

North Land Use Plan

ACKNOWLEDGMENTS

● *City Council* ●

Skip Rimsza, Mayor
Dave Siebert, District 1
Frances Emma Barwood, District 2
Peggy A. Bilsten, District 3
Craig L. Tribken, District 4
John Nelson, District 5
Sal DiCiccio, District 6
Doug Lingner, District 7
Cody Williams, District 8

● *Planning Commission** ●

Mary Jo Waits, Chair
Mike Bielecki, Vice Chair
Virgil Berry Jr.
Chris Hamel
Jim Sasser
Lois Savage
Gary Trujillo

● *City Management* ●

Frank Fairbanks, City Manager
Raymond F. Bladine, Deputy City Manager

● *Supervision* ●

David E. Richert, Planning Director
Ray Quay, Assistant Planning Director
Jim Mathien, Planner III, North Team Leader
David Moody, Deputy Development Services Director

● *Project Team* ●

Jolene Ostler, Planner II, Project Manager, North Land Use Plan
Al Zelinka, Planner I, Project Manager, North Land Use Study
Dean Brennan, Planner II
Randy Weaver, Planner I
John Eamigh, Planning Technician IV, Graphic Designer
Diana Molssonier, Planning Technician IV, Graphics
Howard Steere, Secretary II
Dawn Coomer, Planning Intern

● *Desert View Tri-Villages Planning Committee* ●

Matthew Brady, Chair
Gordon Taylor, Vice-Chair
Faith Sussman, North Land Use Plan Subcommittee Chair
Jean Anderson
Howard Bickerdyke
Daniel Bradley
Arthur Burrows
Bruce Dressel
Christopher Estes
Susan Miner
Carol Shuler
Pat Shepherd-Achenbaugh
Howard Sobelman
Jennifer Mund-Thomas

Special thanks are extended to Dean John Meunier, Frederick Steiner, and many faculty and students of the College of Architecture and Environmental Design, Arizona State University who participated in the North Sonoran Land Use Character Charrette which laid groundwork for this Plan. Thanks are also extended to the Arizona Fish and Game and Arizona State University West for providing guidance on desert ecology.

*at time of adoption

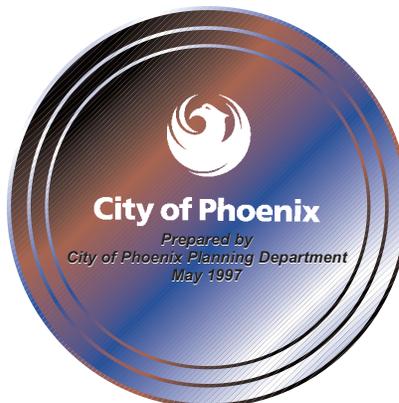
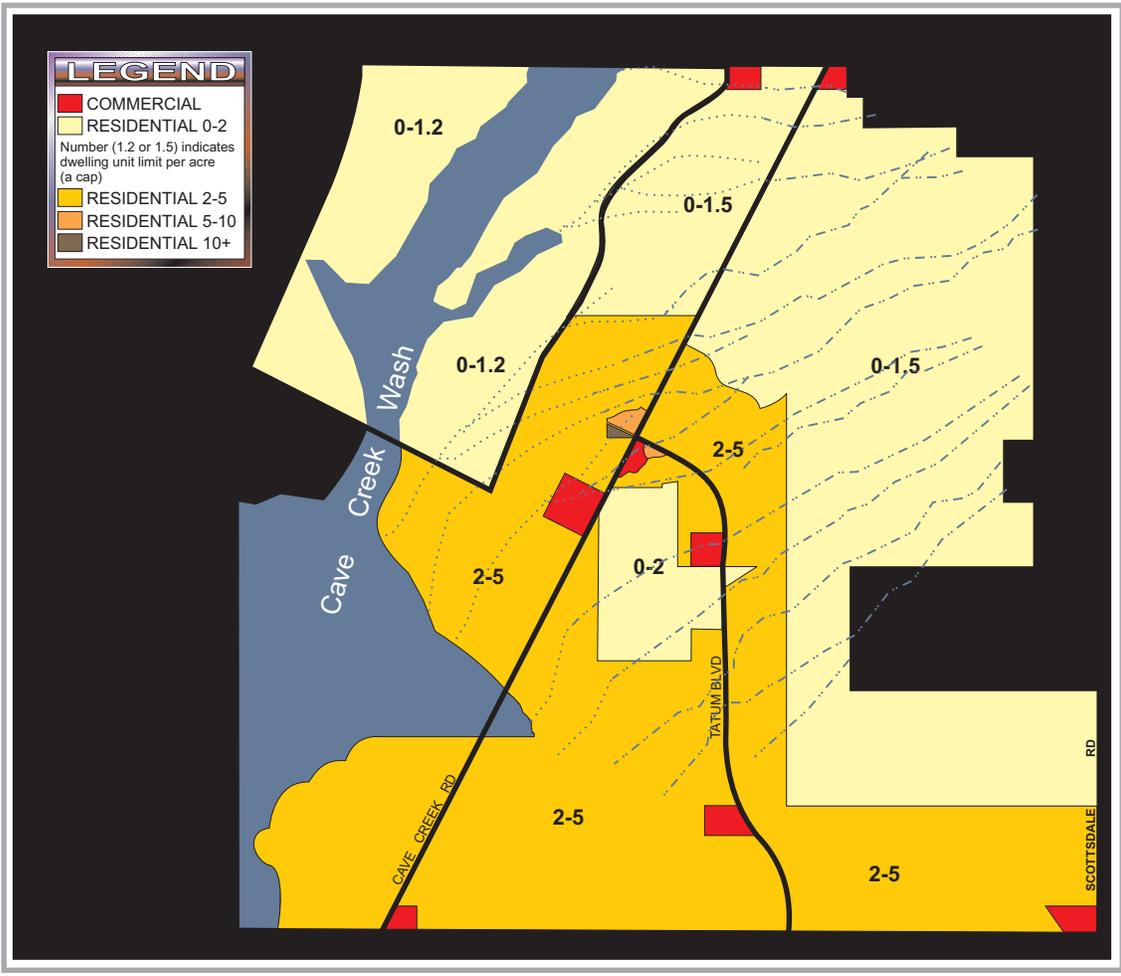


TABLE OF CONTENTS

Background	3
North Land Use Study	6
Strategic Land Use Planning Concepts	8
North Land Use Plan	12
Implementation	19
Appendix: Conclusions of the North Land Use Study	20

Upon request, this publication will be made available within a reasonable length of time through appropriate auxiliary aids or services to accommodate an individual with a disability. this publication may be made available through the following auxiliary aids or services: large print, Braille, audiotape or computer diskette. Contact Theresa Damiani, 262-6368/v or 534-5500 TDD.



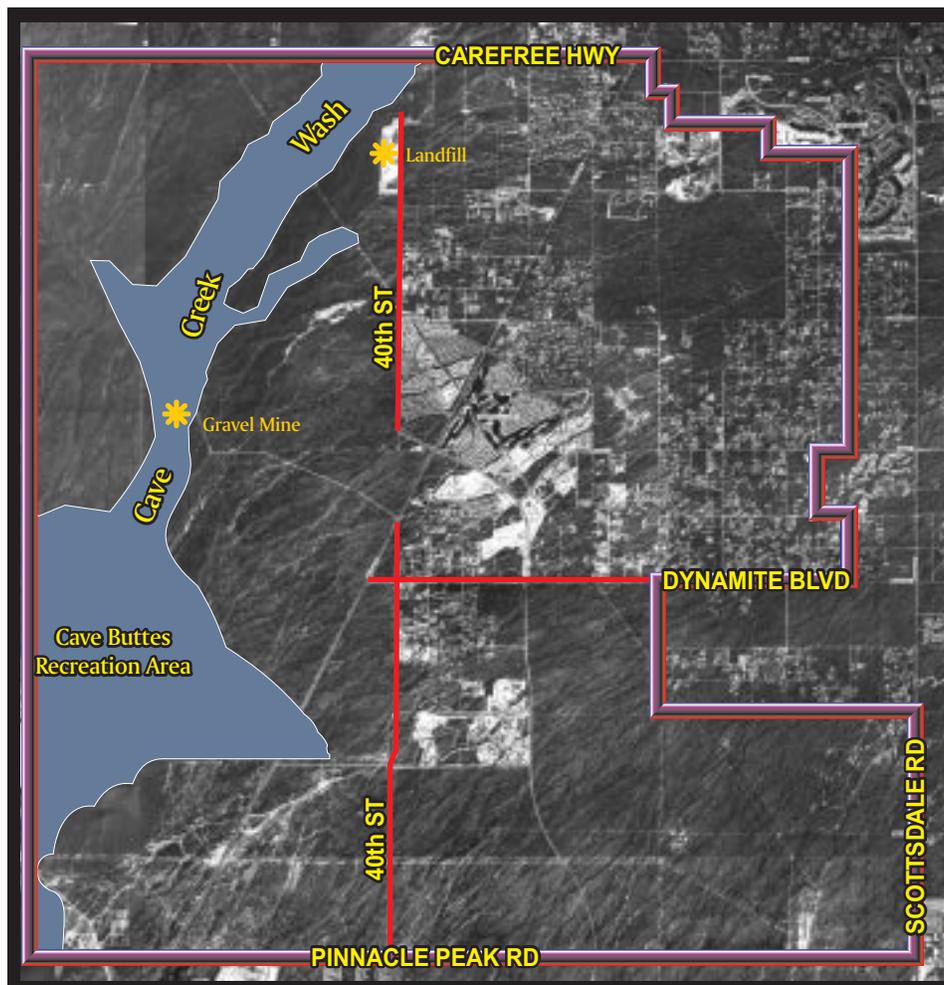
NORTH LAND USE MAP
Approved by City Council June 1996
#SA/DVTV-03-94-2

BACKGROUND

During 1993 and 1994 the City Council heard several controversial zoning cases in Desert View Tri-Villages. Issues included density, life style, desert preservation, and development character. In late 1994, three General Plan amendments were filed that proposed changing the City's policies related to development in these areas. The North Land Use Plan responded to the General Plan amendment filed by Desert View Tri-Villages Planning Committee.

The area of the North Land Use Plan extends from just west of Cave Creek Wash to Scottsdale Road and from Carefree Highway south to Pinnacle Peak Road. This area is upper Sonoran Desert and the hydrology varies from undefined sheet flow in the south to more defined washes in the north. Desert and wash areas west of 40th Street are generally undisturbed, while east of 40th Street the washes and deserts have been altered in various locations. Cave Creek Wash is generally undisturbed north of the Cave Buttes Recreation area. Two exceptions are the area near the Dynamite Road alignment, which is being mined for sand and gravel, and the county-operated land fill south of Carefree Highway.

Figure 1



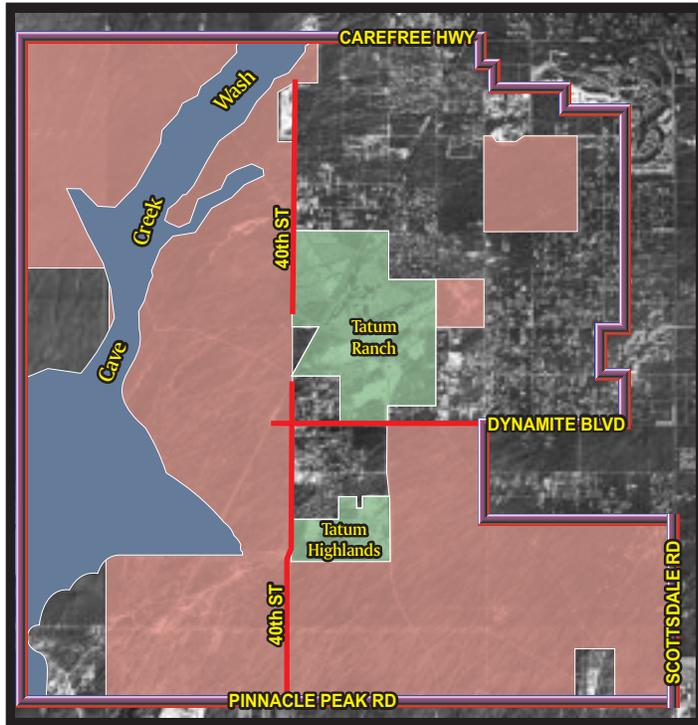
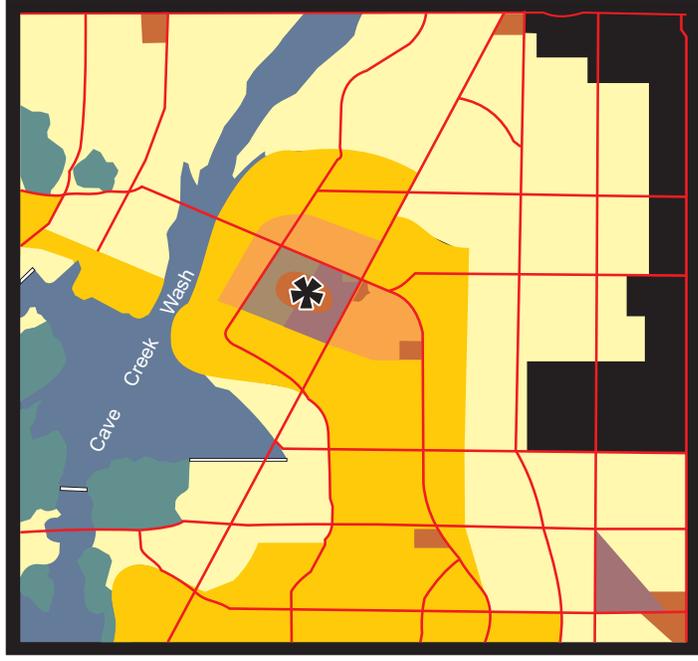


Figure 2

State-owned land, shown in red on Figure 2, covers sixty percent of the area and is mostly undisturbed desert. Most of the remaining privately-owned land has been subdivided in a rural pattern of development of one dwelling unit per acre or less. Exceptions to this include recent subdivisions in Tatum Ranch and Tatum Highlands, shown in green, where densities average 3.3 dwelling units per acres. The remaining private large lot vacant land has been zoned for densities ranging from 1.1 to 2 dwelling units per acre.

Most of this area was annexed into the city in 1985, with smaller annexations occurring over the last few years. Tatum Ranch was initially started in 1986 and is nearly built out. The land use plan for this area came when the city adopted the peripheral Area C & D Plan in 1987.

Figure 3



Prior to this plan, the General Plan included a land use and residential density map, with most of the area designated 0-2, shown in pale yellow on Figure 3. The exception was a corridor along Cave Creek Road and Tatum Boulevard that extends from Pinnacle Peak Road to Tatum Ranch. This corridor included densities from 2-5, shown in orange, to 10 plus dwelling units per acre, shown in brown. This plan also included a commercial core, noted by an asterisk at Dynamite and Cave Creek Road.

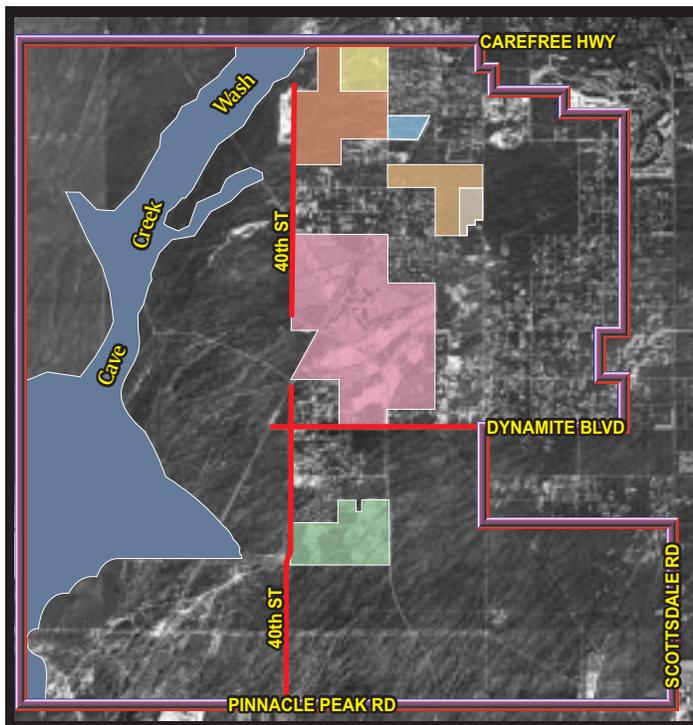


Figure 4

Rezoning cases became very active in 1993. One of the first rezoning cases was Dove Valley Estates with 60 acres, shown in blue on Figure 4. One of the largest cases was Dove Valley Ranch with almost 500 acres, shown in red. Other cases include Tatum Highlands, in green, the Farmer Property in tan, Colina Del Norte in orange, and, most recently, AM Ranch, shown in yellow.

During 1994 three (3) amendments to the General Plan were filed for this area. The first amendment, filed by Sonoran North, a local special interest group, proposed changes to the Area C & D Plan to refine the plan's concepts of rural development. The second amendment, filed by the Desert View Tri-Villages Planning Committee, proposed a general lowering of densities east of 19th Avenue and north of Pinnacle Peak Road. The third, filed by a private land owner adjacent to the Squaw Peak, proposed removing the Squaw Peak north of the Outer Loop.

Because of the potential impact of these amendments on the area, staff suggested extending the normal review process for these General Plan amendments. With the concurrence of the applicants, staff began with examining the land use issues first, with processing the transportation amendment and detailed development standards to come later.

NORTH LAND USE STUDY

The North Land Use Study was initiated with a series of public meetings to identify what issues the community felt should be addressed by these amendments. From the initial public meetings, four key issues became clear.

1 Preservation

Preservation of desert and mountain areas is a priority of the city and region. Within the city's Desert Preservation Plan and the Maricopa Association of Government's Regional Open Space Plan, 11,000 acres of significant mountain and wash area are proposed for preservation within Desert View Tri-Villages.

2 Rural Character

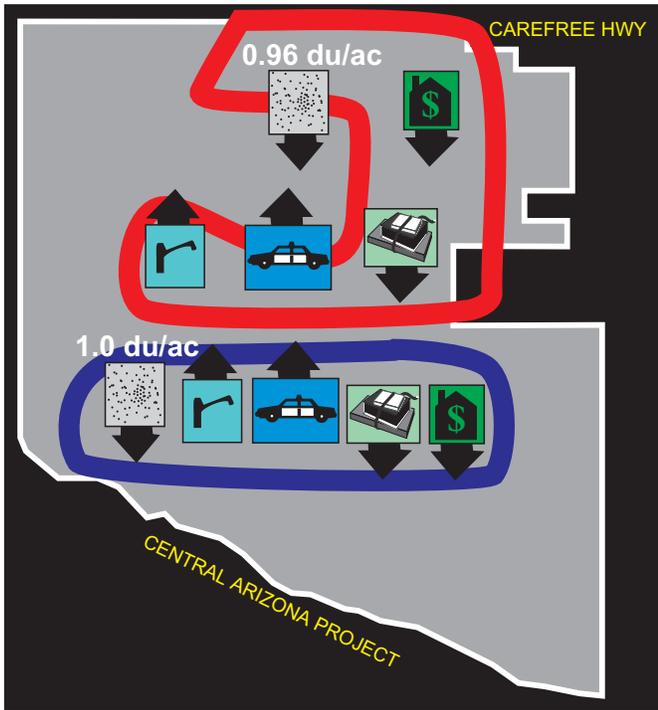
Many of the existing residents commented that they had moved to this area because of the rural lifestyle. They characterized their neighborhoods as low-density residential environments free of urban features such as paved streets, sidewalks, street lights, traffic, and noise. This rural lifestyle was also characterized as freedom to live in the desert as one chooses: with horse properties or large lots of preserved desert, non-traditional building styles, and freedom to move across private property to undisturbed parts of the desert.

3 Density

Some people were concerned about the impacts of growth in general, including traffic, crime, and overburdened schools. Some people expressed concern about higher densities resulting in loss of desert. In contrast, property owners were concerned that lower densities would render their property uneconomical to develop in today's market.

4 Growth Corridors

Concern was also expressed that lower densities leading to higher housing costs would have a negative impact on the city's ability to attract employment. Constraints such as unaffordable housing are recognized barriers to attracting new employers.



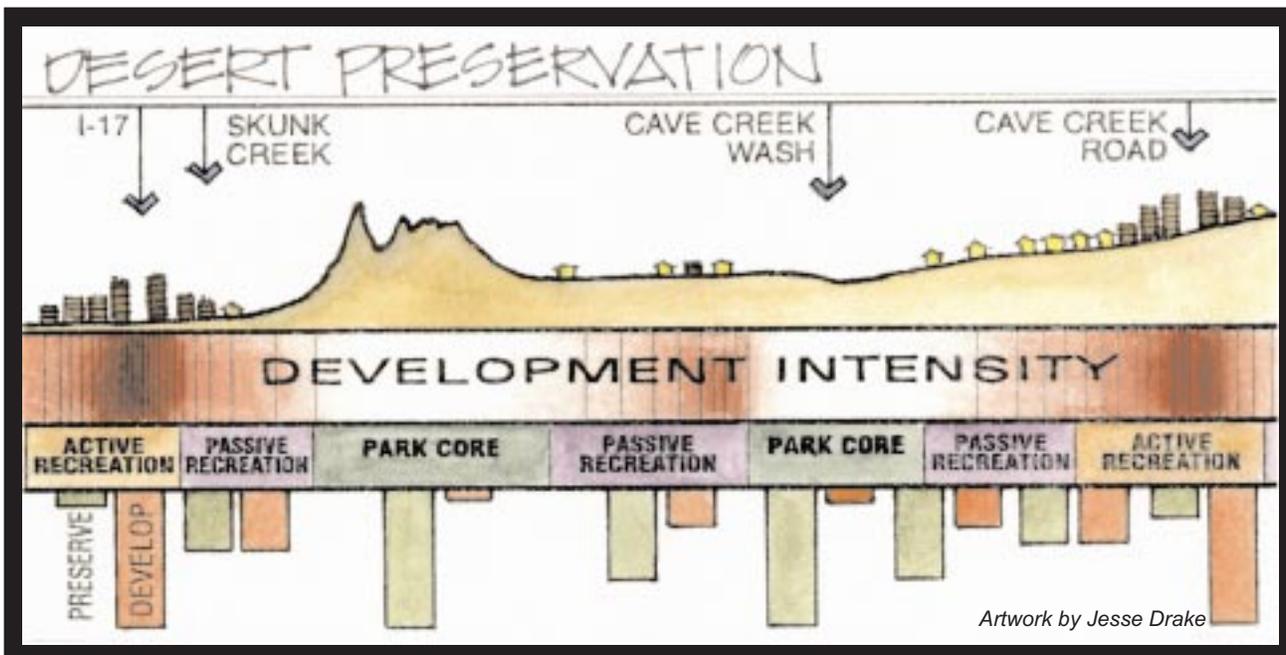
Based on the issues raised, staff began to analyze the impact that lower densities would have on the area. Staff reviewed the impact of different density scenarios and found that, with densities as low as one dwelling unit per acre, the per unit cost infrastructure, such as water and sewer, and operational services, such as police protection, increased significantly. And while school enrollments decreased, housing became less affordable. See the North Land Use Study appendix to learn how changes in development density in four development patterns affect areas of community importance, such as infrastructure and open space.

Figure 5

To begin analyzing the urban design issues, the Arizona State University College of Architecture and Environmental Design offered assistance through a design charrette. The objective of the charrette was to explore how each of the four community characters, that had been earlier identified by the community, could be designed.

Thirty design professionals met with residents and developers to explore detailed design ideas that would make these character area distinctive and viable.

Figure 6



They asked question such as, what features, in addition to horses, creates a rural character?

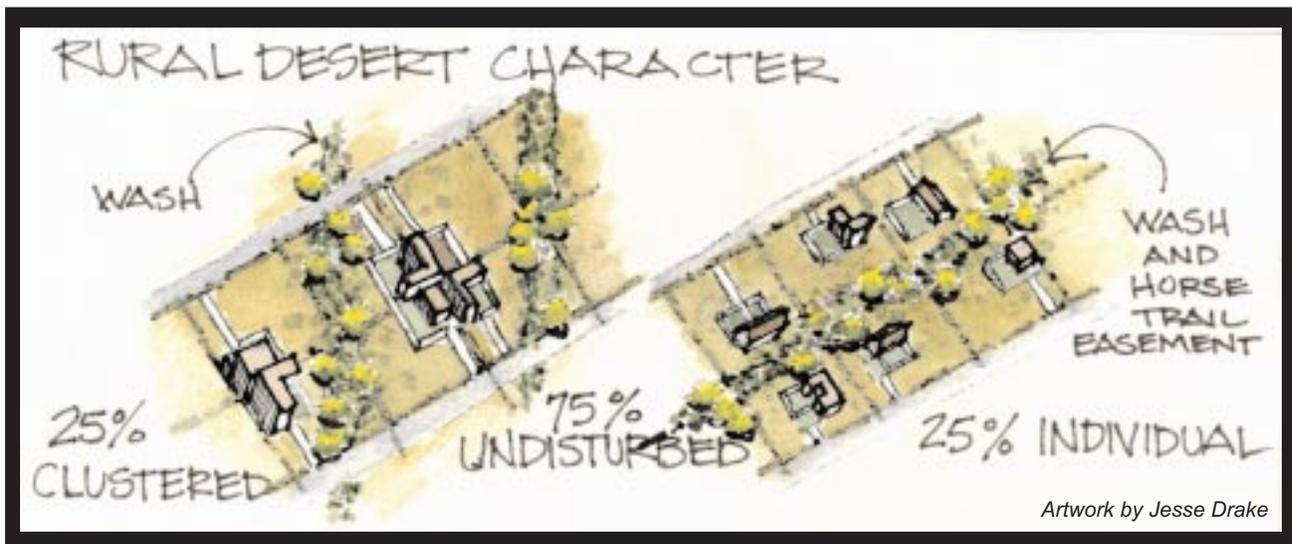


Figure 7

And how can cluster development in suburban areas preserve wash corridors?

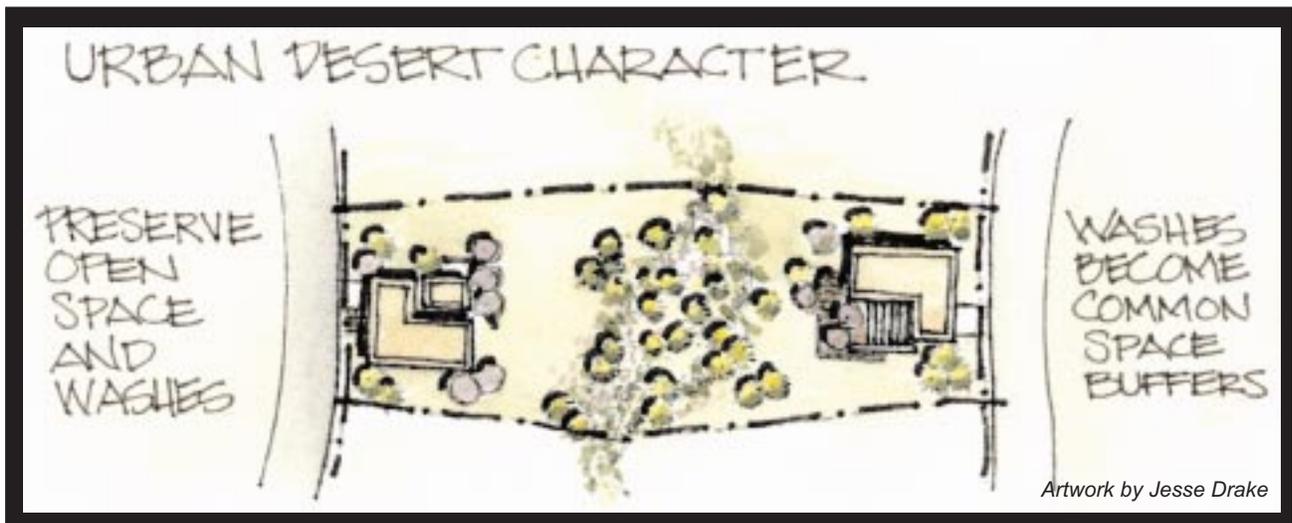


Figure 8

STRATEGIC LAND USE PLANNING CONCEPTS

Based on existing city policy, community input, staff analysis, and the design charrette, staff developed six planning concepts. The intent of these concepts was to refine the existing policies in the Area C & D Plan, and guide the development and discussion of a General Plan amendment.

1 Plan for Strategic Land Uses

The first concept emphasizes the strategic nature of regional employment and desert preservation. Opportunities for regional desert preservation are not only important for recreational and environmental reasons, they are also important to maintain Phoenix's desert character and quality of life. The desert preserves planned for the city, as shown in green on Figure 9, link washes, hillsides, and flatlands together in an environmentally viable unit.

Opportunities to develop employment centers are critical to the health of the city's economy. In this area, the city has two key regional employment corridors shown in orange on Figure 9. One is along the Outer Loop freeway near Tatum Boulevard and one is along the upper I-17 in the vicinity of Carefree Highway. Located on freeways, these areas have access to a very large, future labor pool.

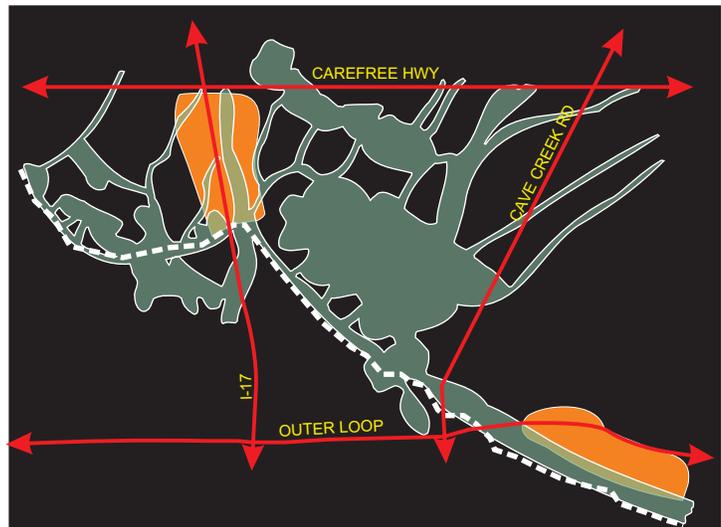


Figure 9

Fortunately, these corridors do not interfere with the pattern of major desert land forms and have sufficient adjacent residential opportunities to support each corridor's employment growth.

2 Preserve Cave Creek Wash as Ecological Spine of Desert

The second concept recognizes the importance of Cave Creek Wash's role in maintaining an environmentally viable desert preserve for this area.

This wash corridor is an important wildlife corridor in that it provides shelter and linkage between adjacent flat land and mountain desert areas. It also provides



Figure 10

a linkage from the upper Sonoran Desert in Phoenix to the upper sonoran areas in the Tonto National Forest. The impact of losing such linkages was a lesson learned by Phoenix in its existing mountain preserves. These linkages are important to maintaining the health and variety of these desert areas.

3

Recognize Washes as a Development Constraint

The third concept addresses the constraint that the area's flooding characteristics place on development. The eastern portion of Desert View has two distinct natural drainage systems. The area generally north of Jomax Road has a distinct wash system, as shown in red on Figure 11. Flooding events result in flows with established washes.

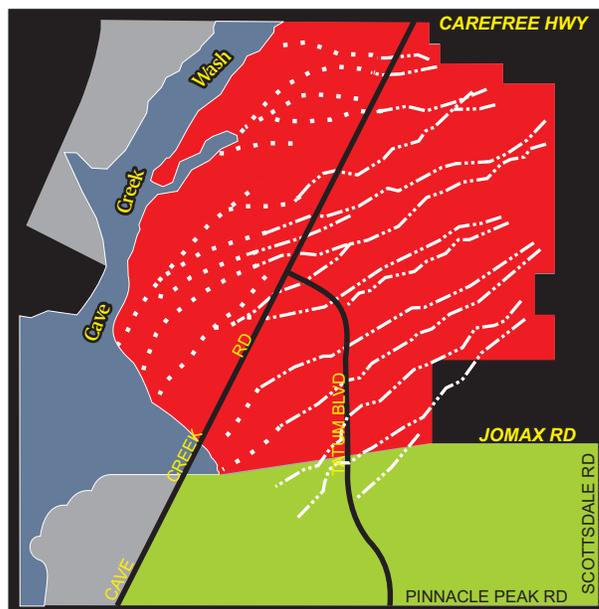


Figure 11

Site design in this area focuses on utilizing the natural drainage system and locating development outside these defined washes.

The areas generally South of Jomax Road, shown in green, have a different drainage profile, with flooding predominantly occurring in a sheet flow fashion. This means that flood waters flow over the entire area, creating smaller and less distinct washes than in the north. When homes are raised and built above the flood level, as required by city ordinance, the natural sheet flow is concentrated as it passes around the house.



Figure 12

Lower density development can space homes for enough apart to allow flood water to spread back out minimizing any impact on adjacent properties.

Higher density development must concentrate these flows. Since the natural wash system can not handle concentrated flows, a new drainage system must be created.



Figure 13

4 Seek Cost Effective Infrastructure

The fourth concept addresses issues related to the cost effectiveness, or ineffectiveness, of providing public infrastructure in low-density areas.

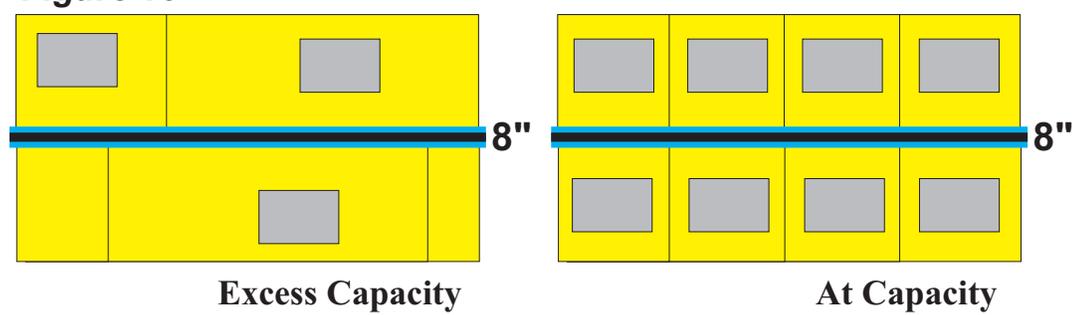
Infrastructure Minimum Sizes	
Street	2 Lanes
Sewer Line	8 Inches
Water Line	8 Inches

Most public infrastructure has a minimum sized unit that can be built. A road can not be less than two lanes regardless of how little traffic it carries. A sewer line, in order to maintain flow, cannot be any smaller than eight inches regardless of the capacity needed. This means services to low-density areas are often not as cost effective as areas only slightly more dense because minimum size constraints result in more capacity being built than will be used.

Figure 14

The location of development and its density relative to the placement of infrastructure can help reduce such inefficiencies. For example, locating higher densities along lines with excess capacity can increase the efficiency of a system.

Figure 16



5 Maintain established character

The fifth concept addressed the community’s desire to maintain the character established by existing developments. For example, the northeastern area has developed with large custom lots. In contrast, Tatum Ranch and Tatum Highlands are suburban subdivisions.

6 Recognize Existing Rights

The last concept addressed locations that are undeveloped, but had been granted development rights. These rights were recognized as revisions to General Plan were considered.

NORTH LAND USE PLAN

The North Land Use Plan addresses community and property owner concerns by modifying the original Area C & D Plan to incorporate the strategic planning concepts. The plan has six key features:

1 Regional Employment

First, the plan recognizes the strategic importance and viability of regional employment. A key regional employment corridor, Desert Ridge, lies just south of this area as shown on Figure 16. This corridor was created on the General Plan in 1996 when the city realized the opportunity to develop an employment area where the accelerated freeway construction would provide new access.

In contrast, regional freeway plans have removed freeways north of the Outer Loop which were to serve the primary core shown on the General Plan at Cave Creek Road and Dynamite. The lack of freeway access combined with low densities in the area raised doubt that this location would develop a large employment base.

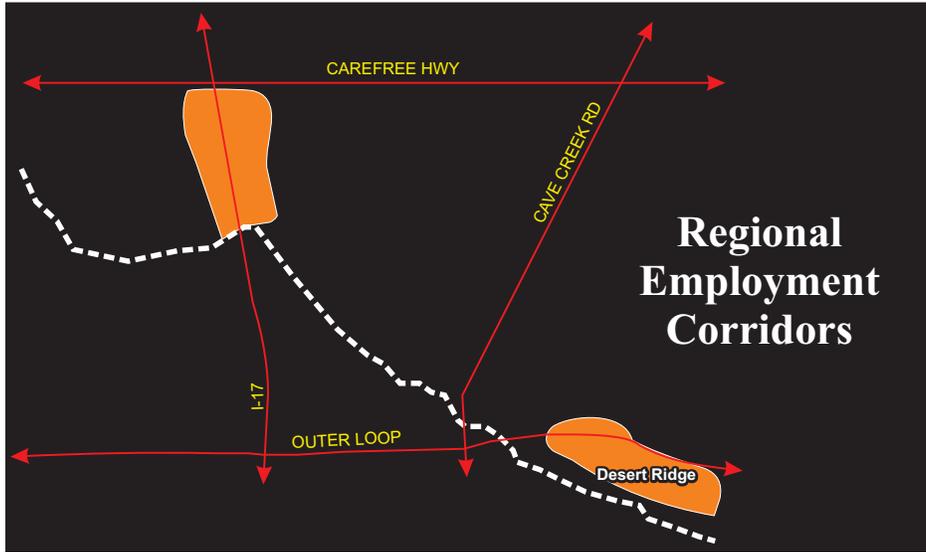


Figure 16

In response, the plan reduces the size of the core to 100 acres of commercial to function as a community service area shown as the middle red square on Figure 17. Two other community service areas are added: one at Carefree Highway and 48th Street in the north and the second at Cave Creek Road and Pinnacle Peak Road in the south.



Figure 17

2

Desert Preservation

Second, the plan recognizes that the critical component of the desert preservation system in the north is Cave Creek Wash. In order to preserve the ecological value of the wash, an area of approximately one mile on either side of the wash is designated as an inhabited preservation buffer. This buffer expands the habitat of Cave Creek Wash to include the many adjacent washes which exist today in a natural condition. A density limit of 1.2 dwelling units per acre applies to the preservation buffer north of Dynamite. Below Dynamite and adjacent to what will be the Cave Buttes Recreational area, the density is 2 to 5 dwelling units per acre. This combination balances objectives to give residents recreational opportunities in the wash and to preserve natural areas. It is recommended that a master plan of the entire Cave Creek Wash and buffer area, which is primarily owned by the state, be prepared in the future.



Figure 18

3

General Location of Primary Washes

Third, the plan recognizes the importance the washes play in determining appropriate land use densities. The amendment added the general location of primary washes to the General Plan Land Use Map to emphasize that development will need to preserve these washes and their alignments.

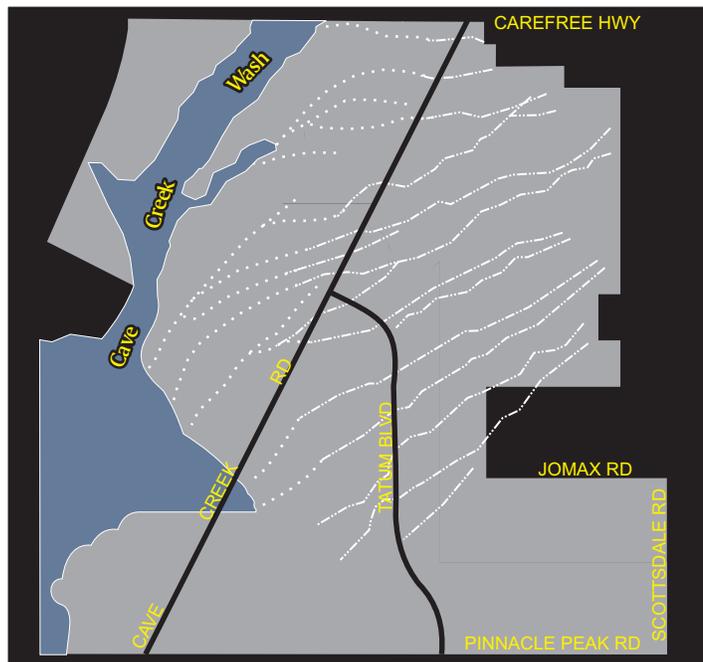


Figure 19

4

Residential Changes based on Hydrology

The transition of hydrology from distinct washes in the north to sheet flow in the south guided revisions to residential densities. The northern densities are limited to 1.5 where the washes can be used in their current natural condition to drain the properties during rains. In these areas, a study of a site's hydrology will be required at the time of rezoning and density will be determined based on the hydrology.

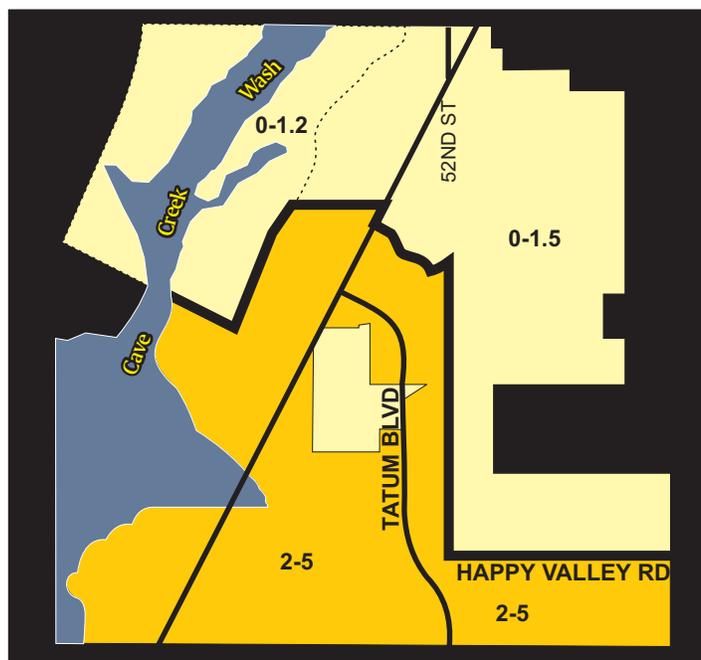
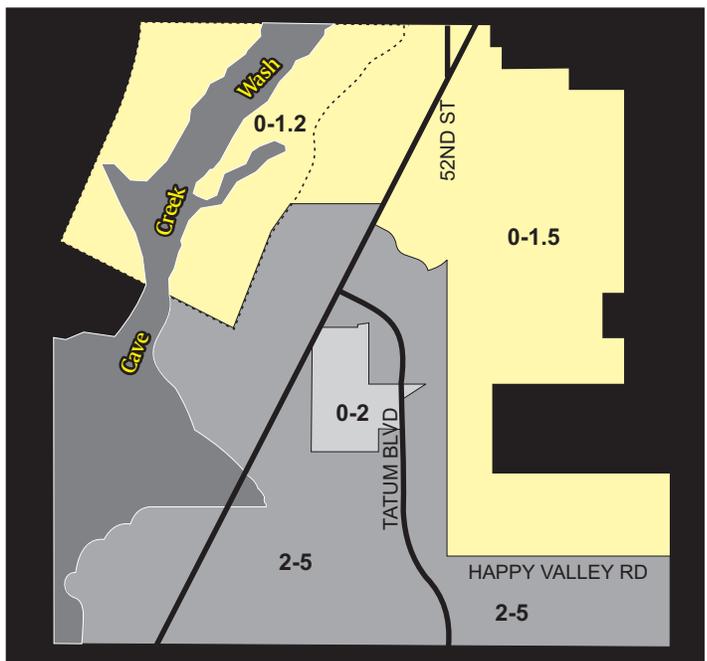


Figure 20

Natural drainage will transition to manmade drainage at 52nd Street and at Happy Valley Road where the hydrology begins to change to sheet flow. Tatum Boulevard and Happy Valley Road will need to be built as dry crossings that are passable in a heavy rain. Development occurring west and south of these roads will require man-made alterations to the hydrology. Because such alterations are required regardless of densities built, the plan designates a density of 2 to 5 dwelling units per acre in these areas.

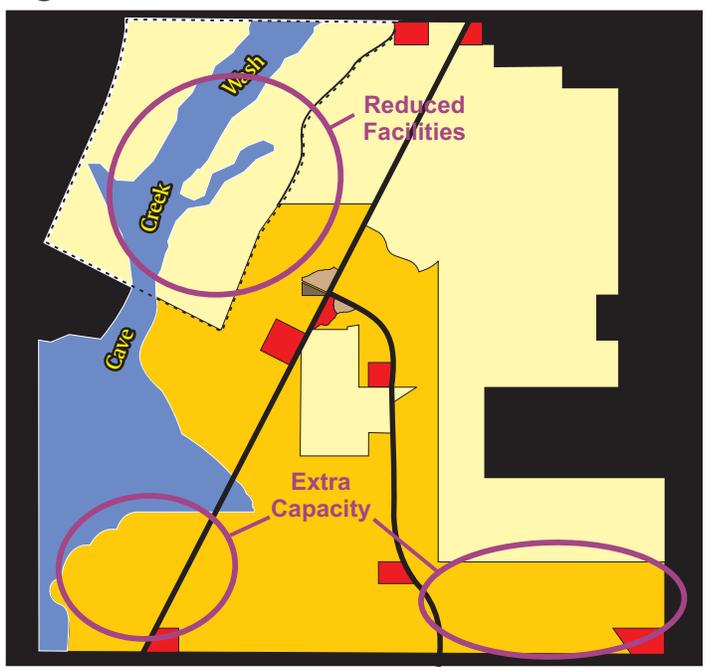
The plan deleted the average densities map found in the Area C & D Plan. The concept of average densities had been difficult to implement. Frequently during the zoning process, it was unclear just what was being averaged and how it should be applied to any one site. Rezoning discussions focused on varying interpretations of average density and not the appropriate density given the natural features on the site and surrounding land.

Figure 21



The plan establishes two density limits for land designated 0-2: a 1.2 limit for those areas near Cave Creek Wash and a 1.5 limit for the remaining areas. Through the zoning process, discussion can focus on how these density limits can be achieved using the natural washes for drainage.

Figure 22



5

Infrastructure Efficiency

The fifth feature is improved cost effectiveness of infrastructure. Three areas for potential improved efficiency were identified which provided the opportunity to move density from areas inefficiently served in the north to areas in the south where exiting capacity was underutilized.

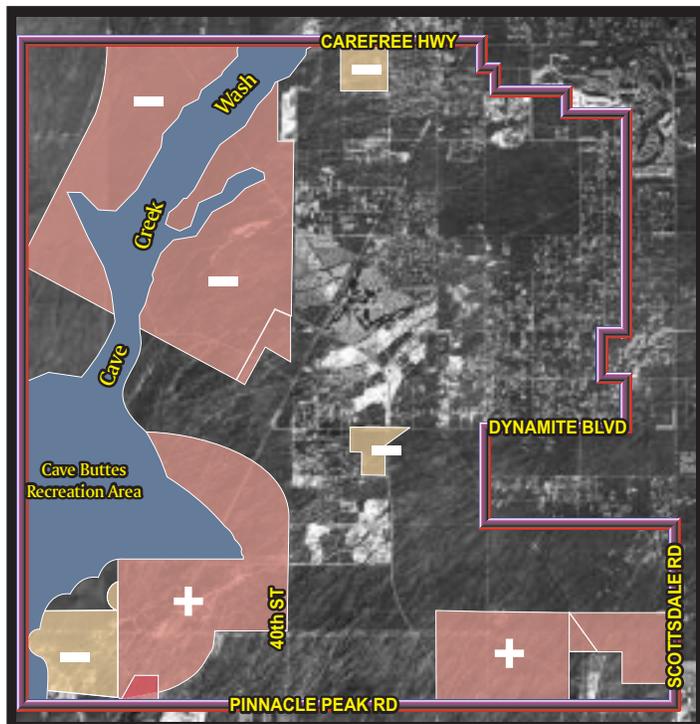
The land use changes overall have little impact on the total number of potential units in the area. Roughly half of the land in the plan area was already developed or committed to a final density through rezoning. The plan affects the remaining 12,500 acres, 92 percent of which is owned by the State Land Department.

Land Potentially Affected		
State Land	11,500 acres	92%
Private Land	1,000 acres	08%
Total	12,500 acres	100%

Figure 23

Figure 24

The changes shifted units from the north to the south. The biggest shift is reducing units on state land east of Cave Creek Wash and in the area that was designated a primary core. Most of these housing units are shifted to the areas east of the Cave Buttes Recreational Area and the area south of Happy Valley Road. Private units are also increased in the Cave Buttes Recreational Area with some minor private reductions in the north central area.



Overall, units are projected to decrease only four percent. Most of the reduction occurs on state land, which loses approximately 3000 units. Private land has a net gain in units, because of the increased density in the Cave Buttes area.

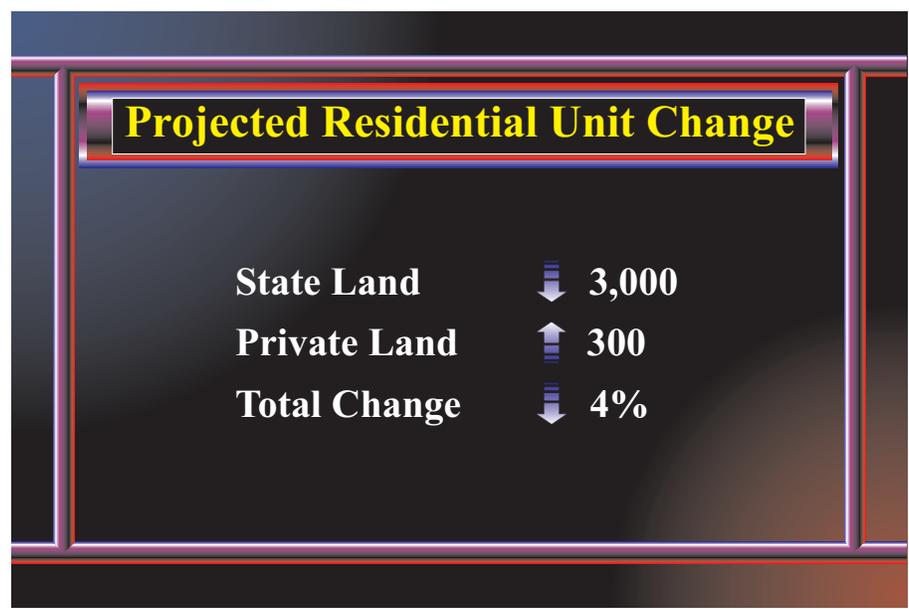


Figure 25

6

Character Areas



Figure 26

Finally, the North Land Use Plan adds a map to the General Plan that identifies three character areas for the eastern portion of Desert View Tri-Villages. On figure 26, Desert Preserve is shown in green, Rural Desert in brown, and Suburban Desert in light blue. The purpose of these character areas is to define the nature of development that is appropriate in each area. This plan calls for the creation of zoning overlay districts that would establish regulatory development standards.

Standards in the Desert Preserve area would reflect a sensitivity for environmental aspects of the buffer along the northern portion of Cave Creek Wash. Standards in the Rural Desert Character area would reflect the desire for a lifestyle associated with rural uses such as horse properties as well as a lifestyle associated with living in the Sonoran Desert.



Figure 27

Standards for Suburban Desert Character areas would balance the need to provide an ample supply of affordable housing to support nearby employment centers, with quality of life associate with living in the north Sonoran Desert.

IMPLEMENTATION

Implementation of the North Land Use Plan will occur through three primary means.

- 1 Land use changes made on the General Plan Map guide the rezoning process. The changes provide clear development expectations for land owners and residents and, therefore, should remove controversy on each individual zoning case.
- 2 Desert preservation areas identified on the General Plan would be acquired through either purchasing or leasing the land.
- 3 Finally, overlay districts should be developed for the three character areas to provide clear development standards which reflect community desires for each area.

APPENDIX

Conceptual Development Patterns

The following maps are from the *North Land Use Study Conceptual Open Space and Development Patterns: Executive Summary*, dated October 1995. The Study laid the groundwork for the North Land Use Plan. It qualitatively and quantitatively examined the potential impacts of various conceptual development patterns within sub-areas of the Desert View Tri-Villages. Four generalized patterns (growth corridor, desert character, rural desert character, and desert preservation) were applied to subareas of Desert View Tri-Villages. The development factors that change with each pattern are dwelling units, non-residential square-footage, residential and nonresidential acreages, etc. The study's development scenarios represent "exercises of extremes" intended only to identify potential broad-based impacts of future land use patterns areas of community importance, such as:

Density: Potential impacts on the number of dwelling units per acre and commercial floor-to area ratios.

School Enrollment: Potential impacts that changes in number of dwelling units could have on school enrollments.

Housing Affordability: Potential impacts of density changes, the number and mix of dwelling units, and desired development character on housing price.

Infrastructure and Operational Costs: Qualitative effects of density changes on infrastructure and operational costs.

Open Space: Potential impact on the provision of open space acreage.

Transportation: Qualitative effects of density changes on planned transportation components.

Growth Corridor/Core

The General Plan currently reflects this development pattern in the I-17 Corridor and the Northeast Core area; therefore, this pattern was not analyzed in other sub-areas.

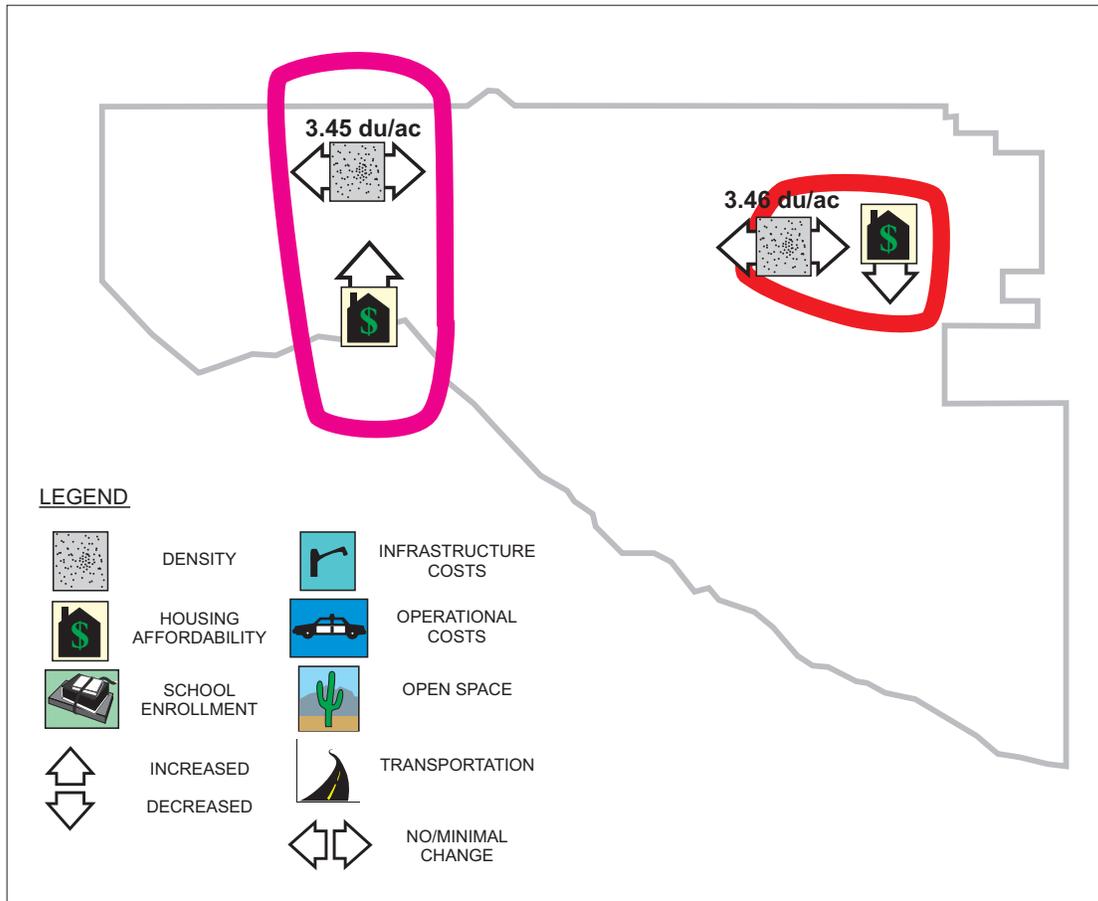


Figure 28

Summary

- Affordability of housing in the I-17 Corridor is enhanced.
- Reduced affordability of housing occurs in the Northeast Core Area.

Desert Character

The Desert Character pattern was analyzed in all sub-areas within the Desert View Tri-Villages.

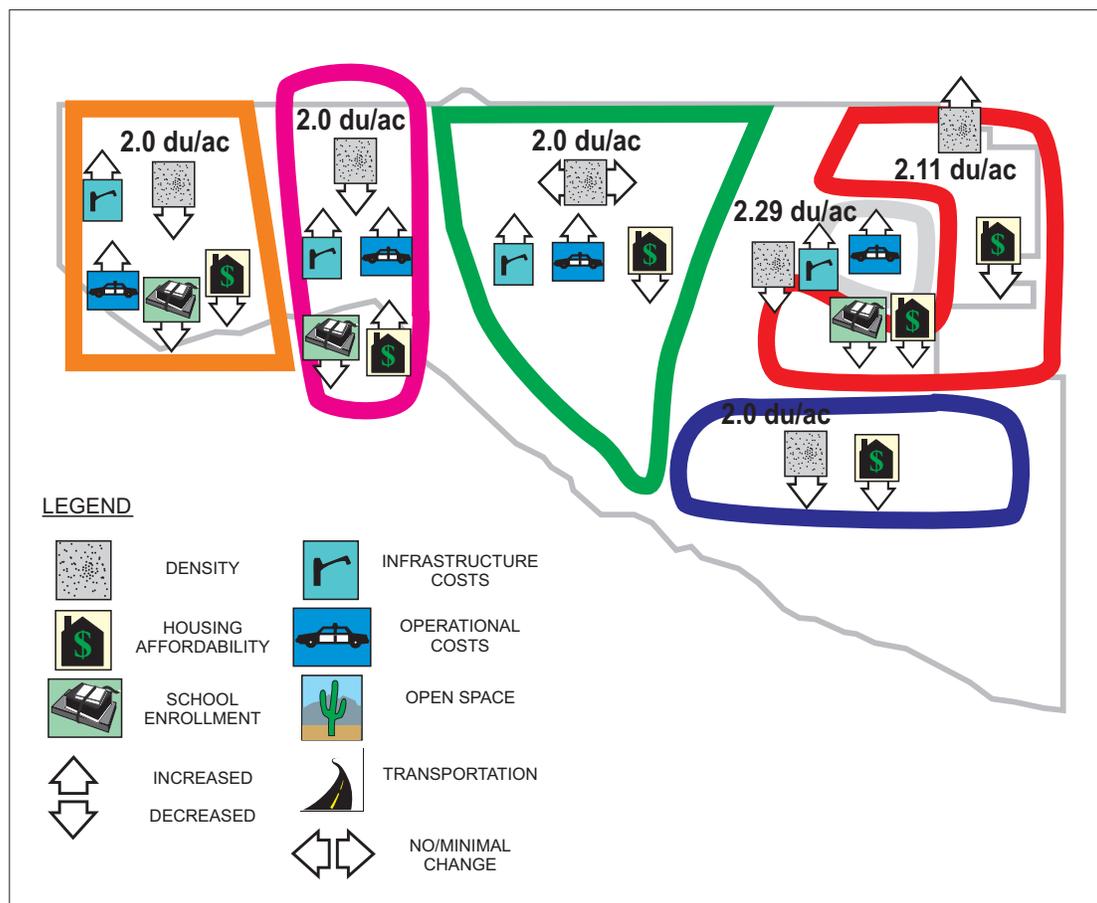


Figure 29

Summary

- Reductions in the affordability of housing occurs in the West Area, Central Area, Northeast Core Area, Northeast Non-Core Area, and Southeast Area.
- The I-17 Corridor realizes enhanced housing affordability.
- Infrastructure and operational costs could be higher per equivalent dwelling unit in all sub-areas except the Northeast Non-Core Area and the Southeast Area.

Rural Desert Character

This pattern was analyzed within all sub-areas except the I-17 Corridor and the Northeast Core Area due to their designation as growth corridor/core areas.

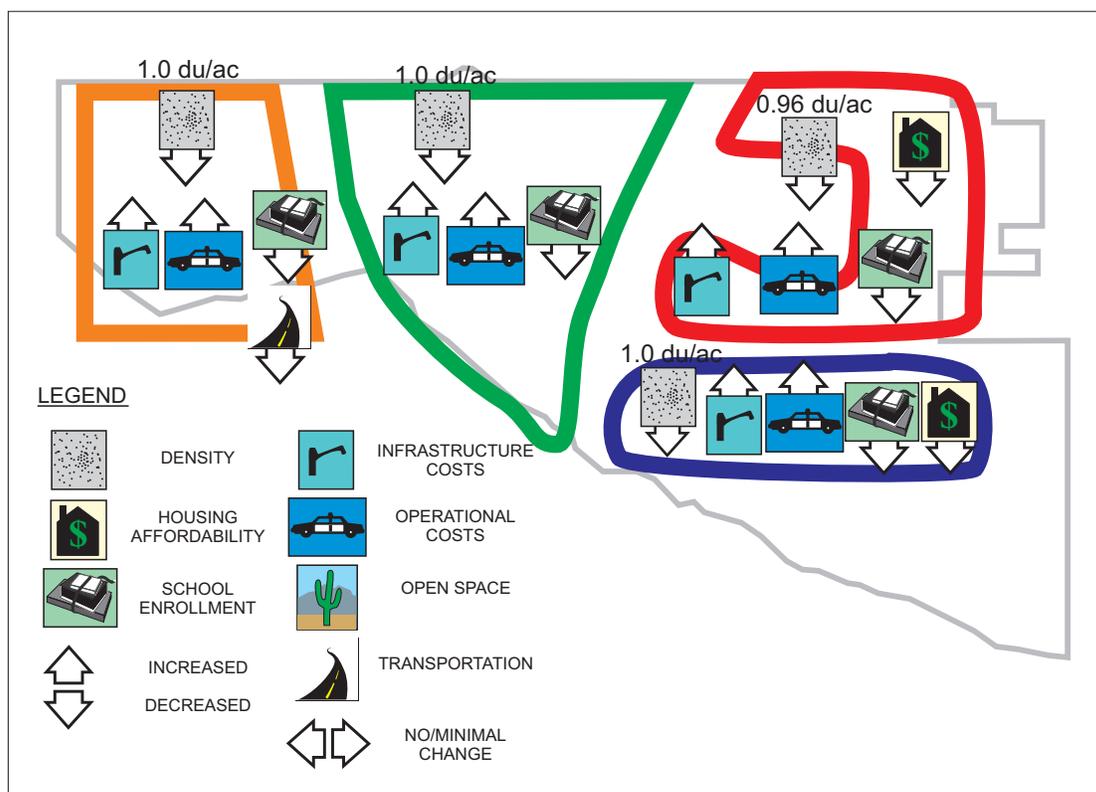


Figure 30

Summary

- Potentially significant decreases in General Plan-based densities resulting in relative decreases in school enrollment.
- Housing becomes less affordable in all sub-areas, with dramatic reductions in the affordability of housing occurring in the Northeast Non-Core Area and the Southeast Area.
- Infrastructure and operational costs could be significantly higher per equivalent dwelling unit in all applicable sub-areas (If rural infrastructure standards are applied, costs per dwelling unit may be reduced.).
- Significant reductions in the planned transportation system would likely occur in the West Area only.

Desert Preservation

The existing General Plan assigns no densities to "Parks/Open Space," "Hillside," and "Floodplain" designations. Therefore no implementation mechanisms, such as land acquisition or transfer of development densities, are specifically in the plan for realizing these areas and other desert preserve lands. For the purposes of this study, the Desert Preservation conceptual development pattern is analyzed through two options for retaining preserved desert lands; in both cases, density values are assigned to the areas identified for desert preservation in order to determine possible impacts. The two options are labeled Desert Preservation(a) and Desert Preservation(b), and are described below.

Desert Preservation(a) (Transfer of Development Densities). This option involves transferring development densities from those residential lands identified for desert preservation to other lands appropriate for residential development, thereby increasing densities and the number of dwelling units.

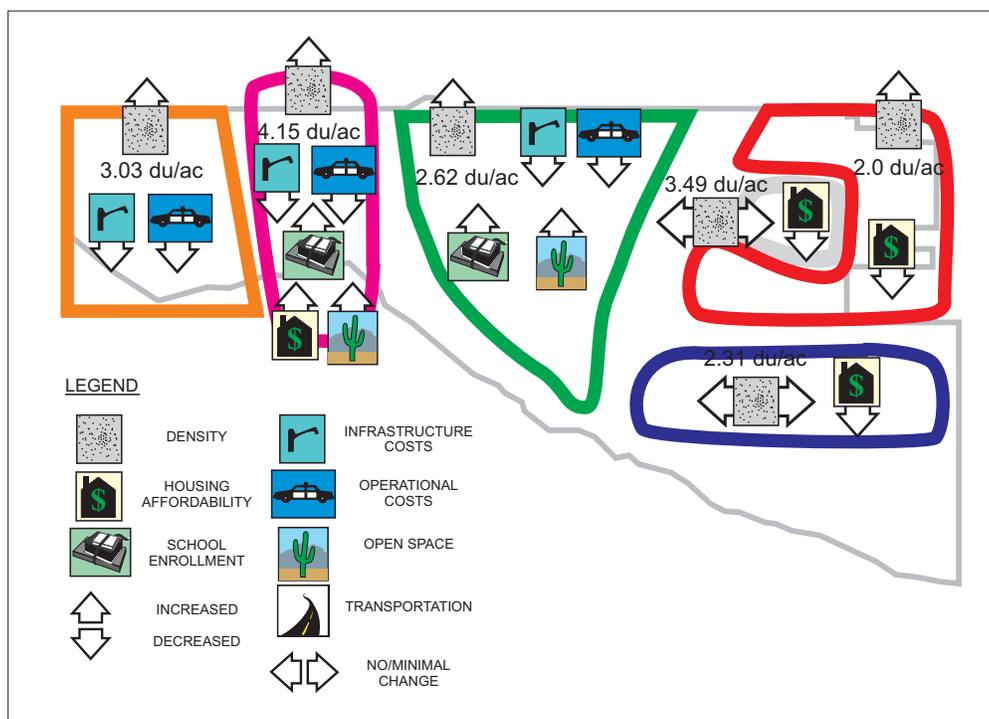


Figure 31

Summary

- The Central Area has the potential for significant increases in density.
- Moderate increases in the number of dwelling units and significant increase to overall density is possible for the I-17 Corridor.
- Housing becomes notably more affordable in the I-17 Corridor and significantly less affordable in the Northeast Core, the Northeast Non-Core, and the Southeast Areas.
- Infrastructure and operational costs could be reduced per equivalent dwelling unit in the West Area, the I-17 Corridor, and the Central Area.
- The I-17 Corridor and the Central Area hold the greatest potential for increased open space lands under this option.

Desert Preservation(b) (Land Acquisition or Long-Term Lease). This option involves land acquisition or long-term lease of residential lands desired for desert preservation, thereby maintaining overall density but reducing the overall number of dwelling units.

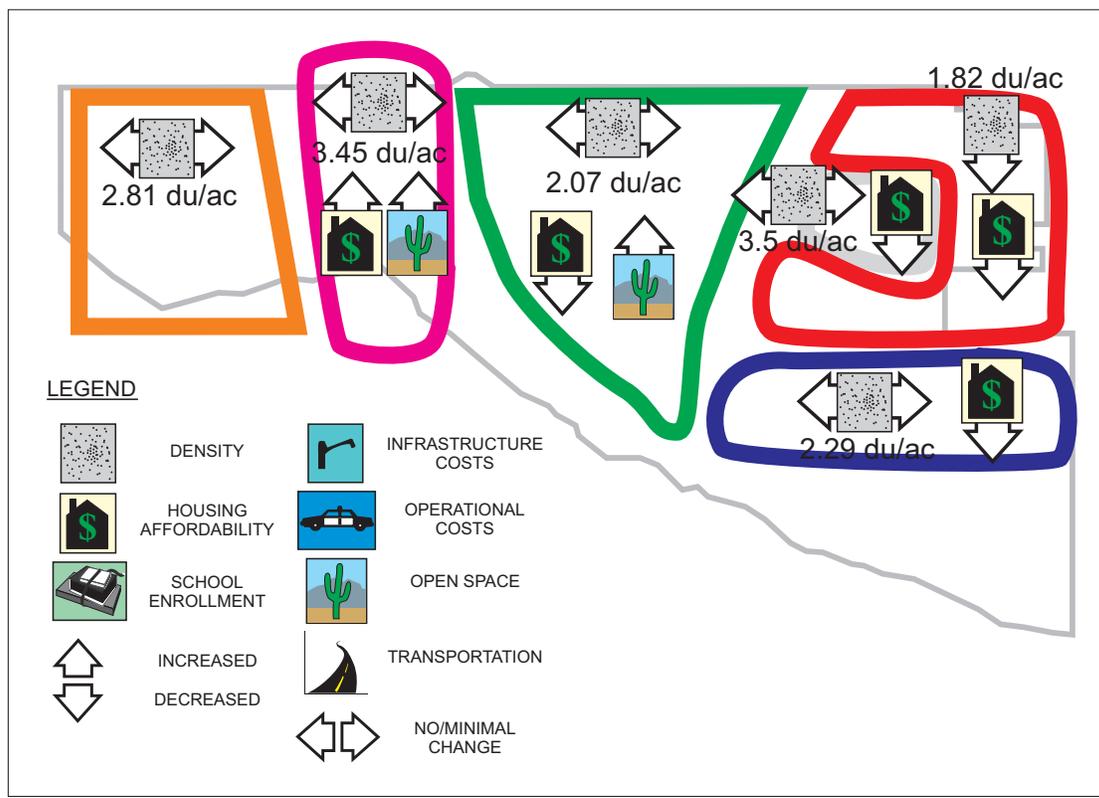


Figure 32

Summary

- Housing could become more affordable in the I-17 Corridor, while east of the corridor housing becomes significantly less affordable.
- Slight open space increases in all of the sub-areas, with most significant increases in the I-17 Corridor and the Central Area.



Printed on recycled paper