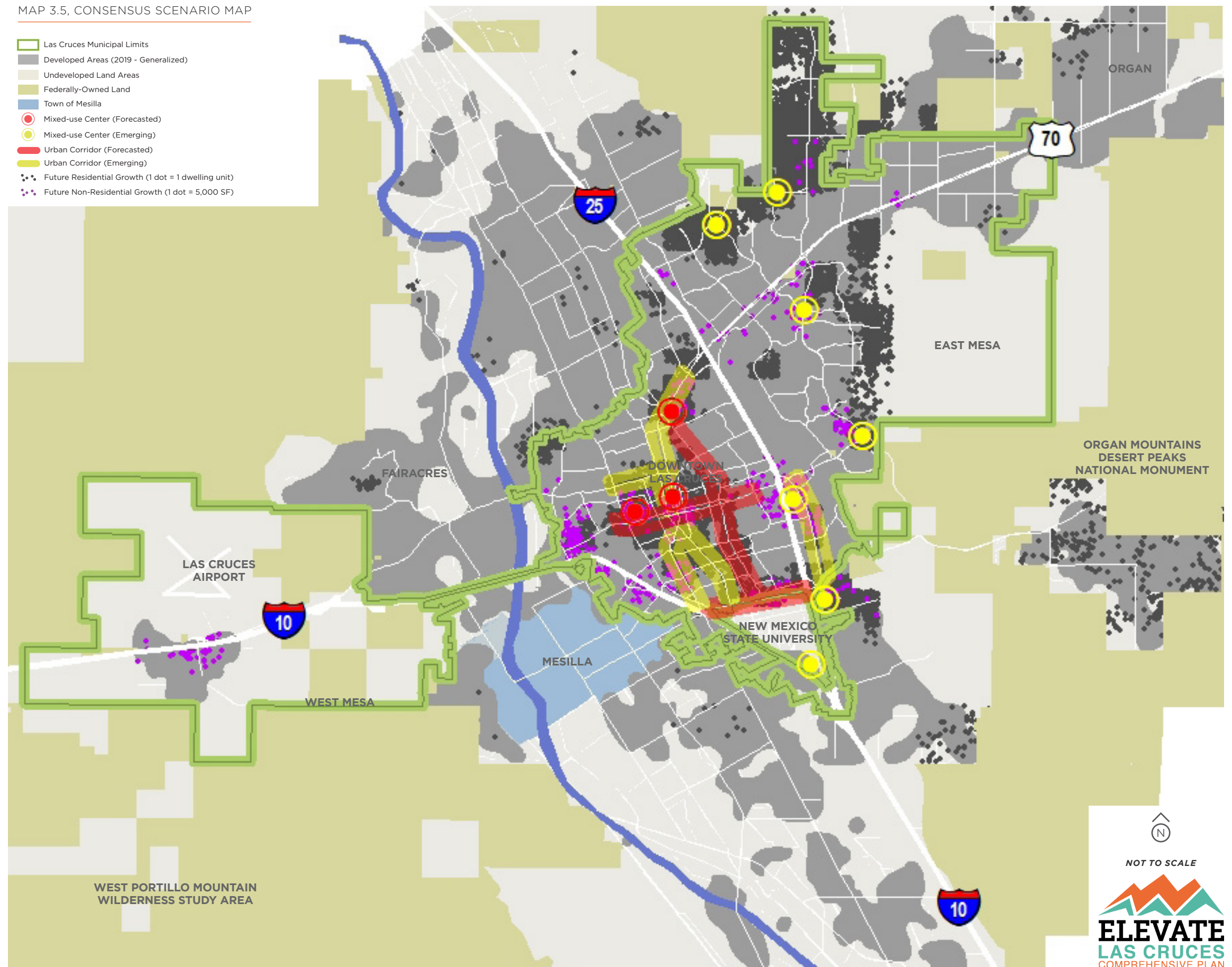
Additional Consensus Growth Scenario features are presented on pages 31 and 32.

TABLE 3.5, CONSENSUS SCENARIO DEVELOPMENT CHARACTERISTICS

DEVELOPMENT TYPE	NUMBER (2019-2045)
SINGLE-FAMILY DWELLING UNITS	10,790 ADDITIONAL UNITS
MULTI-FAMILY DWELLING UNITS	5,310 ADDITIONAL UNITS
INDUSTRIAL BUILDING SQUARE FEET	559,000 ADDITIONAL SF
OFFICE BUILDING SQUARE FEET	1,103,000 ADDITIONAL SF
RETAIL BUILDING SQUARE FEET	1,607,000 ADDITIONAL SF
NATURAL AREA CONSUMED	3,643 ADDITIONAL ACRES

Source: City Explained

MAP 3.5, CONSENSUS SCENARIO MAP



CONSENSUS SCENARIO DASHBOARD

The Consensus Scenario presented on pages 30 and 31 represents a combination of the previously presented alternative growth scenarios. This scenario is referred to as a “consensus” scenario because it represents the feedback that was received from the City Council and CPAC as part of this scenario planning initiative (see page 14). The Consensus Scenario features focused growth along defined centers and corridors and conservation of key environmental areas.

The following presents an overview of expected consensus scenario development outcomes, including a summary presented in **Figure 3.15, Consensus Scenario Dashboard** (facing page).

KEY LAND USE CONSIDERATIONS

In the Consensus Scenario, the majority of new development occurs within the existing city limits, but there is some development that occurs just beyond the city limits.

RESIDENTIAL LAND USES

In this scenario, about 33 percent of new residential dwelling units would occur as multi-family, which represents a mid-point between the Trend Scenario and the two alternative growth scenarios. Approximately 55 percent of new residential development would be built near commercial centers, providing more walkable areas than the Trend Scenario, but less than the two alternatives. Significant areas of growth occur in the city center area and within entitled growth areas (approved lots).

NON-RESIDENTIAL LAND USES

New commercial development would mostly occur near the defined town centers and along urban corridors. Similar to the other scenarios, warehousing and logistics facilities would develop along the southwestern parts of the city, and in the vicinity of the Las Cruces Airport and West Mesa Industrial Park.

PLACE TYPES

This scenario relies on the inclusion of mixed-use and conservation place types defined on page 15, and would require significant changes to the City’s future development regulations.

The Consensus Scenario would promote increased housing densities and different housing types in some areas of the City.

OPEN SPACE

The Consensus Scenario would promote open space preservation, but not to the same extent as the Compact Centers scenario. The preservation of arroyos remains essential and an extension of Mesa Grande Boulevard is identified as a boundary for most residential growth in the East Mesa.

TRANSPORTATION IMPACT

Public transit would be enhanced along the defined urban corridors, however, residential growth to the north and eastern parts of the city would likely result in continued dependence on the automobile. Consistent with the two alternative scenarios, this scenario will likely illustrate a reduction in geographic scope of the City’s pending Future Thoroughfare Map as opposed to the Mesilla Valley MPO’s existing Major Thoroughfare Map.

SUPPORTING INFRASTRUCTURE

Water and waste water system upgrades and extensions would be required to support the additional residential development occurring both within and just outside the existing City limits. This scenario however, has more predictable investments around proposed centers and corridors of activity than in the Trend Scenario.

HOUSING CHOICE

The Consensus Scenario would provide more variety of housing types than the Trend Scenario, but still maintain a majority of detached single-family units except within centers and urban corridors.



FIGURE 3.15 CONSENSUS SCENARIO DASHBOARD

The Consensus Growth Scenario combines elements of both the trend and the two alternative scenarios presented in this report as well as input from the planning process. **Figure 3.15** (below) presents a summary of probable development outcomes that may be expected in Las Cruces as a result of the Consensus Scenario growth and development patterns.



FISCAL IMPACT ANALYSIS

The fiscal impact of different development types on a community will vary based on the location and proximity to services, infrastructure, transportation, and employment centers. To identify and quantify the costs and trade-offs associated with each growth scenario presented in this report, a fiscal impact analysis has been conducted as part of the scenario planning initiative. The fiscal impact model is found in **Appendix III-C**. This section provides a brief summary of the fiscal impact methodology and results.

METHODOLOGY

The fiscal impact analysis seeks to compare anticipated community revenues versus expenditures related to possible future growth scenarios. The project team worked with various departments within Las Cruces to identify municipal revenues and expenditures for 2019. Future revenues and expenditures were then estimated based on the new growth expected in each of the scenarios - including assumptions about the number of people served, type of housing units, street lane miles, park acreage, and more.

REVENUE

Different growth patterns affect project government revenues in multiple ways. Typical impacts that development has on the revenue sources measured by the fiscal impact model include:

- **Gross Receipts Tax¹**. Growth in revenue is impacted by the overall population and associated retail spending, job growth, and industry spending.
- **Property Taxes**. Growth in revenue is dependent on the value of additional development.
- **Gas Tax**. Revenue generally increases with growth of the population.

EXPENDITURES

Typical impacts that development has on the different types of municipal expenditures include:

- **Fire & Emergency Services**. Growth in population will result in increased calls for service and need for response.
- **Parks & Recreation**. Increased population will require more parkland to meet city's established parkland level of service standards.
- **Police**. Growth in population will result in increased calls for service and need for patrols.
- **Public Works**. Greatest costs are related to maintenance of new roads constructed as a result of new development.
- **Other**. Expenditures related to administration and general services generally increase along with more population and employment.

SUMMARY OF RESULTS

Table 3.6, Fiscal Impact Analysis Summary Results, provides an overview of the City of Las Cruces' anticipated revenues, expenditures, net fiscal impact, and capital costs related to each of the four growth scenarios prepared as part of this initiative.

NET FISCAL IMPACT

The net fiscal impact represents the difference between the total expenditures and total revenues of each scenario. As shown in **Table 3.6**, the net fiscal impact is greatest for the Compact Centers Scenario, with a positive net impact of nearly \$4M, followed by the Strategic Centers & Corridors Scenario (positive net impact of \$2.8M), and Consensus Scenario (positive net impact of \$2.3M). Capital costs are one-time expenditures and are shown separately.

While most revenue sources are based on total population or total level of development and do not vary by scenario, property tax is a significant differentiating factor. Single family residential development - with the highest property value - generates the greatest amount of property tax revenue. Because of this the Trend Scenario - with the most single family residential of the three alternatives - is estimated to generate the highest property tax revenue.

¹ GRT is a state tax on the total gross revenues of a company.

TABLE 3.6, FISCAL IMPACT ANALYSIS SUMMARY RESULTS

DESCRIPTION	2019 GENERAL FUND	TREND SCENARIO (Page 18)	COMPACT CENTERS SCENARIO (Page 22)	STRATEGIC CENTERS & CORRIDORS SCENARIO (Page 26)	CONSENSUS SCENARIO (Page 30)
REVENUE (AT BUILD-OUT)					
GROSS RECEIPTS TAX	\$75,296,493	\$14,806,169	\$14,806,169	\$14,806,169	\$14,806,169
PROPERTY TAXES	\$11,322,518	\$6,124,299	\$4,515,316	\$4,669,458	\$5,295,763
GENERAL FUND (OTHERS)	\$12,747,601	\$1,579,661	\$1,579,661	\$1,579,661	\$1,579,661
GAS TAX	\$1,578,469	\$593,161	\$593,161	\$593,161	\$593,161
TOTAL REVENUE	\$100,945,081	\$23,103,291	\$21,494,307	\$21,648,450	\$22,274,755
EXPENDITURES (AT BUILD-OUT)					
FIRE & EMERGENCY SERVICES	(\$15,502,962)	(\$5,407,400)	(\$2,668,500)	(\$3,709,500)	(\$4,366,400)
PARKS & RECREATION	(\$11,679,459)	(\$3,060,528)	(\$3,060,528)	(\$3,060,528)	(\$3,060,528)
POLICE	(\$25,855,550)	(\$9,829,158)	(\$9,829,158)	(\$9,829,158)	(\$9,829,158)
PUBLIC WORKS	(\$9,243,633)	(\$1,557,667)	(\$362,991)	(\$666,895)	(\$1,045,399)
GENERAL FUND (OTHERS)	(\$33,346,035)	(\$1,624,030)	(\$1,624,030)	(\$1,624,030)	(\$1,624,030)
PUBLIC WORKS CIP ROAD MAINTENANCE	(\$4,700,000)	N/A	N/A	N/A	N/A
TOTAL EXPENDITURES	(\$100,327,639)	(\$21,478,783)	(\$17,545,208)	(\$18,890,112)	(\$19,925,515)
NET FISCAL IMPACT (AT BUILD-OUT)					
DIFFERENCE BETWEEN REVENUE & EXPENDITURES	\$617,442	\$1,624,507	\$3,949,099	\$2,758,338	\$2,349,239
CAPITAL COSTS (AT BUILD-OUT)					
FIRE & EMERGENCY SERVICES	N/A	(\$38,500,000)	(\$6,250,000)	(\$19,150,000)	(\$25,600,000)
POLICE	N/A	(\$5,960,853)	(\$5,960,853)	(\$5,960,853)	(\$5,960,853)
PARKS & RECREATION	N/A	(\$39,645,100)	(\$39,645,100)	(\$39,645,100)	(\$39,645,100)
TOTAL CAPITAL COSTS	N/A	(\$84,105,953)	(\$51,855,953)	(\$64,755,953)	(\$71,205,953)

Sources: City of Las Cruces, Economic and Planning Systems.

The differentiating factors on the expenditures are Fire & Emergency Services, Police, and Public Works. As shown in **Table 3.6**, the need for full staffing at new fire stations has a significant impact on expenditures, as does the addition of new roads and the maintenance costs associated.

The Trend Scenario, with the highest need for public services, requires the highest amount of associated municipal expenditures. The Compact Growth Centers Scenario, which focuses most growth in existing developed areas, has the lowest need for these services and thus requires the lowest amount of associated municipal expenditures.



The scenario planning initiative suggests an interest in promoting fiscally conservative growth and development patterns, and balancing new growth with the conservation of important natural areas.

GROWTH SCENARIO SUMMARY

Comparison of the growth scenarios presented in this report confirms that land use patterns and the intensity of development can have a significant impact on a community's quality of life, economic vitality, financial stability, and efficiency in providing public facilities and services. **Figure 3.16, Growth Scenario Comparison** (facing page) compares key outputs between the four growth scenarios generated by the City's scenario planning initiative. (**Figure 3.16** should not be confused with the "dashboard" figures previously presented in the report which use growth scenario outputs to articulate the anticipated effect of long-term development impacts to the City.)

SUMMARY OF MODELING OUTPUTS

As previously presented in this report, all four growth scenarios presume that the amount of projected future development remains constant. What has been altered among the four growth scenarios is the location and intensity of development, potentially impacting development character, transportation mode choice, infrastructure costs, and overall quality of life.

The following assumptions can be made for each of the four growth scenarios modeled as part of this initiative:

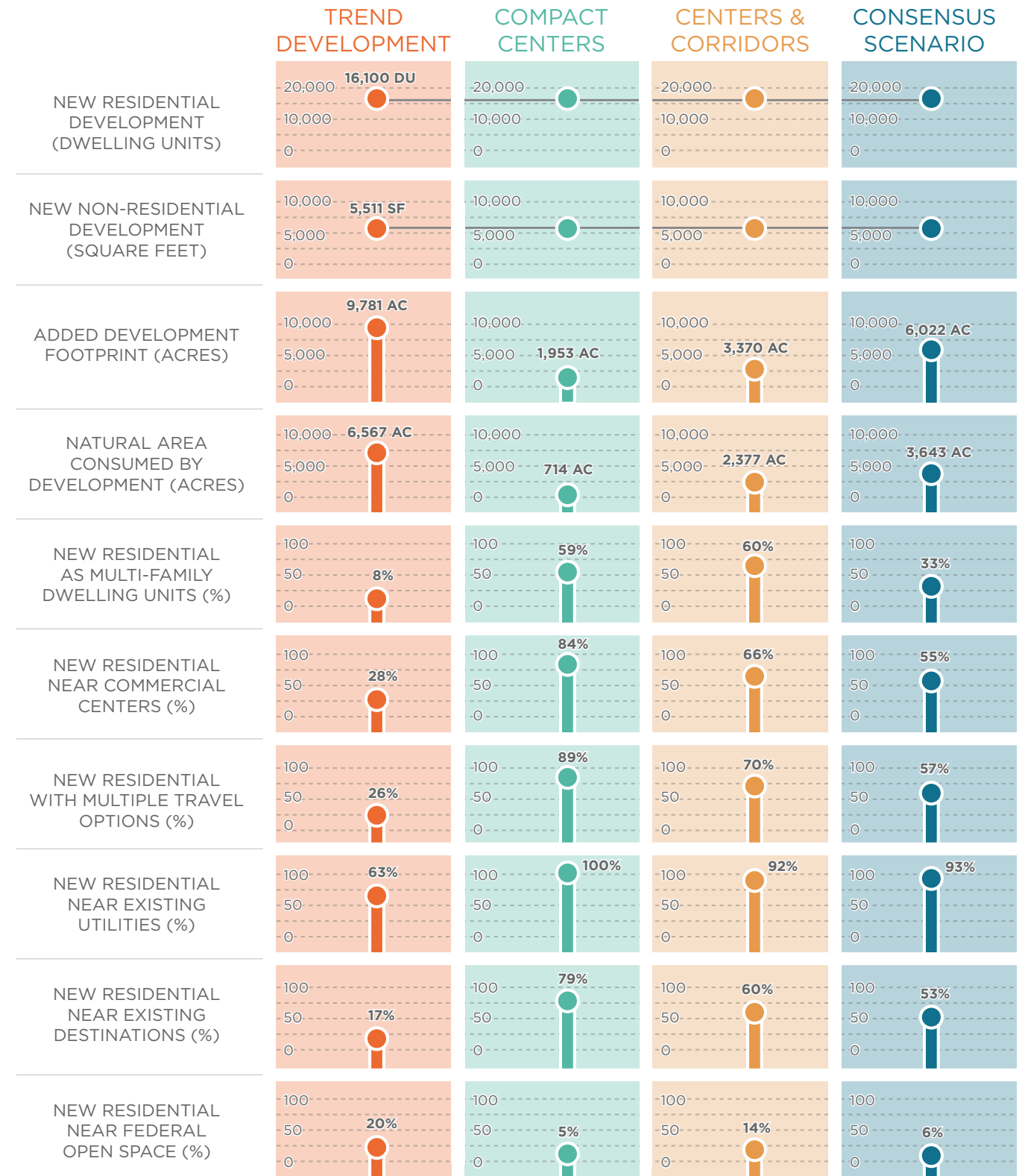
- **Trend Scenario.** Represents what Las Cruces would look like if current development patterns continue into the future. Consumes the most amount of natural area for development and has the largest development footprint. This scenario has the highest expenditures for serving future growth.

- **Alternative Scenario - Compact Centers.** Emphasizes growth within the existing developed footprint of Las Cruces and promotes conservation of undeveloped land. Consumes the least amount of natural area for development and has the smallest development footprint. This scenario has the lowest expenditures for serving future growth.
- **Alternative Scenario - Strategic Centers & Corridors.** Evaluates development within a series of dispersed activity centers and connecting corridors in strategic areas of the city. Consumes less land than the Trend Scenario but more than the Compact Centers Scenario. Contains the highest number of new multi-family residential units.
- **Consensus Scenario.** Represents desirable elements from each of the other scenarios and is used to generate the Elevate Las Cruces Future Development Map and Major Thoroughfare Map. This scenario consumes less land than the Trend Scenario but more than the two alternative scenarios. The majority of performance metrics depicted in **Figure 3.16** fall in between the other scenarios and represent a more balanced growth and development option.

MOVING FORWARD

The Consensus Scenario is the foundation for the Elevate Las Cruces Future Development Map and Major Thoroughfare Map presented in **Volume I, Elevate Las Cruces**. The Future Development Map includes the same place types that were developed as part of this scenario planning initiative and considers the results of the scenario planning exercises (page 14) for determining the location of place types.

FIGURE 3.16 GROWTH SCENARIO COMPARISON¹



1. A detailed explanation of each of these metrics is found in the Appendix III-D.



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