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SOUTH ARIZONA
Entry Corridor Study

Chandler, Arizona

Final Report
October 20, 2006

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Section 1
URBAN DESIGN PLAN

EXECUTIVE SUMMARY

The South Arizona Avenue Entry Corridor Study is prompted by a Mayor and Council goal for redeveloping the section of Arizona Avenue from Pecos Road to Boston Street as a new entryway to downtown from the Santan/ Loop 202 Freeway. The plan was created with extensive neighborhood participation, which included six neighborhood meetings and individual meetings with property owners. The comprehensive approach to this study can be broken down into four primary areas: Land Use, Traffic Circulation, Conceptual Design Standards, and Neighborhood Planning. The following are the major elements of the study:

A Bring in high and medium density residential development to the southern half of the Corridor along South Arizona Avenue and on selected sites in the immediate neighborhood. New zoning encouraging higher densities will create an incentive for developers to assemble small parcels for development. Where possible, select commercial uses such as dry cleaners, cafes or offices will be included with residential units.

B Revise neighborhood streets in the southern neighborhoods to facilitate traffic safety and local circulation for residents, create opportunities for new development along South Arizona Avenue and reinforce the development of the Corridor.

C Re-build South Arizona Avenue with a more pedestrian-oriented street section, narrower lanes and wider sidewalks, new traffic signals, streetscape and landscape elements. Adopt design standards for the private development.

D Create a cultural and entertainment commercial zone on the west side of Arizona Ave and north of Fry Road. Chicago Street can become a pedestrian corridor linking cultural and entertainment uses on the west side of Arizona Ave to City Hall and the civic area on the east side of Arizona Ave. Furthermore, existing downtown commercial can be reinforced through shaded pedestrian walkway connections.

E Recommendation to study the feasibility for locating a new performing arts center and a convention center within the Corridor study area.

F Create Public and Private Design Standards to guide the quality and functionality of the development in the Corridor, both for private and public sector buildings and for streetscape and open space design.

G Locate City Hall South of Chicago Street and locate the Historic Museum on Site 6. The commitment of the new center of civic life will create a climate for new private development in the Corridor. The City Hall can anchor a new south civic campus around a new green civic commons where future municipal and county buildings will be a civic anchor to the corridor's revitalization.

H Preserve and enhance the residential neighborhoods in the southern half of the corridor through single family residential infill on small lots and renovation of existing homes.

I Continue to solicit and utilize the creative input of the neighbors, property and business owners in the Corridor, to create a plan that has unique public buy-in and enthusiasm.

CHAPTER 1 - INTRODUCTION

Downtown Chandler Gateway

New Development South of the 202 Freeway

Background

The City of Chandler is a community of over 240,000 people located in southeastern Maricopa County, Arizona. Chandler has grown from its agricultural roots at the turn of the 20th Century into a high tech oasis. In 25 years, Chandler has grown from a population of 30,000 people to its current population of over 240,000 residents, and is planned for growth to 286,000 people in the next ten years. It is the 6th largest city in Arizona.

As Chandler has grown, the infrastructure of the Phoenix region has also been developing. New freeways now serve a fast-growing low density metropolitan region, changing access patterns and creating new economic development opportunities for cities at the periphery. Chandler, as part of the southeast valley, is destined to benefit from the recent addition of the Santan Freeway to the Phoenix metropolitan transportation system.

The South Arizona Avenue corridor under consideration is the location of a new interchange of the Santan Freeway. The corridor includes the area bounded by Chandler Boulevard, Pecos Road, South Palm Lane, and South Delaware Street. South Arizona Avenue bisects this area north to south, connecting the Santan Freeway to Downtown Chandler.

The northern portion of the Corridor from Chandler Boulevard to Boston Street encompasses the original historic Downtown of Chandler that today includes the City government center, the San Marcos Hotel, A.J. Chandler Park and a variety of historic buildings surrounding the park. The southern portion of the Corridor from Boston Street to Pecos Road is comprised of strip commercial uses and freestanding buildings situated on small lots (typically 50 feet wide by 150 feet deep) that front on Arizona Avenue.

Existing land uses along Arizona Avenue generally consist of retail with a mixture of office uses, quasi-public uses (churches) and retail/service uses. At the southern end of the Corridor is a large apartment complex at the northwest corner of Pecos Road and Arizona Avenue. South of Pecos Road are three large new shopping centers surrounding the intersection of the Loop 202 Freeway and Arizona Avenue. Those shopping centers include Kohl's department store at the southwest corner of the interchange, a Sam's Club and small shop space at the southeast corner and a Wal-Mart and small shop space at the northeast corner.

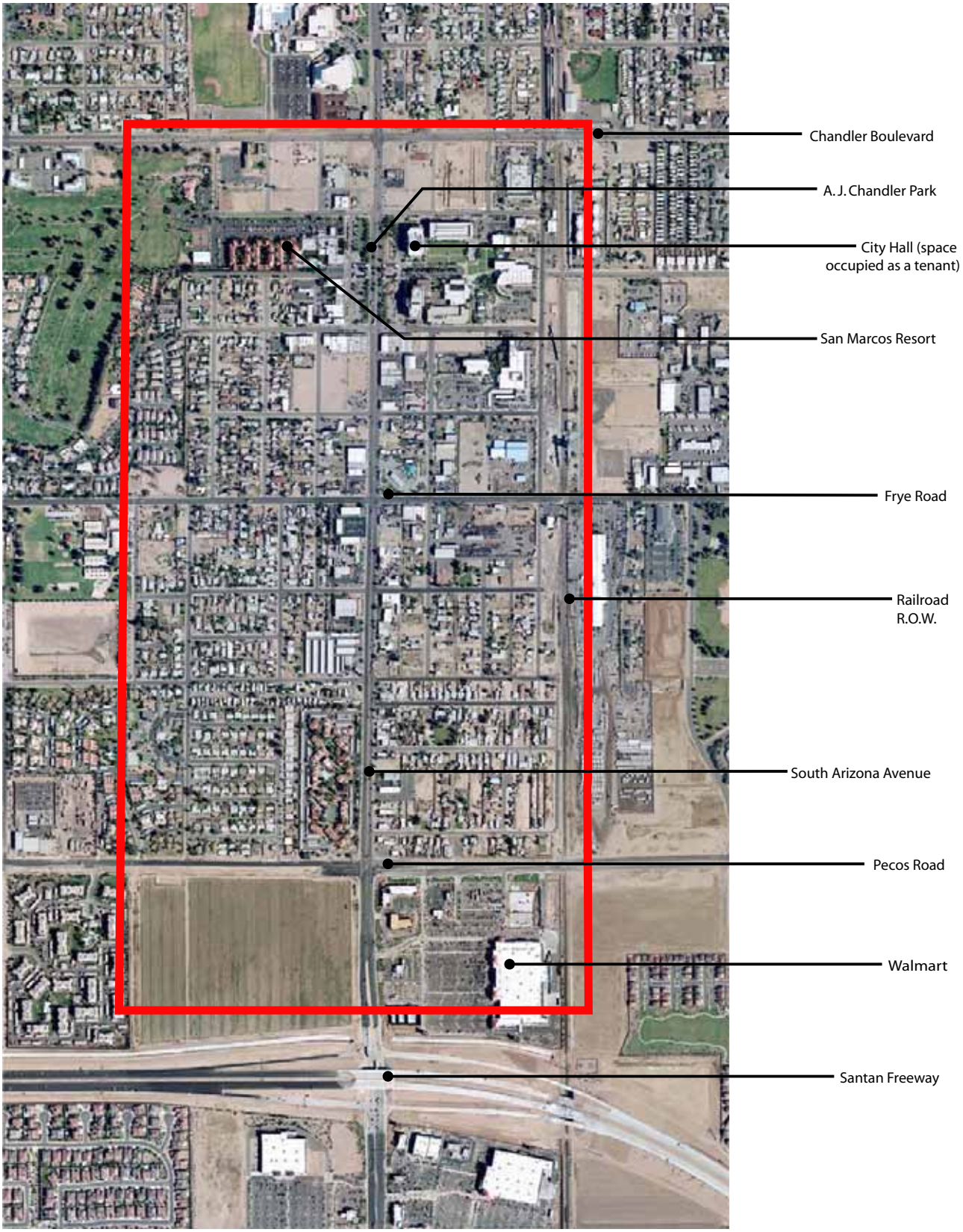


FIGURE 1 Aerial Map of the Corridor

Taking advantage of the new Santan Freeway access will involve time and effort. The keys to new development are planning the Corridor's changing land uses, streets and other public investments in a strategic way and implementing a series of actions targeting developers who will provide the essential investment in the future.

Northeast corner of Pecos Road and S. Arizona Avenue

The evolution of the South Arizona Avenue Corridor is a vignette in the history of Chandler. Dr.. A.J. Chandler commissioned a plan for the city in 1911. It included a classic Beaux Arts park straddling the north-south line that would become State Highway 87, the current Arizona Avenue.

The State highway divided into two one way lanes, running around the edges of the park. Running east-west across the park's mid-section was the Commonwealth Canal. Cars and trucks detoured around the park on dirt roads, coming from both north and south. Few buildings defined the city at that time, but already there were the beginnings in Chandler of a memorable place on the expansive plain of the valley.

By the 1930's, traffic on State Highway 87 was creating safety concerns. The highway was re-designed to go straight through the middle of the park, creating the present configuration, with park land on both sides. Since that time, downtown Chandler has faced north toward the intersection of South Arizona Avenue and Chandler Boulevard as its gateway from the region.

For roughly 70 years, this has been the configuration of the corridor and the orientation of Downtown. In 2005 the Santan Freeway (Loop 202) was extended eastward, including on and off-ramps at South Arizona Avenue. The freeway now continues east to create Loop 202, connecting with the metro area's freeway system.

Santan Freeway Development

This new access will have a powerful effect on the South Arizona Avenue Corridor, as it now will become the front door into Downtown Chandler. At least three shopping centers will dominate this freeway exit ¾ mile south of Downtown, providing a strong attraction to a high exposure location.

At this time the Corridor resembles a barbell, with the Downtown at the north end and the freeway exit and centers at the south end. The South Arizona Avenue Corridor lies between these two. It will be heavily influenced by the new shopping centers and the new pattern of access to and from the freeway on the south, and the new public investments in courts and City Hall at the north end. The recommendations of the study are to include recommendations for Downtown's revitalization as well as the Corridor. The two areas are integrally related.

Project Methodology

In September 2005, the City of Chandler retained the services of RNL Design, architecture and planning firm, to develop an urban design study of the South Arizona Avenue Corridor, and make recommendations to revitalize the corridor, taking advantage of the new access presented by the Santan Freeway.

RNL began work in September, meeting with key City staff to initiate the study. For the corridor study, RNL held community meetings and open houses for residents and business and property owners in the corridor on both sides of South Arizona Avenue from South Delaware Street to Palm Lane.

These six neighborhood meetings were characterized by strong attendance and involvement by residents and owners. They were held prior to the Public Hearing process of Planning and Zoning and City Council. Attendance at these meetings also included City staff and elected officials.

The work has also included extensive coordination with the City Hall and Museum Relocation Study, completed by RNL Design and approved by the Mayor and Council. This study recommended a site, which was chosen by City Council, for the relocation of City Hall and a nearby site in the Corridor for the relocated History Museum.

The Vision

South Arizona Avenue will be a revitalized, lively, urban sector of Chandler, built on a foundation of high-density residential blocks of 30-40 units/acre. They will have some ground floor retail, neighborhood services such as dry cleaners and small offices to serve the residents living in downtown. The single-family neighborhoods on either side of South Arizona Avenue are well maintained and revitalized, consisting of small bungalow style homes.

Just to the north of the neighborhoods, the new City Hall and History Museum and cultural complex transitions into the historic Downtown square, enriched with some entertainment uses. For example, a new art theatre or performing arts complex. A new look for South Arizona Avenue will create a safer street to walk along, and a great streetscape as the major entry to a revitalized South Arizona Avenue Corridor.

The Goals

The major goals of this plan for the South Arizona Avenue Corridor are:

- To take advantage of the new accessibility from the region created by the Santan Freeway
- Creation of a new "front door" for Chandler
- Involve and get the buy-in of the residents and business owners in the area
- Create an economically feasible plan that capitalizes on the strength of the market
- To position Chandler's downtown as a unique regional center

CHAPTER 2 - THE OPPORTUNITY

Assets

The corridor has a number of assets that bode well for activation of South Arizona Avenue, the downtown and the neighborhoods:

Santan Freeway Development

• **Wal-Mart:** The new shopping centers at the Loop 202 and Arizona Avenue can only have a positive effect on the Arizona Avenue Corridor, primarily due to increased traffic that will be brought to the southern end of the Corridor.

Wal-Mart will generate traffic along Arizona Avenue and increase exposure for other retailers on the street. Wal-Mart is not a competitor with these stores. Since Wal-Mart will be constructing Super centers in this region of Phoenix, the trade area for the Arizona Avenue Wal-Mart will likely be very large, stretching as far south as Hunt Highway. Wal-Mart and Sam's Club will be destinations that will bring a large consumer population to the southern end of the Arizona Avenue Corridor.

As a result, Wal-Mart and the related retail centers at the Loop 202 will increase traffic along Arizona Avenue and provide more traffic for Corridor retailers. It will also change the image and perception of the area in the minds of many consumers.

• **Historic Downtown Square:** The northern portion of the Arizona Avenue Corridor (north of Boston Street) is attractive and possesses the historic character that should translate into a successful downtown. While still in its infancy and needing to mature, with additional redevelopment efforts by the City, the northern Corridor should be a success that can be grown to the south.

San Marcos Resort / Hotel

• **Competition:** Retail uses currently existing along Arizona Avenue do not, for the most part, compete with the types of retail uses found in the Loop 202 shopping centers. Most of Arizona Avenue retailers provide services to the immediate neighborhood or ¬¬target a different trade area for retail or restaurant services.

• **Trade Area Demographics:** As the Metro Phoenix Market Report states, the trade area (3 mile and 5 mile radius) surrounding the Arizona Avenue Corridor is very large with high incomes. Both Gilbert and Chandler have some of the highest household incomes in the County. Disposable incomes in this part of the Valley will attract a wide variety of retail uses. There is much potential for retail development throughout the trade area and Loop 202 corridor, but not for the Arizona Avenue corridor itself.

Dr. A.J. Chandler Park

Site 6

• **Other Current Redevelopment:** Construction is moving ahead on the first phases of the residential development at Chandler Boulevard and Arizona Avenue. When complete, this will be a sizeable mixed use residential and commercial development encompassing several blocks at that location.

• **The Chandler Civic Center and City Hall Relocation:** The civic uses of Chandler and the new county courts bring in people and activities during the day. More people and activities are expected when the new courts building opens. The site for both the City Hall relocation and the History Museum, as approved by the Council, is south of Chicago Street. The presence of both these facilities will improve the prospects for redevelopment efforts in the middle and southern half of the corridor.

• **Chandler Park and Walkways:** This historic park and the walkway system with its overhead trellises–plus the historic buildings surrounding the park–create a unique and positive image in the Downtown. This environment or other means of shade can be extended throughout the district to create positive pedestrian conditions and an enhanced sense of place to an area that already has some identity.

• **Neighborhoods:** A mix of residential areas is key to success of the retail stores on South Arizona Avenue. While the neighborhoods on either side of South Arizona Avenue need improvement, there are many houses on both sides of the Avenue that could be reinforced by addition of other residential units on vacant parcels.

• **Developable Land Parcels:** The City has assembled land parcels into a consolidated vacant block (Site 6) just south of Downtown. There are other vacant and under utilized parcels which may be assembled as development sites, particularly on the east side of South Arizona Avenue.

• **Urban Living Lifestyle:** Downtown Chandler is in a unique position to fill this lifestyle niche that has risen in popularity nationwide, by creating new downtown housing and providing pedestrian-oriented amenities and services.

• **Urban Form:** From a retailing perspective, the Arizona Avenue Corridor is taking on the shape of a bookend from the perspective of retail activity. On the north are the City Hall Complex and San Marcos Resort. To the south are the new shopping centers at the Loop 202. The retail uses and restaurants in the A. J. Chandler Park area will not compete with the national chain retail and restaurant uses located in the southern shopping centers. With these two destinations at either end of the Corridor, particular attention must be focused on intervening uses between Boston Street and Pecos Road.

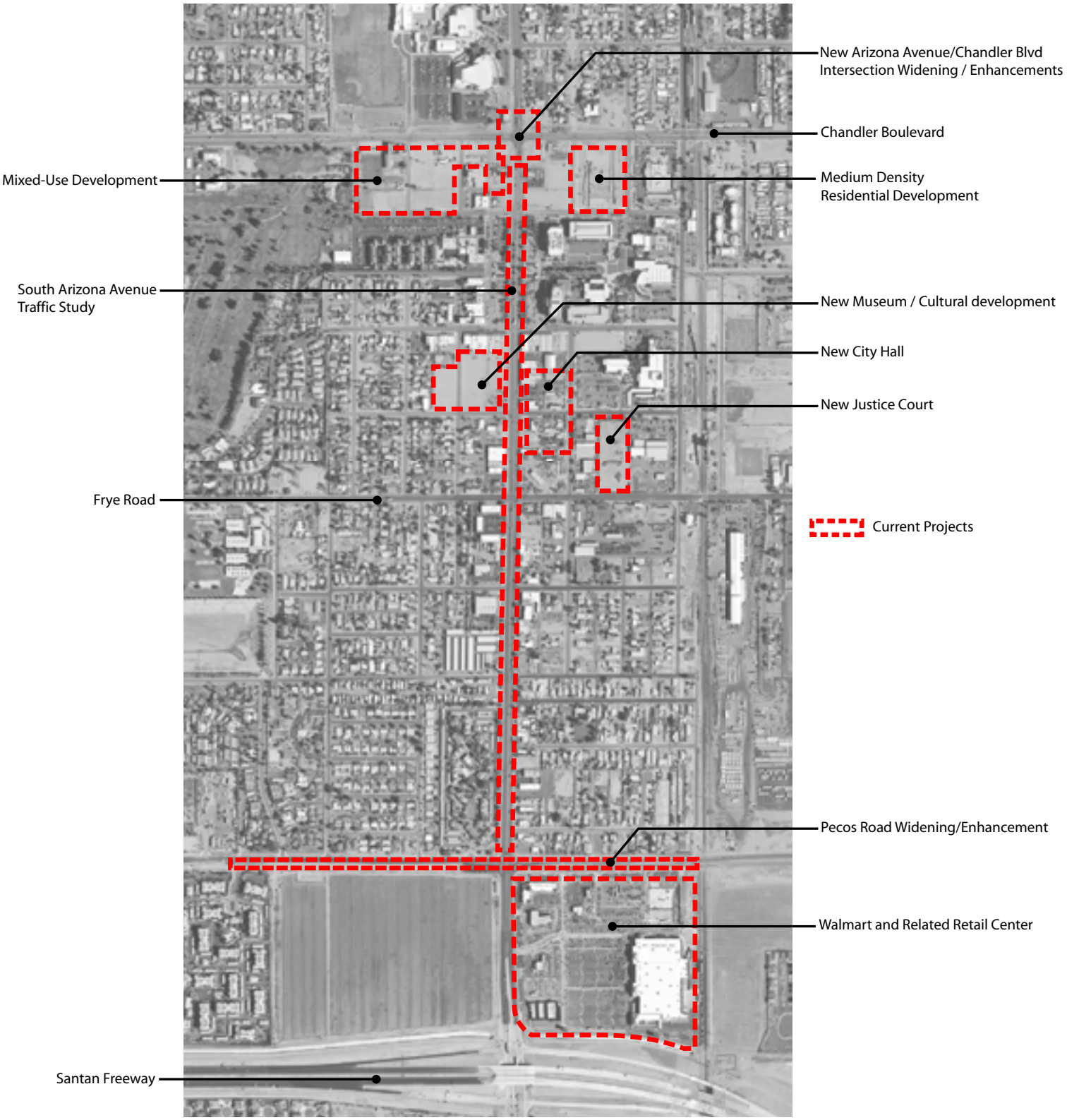


FIGURE 2 Recent and Current Projects

Issues and Problems

To maximize the benefits of the Corridor, several issues will have to be addressed and a coordinated program of action initiated. The major factors present in today's Corridor are based on analysis of the demographic characteristics of the surrounding neighborhood and the mix of retail and business uses along Arizona Avenue.

Looking north on S. Arizona Avenue from Pecos Road

• **Public Perception:** The greatest deterrent facing redevelopment of the Corridor is the perception of the area as a low to moderate income area that is not attractive to most of the residents of the City of Chandler. There is a lack of property maintenance, numerous obsolete buildings, and a lack of onsite parking. The presence of day laborers at street corners adds to this image and will continue to deter any significant retail development in the area.

• **Safety:** Consumers shop where they feel comfortable and secure. The typical Chandler consumer does not feel comfortable in the environment found along Arizona Avenue south of Boston Street. North of Boston Street, the civic facilities, the San Marcos Hotel and historic buildings provide a comfortable environment with varied retail and restaurant uses.

Typical corridor businesses

• **Street Character:** Arizona Avenue is a very wide street that is designed to carry traffic. There is no center raised median to break up the expansive asphalt, and sidewalks are located directly adjacent to the curb. This design is not conducive to a retail environment and, in fact, the number of curb cuts along Arizona Avenue makes for a large number of traffic movements that curtail retail activity.

• **Land Uses:** Land uses along the Corridor south of Boston Street include a combination of retail businesses catering to the local trade area, quasi-industrial uses, and some uses that would attract a larger trade area beyond the immediate neighborhood. Services catering to the local market include dollar stores, Hispanic groceries, self-service laundries and similar uses. Most of these are contained within older buildings. There are also auto body, auto repair and tire shops that likely provide services to the immediate neighborhood. The mixture and type of uses are not cohesive and do not contribute to a strong retailing environment.

Some of the newer buildings in the area include a Pep Boys auto parts store, mini-storage, and some small office buildings. These types of uses may attract consumers from outside the immediate neighborhood. There are also some specialty businesses that can be classified as commercial uses requiring outside storage (such as an electrical contracting company and an architectural stone company).

Typical corridor businesses

Typical corridor businesses

In many respects the land uses along the southern portion of Arizona Avenue are responding to existing market conditions of the adjacent neighborhood. North of Boston Street, uses are clearly oriented toward the San Marcos Hotel and the government complex.

• **Gateway:** The immediate gateway into the southern portion of the Arizona Avenue Corridor is very weak, particularly on the east side of Arizona Avenue. That situation, however, is changing and getting better with the construction of the new shopping centers at the intersection of Arizona Avenue and the Loop 202. The gateway could be much improved by making a seamless transition from the shopping centers at the Loop 202 to the southern part of the Corridor.

• **Parcel Size:** Lots are generally not conducive to modern development practices due to shallow depths and narrow widths. Assembly of small lots is a task that is necessary to facilitate redevelopment efforts. More assembly of land has occurred on the west side of Arizona Avenue. Several new complexes and buildings have been constructed on the West resulting in an improved appearance. Assembly of parcels and extending the depth of lots along Arizona Avenue, especially the east side, is critical to changing the character of the area.

CHAPTER 3 - THE STRATEGY

The strategy for improving South Arizona Avenue is a multi-faceted, coordinated approach that begins with a basic premise:

High density residential housing

- **Residential is the Key to Everything Else**

The key to downtown redevelopment is the construction of new, dense housing projects rather than encouraging more retail development. Retail development by itself does not create retail sales. People create retail sales and people living in the downtown area are a necessity for a successful redevelopment effort.

Based on the study of many comparable urban downtowns' success factors and the consultants' experience and research, it is recommended that the primary effort of the City of Chandler in redeveloping its downtown be focused on housing rather than refocusing or expanding the current retail environment.

Housing will provide the support and foundation for changing the character of the retail uses along the Arizona Avenue Corridor and strengthening the existing retail businesses that already exist there. More housing–not more or different retail uses–is the key ingredient that, over the long term, will lead to a healthy retail and urban environment in the Corridor.

High density residential housing

The Strategy

Following are the primary elements that should be adopted by the City of Chandler for Downtown redevelopment to implement The Vision.

• **Housing:** The primary strategy for reinvigorating and changing the retail market along Arizona Avenue is to introduce medium to high density housing to the area. A combination of housing types and densities should be considered including high density ownership units (condos) at 30 to 40 units per acre, rental units at similar densities, and medium density single family attached or detached units at 6 to 18 units per acre. This part of Chandler should contain the most urbanized and densest development in the community. Residential uses should be introduced directly onto Arizona Avenue to promote new retail uses.

As recommended by the Elliott D. Pollack Market Study (see Appendix A), the City should establish a goal of construction of 1,000 new housing units in the Arizona Avenue Corridor over the next 10 years.

Mixed use development with high density residential

While mixed-use projects are promoted today as the way to incorporate live and work environments within a single building, they have not been successful everywhere and can be highly risky from an investment perspective, particularly in a suburban setting. The inclusion of commercial space within a residential condo project on South Arizona Avenue should be limited and only where it makes sense from the perspective of foot traffic. Chandler should take small steps in redeveloping its Downtown and not overburden private developers in the early stages of the process.

Mixed use development with high density residential

• **Branding:** The Arizona Avenue Corridor should be embellished with a new identity. This should be accomplished through marketing strategies that focus on Downtown Chandler's strengths and a revived character (like "Copper Square" in Downtown Phoenix). Marketing materials should focus on a "live, work, and play" environment, emphasizing a combination of higher residential density mixed with some retail and office.

• **Retail Theming:** While housing is the focus of this strategic vision, opportunities exist for new retail development at the northeast corner of Arizona and Pecos Avenues. This commercial corner should develop a unique theme that will transition from high density residential to the north and commercial to the south while at the same time creating a gateway into downtown Chandler from the freeway.

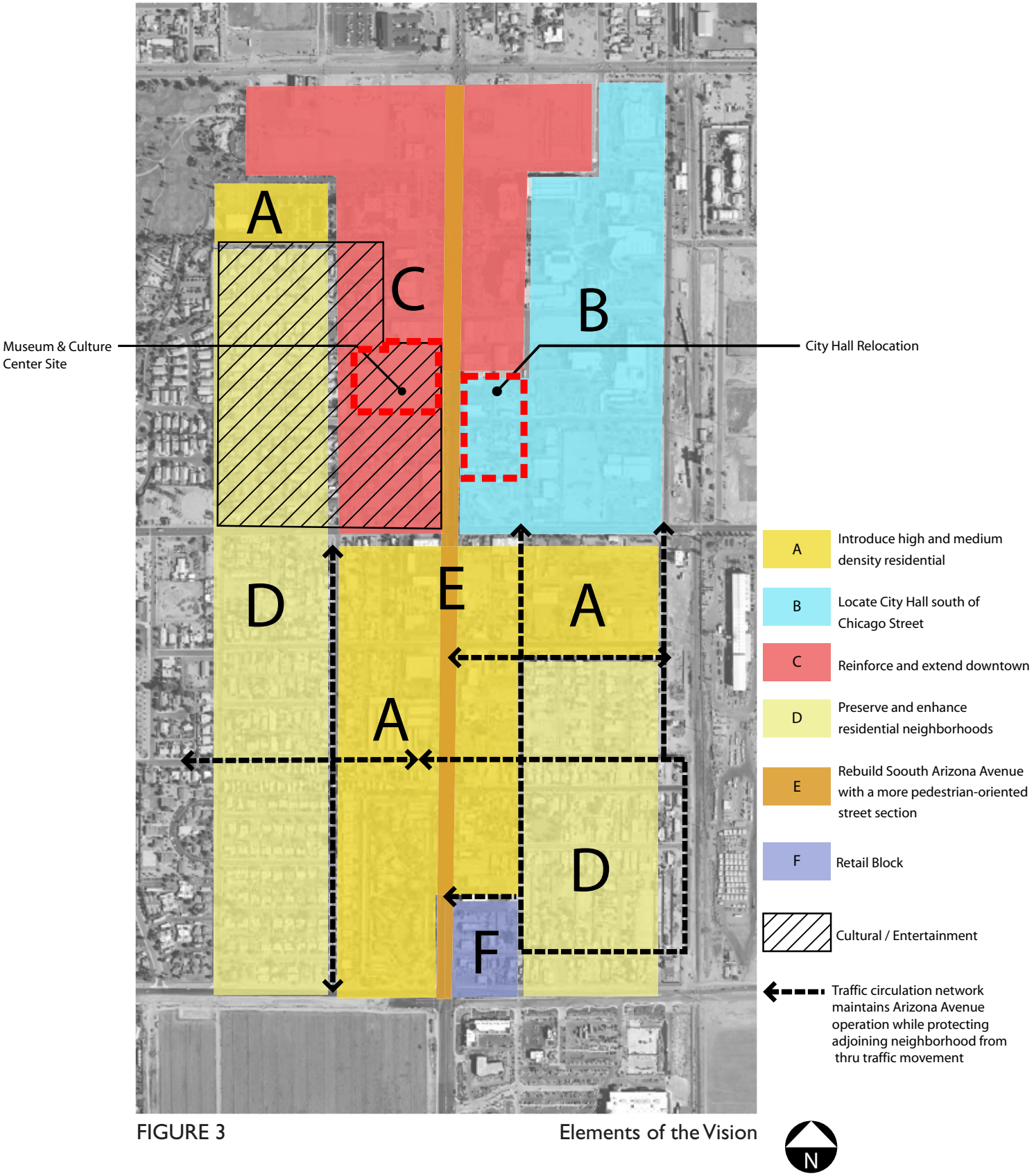


FIGURE 3 Elements of the Vision

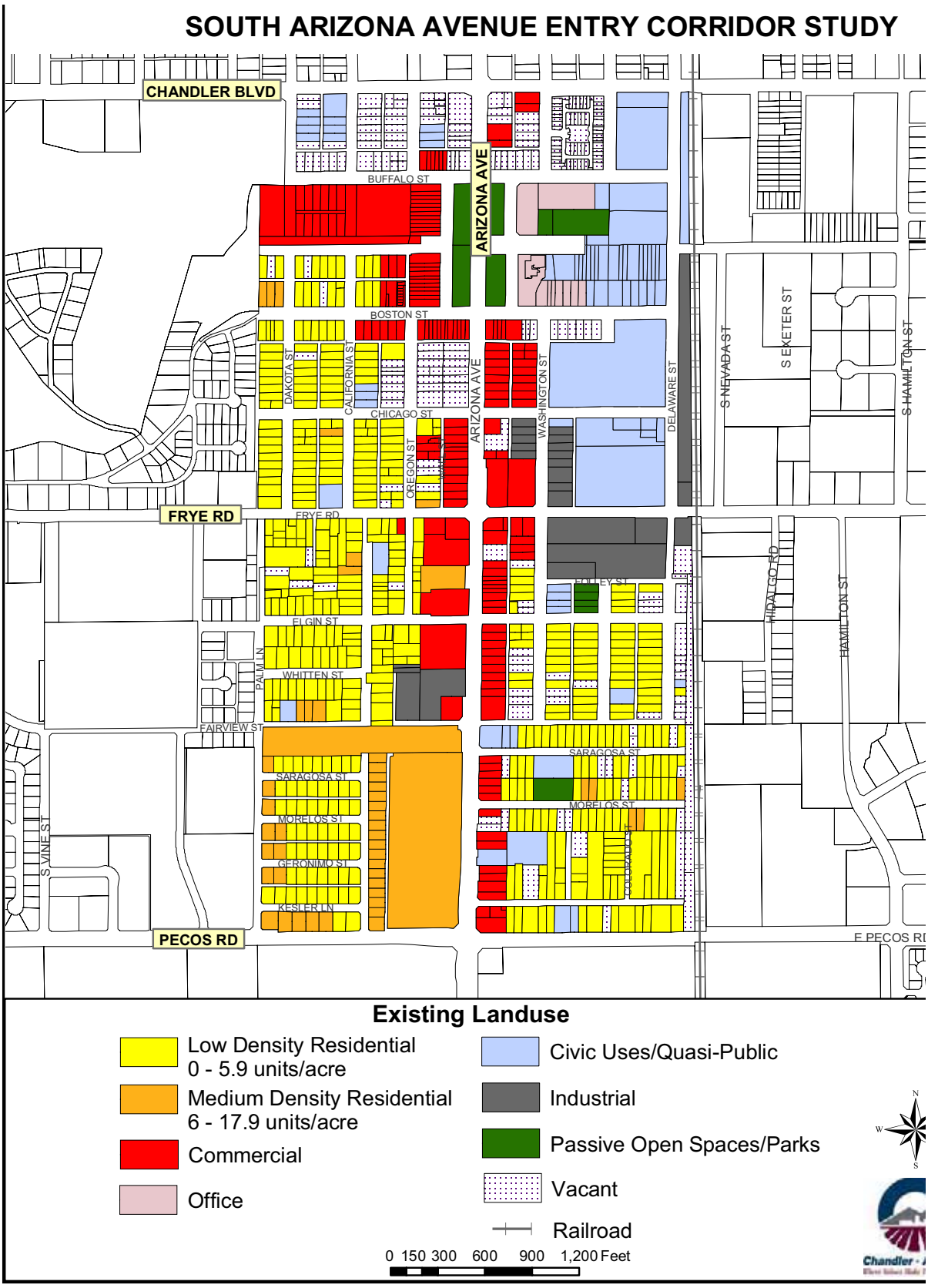


FIGURE 4 Existing Land Use

CHAPTER 4 - LAND USE CONCEPT

To implement the Vision for the Corridor, a clear land use strategy should be articulated which will guide decision-making on zoning and development review during the next several years of Corridor revitalization.

High density residential housing

Residential Land Use

The primary move that must be made is to bring more residential units into the area. Commercial redevelopment of the type that will thrive in the corridor requires more residential units and people, which will accomplish three goals:

• It will attract a population with a higher disposable income to support the retail stores and restaurants in the area.
• It will show that new investment is taking place, and that the area is undergoing a positive turnaround. This will attract both new residents and residential developers into the area.
• It will create a strong sense of place at the core of Chandler that will address a unique urban living lifestyle image.

The market for residential development is strong at this time, particularly for two residential product types: The first is a 6-18/acre single-family attached unit type (town houses), the second type is 30-40/acre high density condo ownership units over parking. The higher density should be related to South Arizona Avenue, and the medium density should be oriented to the existing neighborhoods.

A third type, composed of small single-family detached units, can be developed on the vacant sites that are found throughout the neighborhood, particularly on the east side.

The way to encourage the two primary types of single and multi-family units is to:
• Change the C-3 zone district to a new category that allows higher density residential along Arizona Avenue, in a full block depth to Washington Street. This is discussed in Chapter 6—Implementation.
• Provide sites for higher density residential projects along Arizona Avenue. Residential development will stimulate a change in retail uses along the corridor and support those in Downtown. It will also send a visible signal that new development is taking place in the corridor.

As discussed in the Vision, residential development is the key to Corridor and Downtown revitalization. A variety of housing types are being planned and are under construction at the north end of the Corridor, and sites can be assembled for residential development in the southern part.

Residential Development Sites

Several blocks in the corridor have the potential to play a positive role in the revitalization of Downtown and South Arizona Avenue. These are the potential redevelopment sites. They include (in order from north to south):

• **Sites 1, 2 and 3:** Three blocks being proposed for development by Desert Viking at SW corner Arizona Avenue at Chandler Boulevard, for mixed town homes with retail along Chandler and Arizona Avenue. This project has city approvals, and the sites are cleared.

• **East of Site 7:** Medium density attached residential town home development by Benton-Robb. These units are now under construction.

• **Site 6:** This is a cleared site, owned by the City of Chandler, west side of South Arizona Avenue, south of historic buildings on Boston Street. The full development site includes land

on both sides of S. Oregon Street. The development concept is a mixed use multicultural site with a city museum, specialty retail, and restaurants backed by single family attached residential on both sides of S. Oregon Street. An open space and parking would face South Arizona Avenue. The block extends the pedestrian walkway and trellis system south from A.J. Chandler Park.

• **Steel Yard:** The existing steel yard on Frye Road occupies the largest part of this potential site. Adjacent parcels on the north side of Elgin Street are potentially part of this assembly, including the existing park, which is proposed to be retained and upgraded. Higher density housing is envisioned along Frye Road, with lower density attached town homes oriented to the neighborhood south of the site. Portions of this site may be developed in phases, or as parts of a separate development project.

• **East Side Residential Blocks:** These three blocks are south of Frye Road, extending south, a block short of Pecos Road. They are intended to be residential blocks, with higher density residential on South Arizona Avenue, and low-density town homes facing the neighborhood. They would be developed the full block depth back from South Arizona Avenue to the newly-extended Washington Street. The three sites can have variable densities and can include incidental retail space. However, they are intended to bolster the amount of residential development, so high and medium density residential is appropriate.

• **Self Storage Block:** Self-storage, as with automotive service and repair, is not consistent with the residential and retail concept for South Arizona Avenue. Over time, the Corridor concept includes residential and commercial uses for this site. In a later stage, this site could be redeveloped to a density consistent with the redevelopment concept.

• **Fairview:** The trailer park on Fairview west of Arizona Avenue should be removed and redeveloped with residential densities that are appropriate for the location: multi-family near South Arizona Avenue and single-family detached west of South California Street. The site west of South California Street would be subdivided into lot sizes that are comparable with the existing lot sizes in the neighborhood. California Street would be connected across the site from Fairview south, with appropriate traffic calming improvements. Fairview is recommended to be made a full width street across the trailer park site.

• **Residential Neighborhood Infill:** Numerous opportunities for single-family infill exist in the residential neighborhood on the east side of South Arizona Avenue. In addition to the Habitat for Humanity program, whose goal is to produce five houses a year, there are other vacant properties that could be developed on a selective basis with single family housing that is compatible with the scale of the neighborhood. The City may be able to assist developers or private owners with planning and building these homes. The focus of such a program should be on clusters of sites that are well-located so that they have the maximum positive effect on the surrounding neighborhood.

Furthermore, the single-family area bounded by Delaware St., Pecos Rd., Washington St. extended, and the line 150 ft. south of Morelos St., should be considered eligible for re-platting to achieve lot sizes and shapes more attractive to new single-family development.

Along with new construction, property improvement such as the Neighborhood Program should be a focus. Assistance should be provided to individual families who want to improve their own homes and bring properties into compliance with codes and ordinances. In line with this type of program, non-conforming uses that are not compatible with the future of the neighborhood should be encouraged to relocate. In addition, the city should work with the neighborhood to create a strong sense of identity and pride to further encourage improvement of private properties. This may be accomplished by creating unique street signs for the downtown neighborhoods, encourage and assist with designating key neighborhood buildings (i.e. churches, schools) as historic, and creating new parks/open space.

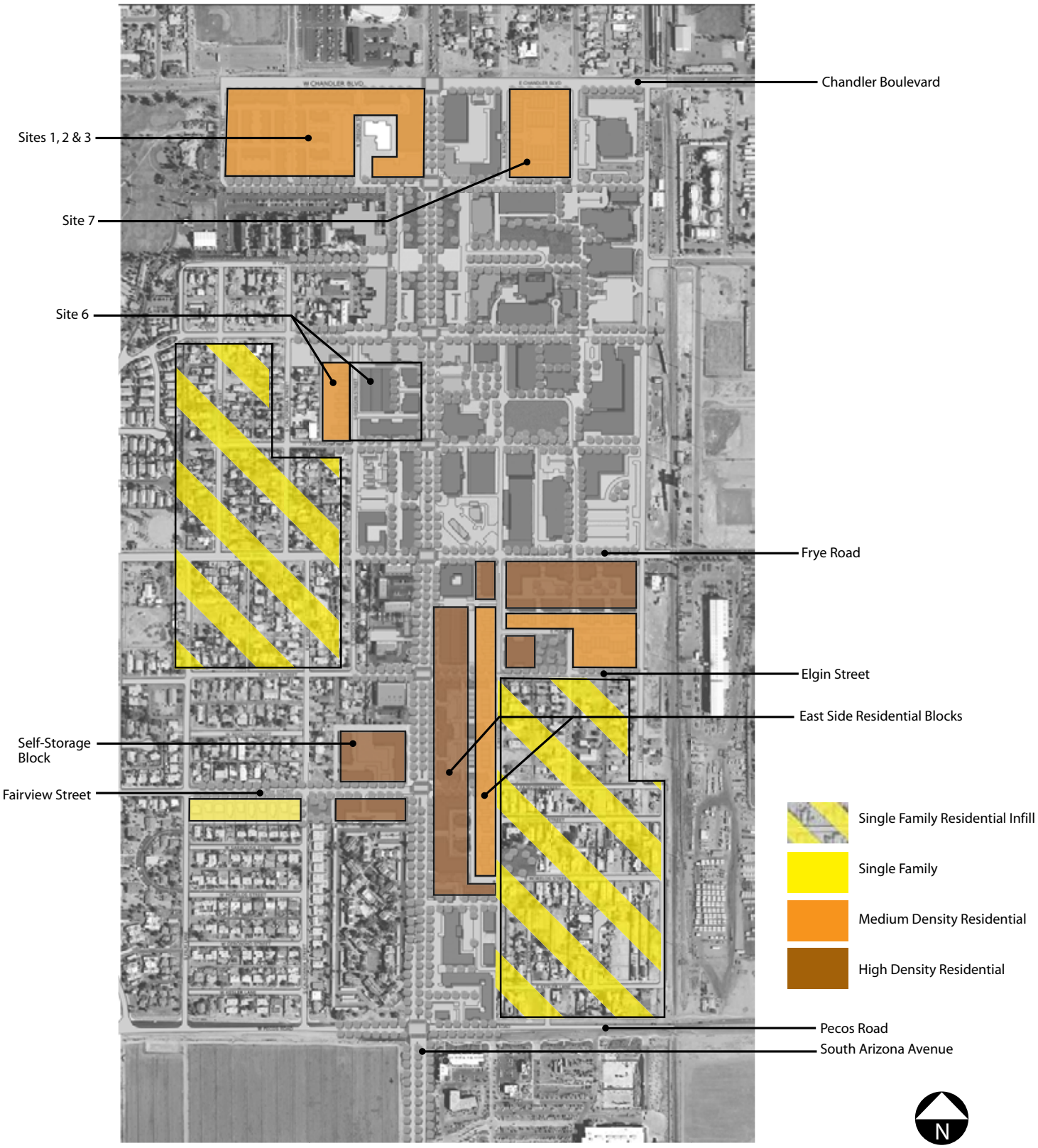


FIGURE 7 Residential Development Sites

Retail and Restaurant Uses

Residential development is the key to South Arizona Avenue's future, but there may be some commercial development potential in the area serving new and existing residential neighborhoods. The mixed residential and retail strategy will strengthen Downtown–with a strong gateway of commercial space at Chandler Boulevard (Desert Viking mixed-use development), continuing around A.J. Chandler Park with the existing retail on the west side. Between Boston Street and Elgin, more retail possibilities exist on the west side of South Arizona Avenue. This could create a very strong continuity of retail frontages from Chandler Boulevard south to Elgin, interspersed with civic uses and open space.

South of that, residential development will prevail, with the exception of a large retail project at Pecos Road and South Arizona Avenue. Finally, the Corridor is anchored by the major retail centers at the Santan Freeway. Commercial uses at the northeast corner of Arizona and Pecos may be themed to take advantage of the proximity of these centers by focusing on home improvements, decorating, building or other home-oriented uses, in proximity to the regional centers at Pecos.

Downtown Chandler restaurant

The primary retail opportunities shown along with the existing retail in the illustrative plan are the following; note that several of these opportunities require assemblage of existing parcels to create sites large enough for commercial development:

• **Site 7:** Across from Sites 1-3, there is an opportunity to create a very strong retail gateway as an entry into Downtown Chandler. Relocating Jack-in-the-Box would be a significant first step in the direction of a great mixed-use gateway. Aside from Jack-in-the-Box, this site is assembled.

• **Boston Street:** The last building site on the south side of Boston Street can complete the retail row on the south end of A.J. Chandler Park. It is an infill site, continuing the historic covered walkway.

Downtown Chandler restaurant

• **Site 6:** This is a mixed-use site across the street from the approved City Hall site. Retail uses, a mix of cultural buildings, and the History Museum will front on South Arizona Avenue, with structured parking behind the retail center. The site is large enough to create a pedestrian space connecting to Boston Street with a pedestrian walkway.

• **South of Site 6:** The west side of South Arizona Avenue has potential retail sites between Chicago Street and Frye.

• **South of Frye Road:** Just west of the Steelyard site, a corner retail site can work with residential and potentially retail/mixed use.

• **Mixed Use on Arizona Avenue:** Other retail opportunities may be possible south of Elgin on the east side of South Arizona Avenue, as these sites become locations for residential and – if feasible for these developers - mixed-use projects.

Downtown Chandler retail

• **NE Corner S. Arizona Avenue and Pecos:** This would be the largest single retail site in the corridor if existing commercial properties were assembled. It could also be phased.

Open Space

Open space, courtyards, parks, civic commons, trellised walkways and shaded streets will create an identity for the residential, retail and civic uses that will make this an attractive place to live, work and play. Public open space and private landscaped open space will, together, create this green public framework. The features of the open space are the following:

• **A. J. Chandler Park:** Consider improving the historic value of the park to Downtown by opening up the sight lines into the park from Arizona Avenue and evaluating the parking

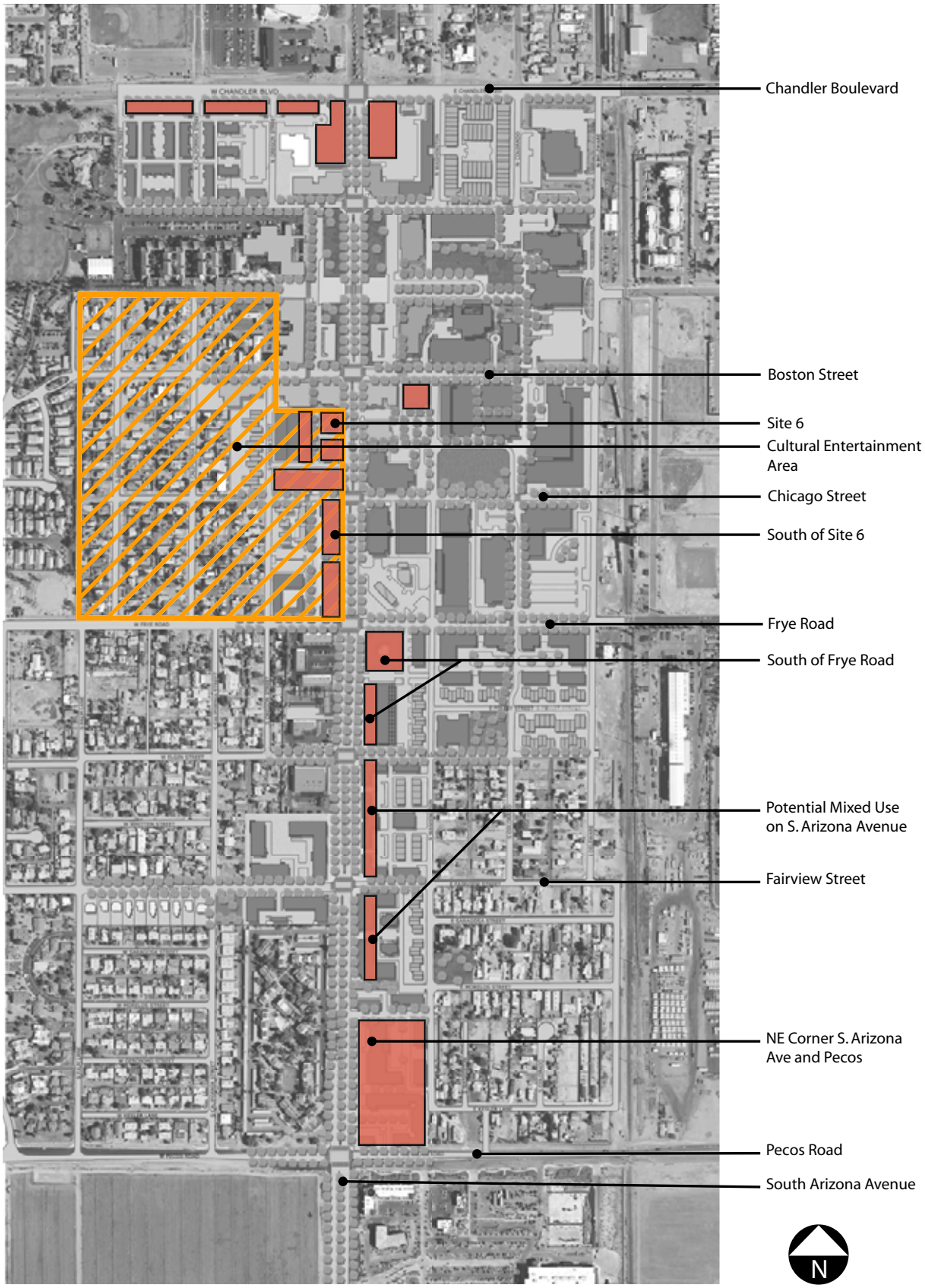


FIGURE 8 Retail Diagram

layout, to create a more aesthetic setting without losing the functionality of the parking and circulation.

• **South Arizona Avenue:** Entry gateways at Chandler Boulevard and Pecos will introduce visitors to the Corridor and Downtown, branding the area. These are envisioned as tasteful signage and landscape features that identify Chandler, and prevent the area from being overshadowed by the shopping centers south of Pecos.

• **North and South Civic Commons:** The relocation of City Hall provides an opportunity for a major focal town green just east of City Hall, as a focus for a number of other municipal and county buildings south of the existing civic center.

• **Trellised Walkways:** Trellises shading sidewalks will be extended into the surrounding retail and civic neighborhoods from their present location in Downtown. Putting these on major pedestrian routes will extend an historic look and feel farther south in the Corridor.

• **Street Tree Planting:** A consistent, persistent street-tree planting program for both City and private development according to a plan will result in a delightful green neighborhood in the corridor. The most important pedestrian paths should be prioritized in the City's Capital improvement Program. Other streets, more oriented toward existing neighborhoods, should have planned, phased planting programs to improve them incrementally over the next several years.

Dr. A.J. Chandler Park

• **Open Space in Private Development:** Design Guidelines will specify open space requirements for new commercial or residential projects. These open spaces will provide for the immediate needs of residents and other users of these spaces and will tie into the public open space system.

Cultural and Entertainment

The blocks bounded by Arizona Avenue, Frye Rd., Oregon St., and the alley south of Boston St., along with the half block on the west side of Oregon St. between Chicago St. and the alley south of Boston, feature specialty retail, restaurants/cafes, offices, museum, entertainment, and other cultural uses as primary uses, with ancillary residential (medium to high density) to achieve appropriate land use transitions and patron support base.

As redevelopment activities begin to materialize along Arizona Avenue itself, the area generally bounded by Arizona Avenue, Frye Rd., the Palm Lane alignment (alley west of Dakota St.), and Boston St., together with Sites 4 and 5 would all be considered eligible for assembly of existing small lots to achieve new building sites for redevelopment projects related to hotel, business conference and support uses, restaurants or restaurant conversions, offices, and other cultural uses such as historic arts, visual arts, or performing arts. Chicago St. would then be envisioned as providing a pedestrian walkway that links the various entertainment/cultural uses west of Arizona Avenue with the civic campus uses to the east of Arizona Avenue.

Trellised walkway in downtown Chandler

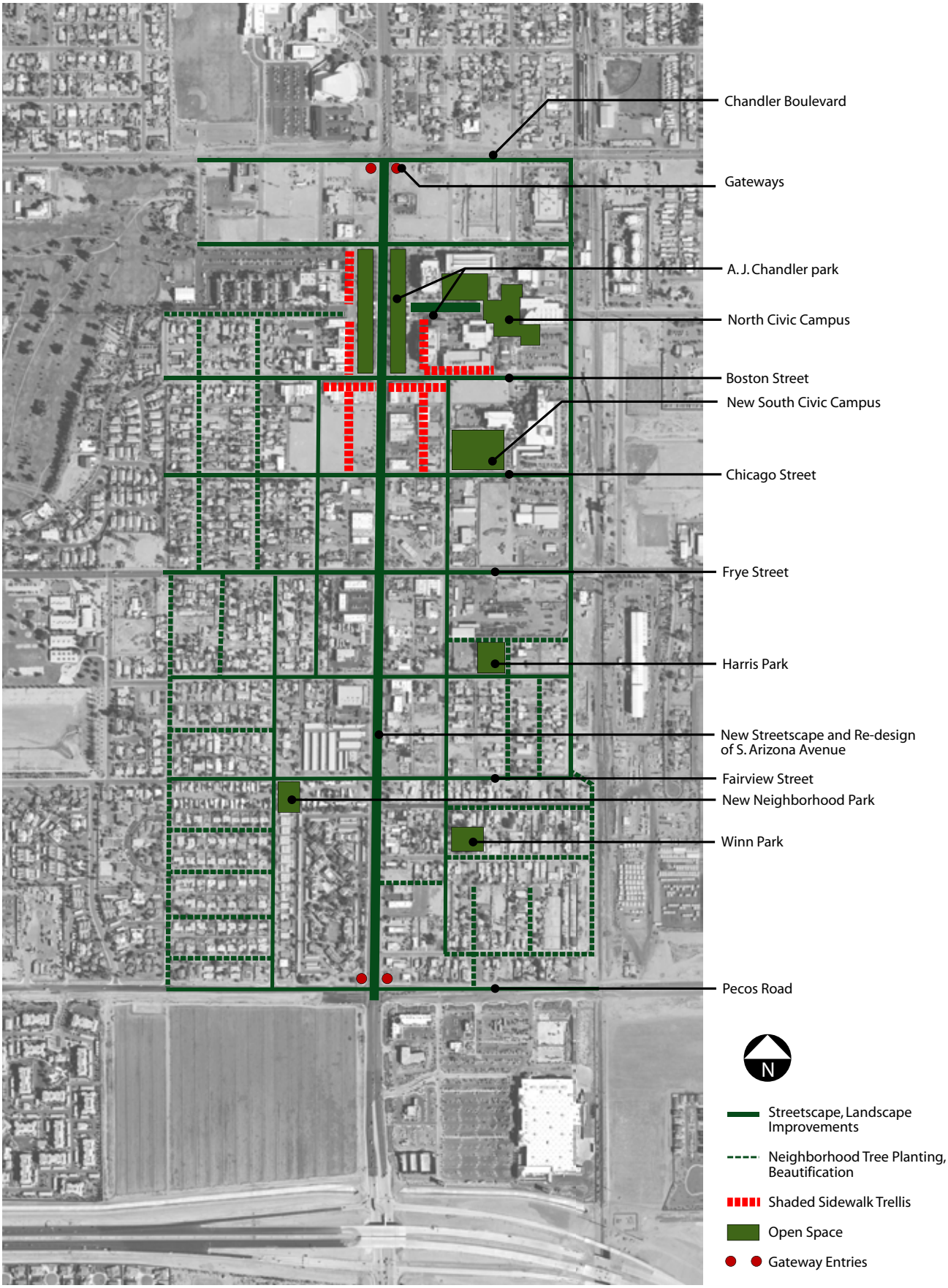
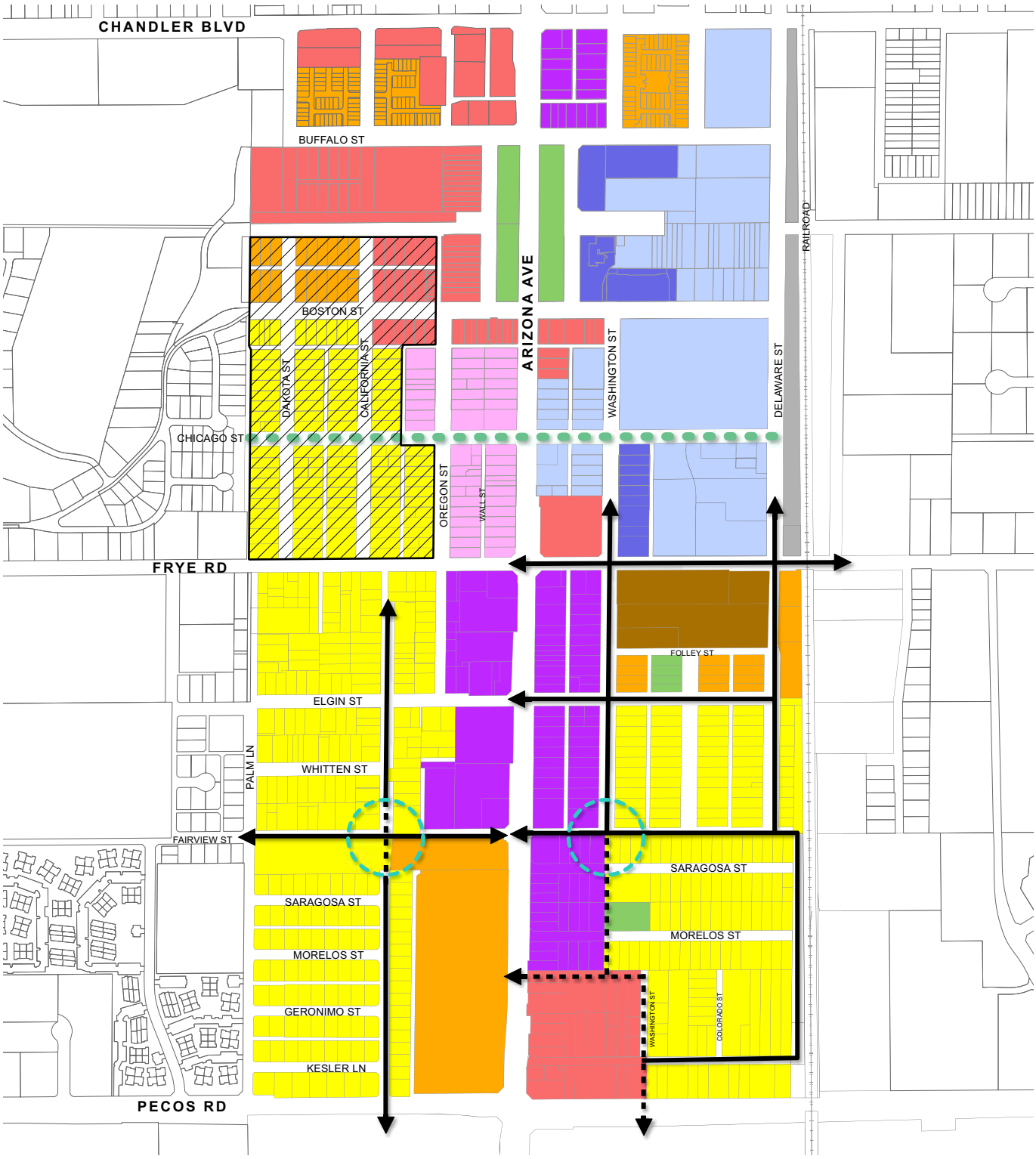


FIGURE 9 Open Space and Streetscape

SOUTH ARIZONA AVENUE ENTRY CORRIDOR STUDY



Future Land Use

- Low Density Residential 0 - 5.9 units/acre
- Medium Density Residential 6 - 17.9 units/acre
- High Density Residential 18 - 40 units/acre
- Urban Commercial
- Cultural & Entertainment
- High Density Residential with Mixed Commercial or Office
- Civic Uses
- Office
- Open Space / Park
- Transit / Light Rail
- Future Growth Area
- Proposed Circulation
- Existing Circulation
- Future Traffic Calming
- Pedestrian Corridor

0 195 390 780 1,170 1,560 Feet

N

Chandler - Arizona

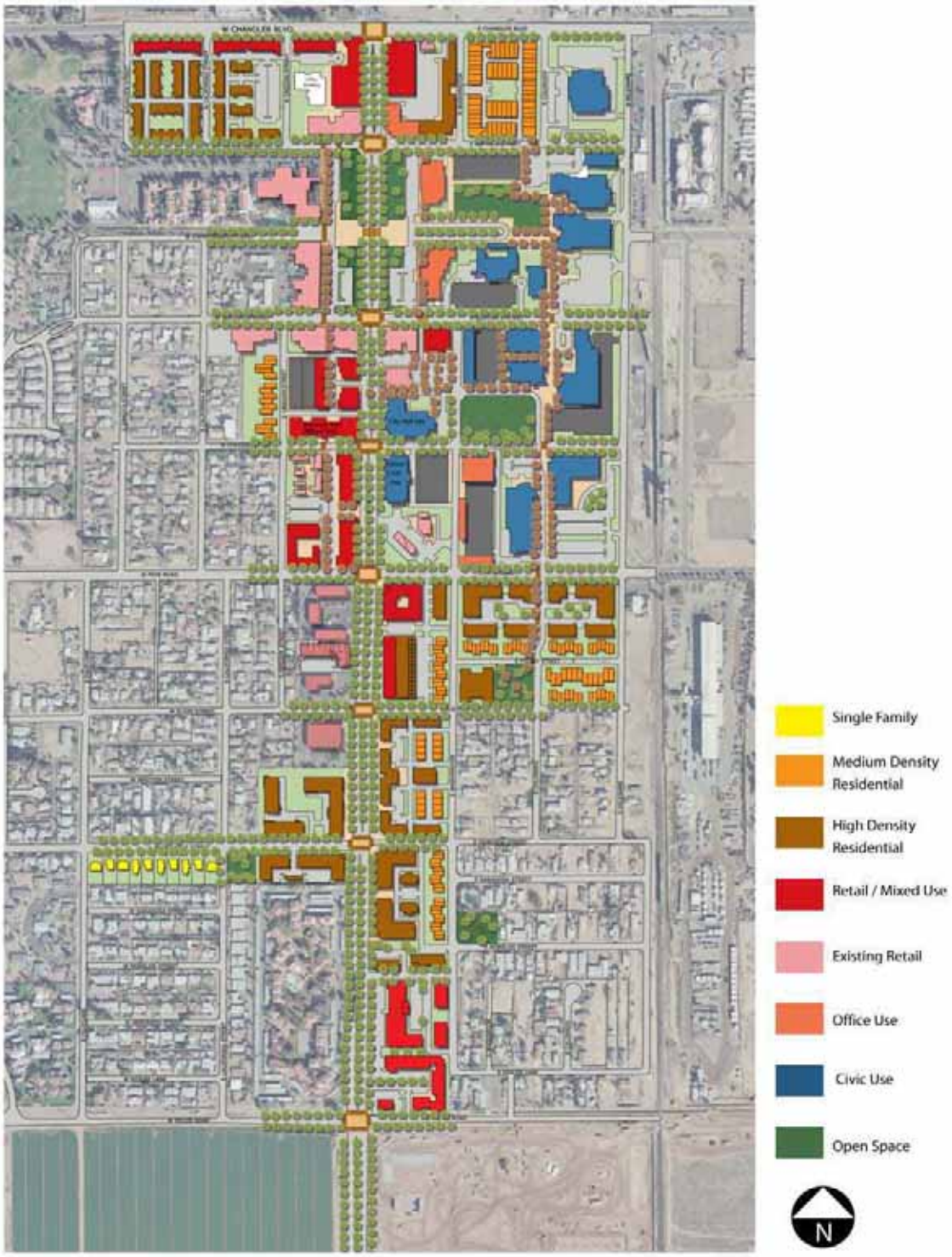


FIGURE 6 Illustrative Site Plan

* Physical form is shown for illustrative purpose only. The corridor can take on many different forms.

Future Land Use Category Descriptions

1. Low Density Residential (0 – 5.9 dwelling units/acre)

Low Density Residential denotes areas where single-family residential development can be accommodated within a range of 0 to 5.9 dwelling units per acre. The use of single-family subdivision design concepts may be applied and are encouraged particularly in areas that were previously parceled rather than subdivided to meet city standards. This plan recommends that areas designated for Low Density Residential south of Frye Road be rezoned where necessary to allow a single-family home as permitted use in order to encourage the development of vacant single-family lots. Densities higher than 5.9 dwelling units per acres can be considered on a case-by-case basis upon demonstrating compatibility with surrounding land uses and receiving approval from the Planning and Zoning Commission and the City Council.

2. Medium Density Residential (6 – 17.9 dwelling units/acre)

This designation allows alternative designs in various non-traditional detached and attached homes for a variety of housing types including patio homes, town homes, condominiums, and other products built at similar intensities. The residential density in this category ranges from 6 to 17.9 dwelling units per acre.

3. High Density Residential (18 – 40 dwelling units/acre)

High Density Residential denotes areas where multi-family residential development can be accommodated within a range of 18 to 40 dwelling units per acre. Design quality, property size, and infrastructure capability will be the primary determinants of the density achieved. This category, which is unique to the downtown corridor, is intended to create a strong sense of place while at the same time provide an urban living lifestyle that will attract people and support downtown commercial.

4. High Density Residential / Mixed Use (18 – 40 dwelling units/acres)

This category, which is unique to the downtown corridor, is intended to create a strong sense of place while at the same time provide an urban living lifestyle with opportunities to live, work and play in the downtown area. This category denotes areas appropriate for mixed use development consisting of high-density residential, selected commercial and office. High density residential in this category can be accommodated within a range of 18 to 40 dwelling units per acre. Design quality, property size, open space and infrastructure capability will be the primary determinants of density achieved. Lower densities can be considered and are encouraged as land use transitions when located next to properties that are planned for Low Density Residential.

Commercial uses in this category are limited to pedestrian oriented uses that serve the population residing or working in the same development or in the immediate area. Examples of appropriate commercial uses in this category include, but are not limited to, cafes, bakeries, restaurants, delicatessen, food specialty stores or other stores carrying a variety of food and related goods, yoga/dance studios, florists, Laundromats, dry cleaners, and personal services such as barbershops and beauty salons. Prohibited uses in this category include automotive service, automotive repair, automobile sales and fast-turnover establishments defined as businesses that include in their design and function the use of drive-through lanes, drive-up windows, or other features that facilitate the rapid delivery of goods or services to vehicular customers.

Office uses in this category are intended to serve the needs of the immediate area and provide additional employment opportunities for downtown residents. Examples of appropriate office uses in this category include, but are not limited to, law offices, real estate offices, financial institutions, computer service/repair, and other general office.

5. Cultural and Entertainment

Cultural and Entertainment denotes where the most intense types of cultural, commercial, entertainment and office development may take place. Examples of appropriate uses in this designation include museums, art galleries, performing art center/theater, hotels, retail, restaurants, business conference and support uses, dance clubs, cinemas, art studios, and amusement arcades. This category may also accomodate a compatible mix of general offices as well as ancellary residential of a density determined by design quality, property size, infrastructure capacity, and compatibility with adjoining land uses. The intent of this category is to create a vibrant, mixed-use, pedestrian oriented, urban environment that is linked to the historic downtown square with shaded pedestrian walkways.

6. Future Growth Area

This category denotes the area that is intended to become a future expansion of the Cultural and Entertainment category. This area is to be considered eligible for assembly of existing small lots to achieve new building sites for redevelopment projects related to hotel, business conference and support uses, restaurants or restaurant conversions, offices, and other cultural uses such as historic arts, visual arts, or performing arts as identified in the Cultural and Entertainment category. Chicago Street is envisioned as becoming a major pedestrian walkway that links the various entertainment/cultural uses west of Arizona Avenue with the civic campus uses to the east of Arizona Avenue.

7. Urban Commercial

Urban Commercial denotes areas that are appropriate for commercial development that are intended to serve a market that is larger than the immediately surrounding area. Development in this category is intended to transition from the conventional shopping center design to a more urban pedestrian oriented commercial design, thus placing more emphasis on pedestrian connections, shade and urban streetscape, while at the same time accomodating for vehicular access.

Development in this category may take the form of retail, restaurant, personal services such as beauty salons and day spas, bank, preschool/childcare, general office and medical office. Prohibited uses in this category include automotive service, automotive repair, automobile sales and fast-turnover establishments defined as business that include in their design and function the use of drive-through lanes, drive-up windows, or other features that facilitate the rapid delivery of goods or services to vehicular customers.

8. Civic Uses

Civic Uses denotes areas that are designated for offices, government offices and services, and ancillary retail.

9. Office

Office denotes areas that can accomodate general office development including but not limited to law offices, real estate offices, financial institutions, non-profit organizations, and professional training/post-high school education.

10. Parks and Open Space

Parks and Open Space depicts areas set aside for recreation of as passive open space either through City, State or Federal ownership or by designations in the Chandler General Plan.

11. Transit / Light Rail

This category denotes areas that are considered appropriate for a bus and/or light rail transit center, and related support uses. Development in this category should provide sufficient shade and be designed to connect to the pedestrian corridor along Chicago Street.

CHAPTER 5 - CIRCULATION

As the City of Chandler plans and redevelops South Arizona Avenue, careful attention will be needed to balance current resident and business needs, mobility, circulation, parking, economic vitality, land use, and pedestrian needs. To better facilitate new development and revitalization, the following transportation improvements will be needed along South Arizona Avenue.

The main factors driving the circulation plan are:
• Creating developable sites
• Preserving and protecting the single family neighborhood from cut-through traffic
• Providing safe access to and from Arizona Avenue to the single family neighborhoods and the high density residential residents.
• Creating a more pedestrian-oriented – intimate street cross section along Arizona Avenue

Each of these issues will need to be complemented by the other elements (economic, land use, and design) to be a part of a successful revitalized South Arizona Avenue Corridor.

This transportation overview is not intended to fully examine each of the issues nor provide comprehensive solutions but rather identify potential improvement opportunities associated with redevelopment approaches proposed by RNL, the City of Chandler, adjacent neighborhoods and others. Where needed, this overview suggests where further study may be warranted to better understand the implications and effects a particular redevelopment approach may have on the adjacent transportation network.

Circulation and Roadway Capacity

The paramount issue with downtown transportation is circulation and mobility. The ability to easily get to a destination in an activity center or downtown is primarily due to the network of streets and their ability to accommodate the traffic loads. Arizona Avenue between Chandler Boulevard and Pecos Road is currently classified as a Major Arterial street in the City's General Plan. The plan calls for Arizona Avenue to have six lanes (three lanes in each direction). However, this classification will need to be redefined as discussed in this chapter to better reflect the City's redevelopment efforts, incorporation of other modes of transportation and an overall vision for South Arizona Avenue.

Circulation

One of the benefits of the downtown area is its street grid. The grid provides site access to area land uses and provides alternative means of traveling the area without using Arizona Avenue. Having motorists use the collector and local streets of Downtown for local trips helps in two ways: first, it helps traffic capacity on Arizona Avenue by reducing the number of vehicles that use the major street. Second, it reduces the number of turning movements on and off of Arizona Avenue, thus reducing the number of conflicts between other motorists and pedestrians.
Evaluation of the current network and discussions of circulation with area neighborhoods revealed that the following connections should occur to promote better circulation within South Arizona Avenue neighborhoods for their convenience and protection.

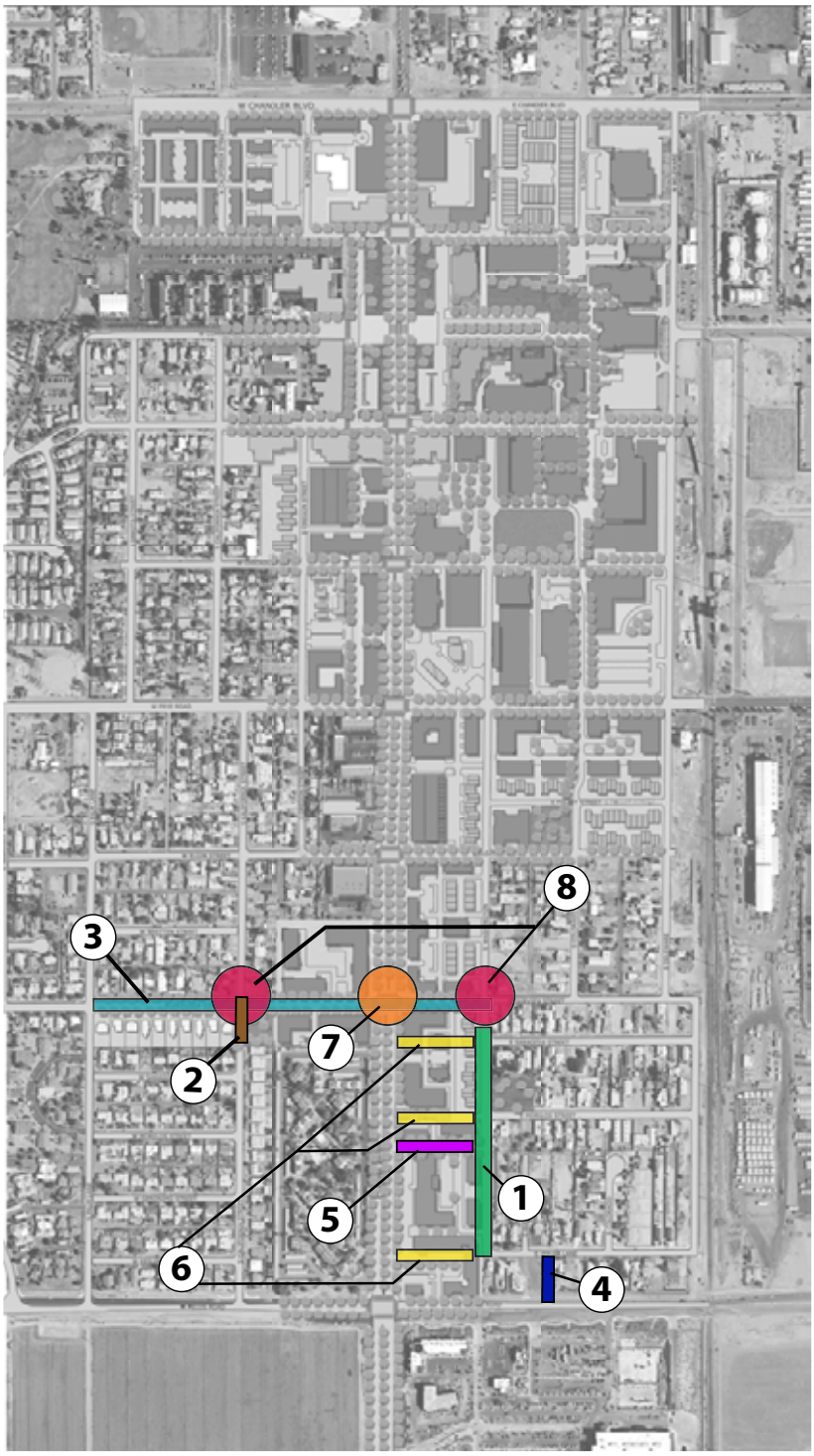


FIGURE 10 Circulation Improvements

1. Extend Washington Street south from Fairview Street to Kessler Street.

2. Extend California Street south from Fairview Street through mobile home park.

3. Acquire southern half of R.O.W. on Fairview from Palm Lane on west side of South Arizona Avenue to Washington Street on east side of Arizona Avenue.

4. Create new street connection form Kessler Street to Pecos Road.

5. Create new street connection from new Washington Street to South Arizona Avenue south of existing Morelos Street.

6. Abandon segments of Saragosa Street, Morelos Street, and Kessler Street located between Washington and South Arizona Avenue.

7. New traffic signal at Fairview Street and South Arizona Avenue.

8. Traffic calming at Fairview Street and California Street and at Fairview Street and Washington Street.

• Widen Fairview Street from Palm Lane to Washington at a minimum.
• Connect California Street to Fairview Street south of Saragosa. The new connection will not include any widening of California Street.
• Provide traffic calming devices along California Street, Palm Lane and others as necessary to discourage speeding and cut-through traffic. The City will work with neighborhoods to select the appropriate traffic calming treatments for each street. Consider installing a roundabout at California Street and Fairview Street when California Street is connected through to Fairview Street.
• Extend Washington Street south to Kessler with a knuckle intersection.
• Do not connect Delaware Street with Pecos Road. A Delaware connection to Pecos Road is too close to the railroad tracks.
• Keep the connection of Delaware Street with Kessler Lane.
• Provide a new connection (Morelos Street) midway between Fairview Road and Pecos Road to Arizona Avenue, from Washington Street.
• Vacate Saragosa, Morelos, and Kessler between Arizona Avenue and Washington.

The City of Chandler has made it clear that any street extensions or alignment changes to existing streets will be made only with the consultation and consideration of the affected property owners. The City of Chandler will take great care to minimize property, business and residential disruption and relocation. All improvements will be made for the safety and convenience of the neighborhood.

Alternatives Evaluated

Street Connections: During the course of this study, several street alignment and connection alternatives were evaluated in the neighborhood east of South Arizona Avenue. They were considered because they were thought to create more convenient access for the neighborhood and in some cases better access and site definition for new projects on South Arizona Avenue. However, some of these alternatives would potentially create more traffic through the neighborhood and disrupt the quiet of the residential streets.

Alternative Circulation Route: During meetings with the public regarding this study, an observer inquired about the feasibility for a new route or connection to Delaware Street from South Arizona Avenue. This new connection would divert off of Arizona Avenue around Fairview Street and proceed in a northeasterly direction to Delaware Street. The idea was intended to divert some traffic from Arizona Avenue, but in doing so it would present problems.

One of the potential problems is that the new road would have required acquisition of several residential properties and doing so would have created a significant disruption to the existing neighborhood. It would have also bisected the existing rectangular blocks and parcels; thereby creating triangular lots that are more difficult to develop and more difficult to assemble into larger developable pieces. The roadway would have also funneled more traffic to one location rather than dispersing it over many intersections, thus causing poorer levels of service at the intersections. Further, a bigger intersection would have become a barrier to pedestrians by deterring them from crossing due to its size and the wait time between crossing cycles.

Connections to Pecos and Washington: The options evaluated by the consultants included a connection of Delaware from Kessler to Pecos. The concept was to create a transition for traffic from Pecos to the neighborhood, and north to the civic buildings. Meetings with the neighborhoods brought forth criticism of this connection because of a potential increase in traffic through the neighborhood as people began to use this "shortcut". Therefore, this option was rejected, in favor of new street connection to Pecos farther west of the railroad tracks, at the location of the new entrance to the regional shopping center south of Pecos.

Options for street connections to South Arizona Avenue were also investigated. The purpose of these was to create safe, convenient travel options for the neighborhood, while providing logical lot sizes for new development on the east side of South Arizona Avenue. Along with this, a new Washington connection between Kessler and Fairview was evaluated and adopted, because of the added convenience for the neighborhood and continuity of Washington, facilitating the new development between Washington and South Arizona Avenue. A new street between Washington and South Arizona Avenue, south of the vacated Morelos, was proposed to provide the neighborhood a safer place to enter South Arizona Avenue.

Roadway Capacity

The current policy and plan for Arizona Avenue in the Corridor is to maintain the Major Arterial classification and improve the roadway to three lanes in each direction. However, this size facility does not accommodate the current goals and vision of the City for the revitalization and redevelopment of South Arizona Avenue. A four lane configuration (two travel lanes in each direction) of South Arizona Avenue between Chandler Boulevard and Pecos Road, somewhat modified from its cross section today, is recommended to promote the type of development the City needs to revitalize the corridor.

To this end, the City of Chandler retained Parsons Brinckerhoff to further evaluate a four lane cross-section with on street parking and subsequently determined that such a cross-section would function at acceptable levels of service.

The recommended configuration of South Arizona Avenue is shown in Figure 11.

The Parsons Brinckerhoff Study (Appendix D) also includes two alternative street cross sections.

Conceptual Section

Conceptual Plan

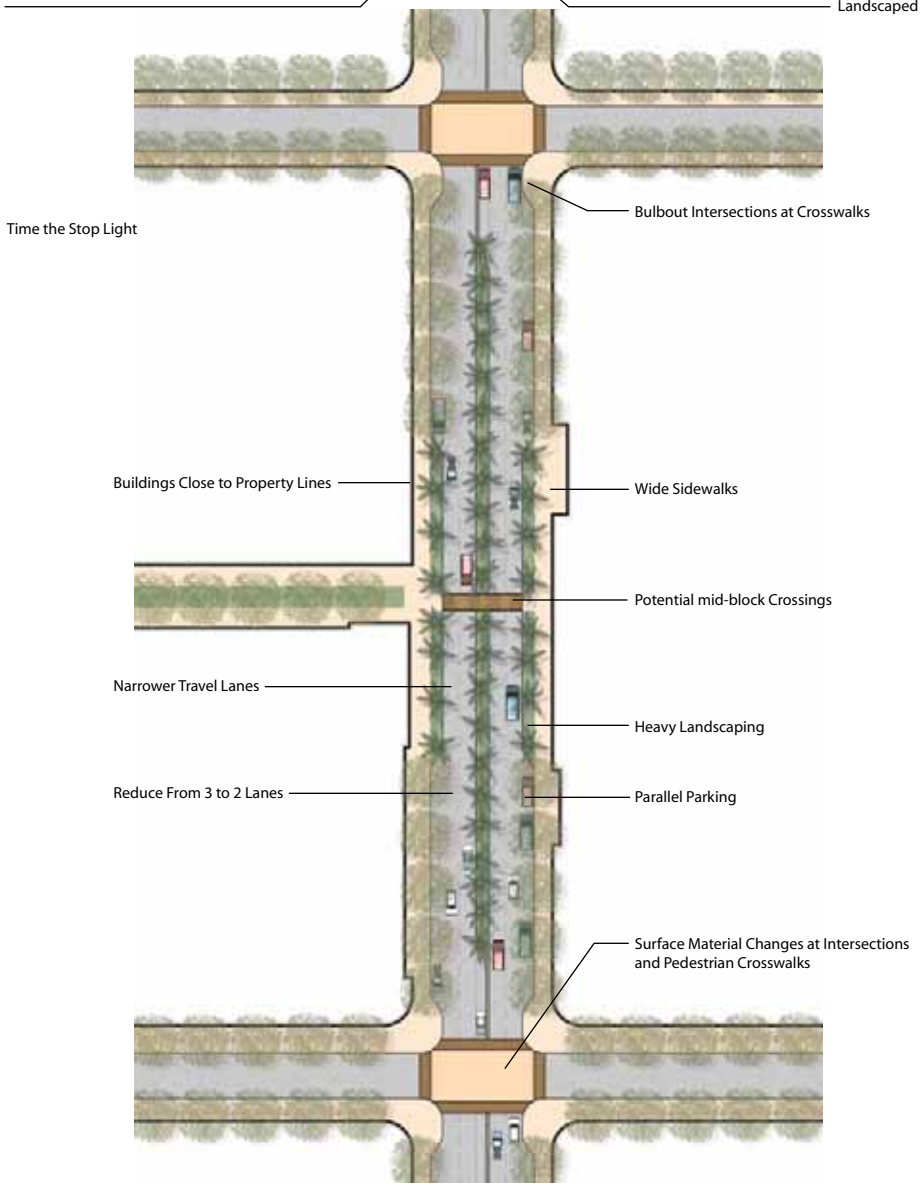


FIGURE 11 South Arizona Avenue Conceptual Section and Plan

Walkability

With the exception of the area around the shops on San Marcos Place and A. J. Chandler Park in front of the Chandler Office Center, Arizona Avenue's pedestrian realm is deficient for promoting Downtown revitalization. However, the City of Chandler recognizes that through their revitalization efforts, South Arizona Avenue's walkability will be an integral part of the area's overall transportation system. Chicago Street has the potential to become a pedestrian corridor connecting cultural and entertainment venues with City Hall and a possible bus transit center/light rail depot to the east. The plan is to create a vibrant, pedestrian oriented, urban environment in the Cultural and Entertainment area that should become a hub for pedestrian oriented events such as arts festivals and other events that would require temporary closure of streets in that area.

Every trip begins and ends with walking. Walking remains the cheapest form of transport for all people, and the construction of a walkable community provides the most affordable transportation system any community can plan, design, construct and maintain. Walkable communities are more sustainable, and lead to more social interaction, physical fitness and diminished crime and other social problems. Walkable communities are more livable communities. Strategies that can be implemented on Arizona Avenue to improve walkability include:

Walkability Recommendations:

• **Provide consistent streetscape treatments** – Proper lighting, landscaping, street furniture, and shelters help provide a sense of place and define the pedestrian's realm. For example, the city should continue to cover or provide other means of shade for sidewalks much like those at San Marcos Place. This traditional shelter treatment will enhance the comfort and put pedestrians at ease as they walk the Arizona Avenue corridor. The Arizona Avenue right-of-way is not recommended for the overhead trellis treatment.

• **Provide signalized crossings at high pedestrian locations** – Concentrating pedestrian crossing activities at key locations (mid-block or at intersections) will help warrant the need of a traffic signal and provide a safer means to cross the street. Signals should be spaced properly to allow for coordination and good progression of traffic on Arizona Avenue.

Mid-block crossings should only be used when adjacent signalized intersections provide a substantially circuitous route for pedestrians. Unsignalized mid-block crossings should not be provided where traffic volumes do not create adequate gaps for pedestrians to cross safely.

• **Shorten the distance to cross Arizona Avenue -** Providing curb extensions or bulb outs at intersections will shorten the distance pedestrians will have to cross and provides areas to improve the streetscape.

• **Minimize curb cuts -** Minimizing curb cuts will flatten out the sidewalk making the surface more comfortable to cross. Further, it eliminates a potential vehicle/pedestrian conflict, thereby improving safety.

• **Maintain sidewalk/path continuity -** Ensure that sidewalks are interconnected between public areas, land uses, parking, and transit stops. In other words, provide pedestrian corridors that serve the same destinations as automobiles.

• **Maintain an open and well-lighted space -** Avoid creating narrow and "dark" places

to walk in order to improve safety. Dark areas promote crime, vandalism, and a sense of unease for pedestrians. A good streetscape should incorporate design elements such as wide sidewalks to make the pedestrian feel safe, secure, and better related in the abutting use.

• **Scale signing and lighting to pedestrians.**

Parking

Arizona Avenue has on street parking available south of Boston Street on both sides. Additional public parking is available in the parking garages on the municipal campus, surface lots by the Library and in temporary unimproved lots south of the shops on San Marcos Place. Parking is allowed on most of the side streets directly off Arizona Avenue.

Discussions with existing Arizona Avenue business owners during the open houses conducted for this project revealed that their customers like the convenience of on street parking ; but the business owners acknowledge that these parking spaces are limited. One business owner stated that she provides additional parking in the rear of her store, but finds that her customers rarely utilize it because it is difficult to get to and that the surrounding neighborhoods cause their customers "concern."

As new developments occur along the South Chandler Avenue corridor, the city should carefully evaluate the parking needs for the variety of land uses it wants to encourage along South Arizona Avenue. The South Arizona Avenue area will need to be treated differently than areas in the more suburban areas of Chandler. Each land use will demand varying parking needs.

Since the new retail along Arizona Avenue south of Frye Road is expected to be incidental to a primarily residential neighborhood, parking is not expected to be an issue. These new high density residential/mixed-use developments may need one or two spaces at most for drop-off, delivery, or fifteen minute parking spaces. On street parking should be kept to a minimum. Sufficient off street parking will be required for each development.

• **Develop Additional Off street Parking –** On street parking will not be enough to handle future development. Therefore, additional off street parking will need to be integrated into future developments. The key to successful off-street parking is to maximize shared use parking. Place complementary land uses together to take full advantage of differing peak parking demands, clustering land use components together that have parking peaks at different day(s) of the week or hour(s) of the day. For example, an office building operating essentially from 8:00 a.m. to 5:00 p.m. during the week can be located closely to entertainment businesses (theaters, nightclubs, restaurants, etc…) that are active in the evenings and on week ends.

• **Maintain On street Parking –** Providing parking on Arizona Avenue maintains the look and feel of a traditional "Main Street" and adds an additional buffer between pedestrians and the travel way while providing a convenient method of parking. However, on street parking reduces vehicular capacity caused by parking maneuvers. In addition, the space used for on street parking is preserved for the City's future transportation needs. For example, the parking might be converted to provide exclusive rapid transit lanes or used for additional roadway capacity.

Parking Recommendations

• Develop a South Arizona Avenue parking plan with specific area requirements and policies.

- Require development to provide additional off street parking.
- Minimize on street parking where feasible.

Transit

As land uses and developments are considered for the revitalization of Arizona Avenue, transit needs to be considered in their planning. Traditionally, access to development has been solely by the single occupant vehicle. Transit should be in the forefront of land use decisions for South Arizona Avenue.

Currently, regular bus service is limited along Arizona Avenue. The following is a list of existing routes that occur along the study area:

- Route 104 – Alma School
- Route 112 – Country Club/Arizona Avenue
- Route 156 – Chandler Boulevard
- Route 540 – Chandler
- Route 541 – Chandler

Most of these routes are tailored to take people out of Chandler and transport them to other places to work and shop. As Chandler's South Arizona Avenue transforms, new routes need to be considered to bring workers and shoppers in from other areas as well.

The primary challenge for the City will be how to treat transit in the downtown area. As rapid transit comes to Chandler (2010) considerations will need to be given to connecting the system to the land use mix to both serve and enhance the downtown areas. At a minimum, Chandler should:

- **Provide bus pullouts and shelters** at key locations along both sides of Arizona Avenue. Major signalized intersections along the corridor should provide far-side bus pull-outs as illustrated in Figure 6.2.

- **Incorporate transit stops at highly visible public spaces** that are directly connected to the pedestrian environment.

This study has identified the area east of Delaware St. between Chandler Blvd and Frye Rd as a potential location for a bus transit center. Furthermore, the railroad corridor has been identified as a potential alignment for a future light rail extension to Chandler. As such, this area along Delaware St. should be considered for future bus and/or light rail transit stations, ideally to take best advantage of the pedestrian links envisioned along Chicago St. that would connect the civic campus on the east side of Arizona Ave. to the cultural/entertainment uses to the west of Arizona Ave.

CHAPTER 6 – STRATEGY AND IMPLEMENTATION PLAN

Putting this plan into place will require an intensive and focused effort over the next several years and close cooperation between the City of Chandler and the private sector developers, owners and tenants who will create the projects that make up this plan. This chapter addresses an organized implementation program—a road map for public action over the next several years that will create momentum and visible results, encouraging further investment in the corridor.

Public and Private Roles

A creative and dynamic relationship between the public and private sectors and the community of residents, property and business owners and tenants will be needed to fully implement the proposals in this plan. A summary of the responsibilities of the City and private entities is as follows:

City Responsibilities

Re-zoning and other regulatory actions
Developer outreach for the Corridor and specific projects
Purchase of properties needed for street improvements
Relocation, where necessary, of residential and commercial owners and tenants
Design review and approval of projects in the Corridor
Street and other infrastructure improvements in the public rights-of-way (see recommendations in Chapter 5.)
Street trees, streetscape improvements and sidewalk trellises
Assistance through programs available to the City of Chandler, such as with residential development and neighborhood improvement
Park and open space development
City Hall relocation
Community outreach and communication
Museum and cultural center development
Website to keep public updated on revitalization news
Marketing and promoting South Arizona Avenue Corridor to the development community

Private Sector Responsibilities

Land Assembly for Development Projects
Project Development
Street trees and streetscape improvements adjacent to their own developments
On-site infrastructure improvements

Recommended Zoning Actions

The first step after adoption of this plan is to prepare the regulatory framework that will encourage new development. Re-zoning that is recommended is based on a very few simple, flexible, mixed-use zone districts; zoning at present consists of several small single-use individual zone districts. It is not the purpose of this report to re-zone the corridor through drafting of new zone ordinances.

Instead, Figure 10 shows the recommended approach to re-zoning, with brief descriptions of the objectives for each broad district. Specific zoning language should be drafted by legal counsel and Planning staff, to address the objectives sought by the City in this report. Furthermore, the conceptual design standards discussed in later sections will provide a framework for more detailed design guidelines to be developed together with the new zoning district.

The CCD Zoning for the area immediately adjoining the Downtown Square is already in place and functioning together with project specific (PAD) zoning for Benton Robb and Desert Viking.

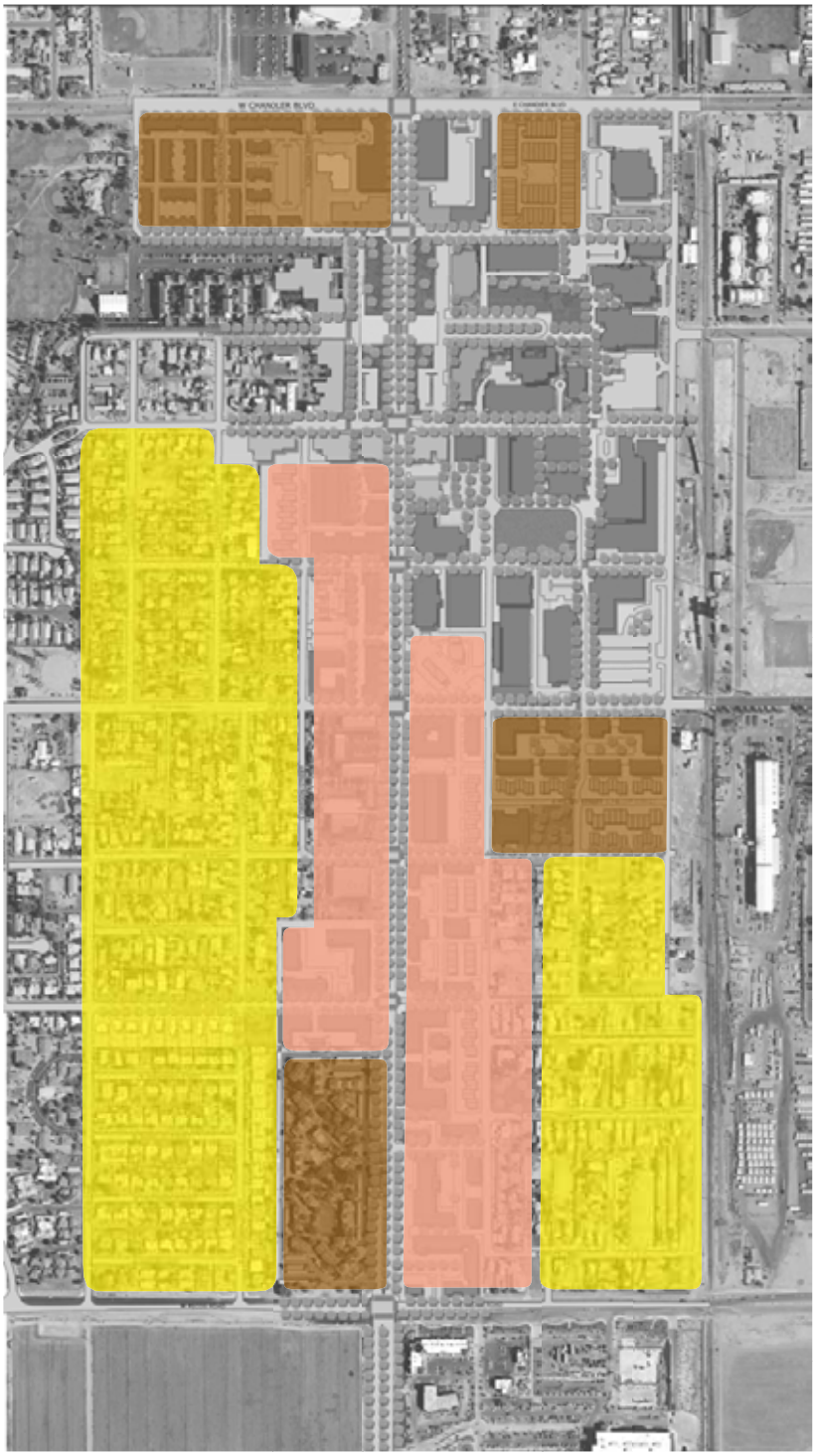
High density mixed uses

• **High Density Mixed-Use Along Arizona Avenue:** This is the most critical zoning declaration of the entire Corridor. On one hand, the plan recommends high density residential development along Arizona Avenue to support retail in the Corridor; that is a clear objective. On the other hand, a developer may perceive that market demand exists for some service or other retail as part of the mixed-use development—that market demand should be acknowledged and permitted in the zoning. The common denominator in the area should be new residential development.

At the south end of the Corridor, the properties at the northeast corner of Pecos and Arizona Avenue should be permitted to go all retail because of their proximity to the centers, and the district should reflect that distinction. On the other end of the corridor in the Steelyard site, medium to high density residential development is the objective. The only non-residential use that might find a place along Frye Road is small scale office space— related to the Civic Center—and that should be limited, relative to the residential units.

The Design Standards for this district should orient commercial uses, whether retail or office, to Arizona Avenue or Frye Road. Where commercial uses contact the residential neighborhood, as along Washington, their access and orientation should be toward Arizona Avenue or Frye Road.

• **Single Family Residential Neighborhoods:** Certain portions of the neighborhoods are currently zoned for multi-family uses, thus requiring a separate zoning action such as a permit, in order to build a single family home. Zoning in the neighborhoods should preserve and enhance the single family character of these districts as well as encourage infill development of new single family residential units, along with renovation and rehabilitation of existing single family homes. All that should be permitted in the neighborhoods are single family and, in special cases, duplex units of a scale and density compatible with the existing development. There are many vacant properties—especially on the east side of South Arizona Avenue—to present opportunities for this type of infill development.



*Areas are general, not specific parcels.

Mixed Use / High Density Residential

Medium / High Density Residential

Single Family Residential

N

FIGURE 12

Zoning Recommendation

Phasing

Public action will create the environment for private investment in the South Arizona Avenue Corridor. The most critical actions will take place over the next three to five years, as the stage is set and the first visible projects come on line. With a coordinated program targeted to high priority projects, the City of Chandler can create a setting for the right kind of development that will re-create the corridor, making it a much stronger front door for the city.

Public sector and private sector projects are illustrated in the Implementation Schedule at the end of this chapter. There is a great deal of flexibility in this schedule. Each project should be broken down into its components and related to the totality of the corridor and its future. Beyond the three year span of this schedule, additional residential, commercial and public works projects are envisioned. Some projects such as neighborhood residential infill and improvement may be ongoing over a period of several years.

This schedule prioritizes projects that will set up the environment for subsequent projects. Each project is discussed individually, but should be viewed in terms of its relationships to all other activities in the Corridor.

• The Area Plan

The first logical step that is a pre-requisite to everything else is approval of this Area Plan and amending the General Plan to accommodate it. This step will enable the City to re-zone the corridor as recommended above, creating the regulatory climate that will encourage developers to create new projects. Assuming the Area Plan is adopted in Fall 2006, re-zoning should be able to be put in place during 2007.

Public Improvements

• South Arizona Avenue R.O.W.

The City is now studying the feasibility of altering the configuration of South Arizona Avenue to create a more attractive and safe pedestrian-oriented main street leading to Chandler's downtown. There will likely be many discussions of the findings with the stakeholders up and down the street, and discussion about the possibilities of funding the project, possibly in phases. Getting widespread agreement and then designing the new street, curb and gutter and the urban streetscape that will make it an attractive front door to Chandler will consume most if not all of 2007.

By 2008, the City could be prepared to undertake an orderly process of street improvement. Rebuilding the street can proceed without completion of all the streetscape on each block. Developers could be made responsible for building the streetscape as they complete their projects.

• Washington Avenue and Morelos Improvements

Completion of these streets is needed to create the residential and commercial projects along South Arizona Avenue. Since these projects depend on acquisition of property to create rights–of–way, some time will be spent discussing land acquisition with the property owners and arranging relocation assistance as needed through the City. Design and bidding may go into late 2007. Construction of these streets could extend through most of 2008. The abandonment of the segments of Saragosa, Morelos, and Kessler Streets located between Arizona Avenue and the extended Washington Street will not occur as along as there are properties that require those segments for access.

• City Hall Relocation

The City Council has determined that the new City Hall location will be at Chicago and South Arizona Avenue. This public investment is a very significant boost for the Corridor. The implementation schedule envisions site remediation and land acquisition projecting into mid-2007. Design of the new City Hall is scheduled for mid-2007 into early 2008, with construction of City Hall beginning in mid-2008 and move-in projected for the end of 2009.

Private Development

• High Density Residential and Mixed-Use Development

While no-one knows which of the blocks along South Arizona Avenue will be developed first, the Implementation Schedule illustrates a typical development schedule that can be anticipated for a first project. A developer identification and outreach program should be underway at the very beginning. Since the City does not control the properties along South Arizona Avenue, an interested developer could be involved with discussions with property owners possibly into mid-2007, with property acquisition and relocation projected to about mid-2008. Meanwhile, design can proceed, and construction could result in occupancy of the first project (probably residential) in mid-2009. Meanwhile, other projects can proceed and follow the first project.

• Neighborhood Infill and Improvements

This program consists of a multitude of small infill residential projects, coupled with City actions to implement neighborhood programs and services. This will likely be an ongoing project over several years, or until sufficient interest in the neighborhood makes its improvement self-sustaining. Individual building projects can be relatively short term, so several may be running simultaneously. The City will need to set up the overall program and make an effort to contact developers who can work on sites identified by the City. Developers will need to work, with the City's help, with individual property owners, Habitat, small builders, and other non-profit builders to work out agreements for sales of properties—especially vacant and neglected lots—which then become the sites for new infill homes.

CHAPTER 7 - PROPERTY ACQUISITION AND RELOCATION PROGRAM

Should the City Council direct staff to proceed with implementing the plan for this area, it is likely that property will need to be acquired for public rights-of-way to accommodate desired changes in traffic patterns for interior neighborhoods and/or to create certain redevelopment areas as described in Chapter 5.

Should this be necessary, the City has established procedures for acquiring property and for assisting in relocating occupants of the property—whether commercial or residential, owner occupied or tenant occupied. Following is an overview of some of the activities that would occur should staff be directed to acquire property for public use.

Overview

When the City acquires property, there are two major components that occur in the process:
1) acquisition of the real estate and 2) assistance related to relocation of the occupants, whether business or residential property.

Acquisition addresses ownership and valuation determination as well as steps to reach an agreement to acquire the property. At times—only after all other avenues have been exhausted— the City's power of eminent domain can be used to acquire the property.

Relocation is the way the qualified owners, businesses and tenants are reimbursed for eligible expenses related to moving their belongings and in establishing benefits that might be paid in finding and occupying a new place to live or operate their business. Generally, the City uses Federal guidelines in implementing relocation benefits.

Acquisition Process

Whether property is being acquired for a road or other type of project, a primary goal of the City of Chandler is to involve businesses and residents in the project development process, keep them informed, and assist them through a transition process that might be difficult.

The City's Real Estate Division, or consultants working for the Real Estate Division, would establish a dialogue with the owners and tenants of the affected properties, meet with them individually to apprise them of the project overall, give them information about how the project would affect their property, business or continued residence, and request information from the property owners and tenants that might be needed or help in valuing the property or planning the project. An assessment would also be performed regarding the businesses and residents occupying the properties in order to develop a relocation plan.

The Real Estate Division would also provide owners and tenants with information about the process by which the City acquires property and what the businesses and residents can expect in the relocation process.

Real Estate would then obtain title, appraisal, and environmental reports for the property that is needed for the project. This also is the time property owners can let the City and the appraiser know any information that should be considered in the appraisal.

Based on these reports, Real Estate prepares documentation to make a formal offer—at fair market value—to the property owners. Since, by this time, there has been substantial interaction between the Real Estate Division and the owner of the property, this phase concentrates primarily on reaching an agreement between the City and the owners. There are times that the owners submit other information that is analyzed by the appraiser and the City. A reasonable amount of time is allowed to negotiate with the property owners, and when an agreement is reached; an escrow is opened to handle the transaction. In the event the City is unable to reach an agreement with an owner, it may be necessary to use eminent domain to acquire the property. Although there are times that this is related to value issues, more frequently, it is related to schedule or title issues.

Relocation Process

Shortly after making the initial offer to the property owner, relocation assistance for the owners and tenants is addressed. This is a very interactive process that includes establishing details about the current occupant, business or residential, researching the current market for new locations and comparing those to the occupant's current situation. Resources are made available to assist the occupant in moving their personal property, in finding another property, and in certain special circumstances, in establishing eligibility to receive financial assistance to obtain a new place to live or conduct business, whichever is applicable. To the extent possible, the City will work to accommodate those who wish to remain in the same neighborhood or vicinity.

Property Assembly by Developers

The city will rely on developers to assemble properties along the South Arizona Avenue Corridor for redevelopment purposes. The city will create the following incentives to encourage property assembly:

- Properties will be zoned thus giving developers one less public hearing step.
- Off-site improvements will be done by the city.
- Some of the re-zoning will allow 30/40 dwelling units/acre - something that will not be enjoyed by any other property or area in the city.

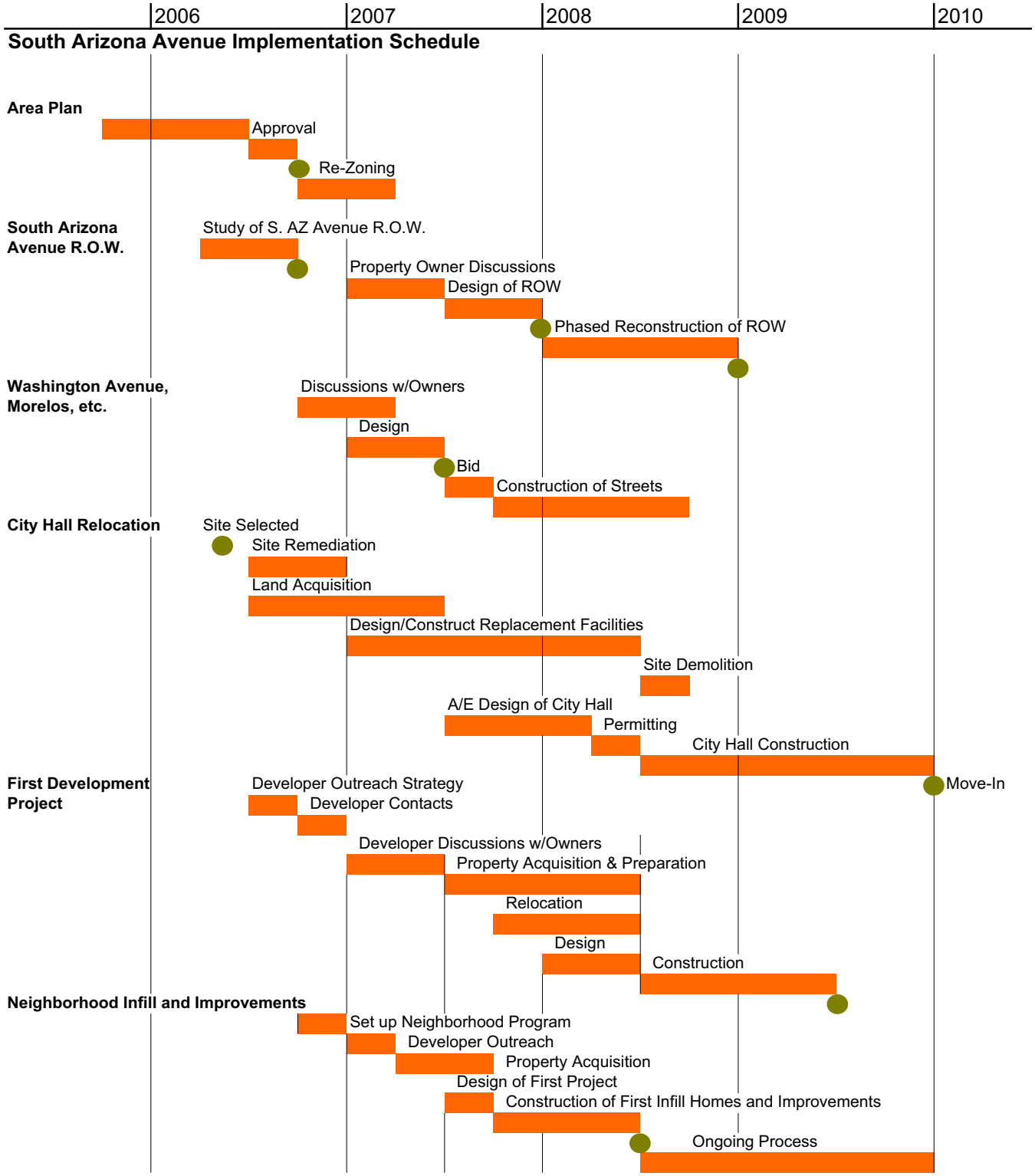


FIGURE 13 Implementation Schedule

Section 2
DESIGN STANDARDS

CHAPTER 8
INTRODUCTION

Purpose of Design Standards

The public and private property and specific parcel design standards are conceptual guidelines that are meant to create a foundation for more detailed design regulations to be developed at a later date. The more detailed design standards will be used to evaluate proposed site plans, landscaping, signs, and architecture along the corridor. The public design standards, also conceptual will be utilized to guide R.O.W. design and public streetscape improvements.

Organization of the Design Standards

The Design Guidelines are organized into the following three sections:

- Public Design Standards
- Private Property Design Standards
- Design Standards for Specific Parcels

The Public Design Standards and Private Property Design Standards sections are broken down into several review categories that are defined by two components: Intent Statements and Standards.

Intent statements set forth the goals and conditions which the design review criteria have been created to achieve. They also serve to provide clarification or direction if the standards are in question or not clearly applicable.
The standards are suggested components, termed as "should do" or "is encouraged". The quality of the project depend on the developer following most if not all of these optional elements.

Design Standards for Specific Parcels: Specific blocks within the S. Arizona Avenue have been identified as important in the overall success of redefining the Chandler Downtown. For each of these blocks, Site Design Standards such as land use, site orientation, parking access, active retail frontages, building height, bulk and massing and other site planning issues have been addressed and illustrated with plan diagrams.

Conceptual Standards

It is important to note that both Public Design Standards and Private Property Design Standards are conceptual and subject to change as of the date of this report. The standards may be revised in the future, as they become more specific.

Area of Application

Area of application of Design Standards

The Design Standards apply to the entire corridor between Chandler Boulevard and Pecos Road and South Palm Lane and the Union Pacific Railroad R.O.W.

Design review process

The Planning and Zoning Committee on Design Review (referred to herein as the DRC) will review each project in the South Arizona Avenue corridor with respect to its urban design, architectural design and landscape design qualities and compliance with the Design Standards. The purpose of this body is to guide and assist the developer and designer in the interpretation and compliance with the Design Standards.

The objectives of the process are:

- To provide an equitable, orderly application of the Design Standards for all projects.
- To advance the goals and requirements of the South Arizona Avenue Urban Design Plan.
- To protect the City's investment in design and its capital expenditure.
- To provide timely, fair and firm design direction for each project.
- To resolve design issues that may exist between the objectives of the developer and the City of Chandler.

The design review process will consist of a series of steps of application, review and approval which will be followed for all projects

1. Pre-Submittal Review
2. Schematic Review
3. Final Review

Guideline Waiver

From time to time the developer applicant may wish to obtain a waiver from a guideline. Such a departure may be considered and granted by the DRC through a design review process. A waiver may be granted where all of the following factors are found to be present or exist:

A. The Applicant has requested in writing the granting of a waiver to a specific requirement imposed by the Design Standards; and

B. Strict application of the Design Standards requirement would be impossible, unduly harsh, or unnecessary in light of either:

   1. Physical conditions or physical restraints—such as sub–surface conditions—are present on the Applicant's property; or
   2. The presence of an extreme and unjustified economic hardship to the Applicant under the circumstances particular to the proposed development; or
   3. The applicant proposal, although not meeting the requirements of the Design Guidelines, directly and substantially advances the stated intent of the Design Guidelines; and

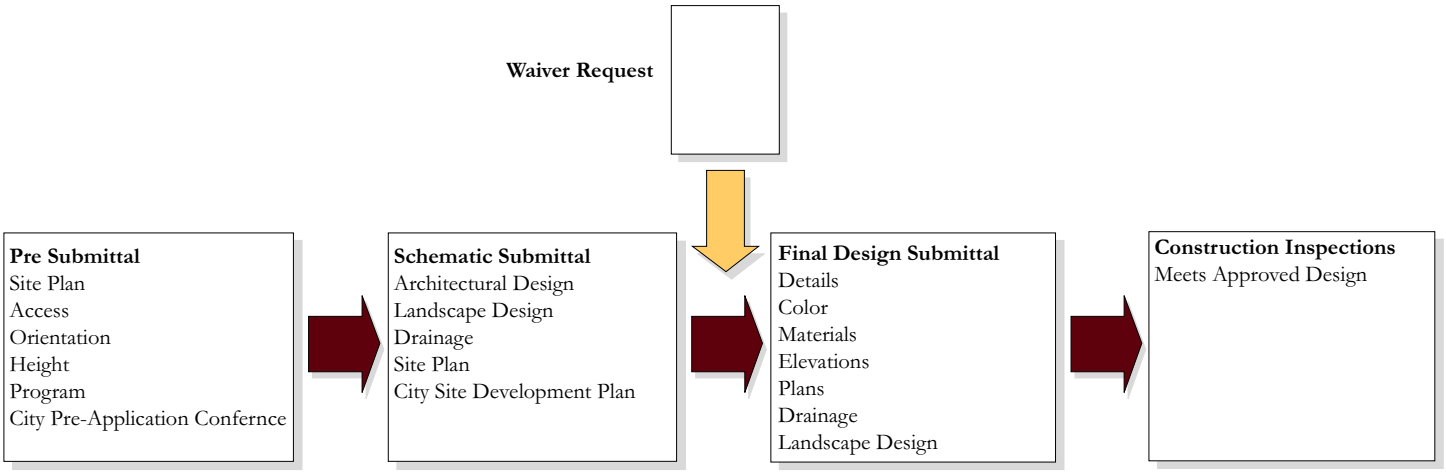
C. The waiver would not unreasonably burden other property within the S. Arizona Avenue corridor or an adjacent property; and

D. The waiver granted is the minimum possible to alleviate the physical condition or relieve the hardship.

The applicant shall bear the burden of establishing the standards justifying the waiver and shall present sufficient information justifying the granting of any requested waiver. The DRC may impose reasonable conditions on such waivers as are necessary or desirable to advance the intent or goals of these Design Standards. Evidence that the proposed development will exceed other standards or requirements or where the proposed development significantly advances the goals and policies of the South Arizona Avenue Urban Design Plan, may be favorably considered by the DRC in the determination of the granting or denial of a waiver.

Construction inspections are conducted while the project is under construction to ensure that the design requirements are carried out.

Submittal requirements, scheduling of reviews and other information can be obtained from the City of Chandler.



CHAPTER 9
PUBLIC DESIGN STANDARDS

The Public Design Standards guidelines are intended to create streets, streetscapes and public open spaces that are integral components of the overall downtown corridor, creating the character of Downtown Chandler and amenities for visitors and residents. The aim is to achieve an urban movement framework and public realm which is convenient, safe and attractive.

Streetscape

Streetscape Design

Intent: A high degree of pedestrian comfort and intimate scale is desirable, using materials, texture and other means to communicate a unique identity for South Arizona Avenue. Streetscape elements including street trees, benches, light fixtures, signage, waste receptacles and paving patterns help to establish the identity of South Arizona Avenue and emphasizes the pedestrian environment. These are unifying elements that, along with the architectural expression, create a unique place that is visually attractive and compelling to visitors, residents and employees.

Guidelines

1. Streetscape designs should give as much space as possible to pedestrians and invite pedestrians to use the whole space.
2. Streetscape design should support a mix of uses along the downtown corridor.
3. Use materials that are easy to maintain by City agencies.
4. Streetscape design should discourage speed and cut through traffic with paving materials and visual clues.
5. Streetscape elements should be pedestrian friendly and include, but not be limited to the following: benches, trash receptacles, bicycle racks, newspaper stands, tables and chairs and drinking fountains.
6. Streetscape elements should be of high quality, durable materials.
7. Appropriate locations for streetscape elements are primary pedestrian gathering spaces, including building entrances, plazas, open space and intersections.

Street Trees

Intent: To use trees in a manner that enhances the pedestrian experience and urban environment, provides shade, beautifies the surroundings and increases property values throughout the downtown corridor.

Guidelines

1. Tree species use should be compatible with the local climate and conditions and be drought–tolerant.
2. Street trees should be installed with respect to adjacent properties and should not interfere with pedestrian and vehicular movement and site lines. Size and scale of trees should be appropriate to their placement.
3. A variety of trees should be used to mitigate the negative effects of disease or insect infestation.
4. Trees along S. Arizona Avenue should have metal grates to facilitate the use of space around trees and prevent the spread of mulch and ground covers.
5. Trees should be located to allow ease of pedestrian movement and in areas where mature trees will not conflict with utilities.
6. Trees should be located to maximize building and pedestrian shading and other sustainable strategies.
7. New street trees should be sensitive to the existing character of the corridor.

Recommended Species

Arizona Ash (Velvet Ash)
Fraxinus velutina

Phoenix Date Palm
Phoenix dactylifera

Palo Brea
Cercidium Praecox

Southern Live Oak
Quercus virginiana

Arizona Ash (Velvet Ash)
Fraxinus velutina

Palo brea
Cercidium Praecox

Southern Live Oak
Quercus virginiana

Phoenix Date Palm
Phoenix dactilifera

Street Furniture

Intent: To enhance the pedestrian environment with a coordinated street furniture group that harmonizes the streets in an aesthetically appealing and functional manner.

Guidelines

1. Street Furniture should contribute to the pedestrian friendly environment by enhancing public pedestrian circulation and safety and promoting a positive downtown corridor identity.
2. Street Furniture should be located to encourage activity and interaction among pedestrians and contribute to the overall livability of the downtown corridor.
3. Street furniture should be made of durable, easily maintained materials.
4. Any street furniture placed by individuals must be approved by the city.

Recommended Street Furniture:

Landscape Forms Scarborough series bench w/ horizontal strap and center arm, color: light ivy

Landscape Forms Scarborough top opening, vertical strap w/ keyed lock receptacle, color:light ivy

Kim vandal proof light bollard or Sternberg prairie lighted bollard

Landscape Forms Bola Bike Rack, color: light ivy

Landscape Forms *Bola Bike Rack*
(color to match existing streetscape elements)

Landscape Forms *Scarborough Trash Receptacle (color to match existing streetscape elements)*

Landscape Forms *Scarborough Bench*
(color to match existing streetscape elements)

Sternberg Prairie Lighted Bollard-730-LB

Lighting

Intent: Create a safe, welcoming environment at all hours of the evening and night, by provision of adequate levels of lighting to encourage a feeling of personal safety. To create a nighttime ambiance of color, texture, and mood that will draw people to the area and encourage them to spend time.

Guidelines

1. Pedestrian–scale light fixtures within the downtown corridor along South Arizona Ave. shall be compatible in design and performance with those currently being used in the public rights–of–way in Downtown Chandler. Cobra fixtures are not allowed on South Arizona Ave. or within the Chandler Downtown area.
2. Lighting should be an element of consistency along the street—located in a standard linear arrangement set back from the curb.
3. Spacing between lights may range from 60-100 feet on center and should be coordinated with street tree layout and other overhead features.
4. Lighting within the public rights of way should not cast light onto neighboring properties (use cut-off fixtures).
5. The impact of lighting on the night sky shall be minimized by a variety of techniques, including cut–off fixtures, downward facing fixtures and minimizing light energy.

Recommended Lighting Fixtures

Period Light- Sternberg 2-0630 HCF2 5S12P (existing style in A.J. Chandler Park)

Palm Uplights- Hydrel 7000 Series, color Green

Period Lighting in A. J. Chandler Park

Period Lighting in A. J. Chandler Park

Palm Uplight

Existing Lighting on Civic Campus

Pedestrian Network

Pedestrian ways, bike trails and streets should be considered in a broad context. They should be a means of circulation that strengthen the Downtown and link to the adjacent neighborhoods. Therefore, sidewalks, roadways, and trails should be coordinated in a comprehensive system that assures continuity of circulation especially for pedestrians and bicycles.

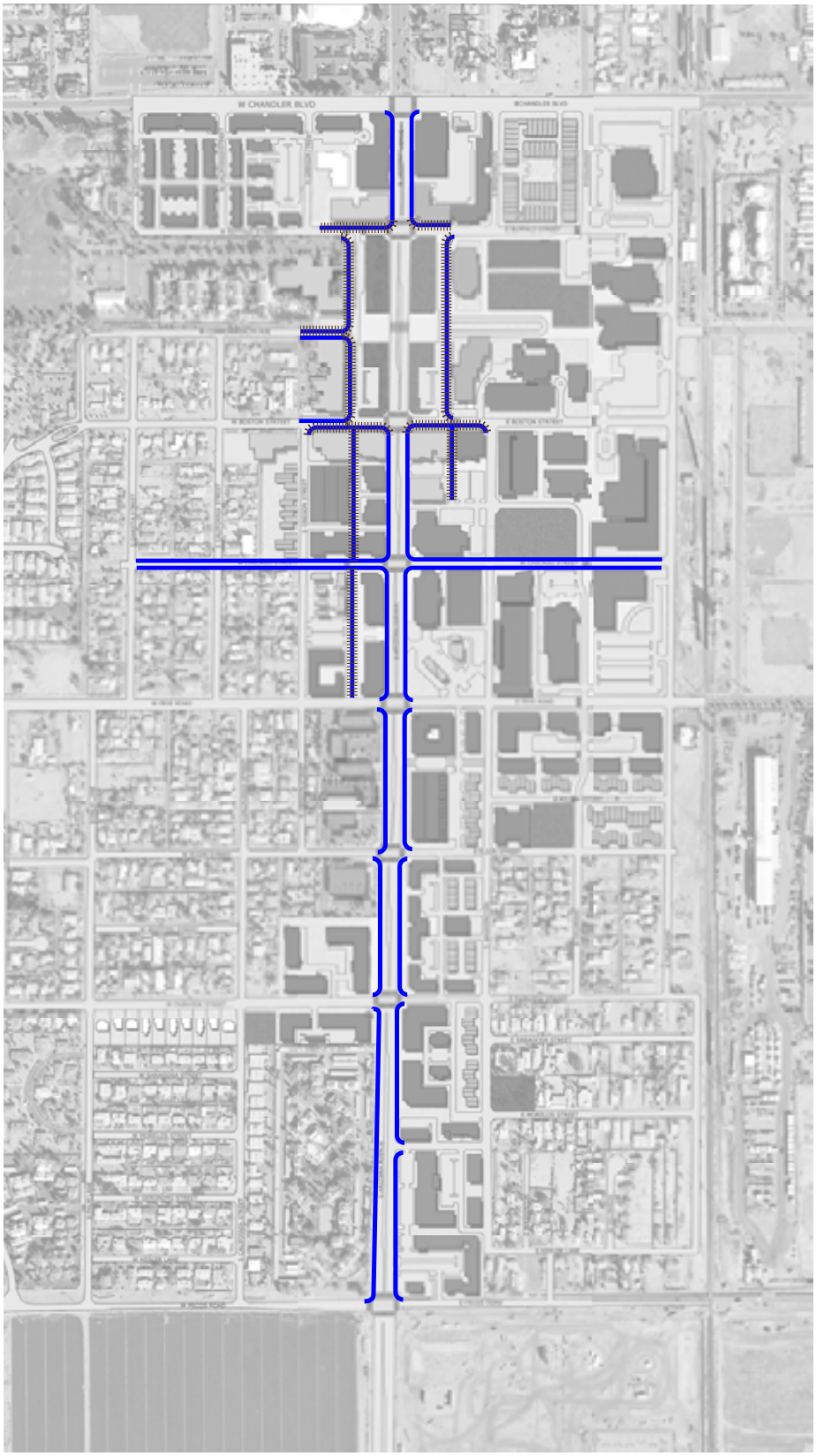
The main goal of the pedestrian circulation is to make it easier and more enjoyable to walk to the Downtown from neighboring communities and to walk between places within the Downtown. The main focus of pedestrian circulation is South Arizona Avenue where commercial and retail functions flank the pedestrian walkways encouraging leisurely walking, window–shopping and informal gathering. Secondary pedestrian walkways link businesses and parking to adjacent neighborhoods and the downtown corridor.

Pedestrian Network

Intent: To create a well designed and maintained system of pedestrian facilities that includes well–marked crosswalks, sidewalks and pathways of adequate width with frequent connections that encourage people to walk. The primary routes that pedestrians are expected to use the most should receive the focus of enhancements in order to establish a hierarchy of primary and secondary pedestrian routes.

Guidelines

1. The pedestrian network should provide access to destinations that attract pedestrian travel such as the downtown shopping area, parks, neighborhoods, transit stops, post offices and other public facilities.
2. Sidewalks and pathways—the most basic elements—should form a connected network.
3. Sidewalks and pathways should be wide enough to comfortably accommodate expected pedestrian movement.
4. Intersections should have well–designed curb ramps on all corners.
5. Traffic signal phasing should allow adequate time for pedestrians to cross.
6. Sidewalk surfaces should be kept as level as possible, consistent with adequate drainage to the street.



Sidewalk Design

To help guide pedestrian activity in and around the downtown corridor, a basic type of sidewalk design is recommended. This provides for a range of experiences from basic scored concrete to routes with brick pavers, benches and decorative lighting. Other types may be developed in the future for special conditions.

Type 1: In this classification the sidewalk is constructed of stamped or brick stamped patterned concrete in order to indicate a high level of pedestrian use. These sidewalks offer the highest level of pedestrian enhancement. Key features include: tree and flower planters, decorative lights, benches, waste receptacles, enhanced street crossings and pedestrian plazas. This sidewalk type is wider to accommodate sidewalk cafes, retail merchandise displays, seating etc.

South Arizona Avenue

Crosswalks and Intersections

Intent: To create a safe condition for pedestrians and vehicles that is attractive and compatible with a pedestrian-oriented street.

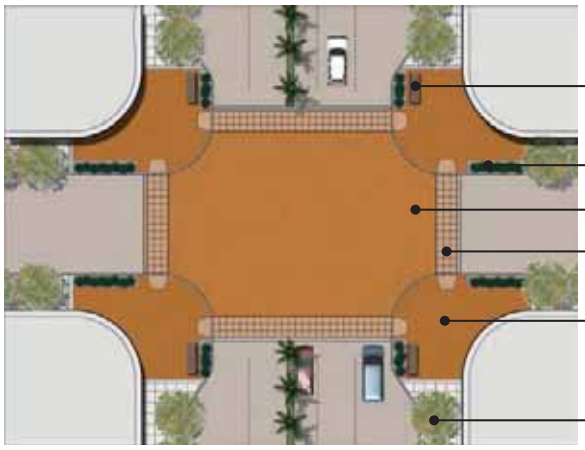
Guidelines

1. Safe street crossings are essential for a vital pedestrian–oriented environment.
2. Crosswalks should be clearly identified and ample space should be provided to allow groups of pedestrians to cross.
3. Reduce the exposure distance for pedestrians by:
   a. Providing curb extensions
   b. Providing pedestrian safety
4. Provide adequate nighttime street lighting in pedestrian crossing areas.

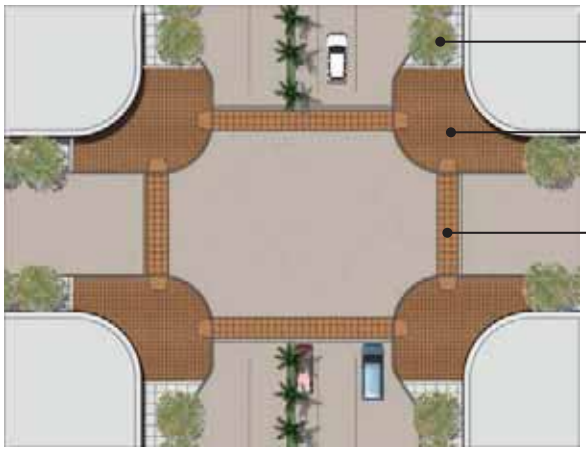
Three types of enhanced Pedestrian Intersections/Crossings are recommended for use along the South Arizona Avenue corridor. Intersections and pedestrian crossings not recommended as one of the following four types can appear as conventionally designed intersections with no upgrades or enhancements necessary.

Three types of Pedestrian Intersections/ Crossings are recommended.

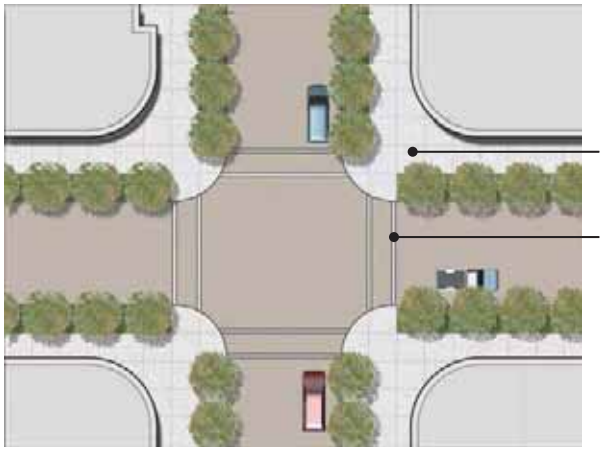
Type 1 Intersection/Pedestrian Crossing: In this classification, the intersection is constructed of decorative paving or colored concrete in order to indicate its high level of pedestrian use. These intersections offer the highest level of pedestrian enhancements and provide the strongest identity for crossings in the Downtown area. Bulbed–out curbs at these intersections provide additional area for street furniture and plantings and prevent cars from parking at pedestrian walkways. Key features of Type 1 pedestrian crossings include: decorative paving at corners, decorative paving at center of intersection, colored and scored concrete crosswalks and pedestrian crossing signals.



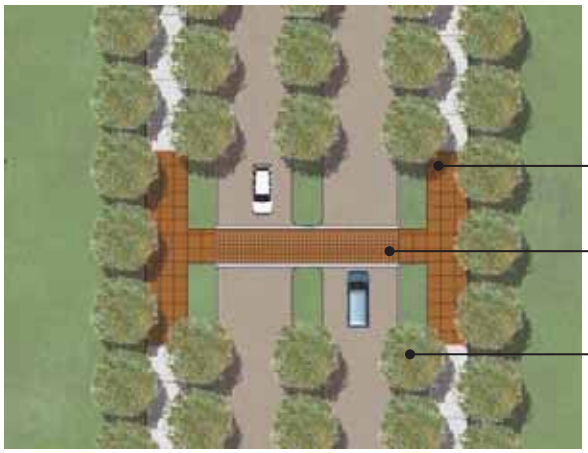
Type 2 Intersection/Pedestrian Crossing: In this classification the crosswalks are defined by colored and scored concrete, but no decorative paving is required at the center of the intersection. Bulbed–out curbs at these intersections prevent cars from parking at pedestrian walkways. Scored concrete or decorative pavers can be used within the sidewalk boundaries at the corners. Key features of Type 1 pedestrian crossings include: decorative paving at corners, colored and scored concrete crosswalks and pedestrian crossing signals.



Type 3 Intersection/Pedestrian Crossing: In this classification, the crosswalks are defined by conventional stripes and scored concrete is used within the sidewalk boundaries at the corners of the intersection.



Type 4 Intersection/Pedestrian Crossing: This crosswalk appears at places where pedestrians cross streets and busy driveways or entrances and not full vehicular intersections. This type uses either decorative paving or scored and colored concrete within the crosswalk and the sidewalk on either side of the crosswalk is defined with compatible materials.



Paving and Sidewalk Materials

Intent: To create a distinct, comfortable, high quality and visually coherent public/private environment for the streets, plazas and open spaces that reinforces the image of Downtown Chandler. The material palette should allow variation within a set of compatible elements and establish a hierarchy of primary and secondary pedestrian routes. Within this hierarchy the amount of decorative paving used varies, in response to the levels of anticipated use.

Guidelines

1. Materials should be chosen for their quality, durability and ease of maintenance.
2. Materials should include but are not limited to concrete, stone or concrete unit pavers that will withstand heavy pedestrian traffic.
3. Utilize appropriate paving colors and textures that reinforce the character downtown and the corridor.
4. Surface material should help determine the character and feel of the street
5. The use of concrete scoring patterns should be designed to reduce the overall scale and enhance the appearance of large paved areas.

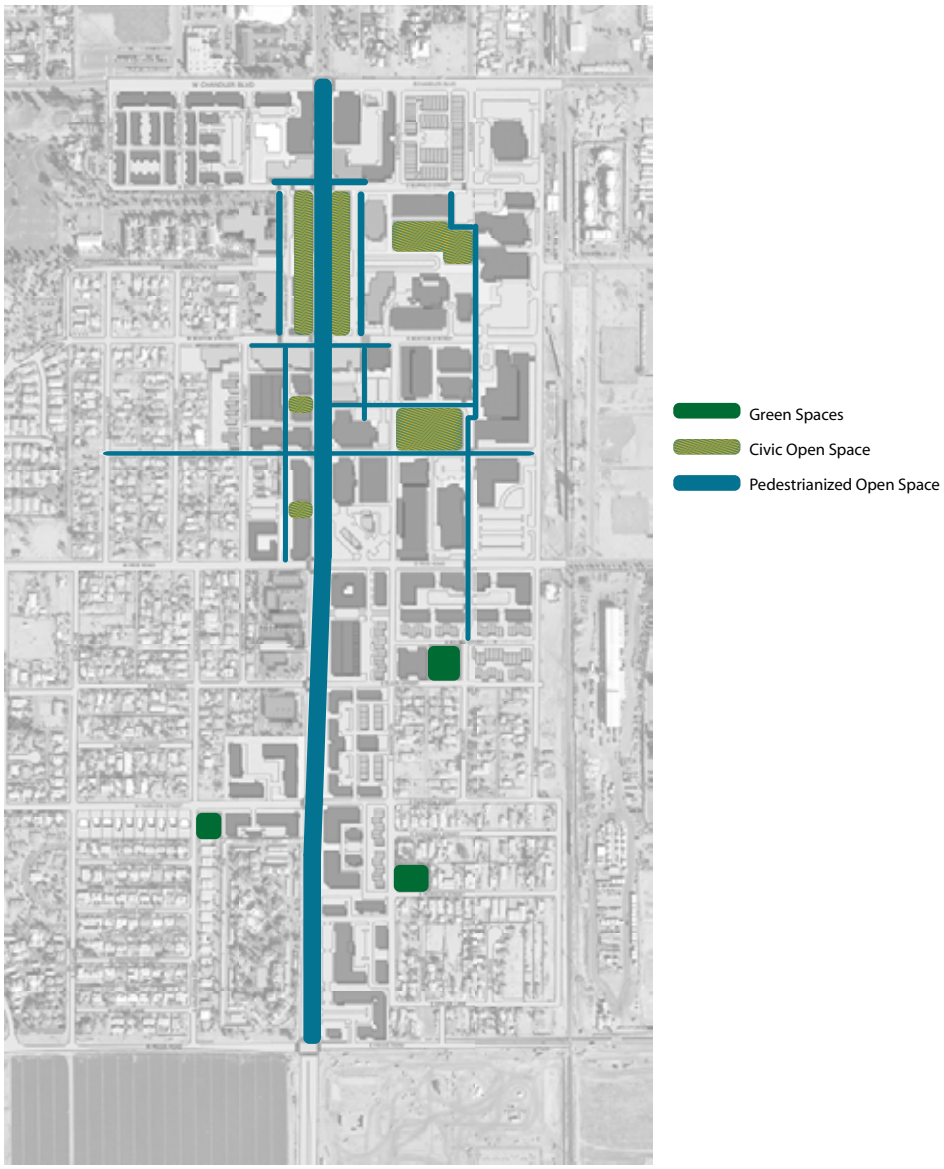
Gathering and Open Spaces

The nature of Open Spaces varies dramatically depending on their position, character, quality and use within the urban fabric. These factors need careful consideration during design. The following typologies define a few broad open space types and the characteristics that should be included in their design.

Green Spaces- areas of green space designed specifically for public access and enjoyment, combining landscape and horticultural elements with facilities for the public. Parks and gardens are characterized by soft surfaces and suited for either active or passive events. Parks and gardens should be centrally located to residential neighborhoods.

Civic Spaces- Focal spaces, often linked to building or monuments, which act as a meeting place and or venue for a range of city events and celebrations. Civic spaces are typically defined by a greater percentage of hardscape and pedestrian amenities. Civic spaces should be publicly accessible and inviting, with direct access from public streets. A variety of seating options should be included in the design.

Pedestrianized Movement Areas- areas of pedestrian priority that provide something more than standard roadside pavement (either by virtue of size or feature). These include pedestrianized streets and precincts. Pedestrian movement areas are characterized by improved paving options such as pavers and stamped or patterned concrete. Pedestrian ways along South Arizona Avenue and the proposed mid-block walkways south from the existing downtown are included in this category.



Gathering Spaces and Open Space

Intent: The objective of gathering spaces and open space is to utilize well-planned open spaces as organizing elements and focal points of development.

Guidelines

1. Gathering space and open space should be used to enhance the value and amenity of surrounding development by offering a rich and varied aesthetic environment.
2. Gathering space and open space should be publicly accessible and located to attract a variety of users.
3. Plazas should be perceived by the passerby as an extension of public space with at least two sides exposed to a public right-of-way.
4. To encourage public use, gathering spaces should be divided into subspaces to encourage their use. Large open spaces devoid of planting, street furniture, or people can be intimidating.
5. A range of weather conditions (wind, rain, summer heat) should be considered and planned for in the design of gathering space and open space.
6. The location of open space should be chosen for its adjacency for to public streets, its centrality to residential neighborhoods, or as the center of public activity in commercial areas.

CHAPTER 10
PRIVATE PROPERTY DESIGN STANDARDS

Private Property Design Standards provide the guidance for building and site design on all the blocks within the downtown corridor.

The following conceptual Design Standards are intended to provide a framework for creating a detailed design standard in the future.

Building Design

Building Orientation

Intent: To provide a clearly–organized system of entrances, driveways and parking area integrated with pedestrian circulation. To provide clear, simple way–finding for everyone who approaches a building or complex. To animate the street with people entering and exiting from buildings.

Guidelines

1. Primary building entrances should be oriented directly toward the street and sidewalk, enhancing the pedestrian environment and encouraging pedestrian interaction.
2. Buildings with active street–front uses should reinforce the convenience of the pedestrian environment and encourage active pedestrian use by incorporating individual entrances for these uses, oriented to the street.
3. Parking entrances should be secondary to pedestrian entrances and pedestrian traffic.
4. Building design should facilitate

Building Setbacks

Intent: To shape the street spaces by placement of building frontages at or behind property lines. To provide space for active public uses. To strengthen the pedestrian environment and the urban experience.

Guidelines

1. Building setbacks should reinforce pedestrian activity and circulation along the street.
2. Building setbacks should reinforce the existing urban structure and pedestrian network.
3. Setbacks areas created behind the build–to line should be used for outdoor dining, building entries, small patios or other active outdoor uses.

Massing and Articulation

Intent: To spatially define the street spaces with building form and massing. To modulate building massing as appropriate to the neighborhood sub–area and immediate environment. To provide interesting and comfortable human scale relationships of buildings through modulation of building massing both surfaces and forms—contrasts in form, color and materials.

Guidelines

1. Building corner at street intersections should be enhanced through special corner treatment such as towers, special roof shapes and taller building sections.
2. Mitigate large scale building masses by providing a variety of rooflines and building façade articulation.
3. Human scaled architectural features are particularly important in areas where pedestrian activity is encouraged. A higher level of visual interest should occur near entries, pedestrian areas and streets.
4. Balconies and terraces should be integrated into vertical and horizontal shifts in building massing where possible.

5. When new development is larger in height and mass than the existing context, building mass should be varied through changes in wall plane and building height to moderate scale between developments.
6. Long, uninterrupted wall surfaces should be broken down into shorter segments of wall with offsets creating shadow lines and a more articulated building elevation.

Building Heights

Intent: To create an exciting, urban scale, comfortable, pedestrian–oriented Downtown center by scaling buildings accordingly.

Guidelines

1. Building heights should emphasize South Arizona Avenue as the most prominent street in the corridor with the tallest building occurring on Site 7.
2. Building heights should also accentuate the corner of the block, with towers or other features.
3. New development should blend in alongside established neighborhoods. Adjacent to established neighborhoods, building height should not exceed two to three stories.

360 Degree Architecture

Intent: To create an urban environment that is pleasing visually from all points of view.

Guidelines

1. All sides of buildings should have design characteristics that make them worthy to be the primary façade.
2. All sides of all buildings should be treated with the same architectural style, materials, and degree and type of detailing as the front or main entrance.
3. For in-line commercial buildings, front and rear design quality may differ, but rear of buildings should still be attractive façades, appropriate for shoppers approaching the rear entries.

Storefronts

Intent: To create individualized, attention–getting, well designed showcases for shops and restaurants as a draw and amenity to Downtown Chandler.

Guidelines

1. Storefronts and entrances should support and enhance the pedestrian–oriented environments while giving identity to buildings and uses therein.
2. Storefront entries shall be at the adjacent sidewalk pavement level to facilitate shopper and visitor access.
3. Storefronts should be comfortably scaled and well-detailed to help break down the large facades of the building into small units.
4. Building entries should be recessed into storefronts where the storefronts face the street.
5. A variety of storefront designs should predominate over a uniform series of storefronts. The objective is to create a visually interesting and compelling environment that is expressive of the individual businesses along the street.

Active Street Frontages

Intent: Street frontages should be of a high standard in terms of layout, design and visual appearance, contributing to the development of a high quality pedestrian environment within a mixed–use village center. Development should relate positively to the street, creating an attractive public / private interface.

Guidelines

1. South Arizona Avenue should be lined with a vibrant mix of retail and commercial uses as an accent to the predominantly high density residential development.
2. Buildings should be designed to create an "urban room" instead of just a street; generally a minimum of two stories in height along South Arizona Avenue.
3. The placement and design of buildings should ensure that there is a high degree of integration between buildings and the street. This can occur through buildings being built close to the street edge and through the use of substantial areas of doors, windows and display areas.
4. Storefronts should be continuous along the street to encourage shopper and pedestrian movement.
5. Ground floors should have a predominance of windows, doors, and openings while upper floors should use windows, balconies and other articulation to create active street frontages.

Awnings, Canopies, Arcades and Shading

Intent: To enhance the pedestrian environment aesthetically and create shade and pedestrian comfort on the sidewalks. To enhance the pedestrian experience and attractiveness of the area.

Guidelines

1. Buildings along Boston Street should match the existing arcade along the street.
2. Trellis structures might be enhanced with vines and other plant materials.
3. Awnings or canopies should be an integral part of the architectural design of the buildings to which they are attached and should be compatible with the buildings' overall architectural design in terms of material, detail, massing and form.
4. Awnings or canopies should be positioned so that signage is not obstructed and so that substantial shade is cast onto the sidewalk at critical times of the day.
5. Diversity in design of the awnings or canopies from one building to the next is encouraged to reinforce the concept of diversity, but shall be within limits of compatibility with the architecture and streetscape concept of the street.
6. Lettering or logos are permitted on sides and edges of awnings, but not on the large sloped surface.
7. The vertical dimension of the awnings should not exceed the horizontal dimension.
8. Awnings shall not be lit from within or used as signs.

Building Materials

Intent: To enrich Downtown Chandler and the South Arizona Avenue in its visual and tactile qualities with materials finishes, detailing and techniques that are timeless, durable, satisfying and sustainable. To ensure the consistent use of high quality materials appropriate to Downtown Chandler.

Guidelines

1. Regionally appropriate materials should be used.
2. Consistent, carefully detailed combinations of material that contribute to the architectural scaling of the building should be used.
3. A consistent and high level of quality that is durable and appropriate to pedestrian contact at the street level should be established.

4. The materials should convey a high level of visual amenity that is commensurate with the urban character of Downtown Chandler.
5. Materials should take into consideration the sunny regional climate of Chandler.

Fenestration

Intent: To give buildings human scale and relationship to the public environment and to provide some ability to see the activity in the buildings by day and night. To reinforce the differences between residential and commercial structures and uses.

Guidelines

1. Transparent glass storefronts should be used in street level facades in order to insure the visibility of active uses, and to provide a lighter, more detailed and human–scale architectural expression along the sidewalk.
2. Transparency and reflectivity of glass should insure visibility from the sidewalk and minimize the glare produced by highly reflective glass.
3. Size and proportion of windows should use devices such as columns, piers, and mullions to reinforce architectural scaling elements.

Building Lighting

Intent: To provide illumination that complements the urban character of the South Arizona Avenue corridor, providing aesthetic appeal and safety, thereby promoting comfortable, safe pedestrian activity at night.

Guidelines

1. The impact of lighting on the night sky should be minimized by a variety of techniques, including cutoff fixtures, downward facing fixtures and minimizing light energy, especially directed upward.
2. The light fixtures on each building should be compatible in design, performance and appeal with those being used in the public right–of–way.
3. Building lighting should enhance the safety and security of the pedestrian.
4. Building facades should not be lit; instead, lighting should emphasize building entries or special features.

Building Signage

Intent: Provide clear identification of businesses and buildings. To add visual interest and delight to the South Arizona Avenue corridor and Downtown Chandler.

Guidelines

1. All signs should be consistent with the Chandler zoning code or with Design Standards developed subsequently to these.
2. Signage with lighting should be located to minimize glare onto adjoining property and unobtrusive in size and appearance. Internal illumination should be avoided. Protruding overhead lights or lamps should be avoided. Lighting devices should be hidden or softened by or integrated into architectural features or landscaping. Natural full–spectrum (soft halogen or incandescent) lighting is preferred over fluorescent light.
3. Signage should be constructed of high quality, durable materials appropriate to an urban setting.
4. Signs should make a positive contribution to the general appearance of the street and/or the area in which they are located.
5. A sign should be proportional in size to the area where the sign is to be located.
6. For single–tenant buildings, multiple signs on the same façade should be avoided. For multi–tenant buildings, all signage on the same façade should be consistent in color, size and elevation.
7. Overly–cluttered signs or signs with too much information are discouraged.

Storage, Equipment and Loading

Intent: To minimize the negative visual and noise impacts of service and loading areas, trash storage and mechanical equipment on adjoining streets, adjacent properties and public spaces.

Guidelines

1. Loading docks, trash storage, service courts and rooftop and ground level mechanical equipment should not be visible from public rights–of–way.
2. Loading docks, trash storage, service courts and mechanical equipment should be screened or buffered by a combination of opaque fences, walls, louvers and/or other features which are integrated with the architecture of the buildings. Landscaping or landscaping in combination with walls, if it results in effective visual screening may provide screens at grade.
3. Walls and screens should be a minimum height of 6'–0".
4. Doors must be lockable and built from steel and/or wood components to minimize maintenance/repair problems.
5. Parapet profiles and rooftop enclosures should, at a minimum, equal the height of adjacent rooftop equipment and all mechanical and utility equipment (e.g. ducts, vents, fans, condensers, etc.). the inside of the parapet should be painted in colors compatible with the color of the roof.
6. The locations and placement of utility structures or devices should be coordinated with public/private utility companies to maximize screening of such devices from public view. All utility distribution systems should be underground.
7. Opaque walls or fences or dense landscaping should screen all utilities and services to buildings.

Site Design

Landscape

Intent: To provide attractive and architecturally compatible landscape and/or hard surface design in all areas of each site. To provide landscaping and/or hard surface design that reinforces pedestrian activity such as sidewalk cafes, window–shopping and other displays of goods.

Guidelines

1. Each development should recognize the unique climate and character of the site and employ landscape design, materials and methods that are appropriate to that environment.
2. Landscaping, including living plant material, special pavements, trellises, screen walls, planters, site furniture and similar features should be appropriately incorporated into the design to enhance the project.
3. Areas not covered by buildings, streets, paved areas or other improved areas should be planted with living plant material and mulches.
4. Street planting should accompany all public streets.
5. Landscaping should be used to attractively buffer parking lots, garages, exposed utilities and service areas.
6. Landscaping should visually frame buildings and enhance the site of arrival at appropriate site locations.
7. Water conserving practices including plant material selection and irrigation practices should be employed.
8. Existing mature trees should be preserved to the greatest extent possible.
9. Landscaping should provide a comfortable microclimate by using cool-temperature paving materials and a shade–providing tree canopy.

Site Buffers and Screening

Intent: To shield parking and other negatively visual uses from the public rights–of–way and from pedestrian walkways.

Guidelines

1. Utilize landscape buffers to provide transitions between different uses, provide compatibility between adjacent lots and to mitigate the impacts of large building faces and expansive paved areas.
2. Provide landscape screens to mitigate and/or soften the edges of parking lots and utility enclosures.
3. Provide landscape buffers adjacent to pedestrian ways, including walks, plazas, courtyard, or streetscapes.
4. Utilize landscape buffers to reinforce the orderly character of open space created to organize building groups.

Landscape Materials

Intent: To create a distinct, comfortable, high quality and visually coherent public/private environment that is consistent with the public framework of streets and sidewalks.

Guidelines

1. The landscape design should take advantage of special on-site conditions such as view corridors and visibility from block to block.
2. Provide high quality durable materials, including concrete, stone or concrete unit pavers that will withstand time and tolerate heavy pedestrian traffic.
3. When possible, use permeable paving systems to encourage groundwater recharge, improved water quality and reduced storm runoff.
4. The use of concrete scoring patterns should be designed to reduce the overall scale and enhance the appearance of large paved areas.
5. Landscape installations should utilize plant material that is compatible with the local climate and conditions; xeriscaping and drought-tolerant plants should be used.

6. Plant material should be installed with respect to adjacent properties and should not interfere with pedestrian and vehicular movement and sight lines.
7. Utilize a variety of plant materials to achieve a layered visual effect for pedestrian level experience.

Site Lighting

Intent: To create a safe, welcoming environment at all hours of the evening and night, by provisions of adequate levels of lighting to encourage a feeling of personal safety.

Guidelines

1. Utilize appropriate lighting elements that complement appropriate adjacent public framework light elements and reinforce individual block character.
2. The impact of lighting on the night sky should be minimized by a variety of techniques, including cutoff fixtures, downward facing fixtures and minimizing light energy, especially directed upward.
3. Site lighting should enhance the safety and security of the pedestrian.
4. Site lighting should reinforce architectural elements such as entries, shop windows, architectural elements, etc.
5. Ensure parking lot lighting does not glare onto the street and/or adjacent properties. Light sources from one property shall not be seen directly for the adjacent property or from the public rights-of-way.
6. Sidewalk light fixtures should be scaled to pedestrian-scaled fixture heights of twelve to fourteen feet tall.
7. Light fixture, levels and colors should be coordinated throughout the South Arizona Avenue corridor.

Site Signage

Intent: Provide clear identification of businesses and buildings. To add visual interest and delight to South Arizona Avenue.

Guidelines

1. Signage with lighting should be located to minimize glare onto adjoining property and unobtrusive in size and appearance.
2. Signage should be constructed of high quality, durable materials appropriate to an urban setting.
3. Signs should make a positive contribution to the general appearance of the street and/or the area in which they are located.
4. Single pole signs are discouraged; monument or structured ground signs are preferred. Freestanding signs should emphasize horizontal rather than vertical massing
5. Consistent landscaping should be planted around the base of freestanding signs.
6. Freestanding signage designed with a base elevation above the site's average finished grade should emphasize horizontal rather than vertical massing.

Temporary Signs

Special Events

- Signs for special community events, grand openings or other special events can be displayed no earlier than 2 weeks before the event, and must be removed no more than 2 days after the event. Exceptions may be granted by the Design Review Committee.

Directional Signs

- Directing the public to model offices or residential, sales and leasing offices and community facilities:
- Permitted for up to one year
- Maximum size 100 sq. ft. per sign
- Maximum height: 10'

Sales or leasing office or model unit accessory signs

- One temporary sign is permitted per property
- May be lighted
- Only new residences and new office properties, while the office is being used for this purpose; may indicate name of project available for sale or lease.

- Maximum size: 36 sq. ft.

Advertising the sale or rental of land, dwelling units or office space

- One temporary sign is permitted per property
- Must be unlighted
- Maximum size: 50 sq. ft. per face of sign (2 permitted)
- Maximum height: 10'

Projects under construction now or in future

- Permitted for one year prior to initiation of construction
- Maximum size: 100 sq. ft.
- Maximum height: 10'

Flags and banners

- Banners may be mounted only to the Base Course of a building.
- They may not interfere with safety or visibility for drivers or pedestrians.
- One temporary banner may be installed on any two walls for the sole intent of announcing the grand opening of the business. Such banners shall be removed no later than one month after the opening of the business.

Prohibited Sign Types

- Animated or flashing signs
- Electronic signs
- Wind-actuated signs or other similar attention getting devices
- Portable or moveable signs
- Signs painted on or affixed to benches, fences, utility poles, trees, or other similar structures
- Roof signs
- Signs in the right-of-way
- Inflatable signs (including blimps, balloons, and figures)
- Signs on parked vehicles

Maintenance

- Signs shall be maintained in good and safe repair, structurally and electrically, in "like new" appearance.
- Signs identifying businesses no longer at a location shall be removed within 15 days from the last day of business.

Materials and Construction

- Junction boxes, conduits, raceways, transformers, electrode boxes, disconnect switches, access hatches or wiring shall be hidden from view.
- Flat sign surfaces should not exhibit bulges, oil canning or other distortions.
- Can signs are not permitted.
- No light from an illuminated sign may cause glare or reflection on drives, public streets, access drives or sidewalk that will be a safety hazard.

Utilities

Intent: To minimize the negative visual effects associated with utilities and their related components.

Guidelines

1. All utility poles and wires should be located underground.
2. Visible features such as transformer boxes should be located where they can be screened from public view.
3. Utility boxes, transformers and other elements should be located away from intersections and views from public rights–of–way.
4. All utility boxes should be surrounded on at least three sides by visual screens, which may be wood or masonry structures or dense landscaping.

Parking

Surface Parking Lots

Intent: To design surface parking lots in a manner and configuration that allows buildings to be closer and more integrated with one another. To soften and mitigate the visual and environmental impacts of large paved areas.

Guidelines

1. Surface parking lots should be located so they do not increase the space between buildings or impede the pedestrian scale of the Town Center.
2. Surface parking lots should be separated from buildings and public sidewalks with a landscape buffer.
3. Lighting associated with surface parking lots should not impact adjacent properties.
4. The surface of large parking lots should be frequently broken up with trees and other landscaping.
5. Landscaping should be used to distinguish access points and define pedestrian access to surface parking lots.

6. Ecological methods of reducing and treating storm water runoff from parking lots should be explored.

Structured Parking

Intent: To enhance the image of the South Arizona Avenue corridor through high quality design of parking facilities. To make parking a positive experience for all Town Center visitors, employees and residents. To minimize the visual and noise impacts of parking structures on the streetscape and other uses of the South Arizona Avenue corridor. To minimize the footprint of parking in the South Arizona Avenue corridor.

Guidelines

1. Parking structure should continue the active street front uses by wrapping parking structures with retail, office and residential uses.
2. The design of parking structures should avoid large blank walls or parking next to the street level sidewalk.
3. Parking structures should utilize architecturally compatible materials and details with surrounding buildings.
4. The design of parking structures should minimize the impact of vehicle noise, headlights, lighting and mechanical systems associated with parking facilities.

CHAPTER 11
DESIGN STANDARDS FOR SPECIFIC PARCELS

The sites below have been identified as important in the overall success of redefining Downtown Chandler. Conceptual site plans have been created for the residential and commercial sites identified in this booklet to address possible land use, site orientation, parking access, active retail frontages, building height, bulk, massing, and other site planning issues.

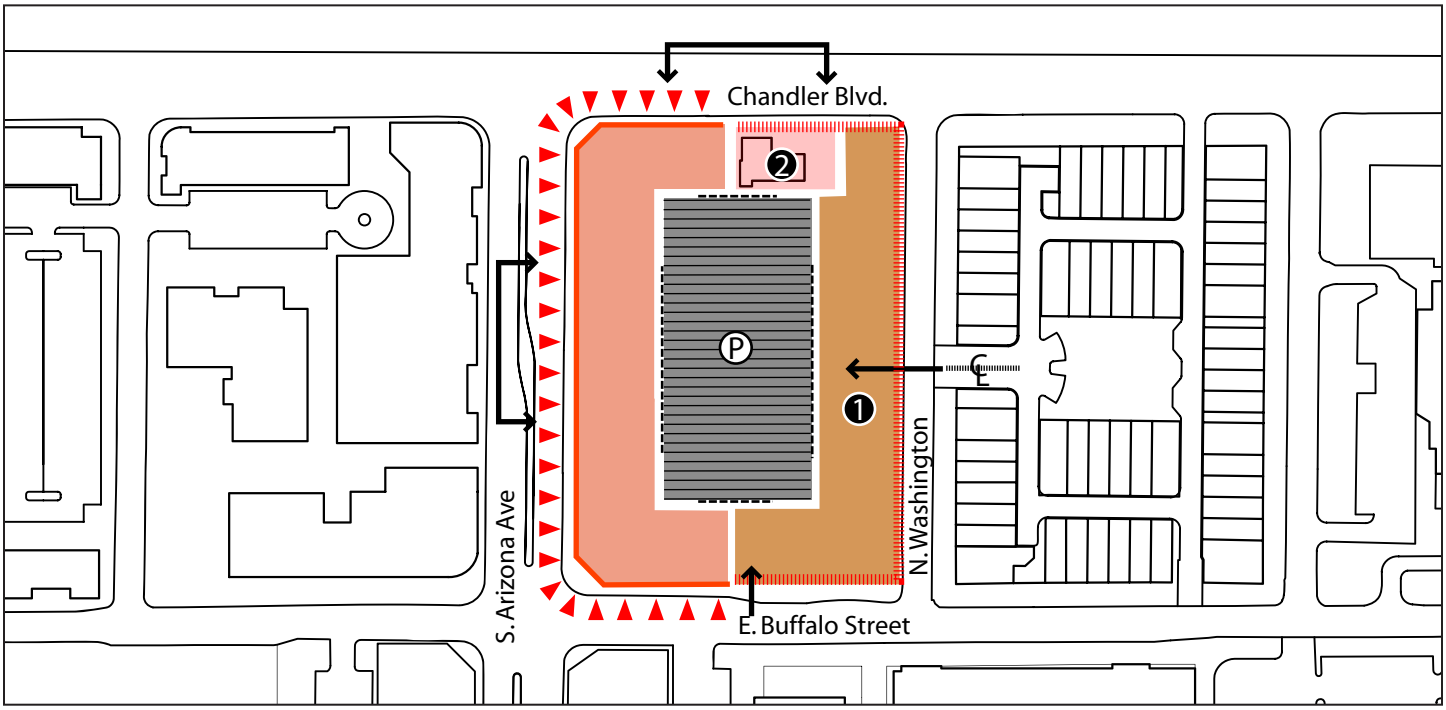
- Site 7
- Site 6 and Block to the South
- Civic Campus
- Steel Yard and Blocks to the South
- South of Frye Road and East Side of Arizona Avenue
- Residential Mixed Use Blocks on South Arizona Avenue
- Trailer Park and Fairview Street
- Northeast Corner of Pecos and Arizona Avenue

SITE 7

Intent: This block is highly visible and located on the corner of South Arizona Avenue and Chandler Boulevard. It is a mixed–use block, with intensive office and residential uses. The northwest corner and western side of the block complement what is developed across the street and architecturally represent a gateway to the Chandler downtown. Buildings on the west side of the block are oriented to South Arizona Avenue with active uses at the street level. The tallest buildings in the corridor should be located on this block along South Arizona Avenue. Residential uses (1) occupy the east side of the site and wrap around the southeast corner although, the southeast corner of the block could be occupied by other commercial uses. Residential uses should be similar scale or slightly more dense than the development located on the other side of North Washington Street. A multi–story parking structure is shown in the middle of the block. The existing Guedo's (2) restaurant is shown on Chandler Boulevard and could be integrated into a mixed-use building.

Vehicular Access

One right in, right out mid–block access along South Arizona Avenue and Chandler Boulevard should be allowed. Access along North Washington and East Buffalo should align with the access to the adjacent developments.



Legend

- Optional 10 ft. Setback
- Recommended 10 ft. Setback
- Recommended 20 ft. Setback
- Build to Line
- Building Orientation
- Parking Access
- Vehicular Access to Block
- Active Street Front Uses
- Optional Active Street Front Uses
- Pedestrian Connection
- Shaded Pedestrian Connection

Land Uses

- Mixed Use
- Mixed Use / Museum
- Retail
- High Density Residential (18-40 du/acre)
- Med Density Residential (6-17 du/acre)
- Single Family Residential
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

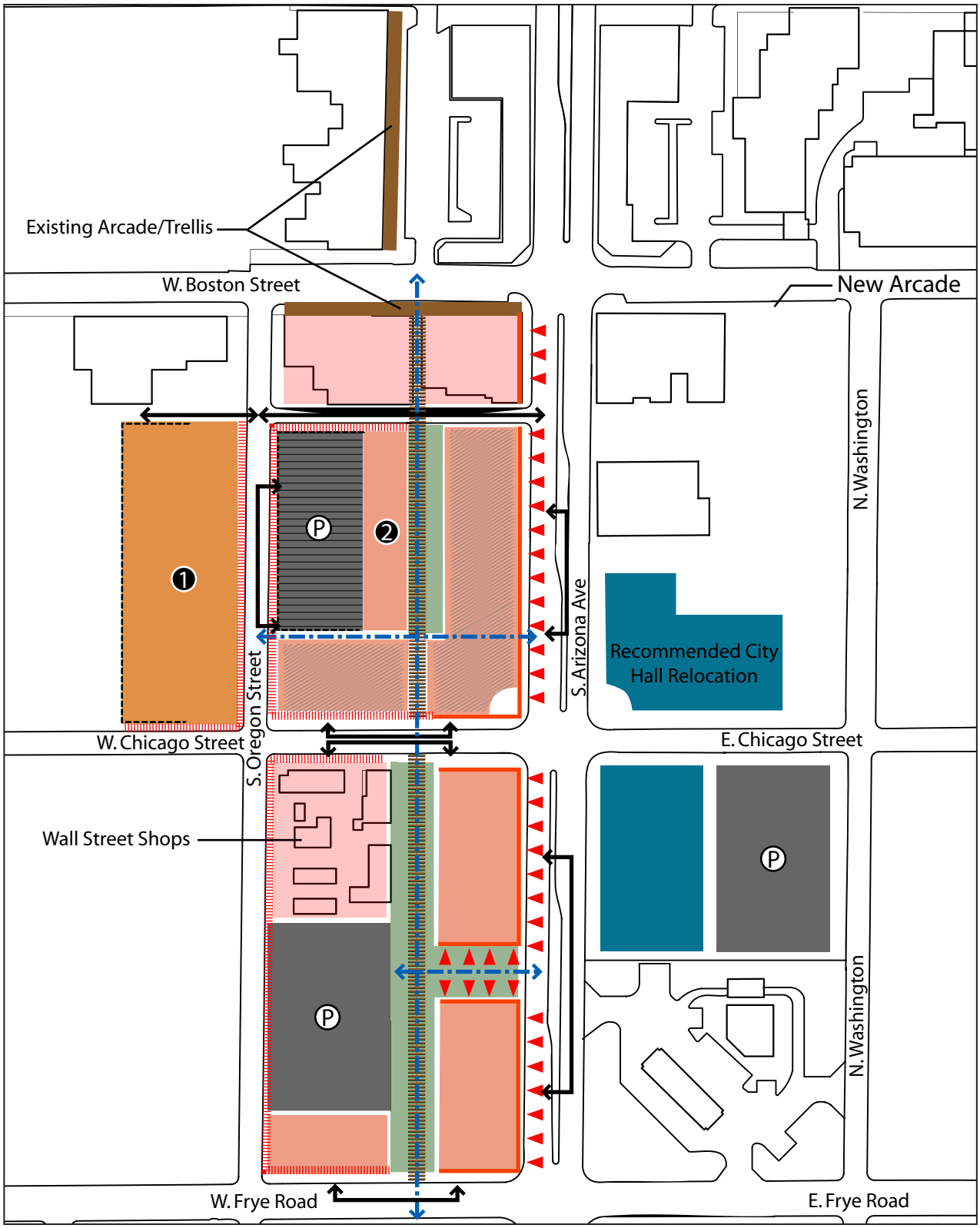
SITE 6 AND ADJACENT BLOCK TO THE SOUTH

Intent: Site 6 and the adjacent block to the south are the best opportunity for expanding Downtown Chandler's retail and restaurant district. They are envisioned as mixed–use blocks with an emphasis on retail and commercial uses oriented toward South Arizona Avenue and an internal pedestrian walkway. Both blocks have some civic obligations as companion blocks to the City of Chandler civic campus which is across the street and Site 6 will be the home of the proposed Chandler Museum. Low–density residential uses (1) are located to provide a transition between the retail/mixed uses and the single–family residences west of Site 6. A mixture of residential types including condos and two to three story apartment style buildings would be appropriate here. A multi story parking structure is located on the northwest corner of Site 6 and is wrapped on the east side with retail and office uses (2). Pedestrian access is encouraged all around the block, along a north-south walkway beginning with access through the existing retail along W. Boston Street continuing south to W. Frye Road. This walkway may have active storefronts and overhead shading similar to the trellis structures found throughout Downtown Chandler. A landscaped specially paved urban open space should be a component of the museum and acknowledge the civic campus across S. Arizona Avenue.

Vehicular Access

Through–block access just south of the existing retail on Boston should be preserved and three other parking access points will be allowed: one mid block on the east, south and west sides, and the access on the east side being right in right out only. Access to the parking garage is along Oregon Street or the through block access.

Access to the residential uses is allowed from the alley and the south and north sides of the site. Mid block access is allowed along all four sides of the block south of Site 6.



Legend

- Optional 10 ft. Setback
- Recommended 10 ft. Setback
- Recommended 20 ft. Setback
- Build to Line
- Building Orientation
- Parking Access
- Vehicular Access to Block
- Active Street Front Uses
- Optional Active Street Front Uses
- Pedestrian Connection
- Shaded Pedestrian Connection

Land Uses

- Mixed Use
- Mixed Use / Museum
- Retail
- High Density Residential (18-40 du/acre)
- Med Density Residential (6-17 du/acre)
- Single Family Residential
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

CIVIC CAMPUS

Intent: The civic campus extension south is defined by a central open space (1), which is the focus of the existing and future buildings. Infill retail (2) can be located on the corner of N. Washington Street and W. Boston Street. Pedestrian access is encouraged throughout and around the site with connections to the Civic Campus to the north, residential neighborhoods to the south and S. Arizona Avenue. A walkway through the existing retail extending down to the proposed City Hall site should receive overhead shading similar to the trellis structures found throughout Downtown Chandler.

Legend

- Optional 10 ft. Setback
- Recommended 10 ft. Setback
- Recommended 20 ft. Setback
- Build to Line
- Building Orientation
- Parking Access
- Vehicular Access to Block
- Active Street Front Uses
- Optional Active Street Front Uses
- Pedestrian Connection
- Shaded Pedestrian Connection

Land Uses

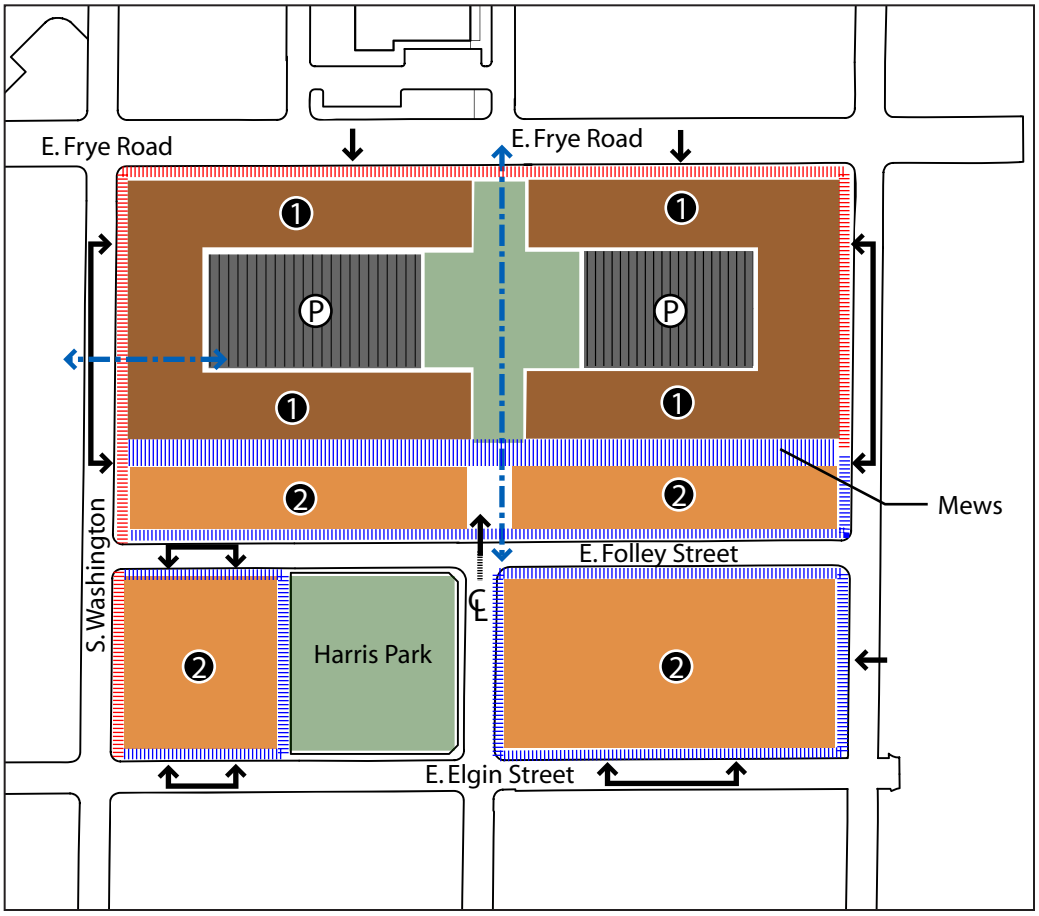
- Mixed Use
- Mixed Use / Museum
- Retail
- High Density Residential (18-40 du/acre)
- Med Density Residential (6-17 du/acre)
- Single Family Residential
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking
- Office

STEEL YARD AND BLOCKS TO THE SOUTH

Intent: These are key sites in creating large-scale medium and low–density residential development within the corridor. The majority of the existing steel yard is envisioned as high density residential (1) beginning the transition from the civic campus to the single family residences located in the south of the corridor. The high density residential would be oriented toward the street with parking on the interior of the block. Medium density residential (2) occupies the south side of the steel yard to buffer the single family homes to the south. Pedestrian access is encouraged throughout and around the blocks but most importantly is a north south pedestrian connection through the Steel Yard block with an opportunity for an associated open space.

Vehicular Access

Access into the Steel Yard block can occur on all four sides and should align with S. Colorado on the south side of the block.



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- Optional Active Street Front Uses
- Pedestrian Connection
- Shaded Pedestrian Connection

Land Uses

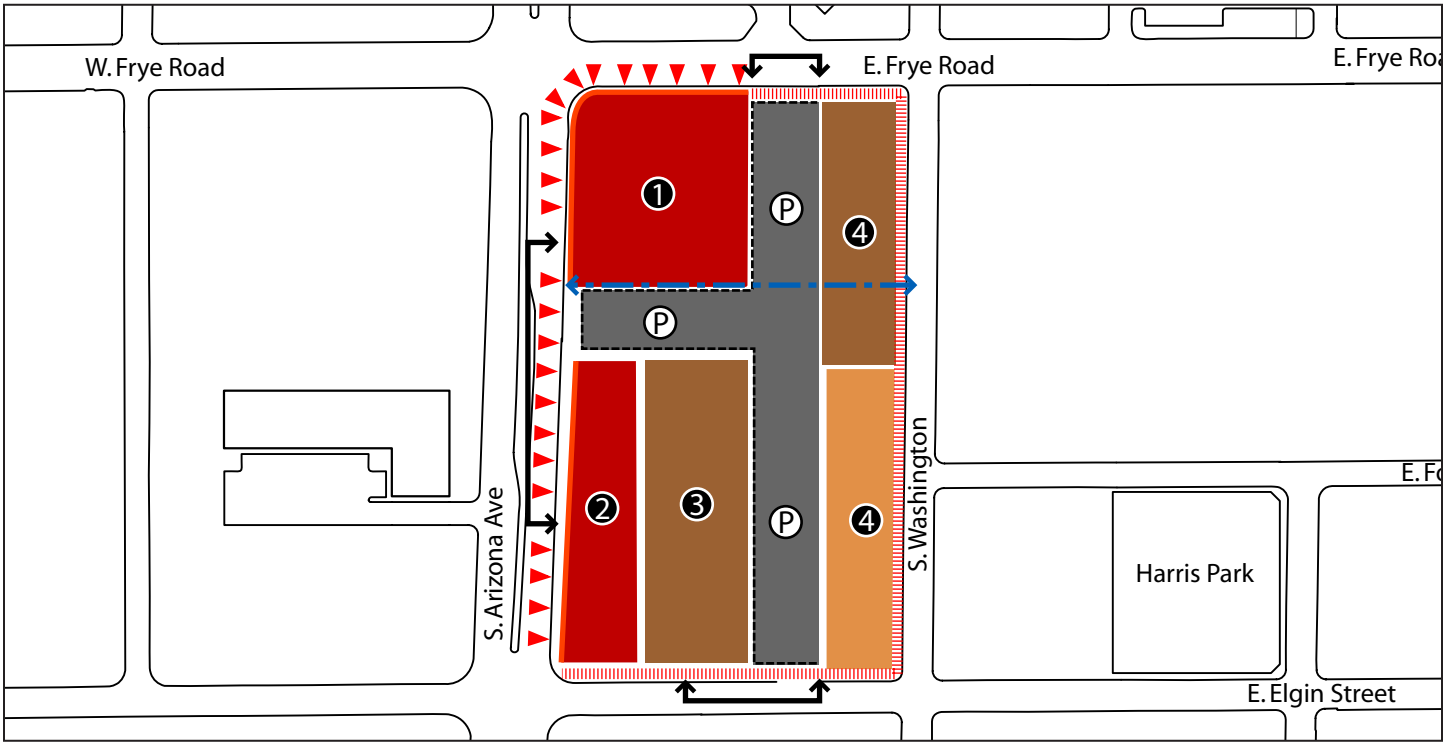
- Mixed Use
- Mixed Use / Museum
- Retail
- High Density Residential (18-40 du/acre)
- Med Density Residential (6-17 du/acre)
- Single Family Residential
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

SOUTH OF FRYE ROAD EAST SIDE OF ARIZONA AVE

Intent: Retail (1) could be located on the northwest corner to take advantage of the exposure along Frye Road and South Arizona Avenue. Retail (2) could be extended south to Elgin Street along S. Arizona Avenue with active uses focused on S. Arizona Avenue. High density residential (3) mixes in with the retail and transitions into all residential uses (4) along the east side of the block complementing the adjacent residential development. Parking occurs interior to the block with minimal exposure to Frye Road and S. Arizona Avenue. Pedestrian access is encouraged throughout and around the block punctuated by an east-west connection through the block connecting the adjacent residential neighborhood with S. Arizona Avenue.

Vehicular Access

Mid block access can occur on all four sides of the block, right in and out only on Frye Road and S. Arizona Avenue.



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- Optional Active Street Front Uses
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- Shaded Pedestrian Connection

Land Uses

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- Mixed Use / Museum
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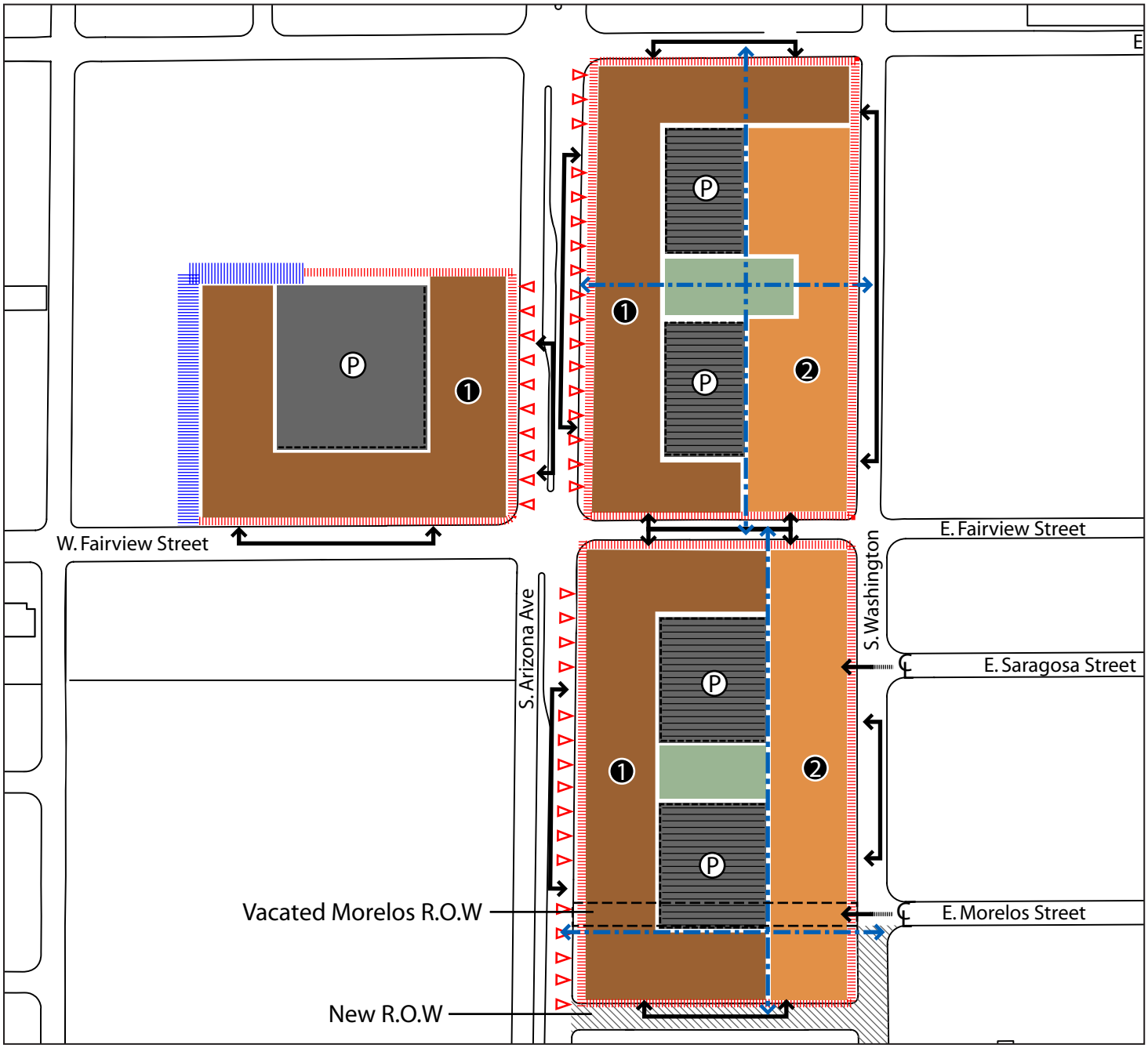
- Med Density Residential (6-17 du/acre)
- Single Family Residential
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

RESIDENTIAL/MIXED USE BLOCKS ON SOUTH ARIZONA AVENUE

Intent: These blocks are mixed use with intensive residential uses oriented toward S. Arizona Avenue and S. Washington Street. Retail (1) and other active uses should form the street frontage along S. Arizona Avenue at ground level with high density residential (1) developed above and behind it. The street level retail and active uses help establish continuity between Downtown Chandler and the newly constructed retail south of Pecos Road. Low–density residential (2) on the east side of the block transitions into the adjacent neighborhoods to the east and parking is provided on the interior of the block. Courtyards and pedestrian open space should occur within the block and be accessible to all the users of the block. Pedestrian access is encouraged throughout and around the block along with an east–west pedestrian connection through the block.

Vehicular Access

Mid–block access is allowed on all four sides and access on the east side of the southern block should align with the centerlines of E. Morelos and E. Saragosa.



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- Vehicular Access to Block
- Active Street Front Uses
- Optional Active Street Front Uses
- Pedestrian Connection
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Land Uses

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- Mixed Use / Museum
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- Med Density Residential (6-17 du/acre)
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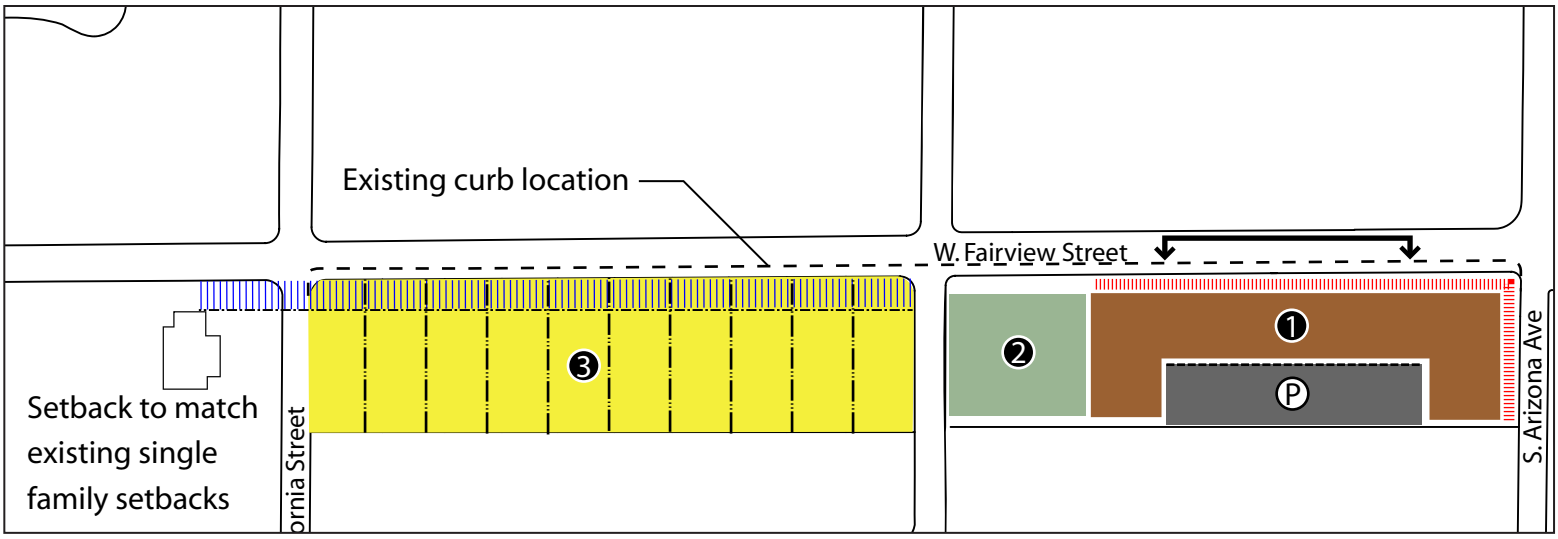
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

TRAILER PARK AND FAIRVIEW STREET

Intent: High density residential (1) is oriented to S. Arizona Avenue and Fairview Street from S. Arizona Avenue to California Street, which is connected through the existing trailer park. Parking is located behind the residential development. Neighborhood open space (2) is developed on the corner of S. California and W. Fairview. West of S. California the site is subdivided into single–family (3) lot sizes and setbacks for these homes are comparable with the existing lot sizes and setbacks in the existing neighborhood.

Vehicular Access

All access for these developments should occur on Fairview Street.



Legend

- Optional 10 ft. Setback
- Recommended 10 ft. Setback
- Recommended 20 ft. Setback
- Build to Line
- Building Orientation
- Parking Access
- Vehicular Access to Block
- Active Street Front Uses
- Optional Active Street Front Uses
- Pedestrian Connection
- Shaded Pedestrian Connection

Land Uses

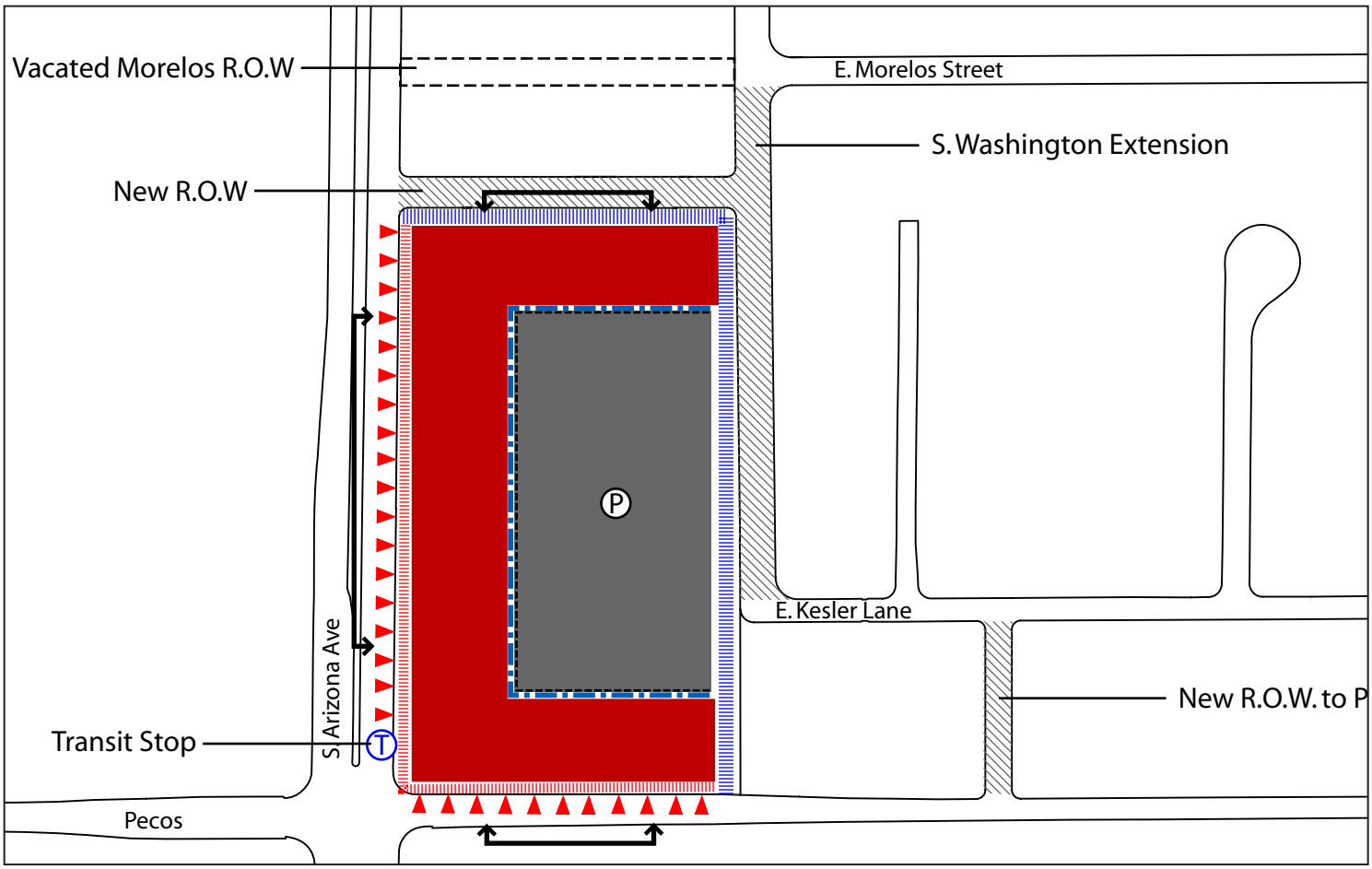
- Mixed Use
- Mixed Use / Museum
- Retail
- High Density Residential (18-40 du/acre)
- Med Density Residential (6-17 du/acre)
- Single Family Residential
- Civic Uses
- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

NE CORNER OF S. ARIZONA AVENUE AND PECOS

Intent: This block is the largest single retail site in the corridor with high visibility from traffic entering the newly constructed retail developments south of Pecos Road. This block is an important component of the corridor; it is the southern-most gateway to Downtown Chandler. Retail (1) and active uses are oriented toward S. Arizona Avenue but are accessible from the parking as well, which is located on the interior of the block.

Vehicular Access

Right in and out access on S. Arizona Ave is located on the northern half of he block to avoid conflict with a transit stop at the corner of S. Arizona Avenue and Pecos Road. Access is also allowed mid block on the new street on the north side of the block. Access along S. Washington is discouraged because of conflicts with the existing residential neighborhoods.



Legend

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- Structured Parking
- Surface Parking
- Existing Retail
- Existing Civic Buildings
- Existing Parking

Section 3
APPENDICES

APPENDIX A
MARKET ANALYSIS FOR ARIZONA AVENUE CORRIDOR

APPENDIX A

Market Analysis
For
Arizona Avenue Corridor
City of Chandler, Arizona

Prepared by:

Economic and Real Estate Consulting

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December 2005

1.0 Purpose

The purpose of this report is to provide real estate market analysis of Downtown Chandler and the South Arizona Avenue Corridor that will provide a foundation for the strategic redevelopment of the area. The report will provide an overview of the characteristics of the current retail market, its strengths and challenges, the demographic characteristics of the population within the surrounding trade area and recommendations on the development of retail and other uses along the Corridor. In addition, the impact of major retail development occurring at the intersection of Arizona Avenue and the Loop 202 Freeway will be analyzed as well.

This study is organized into the following sections:

- Definition of Study Area
- Market Analysis of Study Area - An evaluation of the demographic characteristics of the population and the composition of retail uses within the Arizona Avenue Corridor.
- Metro Phoenix Retail Market - An overview of trends in the retail sector and the potential impact of new retail development on Corridor merchants.
- Strengths and Challenges Facing the Arizona Avenue Corridor – A summary of the major issues facing the City in redeveloping the Corridor.
- Conclusions and Recommendations – Suggested strategies for addressing the retail market along Arizona Avenue and redeveloping the Corridor.

2.0 Definition of Study Area

The study area consists of the frontage properties along Arizona Avenue extending from Chandler Boulevard on the north to Pecos Road on the south. The northern portion of the Corridor from Chandler Boulevard to Boston Street encompasses the original historic Downtown of Chandler that today includes the City government center, the San Marcos Hotel, A.J. Chandler Park and a variety of historic buildings surrounding the park. The southern portion of the Corridor, starting at the alley on the south side of Boston Street to Pecos Road, is comprised of strip commercial uses and freestanding buildings situated on small lots (typically 50 feet wide by 150 feet deep) that front onto Arizona Avenue. Land uses along Arizona Avenue generally consist of retail with a mixture of office uses, quasi-public uses (churches) and light industrial uses. At the southern end of the Corridor is a large apartment complex at the northeast corner of Pecos Road and Arizona Avenue. South of Pecos Road are three large shopping centers surrounding the intersection of the Loop 202 Freeway and Arizona Avenue. Those shopping centers include a Kohl's department store at the southwest corner of the interchange, a Sam's Club and small shop space at the southeast corner and a Wal-Mart and small shop space at the northeast corner.

Arizona Avenue Corridor

3.0 Market Analysis of Study Area

This section of the report will provide an overview of the demographic characteristics of the neighborhood surrounding the Arizona Avenue Corridor. Included in this section will also be a description of the retailers and other businesses within the Corridor and the square footage of building space in the area.

3.1 Demographic Characteristics of Population

The characteristics of the population surrounding the Arizona Avenue Corridor vary with the distance from the Corridor. The following table shows the household characteristics for four different trade areas surrounding the Corridor. The column described as "Neighborhood Corridor" is that population living within one quarter mile east or west of Arizona Avenue. The remaining columns look at the characteristics of the population within one mile, three miles and five miles of the intersection of Arizona Avenue and Frye Road.

Household Characteristics
Neighborhood Surrounding Arizona Avenue and Frye Road

	Corridor Neighborhood	1 Mile Radius*	3 Mile Radius*	5 Mile Radius*	Maricopa County
2000 Population	4,886	16,865	101,311	219,158	3,072,149
1990 Population		10,334	47,890	113,447	2,122,101
2000 Average Household Size	3.71	3.37	2.97	2.91	2.71
2000 Average Household Income		$47,152	$62,562	$69,103	$59,655
2000 Median Household Income	$27,400	$39,082	$55,643	$61,321	$45,821
2000 Per Capita Income		$13,868	$21,292	$23,929	$22,251
2000 Tenure of Occupied Housing Units	1,316	5,008	34,073	75,331	1,132,886
Owner Occupied	402	2,535	24,809	57,461	764,547
Renter Occupied	914	2,473	9,264	17,871	368,339
% Owner Occupied	30.5%	50.6%	72.8%	76.3%	67.5%
% Renter Occupied	69.5%	49.4%	27.2%	23.7%	32.5%

Note: Corridor Neighborhood is that area within 1/4 mile of Arizona Avenue.
*Radius centered on Arizona Avenue and Frye Road

Source: U.S. Census

The neighborhood that directly impacts the Corridor is that population living adjacent to Arizona Avenue. According to the 2000 U.S. Census, that population had a median household income of approximately $27,400 and an average household size of 3.7 persons per household. Household income increases with distance from the Corridor rising to an average of $61,000 (in 1999 dollars) within five miles of the Corridor. A total of 1,316 households live within the immediate Corridor neighborhood, 70% of whom are renters. However, that high percentage is skewed by the presence of the Hacienda Del Sol apartment complex located at the northwest corner of Arizona Avenue and Pecos Road. The percentage of owner occupied units increases with distance from the Arizona Avenue Corridor.

The characteristics of the neighborhood surrounding the Arizona Avenue Corridor are not surprising given that it is the original center of Chandler and contains some of the oldest housing in the community. Most of the growth in Chandler has occurred on the peripheral areas, primarily in the form of single-family housing.

More detailed analysis of the population within the Arizona Avenue Corridor is provided in the following tables. The total number of persons living within one quarter mile east or west of Arizona Avenue is 4,886 with a very young median age of 25 years. This compares to the Maricopa County median of 33 years of age. The population of the Corridor is heavily weighted toward persons of Hispanic origin who comprise approximately 85% of all residents. Household income is heavily weighted towards the lower end of the income range although approximately 21% of the households earn more than $50,000 according to the 2000 U.S. Census.

Population by Age
Arizona Avenue Corridor
1/4 Mile East and West

Age Group	Population	% of total
Under 5	579	11.9%
5 to 9	461	9.4%
10 to 14	370	7.6%
15 to 17	225	4.6%
18 to 20	332	6.8%
21 to 24	443	9.1%
25 to 34	969	19.8%
35 to 44	671	13.7%
45 to 49	202	4.1%
50 to 54	177	3.6%
55 to 59	128	2.6%
60 to 64	98	2.0%
65 to 74	119	2.4%
75 to 84	83	1.7%
85 and over	29	0.6%
Total Population	4,886	100.0%
Under 21	1,967	40.3%
21 yrs to 54 yrs	2,462	50.4%
55 yrs and over	457	9.4%
Median Age	**25.4**	

Source: U.S. Census

Households by Age of Householder
By Tenure
Arizona Avenue Corridor
1/4 Mile East and West

Age of Householder	Owner Households	% of total	Renter Households	% of total	Total Households	% of total
15 to 24 years	17	4.2%	146	16.0%	163	12.4%
25 to 34 years	58	14.4%	308	33.7%	366	27.8%
35 to 44 years	90	22.4%	224	24.5%	314	23.9%
45 to 54 years	74	18.4%	115	12.6%	189	14.4%
55 to 64 years	67	16.7%	68	7.4%	135	10.3%
65 to 74 years	53	13.2%	27	3.0%	80	6.1%
75 to 84 years	30	7.5%	22	2.4%	52	4.0%
85 years and over	13	3.2%	4	0.4%	17	1.3%
Totals	**402**	**100.0%**	**914**	**100.0%**	**1,316**	**100.0%**

Source: U.S. Census

Population by Race
Arizona Avenue Corridor
1/4 Mile East and West

Race	Population	% of total
White	439	9.0%
Black	158	3.2%
Native American	59	1.2%
Asian	27	0.6%
Native Hawaiian & Other Pacific	10	0.2%
Other	4	0.1%
Two or more races	44	0.9%
Hispanic Origin	4,145	84.8%
Total Population	**4,886**	**100.0%**

Source: U.S. Census

Household Income
Arizona Avenue Corridor
1/4 Mile East and West

Income range	Total Households	% of total
Less than $10,000	136	10.3%
$10,000 to $14,999	142	10.8%
$15,000 to $19,999	165	12.5%
$20,000 to $24,999	154	11.7%
$25,000 to $34,999	212	16.1%
$35,000 to $49,999	233	17.7%
$50,000 to $74,999	169	12.8%
$75,000 to $99,999	65	5.0%
$100,000 to $149,999	22	1.7%
$150,000 & above	17	1.3%
Total Households	1,316	100.0%
Median Household Income	**$27,396**	

Source: U.S. Census

Housing in the Arizona Avenue Corridor is also older than much of the housing in the remainder of the City. Approximately one third of the units were built between 1980 and 1989, primarily within the Hacienda Del Sol apartment complex. Fifty-six percent of the units were built before 1980, representing much of the single family inventory in the area.

Occupied Units by Tenure by Year Structure Built
Arizona Avenue Corridor
1/4 Mile East and West

Year Structure Built	Owner Households	% of total	Renter Households	% of total
Built 1999 to March 2000	24	5.9%	9	1.0%
Built 1995 to 1998	6	1.4%	49	5.4%
Built 1990 to 1994	8	1.9%	43	4.7%
Built 1980 to 1989	60	14.9%	385	42.1%
Built 1970 to 1979	72	18.0%	135	14.7%
Built 1960 to 1969	55	13.7%	112	12.2%
Built 1950 to 1959	57	14.2%	105	11.4%
Built 1940 to 1949	72	18.0%	39	4.3%
Built 1939 or earlier	48	12.1%	37	4.1%
Total	**402**	**100.0%**	**914**	**100.0%**

Source: U.S. Census

An estimate of the amount of household spending that may be available within the Arizona Avenue Corridor is provided on the following table. The spending estimate is based on a number of households within one mile of the Arizona Avenue Corridor, which according to the 2000 Census with 5,008 households. The median income of those households was applied to a spending model developed by Elliott D. Pollack & Company based on the U.S. Consumer Expenditure Survey. The model calculates the amount of taxable household spending of the population for a variety of different daily needs. A household with an income of $39,000 spends roughly 51% of its income on taxable goods and services. The largest categories of nontaxable spending are a home mortgage, rent, property taxes and health care.

Taxable Household Spending Potential
Households Within One Mile of Arizona Avenue Corridor

Households 5,008

		% of Income	% of Retail Spending	Total Spending Potential
Income	**$39,082**			
Spending				
Food	**$5,016**	**12.8%**	**25.3%**	**$25,119,334**
Food at home	$2,982	7.6%	15.0%	$14,933,950
Food away from home	$2,034	5.2%	10.2%	$10,187,130
Alcoholic beverages	**$378**	**1.0%**	**1.9%**	**$1,892,346**
Utilities, fuels, and public services	**$2,566**	**6.6%**	**12.9%**	**$12,850,274**
Household supplies and operations	**$950**	**2.4%**	**4.8%**	**$4,759,183**
Other household expenses	$344	0.9%	1.7%	$1,723,368
Laundry and cleaning supplies	$134	0.3%	0.7%	$669,195
Other household products	$344	0.9%	1.7%	$1,723,368
Postage and stationery	$128	0.3%	0.6%	$643,253
Household furnishings and equipment	**$1,307**	**3.3%**	**6.6%**	**$6,545,541**
Household textiles	$105	0.3%	0.5%	$527,723
Furniture	$330	0.8%	1.7%	$1,651,526
Floor coverings	$42	0.1%	0.2%	$208,453
Major appliances	$172	0.4%	0.9%	$861,547
Small appliances, miscellaneous housewares	$81	0.2%	0.4%	$406,649
Misc. household equipment	$577	1.5%	2.9%	$2,889,643
Apparel and services	**$1,522**	**3.9%**	**7.7%**	**$7,620,285**
Vehicle purchases (net outlay)	**$3,216**	**8.2%**	**16.2%**	**$16,105,526**
Gasoline and motor oil	**$1,199**	**3.1%**	**6.0%**	**$6,004,207**
Other vehicle expenses	**$935**	**2.4%**	**4.7%**	**$4,681,726**
Maintenance and repairs	$569	1.5%	2.9%	$2,849,309
Vehicle rental, leases, other charges	$366	0.9%	1.8%	$1,832,417
Health care	**$101**	**0.3%**	**0.5%**	**$505,869**
Medical supplies	$101	0.3%	0.5%	$505,869
Entertainment	**$1,769**	**4.5%**	**8.9%**	**$8,857,033**
Fees and admissions	$394	1.0%	2.0%	$1,975,310
Television, radios, sound equipment	$655	1.7%	3.3%	$3,279,299
Pets, toys, and playground equipment	$346	0.9%	1.7%	$1,730,311
Other entertainment supplies, equipment	$374	1.0%	1.9%	$1,872,114
Personal care products and services	**$489**	**1.3%**	**2.5%**	**$2,446,725**
Reading	**$113**	**0.3%**	**0.6%**	**$567,728**
Tobacco products and smoking	**$300**	**0.8%**	**1.5%**	**$1,502,580**
Total Taxable Spending	**$19,860**	**50.8%**	**100.0%**	**$99,458,358**

Source: U.S. Consumer Expenditure Survey

Aggregate potential spending of the population within one mile of the Arizona Avenue Corridor is nearly $100 million. Food, both groceries and restaurant spending, is one of the largest categories at approximately 13% of gross income. Vehicle Purchases is another large category as well.

According to the above data, the population within one mile of the Corridor would generate about $15 million in grocery sales. Today, the typical grocery store generates about $18 million to $19 million in annual sales. The 5,008 households and 16,865 people living near the Corridor, therefore, would provide the majority of support for a grocery store. However, there are several stores in

the area, including the new Wal-Mart, indicating that demand is probably satisfied.
The spending potential of this population within one mile of the Corridor is significant. However, most of those dollars are captured by retailers within nearby shopping centers. Unfortunately the Arizona Avenue Corridor is not a strong competitor today within the retail market.

3.2 Characteristics of Arizona Avenue Retail Corridor

An extensive inventory of businesses within the Arizona Avenue Corridor was conducted as part of this study. The following table provides the inventory by type of business or use. The locations of these businesses are shown on a graphic in the Appendix of this report corresponding to major streets within the Corridor.

Arizona Avenue Corridor Business Inventory

Restaurant
AJ's Café
Brunchies
Chadow Café
Cupid's Hot Dogs
El Zocalo
Hillbilly Chili
Jack in the Box
Kokopelli Winery
La Stalla Restaurant
NY NY Deli
Pecos Lounge
Pirate's Fish & Chips
Pockets Bakery
Restaurant 98
Serrano's
Starbucks

General Retail
98 cent general store
98 cent store
99 cent store
Arizona Discount Store
Arrow Pharmacy/Market
Convenience Store

Specialty Retail
Antique Store
Art Store
ATV Store
Arizona Mesquite Company
Chandler Glassworks
Day One Art
DiSciacca
Flower Shop
Fountain World
Giro's a Mexico
La Bodega
Naughty but Nice Lingerie
Pottery Painting Store
Saba's Western Wear
Serendipity
Smoke Shop
T&B Glass
Unique Gifts & Antiques
Window Screens

Grocery
Mama Mia Market
Payless Market/ Carniceria

Bank
1st Credit Union

Retail Auto
Bob M's Tires
Frontier Tires
Pep Boys
Used Car Lot

Auto Repair
Discount Brake and Muffler
El Camino
Firestone
Hontech
Lloyd's Complete Auto
Mechanica
Mechanica
Mi Gente
Musclecar Garage
The Lube Shop

Personal Services
Appliance Repair
Day Spa
Laundry
Men's Barber Shop
Women's Salon

Semi - Public
Chamber of Commerce
Gospel 4 Life Church
Methodist Church
Rock Church of the Valley
VFW

Office
Agribusiness Management
Hispano Tax Service
Keystone Homes
Law Office
Labor Express
Mexican Tax Service
Montagnoso Develoment
Property Investment / Development
Real Estate / Mortgage
Saba Realty

Industrial
Architectural Stone Concepts
Dodge Electric
Ernie's Refridgeration / Sheet Metal

Self-Storage
National Self Storage

Gas Station
Circle K
Mobil / On the Run

Residential
345 Apartments
Hacienda Del Sol Apartments
Trailer Park

Educational
Earl Jones Institute
Western International University

Source: Elliott D. Pollack & Co.

In total, there are approximately 528,000 square feet of building space within the Arizona Avenue Corridor between Chandler Boulevard and Pecos Road. This inventory does not include any City owned buildings or the office buildings located on the eastside of A.J. Chandler Park. The most intensely developed

portion of the Corridor is that area between Frye Road and Fairview Street that contains a 67,000 square foot self-storage property. Excluding that site, the square footage between Frye Road and Fairview Street drops to 117,000 square feet. The square footage estimates do not include residential uses.

Summary of Building Square Footage

Area	Building Square Feet
Chandler Avenue to alley south of Boston Street	175,094
Alley south of Boston Street to Frye Road	117,551
Frye Road to Fairview Street	184,096 *
Fairview Street to Pecos Road	51,449
Total	528,190
Total Excluding Self Storage	461,190

* Includes a 67,000 self storage site

Source: Maricopa County Assessor

The total square footage or building space in the Corridor, excluding the self storage business, is approximately 461,000 square feet. If this square footage was contained within a single shopping center site, it would consume approximately 50 acres of land, most of which would be devoted to off street parking. However, the businesses along Arizona Avenue do not function as a single shopping center and do not provide the same amount of parking that would normally be required in a conventional retail center. The shopping environment is also bifurcated by Arizona Avenue which is designed to carry traffic rather than to create an environment conducive to retailing. This factor contributes to the lack of strong retailing activity along Arizona Avenue.

Overall, there are four general categories of businesses along the Arizona Avenue Corridor:

- Specialty stores and restaurants.
- A combination of retail and service businesses catering to the local neighborhood.
- A few national chain retailers that may attract consumers from a trade area larger than the immediate neighborhood (PEP Boys, Firestone).
- Quasi-industrial and heavy commercial uses (electrical contractor, architectural stone company).

From a retailing perspective, the Corridor can also be divided into a north and south segment. Virtually, all of the restaurants in the Corridor are located at the northern end, north of Boston Street, where businesses are oriented towards the City government complex and A.J. Chandler Park. Many of the specialty retail businesses are also located in this area as well. The southern portion of the Corridor, generally south of the alley south of Boston Street, is more oriented towards providing services to the local neighborhood. Interspersed among these uses are some quasi-industrial or heavy commercial uses such as auto repair shops, contractor's offices and yards, and similar businesses.

Concern has been expressed that the construction of the Wal-Mart shopping center located south of Pecos Road could have a significant effect on retailing within the Arizona Avenue Corridor. These issues will be discussed in the following section.

3.3 Conclusions

In summary, the uses found along the Arizona Avenue Corridor are typical of older retail areas found throughout Metro Phoenix. While historic sales performance data is not available from the City, these small businesses generally are marginally profitable and have located in older buildings because of lower rents. There are few national retail franchises in the area, indicating the entrepreneurial spirit of these business owners. Franchises will typically be found traditional shopping centers.

The northern portion of the study area has begun to gain some success due to adjacency to the City complex and A.J. Chandler Park. Most restaurants in the Corridor are located in this area along with additional specialty retailers. The area south of Boston Street is a mixture of uses that provide services to the local population or specialty goods such as the fountain outlet or architectural stone company. Once again, what is drawing these retailers to the area is a lower rent structure, less restrictive zoning and non-conforming buildings.

Competition for retail sales is fierce in Metro Phoenix. Competing retailers can be found in many shopping centers surrounding the Corridor, often at locations that are more convenient to the public. For Downtown Chandler to survive, it must become a destination that appeals to a broader trade area by offering unique goods and services. However, it must also become a place where people feel comfortable shopping. More than just introducing new uses to the area, its entire character must change. These issues will be discussed later in this report.

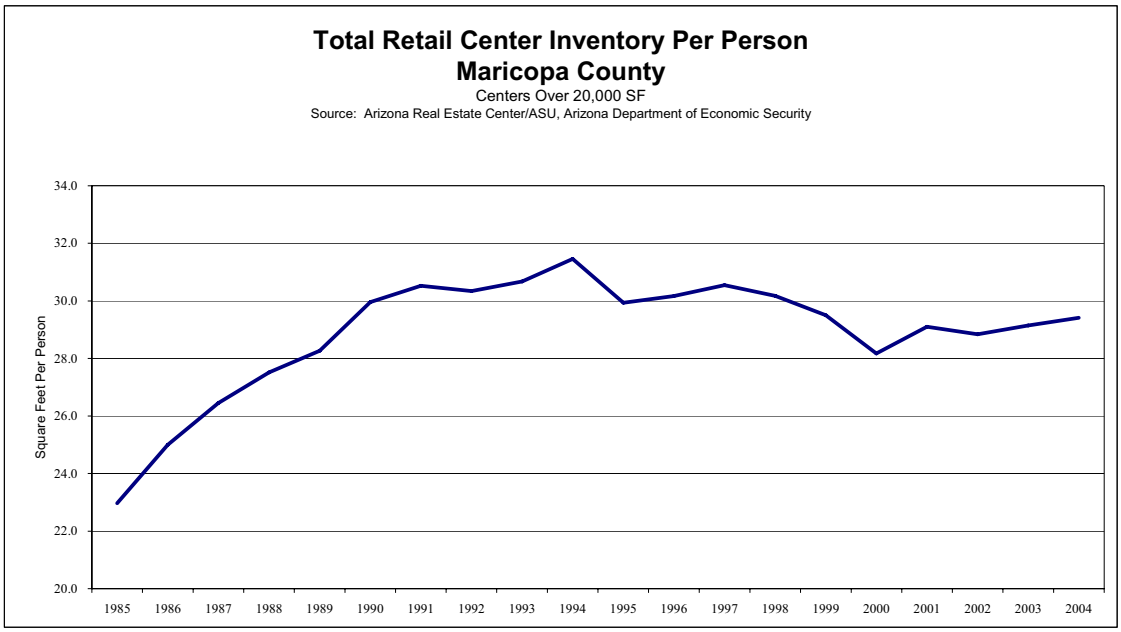
4.0 Metro Phoenix Retail Market Overview

This section of the report will provide information on the Metro Phoenix retail market and the trends that are currently affecting the retail sector. The section will discuss the potential impact of Wal-Mart and other new retail uses on the Corridor.

4.1 Retail Market

The Maricopa County retail market is driven by population growth. Factors such as residential density and household income determine how much retail space is constructed within a community or trade area. Dense or high-income areas typically have more retail square footage than rural or lower income neighborhoods.

At the end of 2004, the retail sector of the real estate market was comprised of approximately 103.6 million square feet of building space according to Arizona State University. These figures do not include freestanding retail buildings, hotels, car dealers, downtown retail areas or shopping centers smaller than 20,000 square feet. Retail centers have experienced significant growth since 1982, increasing by 176% from a base of 37.5 million square feet. At the same time, Maricopa County's population has increased by approximately 121% or 1.9 million people. Therefore, over that time frame, the per capita inventory of retail space increased from 23.6 square feet per person in 1982 to 29.4 square feet per person in 2004. Since 1990, the retail inventory has hovered around the 30 square feet per person range.



Vacancy rates in the retail sector have increased slightly over the past few years from 5.3% in 2000 to 6.1% at the end of 2004 according to CB Richard Ellis. ASU reports a much higher vacancy rate of 10.3% for 2004, compared to 8.1% in 2000. The reason for this discrepancy between the two sources is unknown, but CB Richard Ellis is considered a more accurate source.

At the end of 2004, there were 6.2 million square feet under construction within 43 centers. Retail construction has declined since 2001 when 7.6 million square feet of space was completed, primarily because two new malls were in development at the time. Total completions in 2004 are slightly over 5.6 million square feet with 6.6 million square feet absorbed. On average, 3.5 million square feet have been absorbed annually from 1994 to 2004. In the last four years, absorption has averaged 4.9 million square feet annually. The demand for retail space created by strong population growth has maintained vacancy rates at moderate levels compared to other real estate sectors. In Maricopa County, as long as population growth and resident spending power persist, retail space will continue to be constructed.

Retail centers are generally classified into four categories.

- **Strip/specialty centers** are smaller retail centers that do not have an anchor store.

- **Neighborhood centers** are anchored by a grocer and possibly a drug store, and provide for the daily shopping needs of the population. Neighborhood centers contain about 40% of all the retail square footage in the metro area, although community/power centers have increased in importance over the last eight years.

- **Community centers/Power Centers** are anchored by at least one large discount store along with associated smaller shop space. Power centers comprised of several discount anchor stores are included in this category.

- **Regional malls** contain two or more full line department stores typically along with an enclosed shopping concourse.

The Maricopa County retail market is divided by type in the following table as of year-end 2004. Neighborhood centers contain most of the square footage followed by community centers. The vacancy rate for regional malls has declined in recent years as older centers have been repositioned in the marketplace. For instance, some of the original regional shopping centers, such as Chris-Town Mall, Thomas Mall and Los Arcos Mall have all been converted to discount power centers or demolished for other uses.

Components of Retail Sub-Market
Maricopa County
Retail Centers Over 20,000 SF
4th Quarter 2004

Type of Center	Total SF	Percent of Total SF	Total SF Per Capita
Regional	14,874,041	14.4%	4.2
Community	36,809,951	35.5%	10.4
Neighborhood	40,517,698	39.1%	11.5
Strip/Specialty	11,446,597	11.0%	3.2
Totals	103,648,287	100.0%	29.4

Note: Totals may not add due to rounding

Source: Arizona Real Estate Center, ASU, 4th Quarter, 2004

The average square feet of retail space per person currently stands at 29.4. However, wide differences in the amount of retail exist between different parts of the metro area. At the high end, the northeast part of the Valley has about 43 square feet per person while the Southwest Valley only has about 16 square feet per person. These differences exist because of the income levels of the residents, the density of development, and the out-of-town tourist trade, much of which is currently captured by Scottsdale and Phoenix. The Northeast region, encompassing Northeast Phoenix and Scottsdale, has 48% more retail space per capita than the metro average. The Southeast Valley has 12% more retail space per capita than the average, but all other regions lag behind the county average.

Retail Building Space Per Capita
By Shopping Center Type and Region
Maricopa County

	Region					
Type of Center	Northeast	Southeast	Southwest	Northwest	Central	Metro Phoenix
Regional	6.7	4.2	2.5	3.5	5.0	4.2
Community	16.3	11.1	5.5	8.7	6.1	10.4
Neighborhood	14.3	13.2	7.9	11.2	8.7	11.5
Strip/Specialty	6.0	4.2	0.6	2.5	2.3	3.2
Total	43.3	32.7	16.5	25.9	22.2	29.3

Sources: U.S. Census, AZ Dept. of Economic Security, ASU Real Estate Center

The above data is useful in evaluating the retail marketplace. However, another useful factor is the ratio of new retail building construction activity compared to the growth of Maricopa County. In other words, the true measure of retail activity is the number of square feet of retail space that has been constructed for each new person added to the County population. The following outlines that data by type of retail center for the period between 1986 and 2004.

Construction of Retail Space Per Capita 1986-2004*
Metro Phoenix
Retail Centers Over 20,000 SF

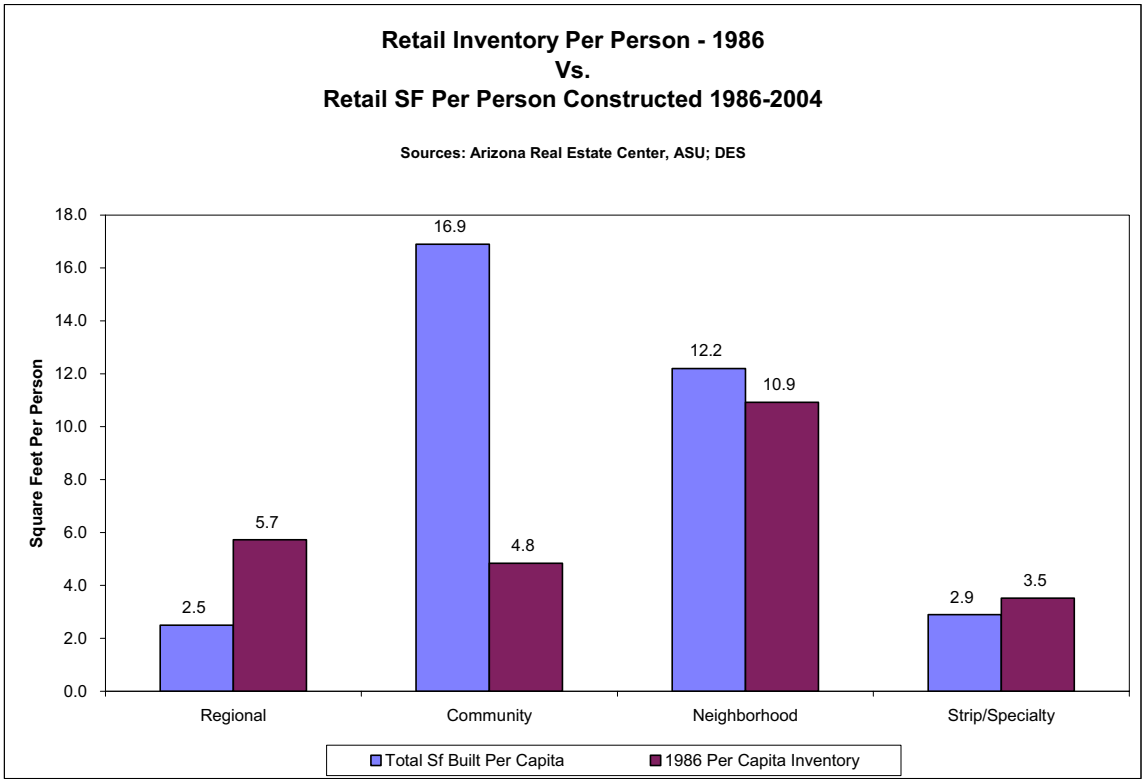
Type of Center	Total SF Built	Total SF Built Per Capita*	% of Inventory Built
Regional	4,107,572	2.5	7.2%
Community	27,704,416	16.9	49.0%
Neighborhood	19,961,630	12.2	35.4%
Strip/Specialty	4,833,084	2.9	8.4%
Totals	56,606,702	34.5	100.0%

*Construction rate compared to new population added to metro area between 1986 and 2004.

Source: Phoenix Metropolitan Reports, AZ Real Estate Center, ASU

The most dramatic increase in retail activity has occurred in the community center category due to the construction of power centers since the 1990s. In addition, some regional malls have been converted to the power center format as the demographics of Maricopa County have changed over time. Since 1986, 49% of all retail space built in the metro area has been in community centers, spurred by the popularity of discount department stores and other big-box users. Community and power centers are expected to continue to be a major focus of retail activity for the foreseeable future. The inventory of regional malls in the Valley has declined in recent years. In the early 1990s, the inventory of regional malls stood at 6.0 square feet per person. Since that time, it has declined to 4.2 square feet per person as the tastes of the buying public have changed over time. Chandler Fashion Mall at Chandler Boulevard and the Loop 101 Freeway is the newest mall, completed at the end of 2001.

The following chart compares the inventory of retail space per person in 1986 to retail construction activity per new resident that occurred between 1986 and 2004. The neighborhood and specialty categories have maintained a fairly consistent construction pace. The community or power center category, however, has shown a significant increase in the past 18 years, growing from just 9.1 million square feet of space in 1986 to 36.8 million square feet in 2004. Community or power centers today comprise 35% of the market compared to 19% in 1986. This shift in shopping center retailing has been led primarily by large discount stores (Wal-Mart and Target) and others such as Home Depot, Lowe's, and Best Buy. The pace of construction of regional malls has slowed in the past 15 years to 2.5 square feet per person compared to the 1986 inventory of 5.7 square feet per person. Part of the reason for such a drastic decline in the inventory is the repositioning of regional mall sites to power center or other uses and the rise in popularity of power retail centers.



4.2 Site Location Criteria of Discount Retailers

The spatial distribution of community and neighborhood retail centers is typically driven by major anchor tenants. Whether local grocery companies or national department store chains, all retailers have certain standards or criteria for evaluating real estate sites. These companies consider the trade area's population size, household incomes, resident education levels and similar criteria before committing to a site. This section will outline the criteria for some of the metro area's major retailers and the manner in which they site stores locally.

Interviews with real estate representatives of the major discount department store chains indicate that they typically require a population of 125,000 to 150,000 persons within a three to five mile trade area surrounding a site. In a developing part of the metro area, this population threshold may represent the ultimate build-out population of the area. This equates to between 46,000 and 55,000 households based on the average of 2.7 persons per unit in Maricopa County.

The typical spacing of stores in Maricopa County (within the same department store chain) is four to five miles based on current housing densities. The site selection criteria of the major chains take into account competition from other discount retailers. The key site location factors for discount retail chains are:

- Population
- Household income

- Visibility and access, preferably adjacent to a freeway.

The per capita square footage of discount department store space in Maricopa County currently stands at 2.2. The distribution of stores is not equal, however, because of differences in income and density. The northeast and southeast parts of the Valley have the largest inventory of discount department store space while the southwest has the smallest. Across the Valley, there is one store for every 55,000 people, with several additional stores in the construction or planning stage.

Costco operates differently from the traditional discount retailers. Costco is more of a destination outlet that people will drive farther to visit. As a result, customers typically visit the warehouses less often, but make larger purchases. There are only ten Costco's in Maricopa County or about one for every 330,000 people. Sales have been quoted at $1,000 per square foot in the typical Costco, about two to three times the rate of the major competing discount retailers.

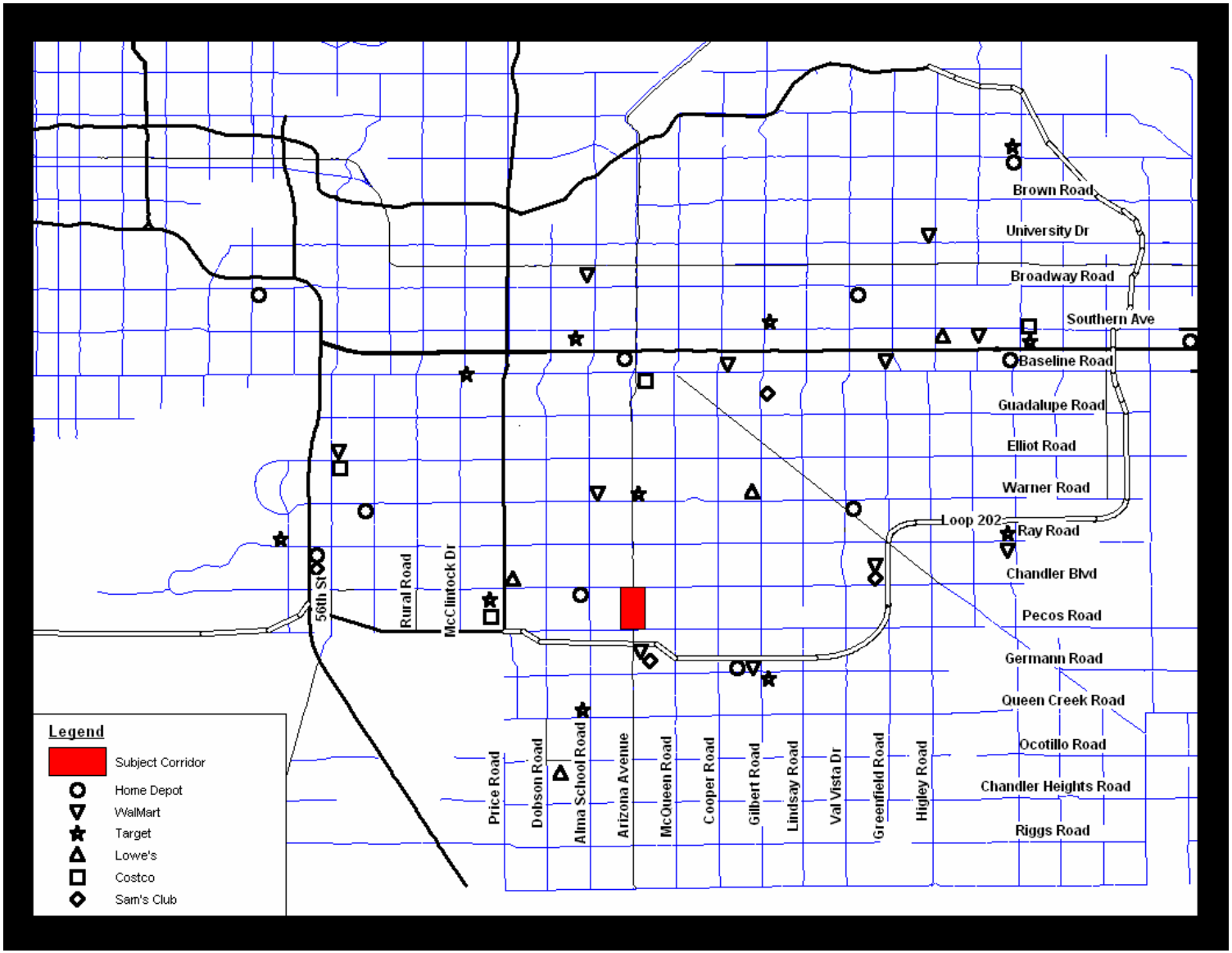
The various chains also target different segments of the market. Wal-Mart has typically targeted middle-income families, but stores are found in all areas including upscale North Scottsdale. Target prefers to see a portion of the trade area population with incomes higher than $60,000 and a large percentage of college degrees. Target has developed a new store format aimed at this upper income segment called Target Greatland. These stores are about 40% larger than the typical Target, carry a wider variety of merchandise (but not groceries) and have a number of shopper-friendly features such as wider aisles.

In Maricopa County, the above site selection criteria have proven to be reliable in determining where the next power center might locate. As an area of the county reaches a critical population mass, these discount retailers are not far behind in purchasing independent sites or committing to purchase a site or lease a building from a retail developer within a power center.

In the Chandler area, Wal-Mart has encountered numerous difficulties placing stores in certain locations, particularly in south Chandler. As a result, the company appears to have adopted the strategy of locating stores along major freeways, such as the Loop 202, where these uses are more accepted and usually do not impact a nearby residential neighborhood. Information gathered by this company indicates that Wal-Mart will be constructing a Super center every three miles along the Loop 202. In addition to the Arizona Avenue site, there will be Wal-Mart Super centers at Gilbert Road, Val Vista Road and Power Road. There will likely be few opportunities to locate stores in southern Chandler or Gilbert.

The following map outlines the locations of big box retailers in the Chandler and Gilbert area.

Major Discount Retailers



After reviewing the types of the uses within the Arizona Avenue Corridor, it appears that there will be little competition between the shopping center and the Corridor merchants. Most of the merchants along the Corridor have already learned how to compete within the age of the discount merchandisers. Both Target and Wal-Mart have been operating within the Chandler trade area for a number of years. The Corridor retailers have been operating with that competition for decades as well.

Most of the retailers within the Corridor have specific products that likely will not be found in Wal-Mart or Sam's Club. Mass merchandise retailers such as Wal-Mart and Target do not offer the same types of products or services. The Corridor merchants, for the most part, have differentiated themselves from the mass merchandisers or they would not currently be in business.

However, some impact will likely be felt by a few merchants now that Wal-Mart and Sam's Club are so close to the Corridor and more convenient to the nearby population. Those who could be affected include the small dollar or discount stores, the pharmacy and the tire stores. The close proximity of Wal-Mart to the Corridor will, nonetheless, have some impact on retail activity, but it is difficult, if not impossible, to determine the exact dollar amount of cannibalized retail sales.

4.3 Grocery Retail Market

While the number of power centers in Metro Phoenix has grown significantly over the past decade, the construction of grocery-anchored neighborhood centers has kept pace with population growth. Grocery stores need to be convenient to the consumer and are typically found on smaller sites, 10 to 15 acres in size, close to residential neighborhoods. However, grocery retailers, which historically operated on thin margins, are under siege from other retailers that now carry a full line of grocery items. These retailers include Wal-Mart, Target, Sam's Club and Costco. As result, the grocery industry in Metro Phoenix has undergone significant consolidation in the past decade and grocery retailers are much more cautious in the selection of a site for an outlet.

The spatial distribution of grocery stores is driven by the national grocery chains. Each company has certain standards or criteria for evaluating real estate sites. They consider the trade area's population size, household incomes, resident education levels and similar criteria before committing to a site.

Because of their focus on convenience shopping, modern grocery retailers want to locate close to their customer base and are developing larger store formats that offer a wider array of non-grocery items in order to compete with the Wal-Marts and Targets. Most stores range in size from 45,000 to 65,000 square feet. However, some chains, such as Albertson's and Fry's, have built 80,000 square foot combined grocery and pharmacy stores to capture a larger share of the market.

Across the Valley, there are 4.5 square feet of space for each person or about 12,500 persons per store. Just a few of years ago, the ratio was over 5.0 square feet of space for each person. With the elimination of several chains from the market, the ratio has dropped significantly. However, these figures do not include the Super centers that have become a major force in the grocery business.

4.4 Case Study on Grocery Store Demand

To provide further context on grocery store penetration and demand, this firm has analyzed the grocery retail market in the Ahwatukee Foothills Village of the City of Phoenix. This area is located west of Interstate 10 and is bounded by South Mountain Park on its north and west and the Gila River Indian community on the south. Interstate 10 and the industrial development to the east in Tempe and Chandler form a manmade boundary along the eastern side of the Village. Because of these geographic boundaries of the Village, it provides a textbook case study of the relationship between retail development and population. It is a well-defined market area where there is likely little traffic generated to neighborhood centers from consumers outside the Village boundaries. It is the best example of a market area that has little overlap with surrounding market areas. The Village has been essentially built out since the 2000 Census and there has been limited additional retail development in the area over the past few years.

The analysis of retail space within the Ahwatukee Foothills area indicates that there are approximately 414,000 square feet of grocery store space within seven grocery stores. This equates into an average grocery store size of approximately 59,000 square feet. All the major national chains are represented in the Village including Safeway, Albertson's, Basha's, and Fry's. Wal-Mart is not represented in the area and there is a Target, but one that has limited grocery selection.

Based on the 2000 U.S. Census population of 75,961 people in the Village, there are approximately 10,850 persons for each grocery store or 5.46 square feet of grocery store space for every person. These ratios are slightly higher than the overall average for metro Phoenix, largely because of the high incomes in the Ahwatukee Village. In the Southeast Valley, the Village has one of the highest median incomes among all cities. Therefore, the number of people that are required to support a grocery store is typically lower.

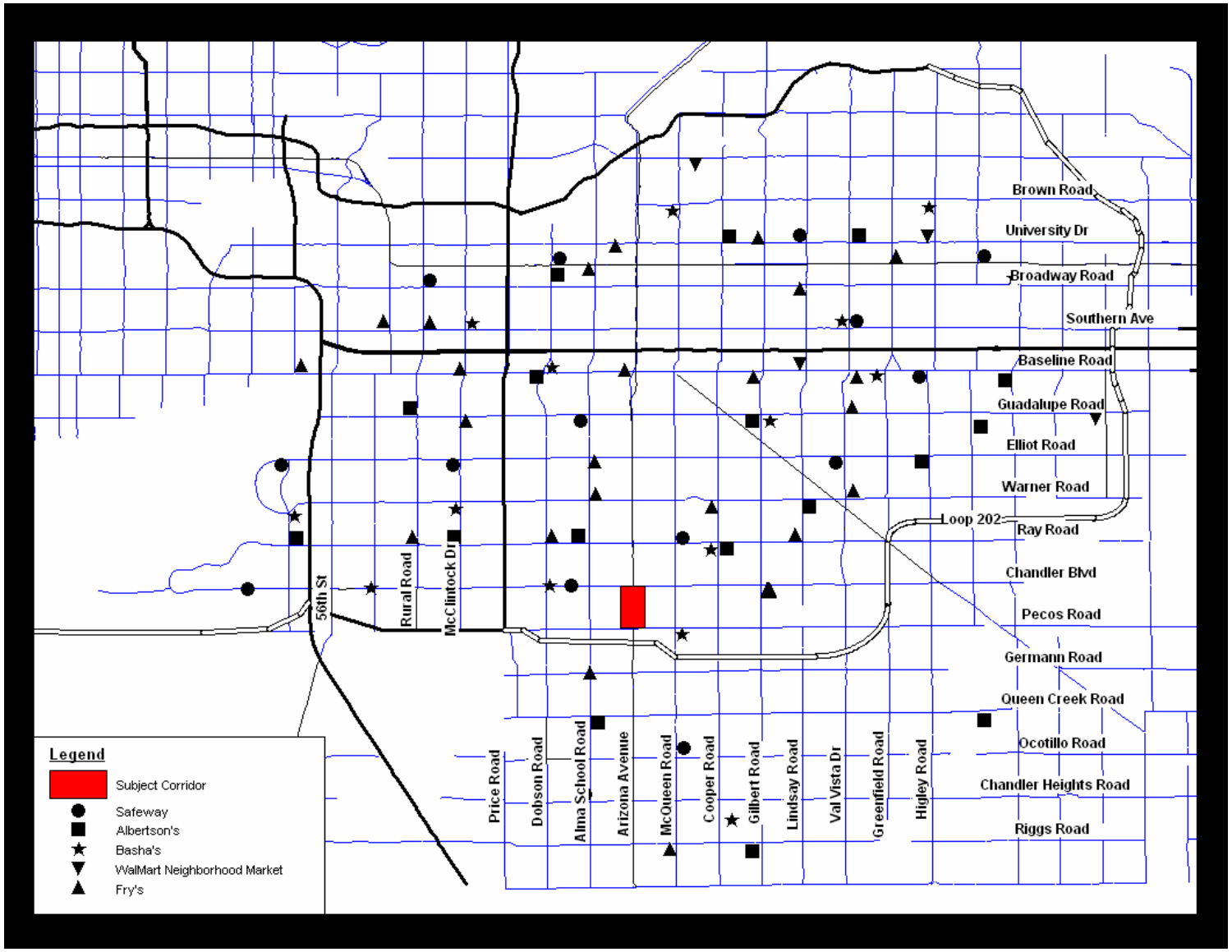
Grocery Store Demand Factors Ahwatukee Foothills Village	
Total Grocery SF	414,426
No. of Grocery Stores	7
Population (2000 Census)	75,961
Persons/Grocery Store	**10,852**
Grocery Store SF/Person	**5.5**

Sources: U.S. Census, Elliott D. Pollack & Co.

Therefore, given this data, we feel comfortable that a ratio of one grocery store for every 12,500 people is a reasonable and conservative approximation of demand for any particular market area in Metro Phoenix.
With respect to the Arizona Avenue Corridor, there are many options to shop for groceries. The following map shows the location of the five major grocery chains in the Southeast Valley. Other smaller chains have not been identified. Arizona Avenue is devoid of grocery stores except for smaller chains near Ray Road. However, the needs of Corridor residents are satisfied in nearby locations on Alma School Road or McQueen Road. This map demonstrates why there are several small grocery stores located within the Corridor.

The population within one mile of Arizona Avenue and Frye Road is able to support the majority of the demand for a grocery store according to spending estimates derived earlier in this report. However, there are no sites large enough within the Corridor to accommodate a grocery store site. This is largely the reason why groceries are found on arterial streets other than Arizona Avenue. A contributing factor is the low household incomes in the Corridor that do not generate as much retail spending as other areas.

If the population within the Corridor grows in the future or changes in composition, demand for a grocery store on Arizona Avenue may be justified. However, the presence of existing competition in the area makes this a difficult proposition, particularly since Wal-Mart just opened at the south end of the Corridor.


Brown Road
University Dr
Broadway Road
Southern Ave
Baseline Road
Guadalupe Road
Elliot Road
Warner Road
Loop 202
Ray Road
Chandler Blvd
Pecos Road
Germann Road
Queen Creek Road
Ocotillo Road
Chandler Heights Road
Riggs Road
56th St
Rural Road
McClintock Dr
Price Road
Dobson Road
Alma School Road
Arizona Avenue
McQueen Road
Cooper Road
Gilbert Road
Lindsay Road
Val Vista Dr
Greenfield Road
Higley Road
Legend
Subject Corridor
Safeway
Albertson's
Basha's
WalMart Neighborhood Market
Fry's

5.0 Strengths and Challenges Facing the Arizona Avenue Corridor

Based on analysis of the characteristics of the Arizona Avenue Corridor retail market and the businesses that are currently located in the area, a series of strengths and challenges have been identified regarding the future redevelopment of the area. Following are those findings.

5.1 Strengths

- **Wal-Mart:** The impact of the new shopping centers at the Loop 202 and Arizona Avenue can only have a positive effect on the Arizona Avenue Corridor, primarily due to increased traffic that will be brought to the southern end of the Corridor. Since Wal-Mart will be constructing a Super center every three miles along the Loop 202, the trade area for the Arizona Avenue Wal-Mart will likely be very large, stretching as far south as Hunt Highway. Wal-Mart and Sam's Club will be destinations that will bring a large consumer population to the southern end of the Arizona Avenue Corridor.

  As a result, Wal-Mart and the related retail centers at the Loop 202 will:
  - Increase traffic along Arizona Avenue and provide more exposure for Corridor retailers.
  - Change the image and perception of the area in the minds of many consumers.

  The key to capitalizing on the Wal-Mart traffic is to develop strategies for Corridor merchants to capture the increase in consumer traffic.

- **Northern Segment of Corridor**: The northern portion of the Arizona Avenue Corridor (north of Boston Street) is attractive and possesses the historic character that should translate into a successful downtown. While still in its infancy and needing to mature, with additional redevelopment efforts by the City, the northern Corridor should be a success that can be grown to the south.

- **Competition:** Retail uses currently existing along Arizona Avenue do not, for the most part, compete with the types of retail uses found in the Loop 202 shopping centers. Most of Arizona Avenue retailers provide services to the immediate neighborhood or target a different trade area for retail or restaurant services.

- **Trade Area Demographics:** The trade area (3 mile and 5 mile radius) surrounding the Arizona Avenue Corridor is very large with high incomes. Both Gilbert and Chandler have some of the highest household incomes in the County. Disposable incomes in this part of the Valley will attract a

wide variety of retail uses. There is much potential for retail development throughout the trade area and Loop 202 corridor.

- **Street Character:** While Arizona Avenue is designed to carry vehicles at a high speed, recent improvements make the area relatively attractive. The street is wide with sidewalks and on-street parking is available in many locations. These improvements were an initial step in redeveloping the Corridor.

5.2 Challenges

- **Perception**: Probably the greatest deterrent facing redevelopment of the Corridor is the perception of the area as a low to moderate income area that is not attractive to most of the residents of the City of Chandler. The presence of day laborers along street corners adds to this image and will continue to deter any significant retail development in the area. Consumers shop where they feel comfortable and secure. The typical Chandler consumer does not feel comfortable in the environment found along Arizona Avenue south of Boston Street. North of Boston Street, civic facilities, the San Marcos Hotel and historic buildings provide a comfortable environment with varied retail and restaurant uses.

- **Image**: Arizona Avenue is a very wide street that is designed to carry traffic. There is no center raised median to break up the expansive asphalt and sidewalks are located directly adjacent to the curb. This design is not conducive to a retail environment and, in fact, the number of curb cuts along Arizona Avenue makes for a large number of traffic movements that curtail retail activity.

- **Competition**: The retail market in Chandler is very robust. Just three miles to the west is the Chandler Fashion Center and related retail development. To the east, the Santan Regional Mall is proposed in Gilbert. The mall and a related development, Main Street Commons, will have a significant specialty retail component that will be prime competition for retail development within the Corridor.

- **Land Uses**: Land uses along the Corridor south of Boston Street include a combination of retail businesses catering to the local trade area, quasi-industrial uses, and some uses that would attract a larger trade area beyond the immediate neighborhood. Services catering to the local market include dollar stores, Hispanic groceries, self service laundries and similar uses. Most of these are contained within older buildings. There are also a series of auto body, auto repair and tire shops that likely provide services to the immediate neighborhood. The mixture and type of uses are not cohesive and do not contribute to a strong retailing environment.

Some of the newer buildings in the area include a Pep Boys auto parts store, mini-storage, and some small office buildings. These types of uses may attract consumers from outside the immediate neighborhood. There are also some specialty businesses that can be classified as "heavy" commercial uses requiring outside storage (such as electrical contracting company and an architectural stone company).

In many respects the land uses along the southern portion of Arizona Avenue are responding to existing market conditions of the adjacent neighborhood. North of Boston Street, uses are clearly oriented toward the San Marcos Hotel and the government complex.

- **Gateway**: The immediate gateway into the southern portion of the Arizona Avenue Corridor is very weak, particularly on the eastside of Arizona Avenue. That situation, however, is changing and getting better with the construction of the new shopping centers at the intersection of Arizona Avenue and the Loop 202. The gateway could be much improved by making a seamless transition from the shopping centers at the Loop 202 to the southern part of the Corridor.

- **Parcel Size:** Lots are generally not conducive to modern development practices due to shallow depths and narrow widths. Assembly of small lots is a difficult, time-consuming, and costly task that will inhibit redevelopment efforts. More assembly of land has occurred on the west side of Arizona Avenue. Several new complexes and buildings have been constructed on the West resulting in an improved appearance. Assembly of parcels and extending the depth of lots along Arizona Avenue is critical to changing the character of the area.

- **Urban Form**: From a retailing perspective, the Arizona Avenue Corridor is taking on the shape of a dumbbell from the perspective of retail activity. On the north are the City Hall Complex and San Marcos Resort. To the south are the new shopping centers at the Loop 202. The retail uses and restaurants in the A. J. Chandler Park area will not compete with the national chain retail and restaurant uses located in the southern shopping centers. With these two destinations at either end of the Corridor, particular attention must be focused on intervening uses between Boston Street and Pecos Road.

The above list is a summary of the primary issues that are facing the Arizona Avenue Corridor based on analysis of the demographic characteristics of the surrounding neighborhood and the mix of retail and business uses along Arizona Avenue.

6.0 Conclusions and Recommendations

Elliott D. Pollack and Company has conducted market studies on the redevelopment of the historic downtowns of several communities in metro Phoenix. A common theme that has emerged from those studies is this: **the key to downtown redevelopment is the construction of new, dense housing projects rather than encouraging more retail development.** Retail development by itself does not create retail sales. People create retail sales and people living in the downtown area are a necessity for a successful redevelopment effort. One only needs to look at the successes and failures of downtown redevelopment to arrive at this very simple and basic conclusion. Some examples can illustrate this finding.

- **City of Phoenix**: Phoenix has poured hundreds of million dollars into its downtown over the past two decades for a variety of civic and public improvements that include museums, a baseball stadium, a basketball arena, a large convention center and numerous theaters. With all that, it is still a downtown that largely closes after 6:00 PM. One of the best known specialty retail developers in the country, the Rouse Company, built what was reputed to be the region's best privately financed entertainment complex - the Arizona Center. After years of difficulties, it has largely been turned into an office complex with a few restaurants. Over the past 20 years, the ingredient that has been missing from City plans is a strong residential component. Downtown Phoenix is now poised to make significant strides with the development of the Downtown ASU Campus. This infusion of employees and students should begin to create the critical mass of activity that would generate demand for retail services, which will ultimately support housing development.

- **City of Mesa:** Mesa has also spent millions of dollars in downtown redevelopment in the form of street improvements and building façade reconstruction. They have promoted office and retail development and now have a new performing arts center. The one key ingredient missing from these plans over the past couple of decades has been housing development. Downtown Mesa still continues to languish as a result.

- **City of Tempe:** The shining example of downtown redevelopment in metro Phoenix is Downtown Tempe. The reason it has been successful is the presence of 50,000 students plus ASU faculty and employees that visit the area every day. In the past five years, high density residential has become more of an important factor in the downtown area and a major project is just breaking ground. However, even with this success, there has been significant turnover of retail tenants along Mill Avenue. Vacant retail space can be found in a variety of locations. The lesson from Tempe is that maintaining a viable downtown is a continuing and costly effort due to competition from nearby shopping center developments. The

Harkins Theatre in Downtown Tempe was at one time the highest grossing theater in the chain. The construction of the Arizona Mills Harkins radically changed those results.

- **City of Scottsdale:** Downtown Scottsdale is a unique situation because of its historical tourism base that provided support for retail development in the downtown. Even with that support, retail sales in Downtown Scottsdale has had its ups and downs although Scottsdale Fashion Square has provided a primary anchor that continues to be the most successful regional mall in metro Phoenix. A variety of condominium projects have been constructed now in the downtown area and many more are being planned. This infusion of population will continue to maintain the viability of Downtown Scottsdale.

To further emphasize the need for a strong residential component to downtown redevelopment, a discussion paper by the Center on Urban and Metropolitan Policy at the Brookings Institution is summarized herein. This paper entitled "Ten Steps to a Living Downtown" was prepared for the City of Denver which for many years has had a vibrant downtown. The paper comments that Denver's success is a combination of luck and determined action, partially fueled by a growing population and a stock of low cost buildings that could be redeveloped. Three of the ten steps suggested for downtown redevelopment in the paper are directly related to housing including:

1. Housing must be downtown's political and business priority;
2. Downtown regulations must be streamlined and support residential growth; and
3. City resources should be devoted to housing.

Based on this experience and research, it is recommended that the primary effort of the City of Chandler in redeveloping its downtown be focused on housing rather than refocusing or expanding the current retail environment. Housing will provide the support and foundation for changing the character of the retail uses along the Arizona Avenue Corridor and strengthening the existing retail businesses that already exists there. More housing, not more or different retail uses, is the key ingredient that, over the long term, will lead to a healthy downtown retail environment.

6.1 Strategic Vision

Following are the primary strategic goals that should be adopted by the City of Chandler for Downtown redevelopment.

- **Positioning of Downtown** – Downtown Chandler should be positioned as the core and heart of the community. It should be a destination with an active street life occurring there from early morning to late in the evening.

With this in mind, it should be comprised of the highest density residential development found in the City. As supplements to the residential component, retail services and office uses should be encouraged as well. The City Hall Complex provides a catalyst for promoting these additional uses, particularly with the existing City courts and planned County court facilities in the area.

- **Housing:** The primary strategy for reinvigorating and changing the retail market along Arizona Avenue is to introduce moderate to high density housing to the area. A combination of housing types and densities should be considered including high density ownership units (condos) at 30 to 40 units per acre, rental units at similar densities, and moderate density single family attached or detached units at 8 to 16 units per acre. This part of Chandler should contain the most urbanized and densest development in the community. Residential uses should be introduced directly onto Arizona Avenue to promote new retail uses. **The City should establish a goal for construction of 1,000 new housing units in Arizona Avenue Corridor over the next 10 years.**

  While mixed-use projects are promoted today as the way to incorporate live and work environments within a single building, they have generally not been successful and are highly risky from an investment perspective, particularly in a suburban setting. The inclusion of commercial space within a residential condo project should be limited and only where it makes sense from the perspective of foot traffic. Chandler should take small steps in redeveloping its Downtown and not overburden private developers in the early stages of the process.

- **Branding:** The Arizona Avenue Corridor should be embellished with a new identity. This should be accomplished through marketing strategies that focus on Downtown Chandler's strengths and a revived character (like "Copper Square" in Downtown Phoenix). Marketing materials should focus on a "live and work" environment, emphasizing a combination or mix of retail, office and high density residential uses.

- **Retail Themeing:** While housing is the focus of this strategic vision, opportunities exist for new retail development within the Corridor due to the construction of the Loop 202 Freeway. In particular, retail opportunities exist at the southern end of the Corridor, but current lotting patterns and fractured ownerships inhibit redevelopment. A theme for retail along the southern portion of the Corridor could build upon existing uses and zoning that is currently in place. A potential theme is suggested in the next section.

6.2 Implementation

Downtown redevelopment efforts require a long term investment horizon. Change will not happen quickly. But through careful and thoughtful planning, the downtown environment can improve one step at a time. Parts of downtown that exhibit positive characteristics should be strengthened and stabilized. Efforts should then be directed at expanding those positive assets to other parts of downtown.

Today, the northern end of the Arizona Avenue Corridor is the healthiest. Redevelopment efforts should start there and expand southwardly. At the same time, retail opportunities exist at the far southern end of the Corridor. Assembly of land should be considered for redevelopment efforts in that area as well. Following are the recommended primary implementation measures.

- **Housing:** There are approximately 41 acres of land within or adjacent to the Corridor that could be redeveloped into residential or other uses. Approximately 12 acres are available at the northern end of the Corridor and 29 acres south of Boston Street. The 12 acres on the north consist of four blocks of land along Chandler Boulevard, one of which is being considered for the City Hall site (southeast corner of Chandler Boulevard and Arizona Avenue). A fifth block is being developed into 56 townhouse units in the 123 Washington project. The remaining 29 acres are located along Arizona Avenue south of Boston Street and encompass most of the older buildings and vacant small lots. They do not include newer buildings such as Pep Boys.

  It is recommended that the City encourage the development of both town home and condominium units within the Downtown. Town home densities should range from 12 to 16 units per acre, similar to the 123 Washington product. Condo units should be permitted to occur in densities of 30 to 40 units per acre that will require structured parking and four to five story buildings. The location and ultimate number of units that could be developed on the identified sites will depend upon the City's decision on the City Hall site and historical society museum.

  High-density condo projects should be encouraged to have some retail space allocated to the ground floor of units if the project is located directly on Arizona Avenue. Generally, the retail portion of mixed use projects have been difficult to lease unless in high pedestrian traffic locations.

  Following is preliminary development concept for the Corridor showing that it can accommodate over 800 residential units if all vacant and under utilized sites are assembled and redeveloped. A retail concept of five acres is described below.

Preliminary Development Concept
Arizona Avenue Corridor

Use	Acres	Units/Acre	Total Units
City Hall	4		
Museum	2		
Retail	5		
Residential			
High Density Condos	15	40	600
Townhomes	15	14	210
Totals	41		810

Source: Elliott D. Pollack & Co.

- **Retail:** It is anticipated that the retail character of the Corridor will change over time and that some existing uses may transition to more productive uses. It is recommended that a five-acre assembled site be retained at the northeast corner of Arizona Avenue and Pecos Road. This site would be approximately 300 feet deep and stretch from Pecos Road north to Morelos Street.

  This site could be used for a small retail center that targets the needs of the local population. However, it could also build upon some of the existing quasi-industrial uses that are currently present in the area that require a showroom and some outdoor storage. These uses could include the architectural stone company and the fountain outlet that are already located along the Corridor. The theme for the site would be a home designer or decorator site that could be expanded to flooring companies (tile, wood or carpet), lighting, specialty furniture and similar uses that provide specialized services and products to the growing residential area to the south. While these businesses would compete with Home Depot and Lowes, generally these large companies do provide the same level of service as the small companies.

  For comparison, the Scottsdale Airpark has transitioned into a large assembly of similar types of home improvement and decorating uses targeting the upscale population in north Phoenix and Scottsdale. Household incomes in the Chandler and Gilbert area should be able to support a similar assembly of uses in the Arizona Avenue Corridor.

  Restaurant and specialty retail uses should continue to be encouraged in the Corridor, particularly surrounding A.J. Chandler Park. New housing development will create additional demand for restaurants and begin to establish the area as a destination for such uses that offer an alternative to the national chains found in nearby shopping centers.

- **Office:** A small amount of additional office uses should be incorporated into the Downtown. Ground floor commercial space in condo buildings can provide some of this inventory. A specific goal for office space has not been provided since the existing office buildings on the east side of A.J. Chandler Park provide a significant supply (200,000 square feet). If the City vacates its office space in these buildings in the near future, it would be a readily available supply for private industry.

6.3 Additional Implementation Measures

Following are additional implementation measures that should be undertaken by the City to assist in redevelopment measures.

- **Street Character and Traffic Movement:** Arizona Avenue must be embellished beyond its current character in order to slow down traffic and improve the residential/retail environment. The installation of raised, landscaped medians will assist in changing the character of the street and reducing traffic movements. Alternative traffic circulation patterns should be considered on adjacent streets. The interface between the street and buildings needs to be evaluated (bringing new buildings closer to the street versus setbacks from the street) to create a more urban setting. Adequate parking needs to be provided.

- **Zoning:** Zoning for the suggested residential uses should be established to encourage the development of new housing, including mixed use buildings. Density requirements will likely need to be changed to accommodate the types of condominium buildings suggested for the Corridor.

- **Incentives:** Incentives should be developed to encourage high density housing such as fast track permitting, fee waivers, etc.

- **Land Assembly:** When necessary and financially feasible, the City should assist in the assembly of parcels. Extending the depth of lots along Arizona Avenue is critical to changing the character of the area.

- **Monitoring Retail Activity:** The City tax department should begin and maintain a database of retail sales activity in the South Arizona Avenue Corridor. Historical information should be developed from existing records in order to be able to determine the vitality of the Corridor and the cost/benefit of the redevelopment efforts.

Appendix

Chart of businesses within Arizona Avenue Corridor

Name	Type		Name	Type
		Chandler Boulevard		
La Stalla Restaurant	Restaurant		Jack in the Box	Restaurant
Earl Jones Institute	Educational			
Law Office	Office			
Rock Church of the Valley	Church			
Keystone Homes	Office			
Cupid's Hot Dogs	Restaurant			
		Buffalo		
San Marcos Resort	Hotel/Resort		Western International University	University
Starbucks	Restaurant			
AJ's Café	Restaurant			
Day Spa	Spa			
		Commonwealth		
Vacant Space			1st Credit Union	Bank
Agribusiness Management	Office		Chamber of Commerce	Office
El Zocalo	Restaurant		City of Chandler Office Buildings	Office
Pockets Bakery	Restaurant			
Serendipity	Retail - Knick Knacks			
Chadow Café	Restaurant			
Barber Shop	Barber Shop			
Pottery Painting Store	Retail - Pottery Painting			
Flower Shop	Retail - Flower Shop			
Art Store	Retail - Art			
Real Estate / Mortgage	Office			
Restaurant 98	Restaurant			
		Boston		
Hillbilly Chili	Restaurant		Naughty but Nice Lingerie	Retail - Clothing
Arizona Mesquite Co.	Furniture		Brunchies	Restaurant
DiSciacca	Art		Unque Gifts and Antiques	Retail
Saba Realty	Real Estate		Day 1 Art	Retail
Antiques	Retail		Serrano's	Restaurant
Saba's Western Store	Clothing		Lloyd's Complete Auto	Auto Repair
Kokopelli Winery	Restaurant		Musclecar Garage	Auto Repair
Arrow Pharmacy / Market	Retail - Grocery, Pharmacy			
98 cent store	Retail			
		Chicago		
Pirate's Fish & Chips	Restaurant		Bob M's Tires	Tire Store
NY NY Deli	Restaurant		Giro's a Mexico	Retail - Phone Cards
Montagnoso Develoment	Office		Mobil / On the Run	Gas Station
98 cent general store	Retail			
Gospel 4 Life Church	Church			
Discount Brake and Muffler	Auto Repair			
The Lube Shop	Auto Repair			
		Frye		
Hontech	Auto Repair		Used Car Lot	Used Car Sales
Firestone	Auto Repair		Labor Express	Day Labor Center
345 Apartments	Apartment		ATV Store	Retail-ATV's & accessories
Payless Market/ Carniceria	Grocery / Restaurant		Women's Salon	Hair
			Window Screens	Retail - Windown Screens
			Hispano Tax Service	Office
			Mechanica	Auto Repair
		Elgin		

Name	Type		Name	Type
		Elgin		
Pep Boys	Retail - Auto Parts		Laundry	Laundry
National Self Storage	Self Storage		99 cent store	Retail
Circle K	Gas Station		Mexican Tax Service	Office
			Antique Store	Retail - Antiques
			Property Investment / Development	Office
			Ernie's Refridgeration / Sheet Metal	
			Convenience Store	Retail
			Smoke Shop	Retail - Cigarettes, Cigars
			Chandler Glassworks	Retail - Custom Glass
			Architectural Stone Concepts	Office / Retail
			Mechanica	Auto Repair
			Fountain World	Retail - Fountains
		Fairview		
Trailer Park	Residential		Methodist Church	Church / Day Labor Center
Hacienda Del Sol	Apartments		Frontier Tires	Retail - Tire Shop
			Mi Gente	Auto Repair
			Appliance Repair	Appliance Repair
			La Bodega	Retail - Furniture
			Arizona Discount Store	Retail - Mexican stuff
			Mama Mia Market	Grocery / Restaurant
			VFW	
			Dodge Electric	Electronic Parts
			El Camino	Auto Repair
			T&B Glass	Glass Repair
			Pecos Lounge	Restaurant / Bar
		Pecos		
			San Tan Gateway North	
			Wal - Mart	
			Del Taco	
			Super Cuts	
			Wendy's	
			Mirage Nails	
			Quizno's	
			Game Stop	
			t-Mobile	
			Sleep Gallery	
			Bank One	
			McDonalds	
		Loop 202		
Kohl's			San Tan Gateway South	
M & I Bank			Sam's Club	
			Paddock Pools	
			Sealy Mattress	
			Subway	
			Starbucks	
			Payday Loans	
			Nail World	
			Go Wireless	
			Family Dentist	
			Fantastic Sam's	
			hi-Health	

APPENDIX B
COMMUNITY COMMENTS

APPENDIX B

COMMUNITY COMMENTS
During the community meetings, many comments and questions were received from community members from the immediate neighborhoods. They addressed a range of concerns and opinions, and provided valuable information to the consultant team and Planning staff. These comments are summarized here, from notes taken at the meetings, organized by topic. City and consultant comments and responses are in parentheses.

Development Projects
Are there any developers interested in the west side of Arizona Avenue?
What type of developer is the City looking for?
What is the plan for Site 6? (City Hall and Museum sites have been chosen.)
Could the local people have a vested interest in any future development?

Property Acquisition
Do owners of properties have to sell to the City or developers?
Will owners be forced to make improvements and then have to sell?
Business owners could get together and sell larger parcels of land.

Community Services
If local stores move away, where do we shop?
Could Museum have space for food service operations?

Relocation
How do we afford a new or different home--more expensive? (Answer: The City has a relocation policy and program; see Chapter 6) (The City would relocate affected people to equal or better homes)
Could the City bring the vision to the neighborhoods rather than just buying properties and putting homeowners on their own?

Traffic and Streets
City could require developers to build the streets they need.
If California Street is opened to Pecos (at Fairview), would it be wider? (Answer: No)
Traffic needs to be slowed down in the neighborhoods. (City is looking at traffic calming and control in the Downtown area)
Dakota Street gets a lot of traffic from San Marcos Estates.
When will traffic light at Fairview happen? (This is being studied as an option)
Where would it be? (Both Fairview and Elgin should be examined)
The community needs crosswalks, lights, bus stops and bike lanes on South Arizona Avenue.
A light at Fairview does not help residents south of Fairview.
Delaware Street has a speeding problem. Adding more traffic on Delaware is not a good idea.
There are no plans currently to extend or otherwise design Delaware to carry more traffic.
(If there is a connection across Pecos east of South Arizona Avenue it would be at the median cut at the shopping center)

There are concerns about left turns onto Pecos from Wal-Mart.
A pedestrian traffic signal is needed on Pecos—to cross the street.
If Delaware extends to Pecos then there should be a traffic signal at Frye & Delaware.
Who controls South Arizona Avenue (The City controls it)
Community hears that more traffic is planned for the neighborhoods. (The intent is not to add through traffic in the neighborhoods)
The study should consider taking through traffic on the east side of the railroad tracks, with limited access to the neighborhood.
What happens if the neighborhood is closed off—i.e., a gated community?
What about Washington and Arizona as a one-way pair of streets? (Arizona Avenue would need to be two-way)
(Another possibility is a raised median along Arizona Avenue)

Businesses
Storage unit business wants to add more office—City wants part of site for landscape and parking. (Zoning requires certain requirements at the time a building is improved. More office needs more parking)

Upgrading the Area
Concern about more vibrant dense South Arizona Avenue might mean people who live there now will eventually have to move.
Can the area currently zoned residential be re-zoned to commercial so that residents can take advantage of the higher values? The two sides of Arizona Avenue should be treated the same.
How does commercial use integrate with single family use through zoning?
What happens to Habitat for Humanity homes? (Remain in place)
Concern: more density being equated with more drug trafficking.

Zoning
Will the City charge property owners for re-zoning? (No, City will initiate at no cost to owners)
What happens to existing businesses when re-zoned (Rezoning provides options but does not require relocation)
Does re-zoning allow developers to come in and take over? (Current owners have options to remain or sell)
Does the City set minimum standards? (Yes)

Neighborhoods and Properties
What will happen to the properties east of Washington, north side of Pecos?
The church on Kessler does not intend to sell its property.

Streetscape
(Street lights are funded through the City's Capital Improvement Program)

Infrastructure
Has anyone thought about sewer and water capacity? (There is plenty of service for the area)

APPENDIX C
DEMOGRAPHICS AND BUSINESSES IN THE CORRIDOR

APPENDIX C

This Appendix provides an overview of the demographic characteristics of the neighborhood surrounding the Arizona Avenue Corridor. Included in this section will also be a description of the retailers and other businesses within the Corridor and the square footage of building space in the area.

Demographic Characteristics of Population

The characteristics of the population surrounding the Arizona Avenue Corridor vary with the distance from the Corridor. The following table shows the household characteristics for four different trade areas surrounding the Corridor. The column described as "Neighborhood Corridor" is that population living within one quarter mile east or west of Arizona Avenue. The remaining columns look at the characteristics of the population within one mile, three miles and five miles of the intersection of Arizona Avenue and Frye Road.

Household Characteristics
Neighborhood Surrounding Arizona Avenue and Frye Road

	Corridor Neighborhood	1 Mile Radius*	3 Mile Radius*	5 Mile Radius*	Maricopa County
2000 Population	4,886	16,865	101,311	219,158	3,072,149
1990 Population		10,334	47,890	113,447	2,122,101
2000 Average Household Size	3.71	3.37	2.97	2.91	2.71
2000 Average Household Income		$47,152	$62,562	$69,103	$59,655
2000 Median Household Income	$27,400	$39,082	$55,643	$61,321	$45,821
2000 Per Capita Income		$13,868	$21,292	$23,929	$22,251
2000 Tenure of Occupied Housing Units	1,316	5,008	34,073	75,331	1,132,886
Owner Occupied	402	2,535	24,809	57,461	764,547
Renter Occupied	914	2,473	9,264	17,871	368,339
% Owner Occupied	30.5%	50.6%	72.8%	76.3%	67.5%
% Renter Occupied	69.5%	49.4%	27.2%	23.7%	32.5%

Note: Corridor Neighborhood is that area within 1/4 mile of Arizona Avenue.
*Radius centered on Arizona Avenue and Frye Road

Source: U.S. Census

The neighborhood that directly impacts the Corridor is that population living adjacent to Arizona Avenue. According to the 2000 U.S. Census, that population had a median household income of approximately $27,400 and an average household size of 3.7 persons per household. Household income increases with distance from the Corridor rising to an average of $61,000 (in 1999 dollars) within five miles of the Corridor. A total of 1,316 households live within the immediate Corridor neighborhood, 70% of whom are renters. However, that high percentage is skewed by the presence of the Hacienda Del Sol apartment complex located at the northwest corner of Arizona Avenue and Pecos Road. The percentage of owner occupied units increases with distance from the Arizona Avenue Corridor.

The characteristics of the neighborhood surrounding the Arizona Avenue Corridor are not surprising given that it is the original center of Chandler and contains some of the oldest housing in the community. Most of the growth in Chandler has occurred on the peripheral areas, primarily in the form of single-family housing.

More detailed analysis of the population within the Arizona Avenue Corridor is provided in the following tables. The total number of persons living within one quarter mile east or west of Arizona Avenue is 4,886 with a very young median age of 25 years. This compares to the Maricopa County median of 33 years of age. The population of the Corridor is heavily weighted toward persons of Hispanic origin who comprise approximately 85% of all residents. Household income is heavily weighted towards the lower end of the income range although approximately 21% of the households earn more than $50,000 according to the 2000 U.S. Census.

Population by Age
Arizona Avenue Corridor
1/4 Mile East and West

Age Group	Population	% of total
Under 5	579	11.9%
5 to 9	461	9.4%
10 to 14	370	7.6%
15 to 17	225	4.6%
18 to 20	332	6.8%
21 to 24	443	9.1%
25 to 34	969	19.8%
35 to 44	671	13.7%
45 to 49	202	4.1%
50 to 54	177	3.6%
55 to 59	128	2.6%
60 to 64	98	2.0%
65 to 74	119	2.4%
75 to 84	83	1.7%
85 and over	29	0.6%
Total Population	4,886	100.0%
Under 21	1,967	40.3%
21 yrs to 54 yrs	2,462	50.4%
55 yrs and over	457	9.4%
Median Age	**25.4**	

Source: U.S. Census

Households by Age of Householder
By Tenure
Arizona Avenue Corridor
1/4 Mile East and West

Age of Householder	Owner Households	% of total	Renter Households	% of total	Total Households	% of total
15 to 24 years	17	4.2%	146	16.0%	163	12.4%
25 to 34 years	58	14.4%	308	33.7%	366	27.8%
35 to 44 years	90	22.4%	224	24.5%	314	23.9%
45 to 54 years	74	18.4%	115	12.6%	189	14.4%
55 to 64 years	67	16.7%	68	7.4%	135	10.3%
65 to 74 years	53	13.2%	27	3.0%	80	6.1%
75 to 84 years	30	7.5%	22	2.4%	52	4.0%
85 years and over	13	3.2%	4	0.4%	17	1.3%
Totals	**402**	**100.0%**	**914**	**100.0%**	**1,316**	**100.0%**

Source: U.S. Census

Population by Race
Arizona Avenue Corridor
1/4 Mile East and West

Race	Population	% of total
White	439	9.0%
Black	158	3.2%
Native American	59	1.2%
Asian	27	0.6%
Native Hawaiian & Other Pacific	10	0.2%
Other	4	0.1%
Two or more races	44	0.9%
Hispanic Origin	4,145	84.8%
Total Population	**4,886**	**100.0%**

Source: U.S. Census

Household Income
Arizona Avenue Corridor
1/4 Mile East and West

Income range	Total Households	% of total
Less than $10,000	136	10.3%
$10,000 to $14,999	142	10.8%
$15,000 to $19,999	165	12.5%
$20,000 to $24,999	154	11.7%
$25,000 to $34,999	212	16.1%
$35,000 to $49,999	233	17.7%
$50,000 to $74,999	169	12.8%
$75,000 to $99,999	65	5.0%
$100,000 to $149,999	22	1.7%
$150,000 & above	17	1.3%
Total Households	1,316	100.0%
Median Household Income	**$27,396**	

Source: U.S. Census

Housing in the Arizona Avenue Corridor is also older than much of the housing in the remainder of the City. Approximately one third of the units were built between 1980 and 1989, primarily within the Hacienda Del Sol apartment complex. Fifty-six percent of the units were built before 1980, representing much of the single family inventory in the area.

Occupied Units by Tenure by Year Structure Built
Arizona Avenue Corridor
1/4 Mile East and West

Year Structure Built	Owner Households	% of total	Renter Households	% of total
Built 1999 to March 2000	24	5.9%	9	1.0%
Built 1995 to 1998	6	1.4%	49	5.4%
Built 1990 to 1994	8	1.9%	43	4.7%
Built 1980 to 1989	60	14.9%	385	42.1%
Built 1970 to 1979	72	18.0%	135	14.7%
Built 1960 to 1969	55	13.7%	112	12.2%
Built 1950 to 1959	57	14.2%	105	11.4%
Built 1940 to 1949	72	18.0%	39	4.3%
Built 1939 or earlier	48	12.1%	37	4.1%
Total	**402**	**100.0%**	**914**	**100.0%**

Source: U.S. Census

An estimate of the amount of household spending that may be available within the Arizona Avenue Corridor is provided on the following table. The spending estimate is based on a number of households within one mile of the Arizona Avenue Corridor, which according to the 2000 Census with 5,008 households. The median income of those households was applied to a spending model developed by Elliott D. Pollack & Company based on the U.S. Consumer Expenditure Survey. The model calculates the amount of taxable household spending of the population for a variety of different daily needs. A household with an income of $39,000 spends roughly 51% of its income on taxable goods and services. The largest categories of nontaxable spending are a home mortgage, rent, property taxes and health care.

Taxable Household Spending Potential
Households Within One Mile of Arizona Avenue Corridor

Households 5,008

		% of Income	% of Retail Spending	Total Spending Potential
Income	**$39,082**			
Spending				
Food	**$5,016**	**12.8%**	**25.3%**	**$25,119,334**
Food at home	$2,982	7.6%	15.0%	$14,933,950
Food away from home	$2,034	5.2%	10.2%	$10,187,130
Alcoholic beverages	**$378**	**1.0%**	**1.9%**	**$1,892,346**
Utilities, fuels, and public services	**$2,566**	**6.6%**	**12.9%**	**$12,850,274**
Household supplies and operations	**$950**	**2.4%**	**4.8%**	**$4,759,183**
Other household expenses	$344	0.9%	1.7%	$1,723,368
Laundry and cleaning supplies	$134	0.3%	0.7%	$669,195
Other household products	$344	0.9%	1.7%	$1,723,368
Postage and stationery	$128	0.3%	0.6%	$643,253
Household furnishings and equipment	**$1,307**	**3.3%**	**6.6%**	**$6,545,541**
Household textiles	$105	0.3%	0.5%	$527,723
Furniture	$330	0.8%	1.7%	$1,651,526
Floor coverings	$42	0.1%	0.2%	$208,453
Major appliances	$172	0.4%	0.9%	$861,547
Small appliances, miscellaneous housewares	$81	0.2%	0.4%	$406,649
Misc. household equipment	$577	1.5%	2.9%	$2,889,643
Apparel and services	**$1,522**	**3.9%**	**7.7%**	**$7,620,285**
Vehicle purchases (net outlay)	**$3,216**	**8.2%**	**16.2%**	**$16,105,526**
Gasoline and motor oil	**$1,199**	**3.1%**	**6.0%**	**$6,004,207**
Other vehicle expenses	**$935**	**2.4%**	**4.7%**	**$4,681,726**
Maintenance and repairs	$569	1.5%	2.9%	$2,849,309
Vehicle rental, leases, other charges	$366	0.9%	1.8%	$1,832,417
Health care	**$101**	**0.3%**	**0.5%**	**$505,869**
Medical supplies	$101	0.3%	0.5%	$505,869
Entertainment	**$1,769**	**4.5%**	**8.9%**	**$8,857,033**
Fees and admissions	$394	1.0%	2.0%	$1,975,310
Television, radios, sound equipment	$655	1.7%	3.3%	$3,279,299
Pets, toys, and playground equipment	$346	0.9%	1.7%	$1,730,311
Other entertainment supplies, equipment	$374	1.0%	1.9%	$1,872,114
Personal care products and services	**$489**	**1.3%**	**2.5%**	**$2,446,725**
Reading	**$113**	**0.3%**	**0.6%**	**$567,728**
Tobacco products and smoking	**$300**	**0.8%**	**1.5%**	**$1,502,580**
Total Taxable Spending	**$19,860**	**50.8%**	**100.0%**	**$99,458,358**

Source: U.S. Consumer Expenditure Survey

Aggregate potential spending of the population within one mile of the Arizona Avenue Corridor is nearly $100 million. Food, both groceries and restaurant spending, is one of the largest categories at approximately 13% of gross income. Vehicle Purchases is another large category as well.

According to the above data, the population within one mile of the Corridor would generate about $15 million in grocery sales. Today, the typical grocery store generates about $18 million to $19 million in annual sales. The 5,008 households and 16,865 people living near the Corridor, therefore, would provide the majority of support for a grocery store. However, there are several stores in the area, including the new Wal-Mart, indicating that demand is probably satisfied.

The spending potential of this population within one mile of the Corridor is significant. However, most of those dollars are captured by retailers within nearby shopping centers. Unfortunately the Arizona Avenue Corridor is not a strong competitor today within the retail market.

Characteristics of Arizona Avenue Retail Corridor

An extensive inventory of businesses within the Arizona Avenue Corridor was conducted as part of this study. The following table provides the inventory by type of business or use. The locations of these businesses are shown on a graphic in the Appendix of this report corresponding to major streets within the Corridor.

Arizona Avenue Corridor Business Inventory

Restaurant
AJ's Café
Brunchies
Chadow Café
Cupid's Hot Dogs
El Zocalo
Hillbilly Chili
Jack in the Box
Kokopelli Winery
La Stalla Restaurant
NY NY Deli
Pecos Lounge
Pirate's Fish & Chips
Pockets Bakery
Restaurant 98
Serrano's
Starbucks

General Retail
98 cent general store
98 cent store
99 cent store
Arizona Discount Store
Arrow Pharmacy/Market
Convenience Store

Specialty Retail
Antique Store
Art Store
ATV Store
Arizona Mesquite Company
Chandler Glassworks
Day One Art
DiSciacca
Flower Shop
Fountain World
Giro's a Mexico
La Bodega
Naughty but Nice Lingerie
Pottery Painting Store
Saba's Western Wear
Serendipity
Smoke Shop
T&B Glass
Unique Gifts & Antiques
Window Screens

Grocery
Mama Mia Market
Payless Market/ Carniceria

Bank
1st Credit Union

Retail Auto
Bob M's Tires
Frontier Tires
Pep Boys
Used Car Lot

Auto Repair
Discount Brake and Muffler
El Camino
Firestone
Hontech
Lloyd's Complete Auto
Mechanica
Mechanica
Mi Gente
Musclecar Garage
The Lube Shop

Personal Services
Appliance Repair
Day Spa
Laundry
Men's Barber Shop
Women's Salon

Semi - Public
Chamber of Commerce
Gospel 4 Life Church
Methodist Church
Rock Church of the Valley
VFW

Office
Agribusiness Management
Hispano Tax Service
Keystone Homes
Law Office
Labor Express
Mexican Tax Service
Montagnoso Develoment
Property Investment / Development
Real Estate / Mortgage
Saba Realty

Industrial
Architectural Stone Concepts
Dodge Electric
Ernie's Refridgeration / Sheet Metal

Self-Storage
National Self Storage

Gas Station
Circle K
Mobil / On the Run

Residential
345 Apartments
Hacienda Del Sol Apartments
Trailer Park

Educational
Earl Jones Institute
Western International University

Source: Elliott D. Pollack & Co.

In total, there are approximately 528,000 square feet of building space within the Arizona Avenue Corridor between Chandler Boulevard and Pecos Road. This inventory does not include any City owned buildings or the office buildings located on the eastside of A.J. Chandler Park. The most intensely developed portion of the Corridor is that area

between Frye Road and Fairview Street that contains a 67,000 square foot self-storage property. Excluding that site, the square footage between Frye Road and Fairview Street drops to 117,000 square feet. The square footage estimates do not include residential uses.

Summary of Building Square Footage

Area	Building Square Feet
Chandler Avenue to alley south of Boston Street	175,094
Alley south of Boston Street to Frye Road	117,551
Frye Road to Fairview Street	184,096 *
Fairview Street to Pecos Road	51,449
Total	528,190
Total Excluding Self Storage	461,190

* Includes a 67,000 self storage site

Source: Maricopa County Assessor

The total square footage of building space in the Corridor, excluding the self storage business, is approximately 461,000 square feet. If this square footage was contained within a single shopping center site, it would consume approximately 50 acres of land, most of which would be devoted to off street parking. However, the businesses along Arizona Avenue do not function as a single shopping center and do not provide the same amount of parking that would normally be required in a conventional retail center. The shopping environment is also bifurcated by Arizona Avenue which is designed to carry traffic rather than to create an environment conducive to retailing. This factor contributes to the lack of strong retailing activity along Arizona Avenue.

Overall, there are four general categories of businesses along the Arizona Avenue Corridor:

- Specialty stores and restaurants.
- A combination of retail and service businesses catering to the local neighborhood.
- A few national chain retailers that may attract consumers from a trade area larger than the immediate neighborhood (PEP Boys, Firestone).
- Quasi-industrial and heavy commercial uses (electrical contractor, architectural stone company).

From a retailing perspective, the Corridor can also be divided into a north and south segment. Virtually, all of the restaurants in the Corridor are located at the northern end, north of Boston Street, where businesses are oriented towards the City government complex and A.J. Chandler Park. Many of the specialty retail businesses are also located in this area as well. The southern portion of the Corridor, generally south of the alley south of Boston Street, is more oriented towards providing services to the local neighborhood. Interspersed among these uses are some quasi-industrial or heavy

commercial uses such as auto repair shops, contractor's offices and yards, and similar businesses.

Concern has been expressed that the construction of the Wal-Mart shopping center located south of Pecos Road could have a significant effect on retailing within the Arizona Avenue Corridor.

BUSINESSES IN THE ARIZONA AVENUE CORRIDOR

Name	Type		Name	Type
		Chandler Boulevard		
La Stalla Restaurant	Restaurant		Jack in the Box	Restaurant
Earl Jones Institute	Educational			
Law Office	Office			
Rock Church of the Valley	Church			
Keystone Homes	Office			
Cupid's Hot Dogs	Restaurant			
		Buffalo		
San Marcos Resort	Hotel/Resort		Western International University	University
Starbucks	Restaurant			
AJ's Café	Restaurant			
Day Spa	Spa			
		Commonwealth		
Vacant Space			1st Credit Union	Bank
Agribusiness Management	Office		Chamber of Commerce	Office
El Zocalo	Restaurant		City of Chandler Office Buildings	Office
Pockets Bakery	Restaurant			
Serendipity	Retail - Knick Knacks			
Chadow Café	Restaurant			
Barber Shop	Barber Shop			
Pottery Painting Store	Retail - Pottery Painting			
Flower Shop	Retail - Flower Shop			
Art Store	Retail - Art			
Real Estate / Mortgage	Office			
Restaurant 98	Restaurant			
		Boston		
Hillbilly Chili	Restaurant		Naughty but Nice Lingerie	Retail - Clothing
Arizona Mesquite Co.	Furniture		Brunchies	Restaurant
DiSciacca	Art		Unque Gifts and Antiques	Retail
Saba Realty	Real Estate		Day 1 Art	Retail
Antiques	Retail		Serrano's	Restaurant
Saba's Western Store	Clothing		Lloyd's Complete Auto	Auto Repair
Kokopelli Winery	Restaurant		Musclecar Garage	Auto Repair
Arrow Pharmacy / Market	Retail - Grocery, Pharmacy			
98 cent store	Retail			
		Chicago		
Pirate's Fish & Chips	Restaurant		Bob M's Tires	Tire Store
NY NY Deli	Restaurant		Giro's a Mexico	Retail - Phone Cards
Montagnoso Develoment	Office		Mobil / On the Run	Gas Station
98 cent general store	Retail			
Gospel 4 Life Church	Church			
Discount Brake and Muffler	Auto Repair			
The Lube Shop	Auto Repair			
		Frye		
Hontech	Auto Repair		Used Car Lot	Used Car Sales
Firestone	Auto Repair		Labor Express	Day Labor Center
345 Apartments	Apartment		ATV Store	Retail-ATV's & accessories
Payless Market/ Carniceria	Grocery / Restaurant		Women's Salon	Hair
			Window Screens	Retail - Windown Screens
			Hispano Tax Service	Office
			Mechanica	Auto Repair
		Elgin		

Name	Type		Name	Type
		Elgin		
Pep Boys	Retail - Auto Parts		Laundry	Laundry
National Self Storage	Self Storage		99 cent store	Retail
Circle K	Gas Station		Mexican Tax Service	Office
			Antique Store	Retail - Antiques
			Property Investment / Development	Office
			Ernie's Refridgeration / Sheet Metal	
			Convenience Store	Retail
			Smoke Shop	Retail - Cigarettes, Cigars
			Chandler Glassworks	Retail - Custom Glass
			Architectural Stone Concepts	Office / Retail
			Mechanica	Auto Repair
			Fountain World	Retail - Fountains
		Fairview		
Trailer Park	Residential		Methodist Church	Church / Day Labor Center
Hacienda Del Sol	Apartments		Frontier Tires	Retail - Tire Shop
			Mi Gente	Auto Repair
			Appliance Repair	Appliance Repair
			La Bodega	Retail - Furniture
			Arizona Discount Store	Retail - Mexican stuff
			Mama Mia Market	Grocery / Restaurant
			VFW	
			Dodge Electric	Electronic Parts
			El Camino	Auto Repair
			T&B Glass	Glass Repair
			Pecos Lounge	Restaurant / Bar
		Pecos		
			San Tan Gateway North	
			Wal - Mart	
			Del Taco	
			Super Cuts	
			Wendy's	
			Mirage Nails	
			Quizno's	
			Game Stop	
			t-Mobile	
			Sleep Gallery	
			Bank One	
			McDonalds	
		Loop 202		
Kohl's			San Tan Gateway South	
M & I Bank			Sam's Club	
			Paddock Pools	
			Sealy Mattress	
			Subway	
			Starbucks	
			Payday Loans	
			Nail World	
			Go Wireless	
			Family Dentist	
			Fantastic Sam's	
			hi-Health	

APPENDIX D
SOUTH ARIZONA AVENUE TRAFFIC STUDY

South Arizona Avenue Traffic Study

FINAL REPORT

Chandler, Arizona

June 16, 2006

Submitted to:

Chandler Arizona
Where Values Make The Difference

Submitted by:

PARSONS BRINCKERHOFF

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I. INTRODUCTION

A. Problem Statement

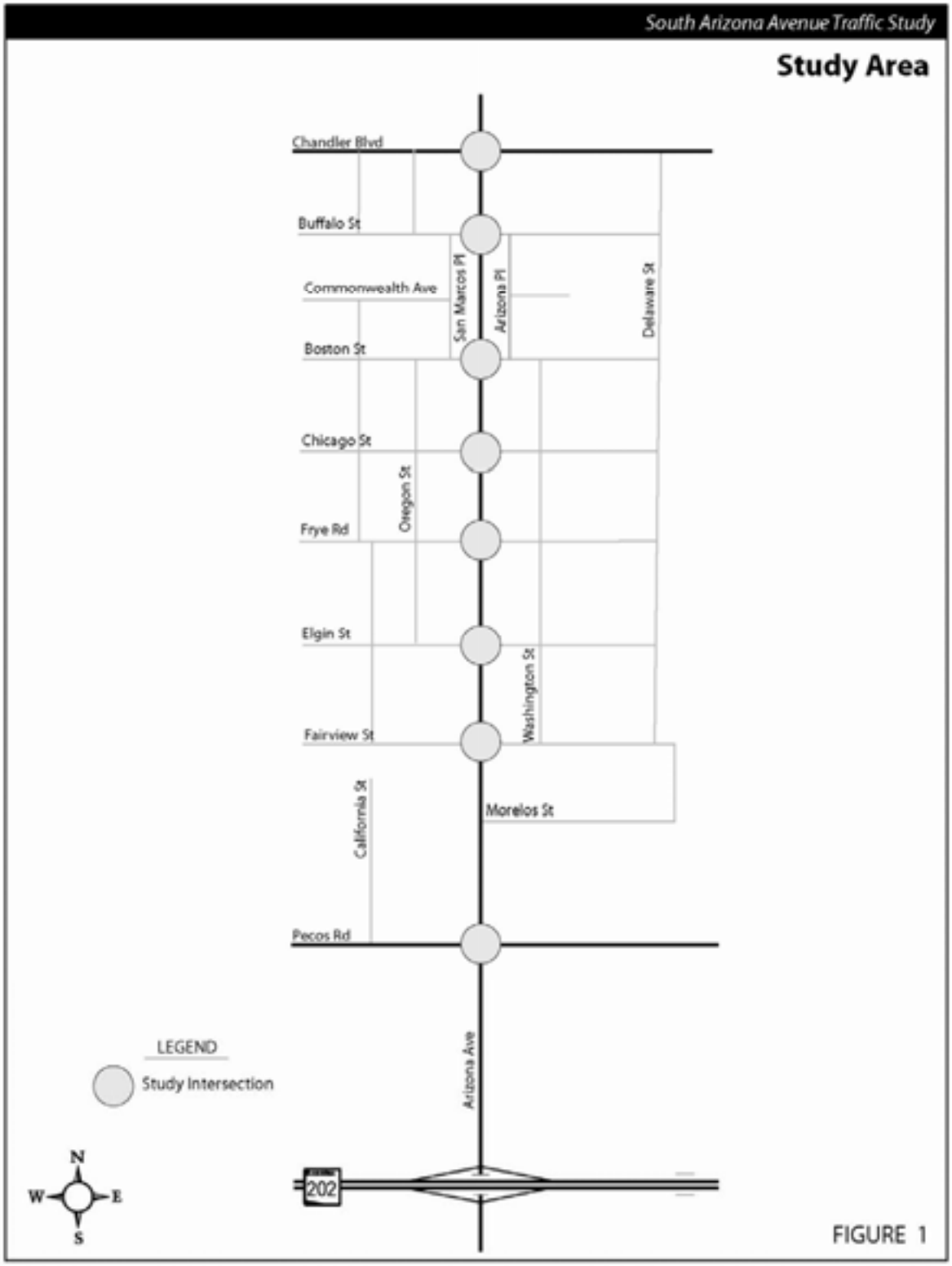
The 2001 City of Chandler Transportation Plan identifies Arizona Avenue as a six-lane road in the long range planning horizon. This includes the segment through downtown from Chandler Boulevard to Pecos Road. Recent land use planning studies, including the City Hall site selection and the South Arizona Avenue Planning Study, have proposed a mixed-use, pedestrian-friendly downtown area, which would include limiting Arizona Avenue to four lanes between Chandler Boulevard and Pecos Road. As a result, this study was undertaken to assess the impacts of maintaining four lanes on Arizona Avenue in the future.

B. Background

The City of Chandler continues to experience significant growth throughout the city including the downtown area where redevelopment is beginning to occur. The latest projections indicate that population and employment will increase in the downtown area as redevelopment occurs and the area is built out.

In addition to development growth, travel patterns to/from the downtown area have changed. The recently completed Loop 202 has an interchange at Arizona Avenue just south of downtown, which has changed the way motorists access downtown. In the future, mixed-use development will also change peak period travel characteristics.

The study area, as shown in Figure 1, is one-quarter mile east and west of Arizona Avenue from Pecos Road to Chandler Boulevard. It includes the intersections of Chandler Boulevard, Buffalo Street, Commonwealth Place, Boston Street, Chicago Street, Frye Road, Elgin Street, Fairview Street, and Pecos Road.


South Arizona Avenue Traffic Study
Study Area
Chandler Blvd
Buffalo St
Commonwealth Ave
Boston St
Chicago St
Frye Rd
Elgin St
Fairview St
Pecos Rd
San Marcos Pl
Arizona Pl
Delaware St
Oregon St
Washington St
California St
Morelos St
Arizona Ave
202
LEGEND
Study Intersection
N
W
E
S
FIGURE 1

C. Study Process

This report presents a description of existing and future conditions including the street system, land use, traffic signal locations, and proposed transit routes. Also included is a review of the forecasts contained in the 2001 Transportation Plan to determine if those forecasts should be revised. Additionally, recent land use plans being prepared for the downtown were used to generate site specific traffic that would impact Arizona Avenue. Based on the forecasts and the land use plans, intersection analysis was conducted to determine the projected operating conditions at the existing and proposed signalized intersections. If needed, additional intersection improvements were identified and impacts to adjacent streets examined. The report concludes with a summary of the recommendations for Arizona Avenue in downtown Chandler.

Data sources used for the study include the Maricopa Association of Governments (MAG) socio economic data for 2006, the 2001 Transportation Plan, City of Chandler Planning Department 2030 socioeconomic forecasts, land use plan from the South Arizona Avenue Corridor Study, City of Chandler 2004 traffic volumes, intersection turning movement volumes, SanTan Gateway Traffic Impact Analysis Report, and Traffic Impact Study Report for the Northeast Courts Complex.

The study included a presentation to both the Transportation Commission and the Planning and Zoning Commission.

II. EXISTING CONDITIONS

This section documents the existing street system and land uses in the study area. Current traffic operations are described and analyzed.

A. Street System

Arizona Avenue is a major north-south arterial street in the City of Chandler, which extends across the entire length of Chandler from the City of Mesa to Pinal County. In general, it is currently a four-lane road with a center two way left turn lane and with parking in the downtown area. Except for some restrictions at intersections, on-street parking is generally permitted on the east side between Pecos Road and Boston Street and on the west side between Boston Street and Fairview. There is sidewalk on both sides of the street. Access occurs at signalized intersections, unsignalized intersections, and driveways.

The signalized intersections are located at Chandler Boulevard, Buffalo Street, Boston Street, Frye Road, and Pecos Road. There is also a signalized pedestrian crossing at Commonwealth Place. All the signalized intersections include separate left turn lanes on Arizona Avenue. In addition, there is a separate right turn lane NB and SB at Chandler Boulevard, SB at Buffalo Street, SB at Boston Street, SB at Frye Road, and NB and SB at Pecos Road.

There is a transit line, route 112, which runs along Arizona Avenue with a southern terminus at Frye Road. The route currently loops around downtown using Boston Street, Delaware Street, and Frye Road.

B. Land Use

The land use in downtown Chandler is mixed-use with residential, office and commercial uses. Specifically, City Hall and city offices are located on the east side of the corridor. The San Marcos Hotel and golf course are located on the

west side adjacent to the corridor. Commercial uses include restaurants and shops as well as a variety of older, small businesses on the south end of downtown.

Table 1 presents existing population and employment for the area bounded by Ray Road, McQueen Road, Loop 202, and Alma School Road. There are approximately 34,000 people living and 9,600 people working in that area today.

TABLE 1
CURRENT BUILDOUT POPULATION AND EMPLOYMENT SUMMARY

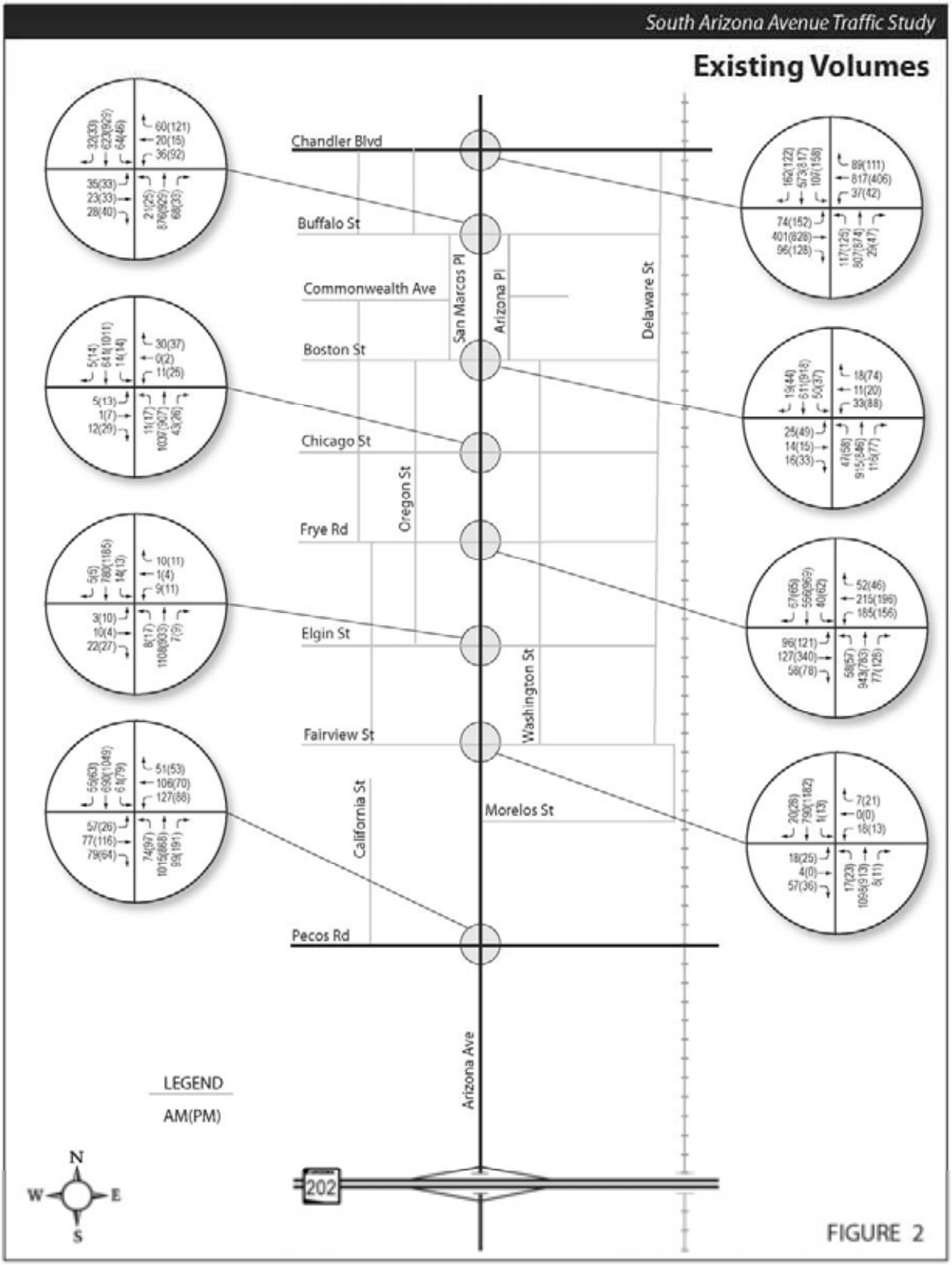
		Employment					
TAZ	**Population**	**Retail**	**Office**	**Industrial**	**Public**	**Other**	**Total**
1244[1]	6614	651	497	0	745	110	2003
1245[2]	7059	755	69	10	164	286	1284
1246[3]	9697	552	0	144	184	66	946
1247[4]	5821	354	517	450	1683	91	3095
1260[5]	3634	758	667	0	84	120	1629
1265[6]	1251	405	264	0	1	13	683
TOTAL	**34,076**	**3475**	**2014**	**604**	**2861**	**686**	**9640**

[1]north of Chandler, west of Arizona
[2]between Chandler and Pecos, west of Arizona
[3]north of Chandler, east of Arizona
[4]between Chandler and Pecos, east of Arizona
[5]south of Pecos, west of Arizona
[6]south of Pecos, east of Arizona

C. Traffic Data

According to the City of Chandler traffic data, the 2004 daily traffic on Arizona Avenue was 30,700 vehicles.

Intersections turning movement counts were conducted on Wednesday, March 29, 2006 at the five signalized intersections in the study area and at the unsignalized intersections of Chicago Street, Elgin Street, and Fairview Street. The counts were taken during the peak traffic periods from 6:30 to 8:30 am and from 4:00 to 6:00 pm. The AM and PM peak hour traffic volumes are shown in Figure 2.


South Arizona Avenue Traffic Study
Existing Volumes
Chandler Blvd
Buffalo St
Commonwealth Ave
Boston St
Chicago St
Frye Rd
Elgin St
Fairview St
Morelos St
Pecos Rd
San Marcos Pl
Arizona Pl
Delaware St
Oregon St
Washington St
California St
Arizona Ave
202
LEGEND
AM(PM)
N
W
E
S
FIGURE 2

A review of the turning movement volumes indicates that the peak hour volumes on Arizona Avenue are not consistent with a 24 hour volume of 30,700 vehicles per day. After discussion with City staff, it is assumed that traffic was reduced the day of the counts because of construction activities at Arizona Avenue and Chandler Boulevard and Arizona Avenue and Pecos Road.

In order to provide peak hour volumes consistent with the daily volume, the through volumes on Arizona Avenue were increased at each intersection to approximate peak hour volumes that would be consistent with a daily volume of 30,700 vehicles. Additionally, the volumes on Chandler Boulevard and Pecos Road were also adjusted to better represent the existing daily volumes on those streets.

D. Traffic Analysis

The adjusted peak hour traffic was analyzed using the SYNCHRO software package. SYNCHRO analysis is based on the methodology presented in the Highway Capacity Manual (Transportation Research Board, 2000). This method uses the critical volumes passing through the intersection in one hour and compares those volumes to the capacity of the intersection and an associated delay. The analysis incorporates the effects of traffic volumes, geometry, traffic signal operation, truck and local bus volumes, pedestrian activity, and peaking characteristics. The result is a level of service determination for each approach and for the intersection as a whole.

Level of Service (LOS) is a term used to describe traffic operations. The various levels of service, which range from A to F, are generally defined as follows:

- **LEVEL OF SERVICE A** represents free flow operation.
- **LEVEL OF SERVICE B** is in the range of free flow, but the presence of other users in the traffic stream begins to be noticeable.
- **LEVEL OF SERVICE C** is in the range of stable flow, but marks the beginning of the range in which the operation of individual users becomes significantly affected by others.
- **LEVEL OF SERVICE D** represents high density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.
- **LEVEL OF SERVICE E** represents operating conditions at or near the capacity level. All speed is reduced to a low but relatively uniform value.
- **LEVEL OF SERVICE F** is used to define forced or stop and go travel. This condition exists wherever the amount of traffic approaching a point exceeds the amount that can traverse the point.

The level of service for signalized intersections is based on average vehicle delay as shown in Table 2.

TABLE 2
CAPACITY CRITERIA FOR SIGNALIZED INTERSECTIONS*

Level of Service (LOS)	Control Delay per Vehicle (sec)
A	less than 10
B	10.1-20
C	20.1-35
D	35.1-55
E	55.1-80
F	over 80

*Source: Highway Capacity Manual

The resulting level of service and delay is presented in Table 3 for both peak hours. It should be noted that the intersection analysis for both the Chandler Boulevard and Pecos Road intersections was based on the completion of the recent intersection improvements.

TABLE 3
EXISTING INTERSECTION LEVEL OF SERVICE SUMMARY

	AM		PM	
INTERSECTION/APPROACH	**LOS**	**DELAY**	**LOS**	**DELAY**
Arizona/Chandler	**C**	**33**	**E**	**71**
Arizona/Buffalo	**A**	**6**	**A**	**7**
Arizona/Boston	**A**	**5**	**A**	**9**
Arizona/Frye	**B**	**18**	**C**	**32**
Arizona/Pecos	**B**	**20**	**C**	**29**

The results indicate that only one intersection has an overall level of service of E or F and that is Chandler Boulevard in the PM peak hour.

III. FUTURE CONDITIONS

This section presents the forecast assumptions and results from the 2001 Chandler Transportation Plan, current land use planning, updated traffic forecasts, and analysis of future conditions.

A. 2001 Chandler Transportation Plan Forecasts

According to the 2001 Chandler Transportation Plan, the 2040 (buildout) daily traffic forecast for Arizona Avenue between Chandler Boulevard and Pecos Road was 42,000 vehicles. The traffic forecast was obtained from MAG and is based on population and employment forecasts disaggregated to traffic analysis zones (TAZ) using the DRAM/EMPAL land use model and a geographic information system based sub area allocation model.

The TAZ data for the zones immediately adjacent to the study corridor was reviewed. The data is summarized in Table 4.

TABLE 4
BUILDOUT FORECAST POPULATION & EMPLOYMENT FROM THE 2001 CHANDLER TRANSPORTATION PLAN

		Employment					
TAZ	**Population**	**Retail**	**Office**	**Industrial**	**Public**	**Other**	**Total**
1244[1]	5734	781	510	67	1159	59	2576
1245[2]	6826	136	530	25	1023	894	2608
1246[3]	9355	2004	14	93	224	104	2439
1247[4]	5343	308	3890	1051	2041	339	7629
1260[5]	4087	701	18	63	56	56	894
1265[6]	2957	37	320	33	1	21	412
TOTAL	**34302**	**3967**	**5282**	**1332**	**4504**	**1473**	**16558**

[1]north of Chandler, west of Arizona
[2]between Chandler and Pecos, west of Arizona
[3]north of Chandler, east of Arizona
[4]between Chandler and Pecos, east of Arizona
[5]south of Chandler, west of Arizona
[6]south of Chandler, east of Arizona

As seen in Table 4, the projected population was 34,300 and the employment was 16,600.

B. Land Use Plan

In order to verify the forecast contained in the 2001 Chandler Transportation Plan, the latest buildout population and employment projections were obtained from the City planning department. The current buildout data reported by the City is summarized in Table 5.

TABLE 5
BUILDOUT FORECAST POPULATION AND EMPLOYMENT BASED ON 2006 LAND USE PLANS

		Employment					
TAZ	**Population**	**Retail**	**Office**	**Industrial**	**Public**	**Other**	**Total**
1244[1]	6780	688	497	0	745	110	2040
1245[2]	7556	874	69	35	283	287	1548
1246[3]	10496	736	0	172	229	67	1204
1247[4]	6174	767	842	858	1683	91	4241
1260[5]	5477	1581	2173	0	305	126	4185
1265[6]	1712	679	905	0	3	15	1602
TOTAL	**38195**	**5325**	**4486**	**1065**	**3248**	**696**	**14820**

[1]north of Chandler, west of Arizona
[2]between Chandler and Pecos, west of Arizona
[3]north of Chandler, east of Arizona
[4]between Chandler and Pecos, east of Arizona
[5]south of Pecos, west of Arizona
[6]south of Pecos, east of Arizona

As can be seen from a comparison of Tables 4 and 5, the buildout population forecast based on the 2006 land use plans is higher than what was used in the 2001 Chandler Transportation Plan, while the employment is lower. The overall trip generation between the two forecasts would be similar so it was determined that the 42,000 vehicles per day forecast used in the 2001 Chandler Transportation Plan, which is a 37 percent increase compared to the 2004 count was valid for this analysis.

Although the 2001 Chandler Transportation Plan reflects a similar total population and employment projection compared to what is currently being considered, and therefore a valid traffic volume on Arizona Avenue; it is still necessary to examine the specific impact of the increased development on the east-west streets and the individual study intersections. The current development plan which was obtained from the South Arizona Avenue Corridor Study is depicted in Figure 3. Table 6 shows the estimated size and use associated with the land use plan in Figure 3. As can be seen in Table 6, the South Arizona Avenue Corridor Study land use plan includes 800 new dwelling units and 565,000 square feet of new commercial and office development. It should be noted that approximately 70 percent of the commercial and office development is planned between Chandler Boulevard and Boston Street.

An estimate of the traffic that would be generated by a proposed land use can be calculated using trip generation rates published by the Institute of Transportation Engineers (ITE) in *Trip Generation, 7th Edition* (2003). These rates are the result of observations of traffic entering and exiting various types of land uses across the country and are considered to be the standard in the profession.

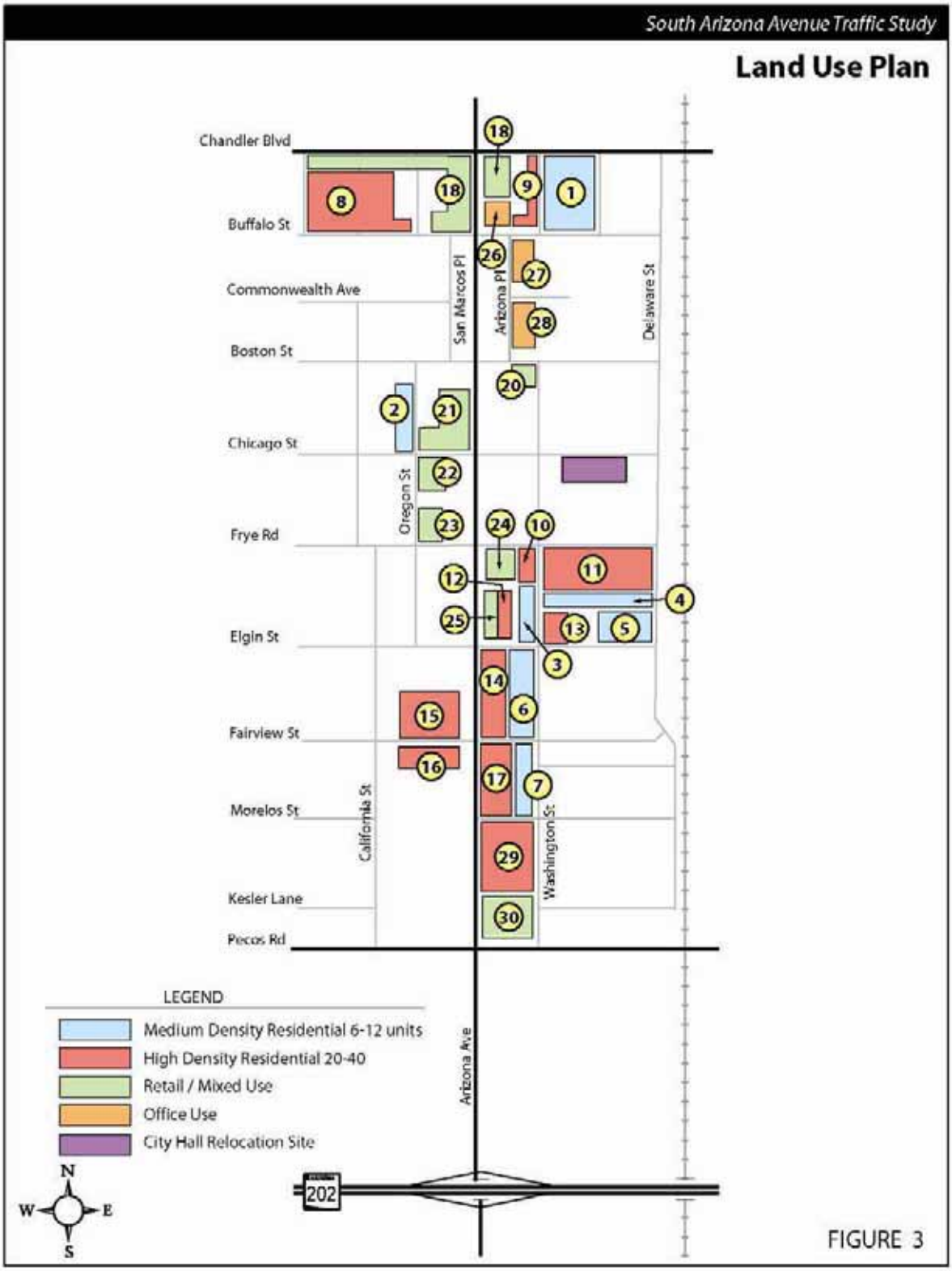

South Arizona Avenue Traffic Study
Land Use Plan
Chandler Blvd
Buffalo St
Commonwealth Ave
Boston St
Chicago St
Frye Rd
Elgin St
Fairview St
Morelos St
Kesler Lane
Pecos Rd
San Marcos Pl
Arizona Pl
Delaware St
Oregon St
California St
Washington St
Arizona Ave
202
LEGEND
Medium Density Residential 6-12 units
High Density Residential 20-40
Retail / Mixed Use
Office Use
City Hall Relocation Site
N
W
E
S
FIGURE 3

TABLE 6
DOWNTOWN CHANDLER LAND USE PLAN

Parcel #	Land Use	Dwelling Units	SQ.FT.
1	Medium Density Residential	54	
2	Medium Density Residential	10	
3	Medium Density Residential	6	
4	Medium Density Residential	15	
5	Medium Density Residential	20	
6	Medium Density Residential	33	
7	Medium Density Residential	16	
8	High Density Residential	79	
9	High Density Residential	31	
10	High Density Residential	30	
11	High Density Residential	212	
12	High Density Residential	32	
13	High Density Residential	30	
14	High Density Residential	88	
15	High Density Residential	78	
16	High Density Residential	68	
17	High Density Residential	96	
18	Retail/Mixed		200,000
19	Retail/Mixed		14,571
20	Retail/Mixed		4,900
21	Retail/Mixed		25,615
22	Retail/Mixed		7,841
23	Retail/Mixed		9,800
24	Retail/Mixed		8,712
25	Retail/Mixed		4,879
26	Office		9,121
27	Office		105,000
28	Office		105,000
29	Retail/Mixed		43,561
30	Retail/Mixed		26,137
	Justice Courts		
TOTAL		796	565,137

The trip generation rate for the proposed justice courts was obtained from a Traffic Study for the Northeast Phoenix justice courts complex. It should be noted that the City Hall relocation is not included in the trip generation, since the existing City Hall

trips are included in the traffic counts and the 37 percent future growth projections. The trip generation is summarized by land use parcel in Table 7.

TABLE 7
TRIP GENERATION

Parcel #	Land Use	Area/Units	AM IN	AM OUT	PM IN	PM OUT
1	Medium Density Residential	54	4	20	18	9
2	Medium Density Residential	10	1	7	6	3
3	Medium Density Residential	6	1	5	4	2
4	Medium Density Residential	15	2	9	9	4
5	Medium Density Residential	20	2	12	11	5
6	Medium Density Residential	33	4	18	16	8
7	Medium Density Residential	16	2	10	9	4
8	High Density Residential	79	14	70	67	33
9	High Density Residential	31	3	17	15	8
10	High Density Residential	30	3	16	15	7
11	High Density Residential	212	16	78	75	37
12	High Density Residential	32	4	17	16	8
13	High Density Residential	30	3	16	15	7
14	High Density Residential	88	8	39	36	18
15	High Density Residential	78	7	35	33	16
16	High Density Residential	68	6	31	29	14
17	High Density Residential	96	8	41	39	19
18	Retail/Mixed	200,000	0	0	55	71
19	Retail/Mixed	14,571	0	0	25	32
20	Retail/Mixed	4,900	0	0	15	19
21	Retail/Mixed	25,615	0	0	37	46
22	Retail/Mixed	7,841	0	0	18	23
23	Retail/Mixed	9,800	0	0	20	25
24	Retail/Mixed	8,712	0	0	19	24
25	Retail/Mixed	4,879	0	0	15	19
26	Office	9,121	24	3	15	74
27	Office	105,000	34	5	16	78
28	Office	105,000	42	6	17	82
29	Retail/Mixed	43,561	0	0	55	71
30	Retail/Mixed	26,137	0	0	37	47
	Courts		85	38	34	49
TOTAL			490	479	893	1,118

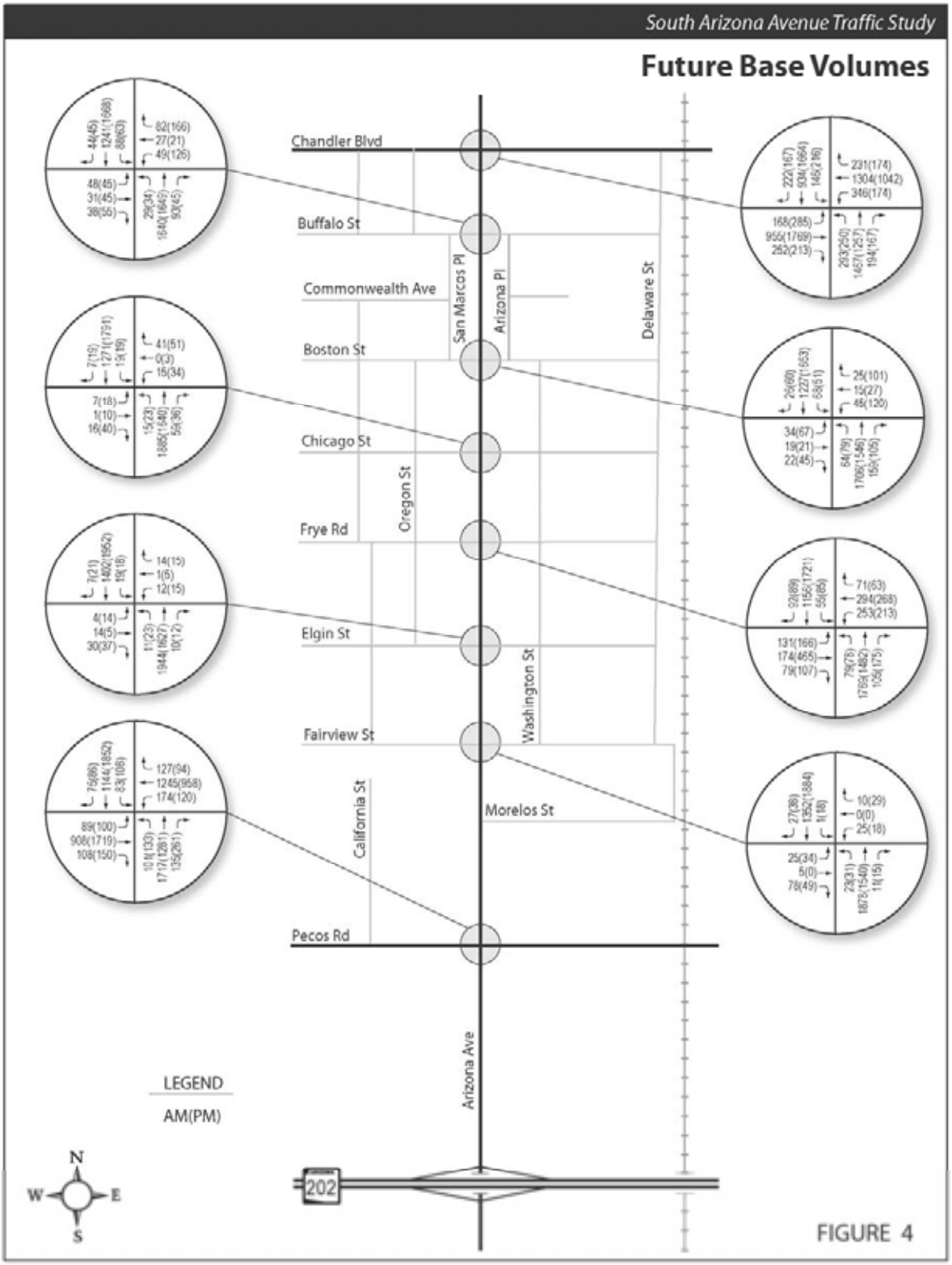
The total trips represent external trips after adjustment for five percent internal trips and five percent transit trips. The next steps in the process in to determine trip distribution and trip assignment for the redevelopment. The trip distribution was obtained from the SanTan Gateway Traffic Study Report dated October 2003 and is 25 percent to/from the north, south, east, and west. The traffic from the proposed downtown redevelopment is then assigned to the street system. Because of the proximity of SR 202, 75 percent of the traffic was assigned to the south on Arizona Avenue and 25 percent to the north. These redevelopment trips were only added to the crossroads or to Arizona Avenue as turns onto the crossroads. Additional through traffic was not added to Arizona Avenue since it was determined that the 37 percent growth included these redevelopment trips on Arizona Avenue.

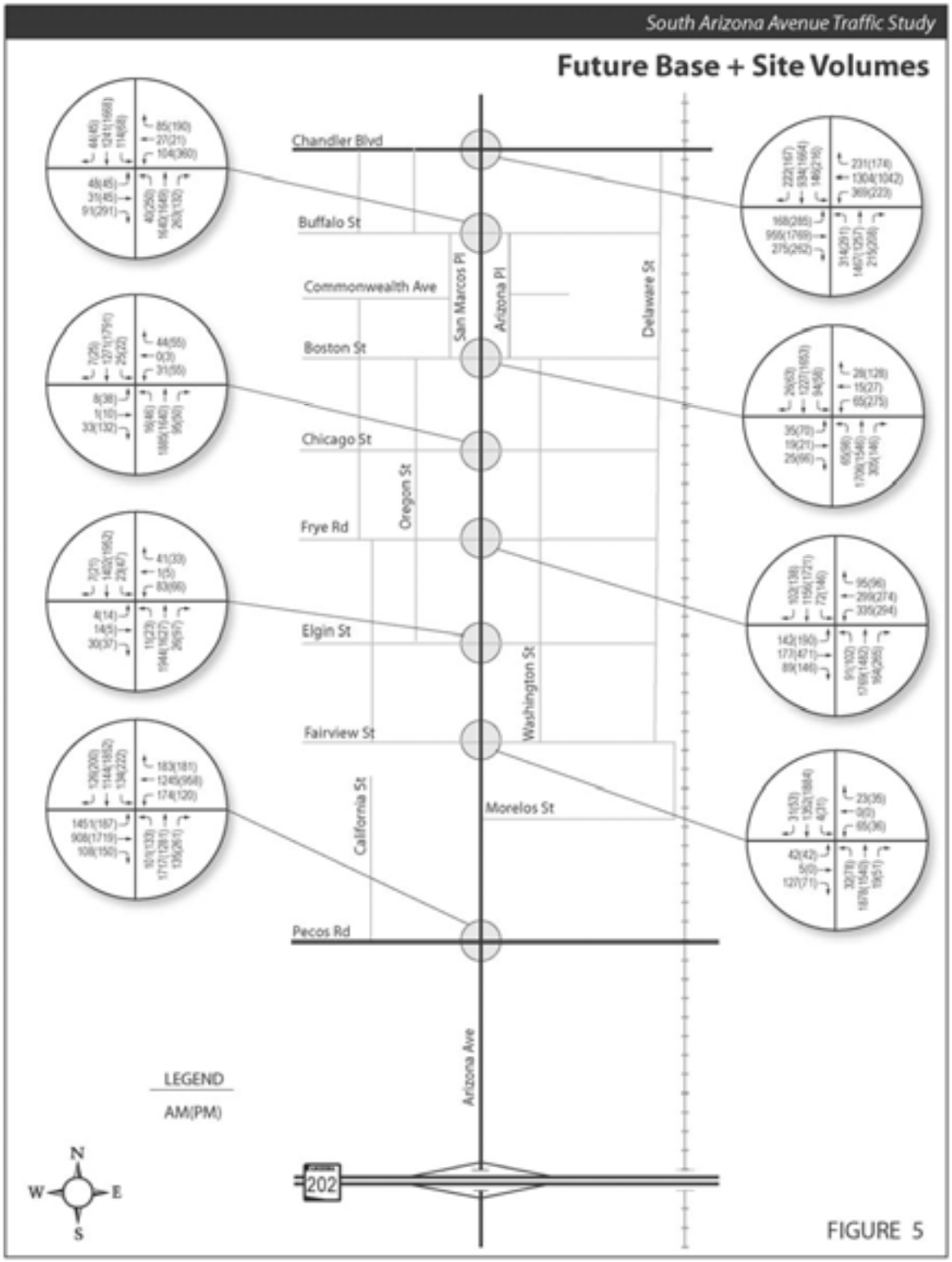
C. Future Street System

For the purpose of this analysis, the current lane configuration at each of the study intersections was assumed with the exception that northbound Arizona Avenue at Buffalo Street was assumed to have only two through lanes. The intersection of Fairview Street was included as a signalized intersection in the future analysis.

D. Traffic Forecasts

The following process was used to obtain the future peak hour traffic volumes at each of the study intersections. The adjusted existing turning movement volumes were increased by a growth rate of 37 percent to reflect the daily volume increase from 30,700 vehicles to 42,000 vehicles. The future base volumes are shown in Figure 4. The peak hour traffic volume that results from the downtown redevelopment was assigned to the study intersections based on the location of the individual developments. The resulting future base plus development traffic is shown in Figure 5.


South Arizona Avenue Traffic Study
Future Base Volumes
Chandler Blvd
Buffalo St
Commonwealth Ave
Boston St
Chicago St
Frye Rd
Elgin St
Fairview St
Morelos St
Pecos Rd
San Marcos Pl
Arizona Pl
Delaware St
Oregon St
Washington St
California St
Arizona Ave
202
LEGEND
AM(PM)
N
W
E
S
FIGURE 4


South Arizona Avenue Traffic Study
Future Base + Site Volumes
Chandler Blvd
Buffalo St
Commonwealth Ave
Boston St
Chicago St
Frye Rd
Elgin St
Fairview St
Morelos St
Pecos Rd
San Marcos Pl
Arizona Pl
Delaware St
Oregon St
Washington St
California St
Arizona Ave
202
LEGEND
AM(PM)
N
S
E
W
FIGURE 5

E. Traffic Analysis

The future peak hour traffic volumes were also analyzed using the SYNCHRO software methodology previously described in the existing conditions section. .

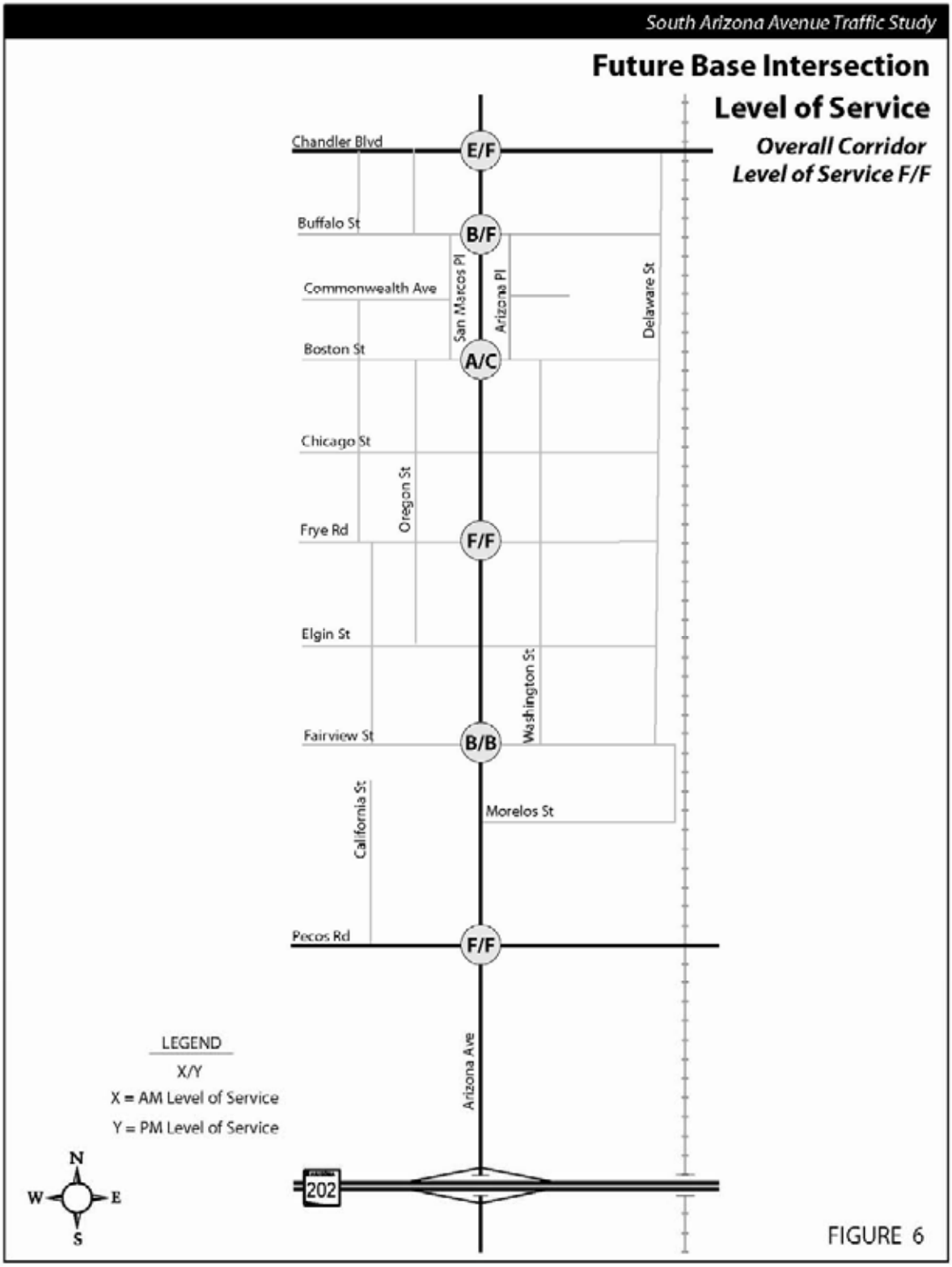
A summary of the future conditions analysis is presented in Table 8.

TABLE 8
FUTURE INTERSECTION LEVEL OF SERVICE SUMMARY
(buildout land use)

	AM PEAK HOUR		PM PEAK HOUR	
INTERSECTION	**LOS**	**DELAY**	**LOS**	**DELAY**
Arizona/Chandler	**E**	**74**	**F**	**86**
Arizona/Buffalo	**B**	**16**	**F**	**129**
Arizona/Boston	**A**	**8**	**C**	**24**
Arizona/Frye	**F**	**112**	**F**	**147**
Arizona/Fairview	**B**	**17**	**B**	**15**
Arizona/Pecos	**F**	**99**	**F**	**84**

As can be seen from Table 8, when only four lanes are provided on Arizona Avenue, several intersections are projected to be operating at level of service E or F in one or both peak hours. The intersection level of service is also shown graphically on Figure 6.

The overall level of service of an arterial street corridor is generally controlled by the operation at the major intersections. For the Arizona Avenue corridor from Chandler Boulevard to Pecos Road, the major intersections are assumed to be Chandler Boulevard, Frye Road, and Pecos Road. The weighted average delay for these three intersections would be 92 seconds in the AM peak hour and 98 seconds in the PM peak hour, which would equate to level of service F in both peak hours.


South Arizona Avenue Traffic Study
Future Base Intersection
Level of Service
Overall Corridor
Level of Service F/F
Chandler Blvd
E/F
Buffalo St
B/F
Commonwealth Ave
San Marcos Pl
Arizona Pl
Delaware St
Boston St
A/C
Chicago St
Oregon St
Frye Rd
F/F
Elgin St
Washington St
Fairview St
B/B
California St
Morelos St
Pecos Rd
F/F
Arizona Ave
LEGEND
X/Y
X = AM Level of Service
Y = PM Level of Service
N
W
E
S
202
FIGURE 6

IV. POTENTIAL IMPROVEMENTS

This section evaluates intersection modifications to improve the level of service as needed, discusses traffic calming as a feature on Arizona Avenue, and examines different cross sections that could be applied to Arizona Avenue.

A. Intersection Analysis

The intersections with level of service E or F were examined to determine if there were any modifications that would improve the level of service without widening to six lanes on Arizona Avenue. This would include additional turn lanes or traffic signal phasing modifications.

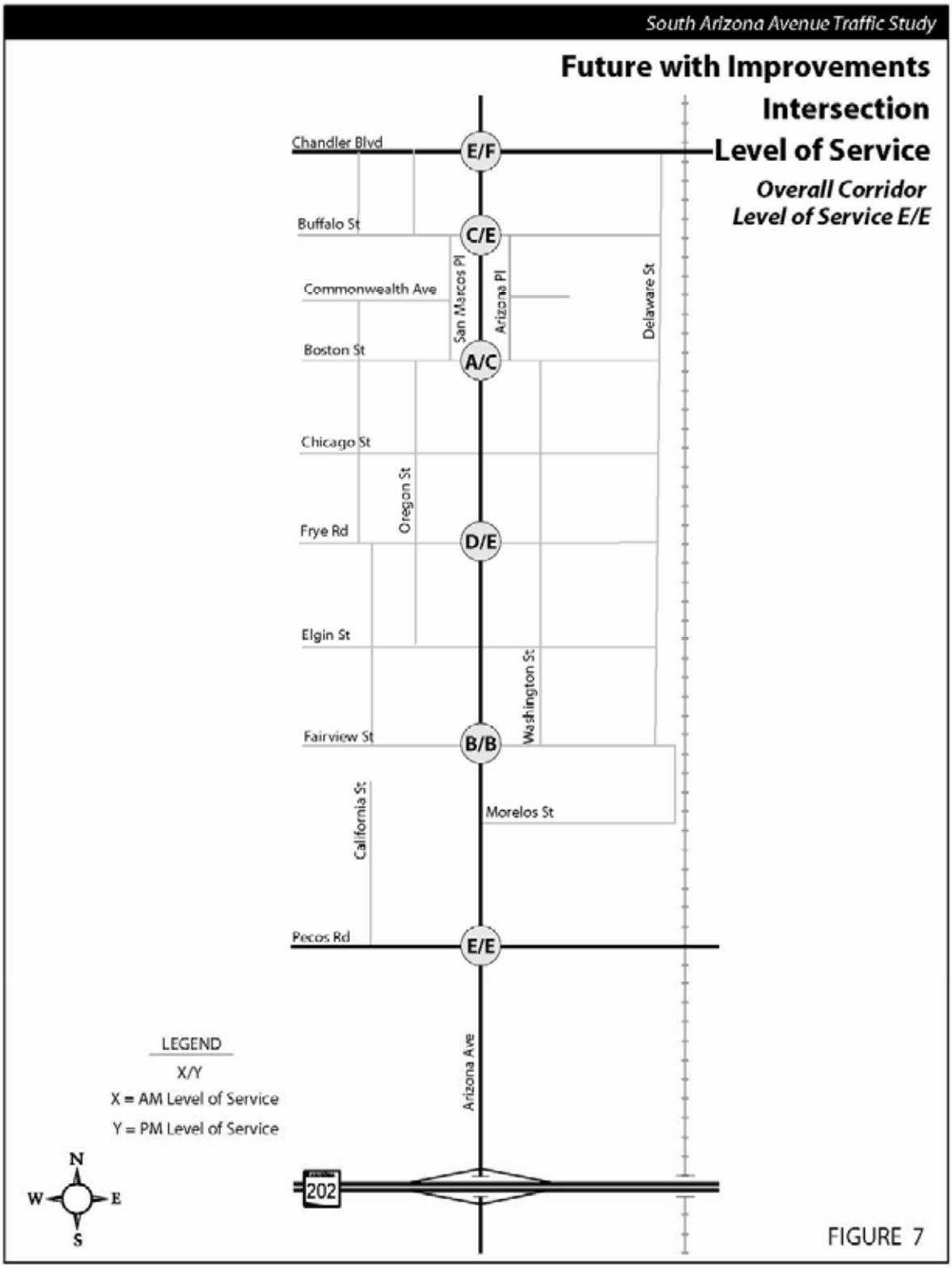
The result of this additional analysis is presented in Table 9.

TABLE 9
FUTURE INTERSECTION LEVEL OF SERVICE -WITH IMPROVEMENTS (buildout land use)

	AM PEAK HOUR		PM PEAK HOUR	
INTERSECTION/APPROACH	**LOS**	**DELAY**	**LOS**	**DELAY**
Arizona/Chandler	**E**	**77**	**F**	**87**
Arizona/Buffalo[1]	**C**	**22**	**E**	**69**
Arizona/Boston	**A**	**6**	**C**	**24**
Arizona/Frye[2]	**D**	**52**	**E**	**65**
Arizona/Fairview	**B**	**17**	**B**	**16**
Arizona/Pecos[3]	**E**	**73**	**E**	**74**

[1] add left turn phase northbound and westbound
[2] add second through lane eastbound and westbound and right turn lane northbound
[3] extend third northbound through lane north of Pecos Road and add northbound right turn lane

As can be seen comparing Tables 8 and 9, there is improvement in the level of service with the modifications footnoted in Table 9. However, level of service E or F would remain at certain intersections. The intersection level of service with improvements is also shown graphically on Figure 7.


South Arizona Avenue Traffic Study
Future with Improvements
Intersection
Level of Service
Overall Corridor
Level of Service E/E
Chandler Blvd
E/F
Buffalo St
C/E
Commonwealth Ave
San Marcos Pl
Arizona Pl
Delaware St
Boston St
A/C
Chicago St
Oregon St
Frye Rd
D/E
Elgin St
Washington St
Fairview St
B/B
California St
Morelos St
Pecos Rd
E/E
Arizona Ave
LEGEND
X/Y
X = AM Level of Service
Y = PM Level of Service
N
W
E
S
202
FIGURE 7

The weighted average delay for the three major intersections on Arizona Avenue was computed with the modifications included and is 70 seconds in the AM peak hour and 77 seconds in the PM peak hour, which would equate to level of service E in both peak hours.

These results are not surprising given that the 2001 Transportation Plan recommended six lanes for Arizona Avenue. However, it should be noted that it is not uncommon for a City to accept level of service E or F in a downtown area where there is expected to be higher levels of pedestrian activity. Also, the E and F level of service are only expected to occur in the AM and PM peak period, which means that 20-22 hours of the day would be level of service D or better.

The mid-range plan in the 2001 Chandler Transportation Plan shows a level of service D for Alma School Road between Chandler Boulevard and Pecos Road and a level of service C for McQueen Road between Chandler Boulevard and Pecos Road. This would indicate that there is available capacity on these two streets in the short term to accommodate some Arizona Avenue through traffic. In the long term, additional transit or other improvements could improve level of service on Arizona Avenue.

B. Consideration of Traffic Calming

The City has received requests to consider traffic calming techniques to reduce speed on Arizona Avenue. While traffic calming was not a specific element of this study, it is recommended that the City conduct speed studies along Arizona Avenue to document the current condition. Based on the results, City staff can better evaluate the need for traffic calming and potential techniques for this corridor.

C. Arizona Avenue Cross Section Options & Implementation

As was mentioned previously in this report, on-going land use planning studies include recommendations for Arizona Avenue that encourage bicycle and pedestrian activity to create a downtown urban setting for this section of Arizona Avenue. There are several options that can be considered that would support the goals for Arizona Avenue in the downtown area. Figures 8 and 9 present cross section options and their application in the downtown area.

Figure 8 shows two different cross sections that provide four through lanes on Arizona Avenue. One cross section includes a raised median, on street parking, and a bike lane that can be accommodated in the existing pavement width. The other option shows a cross section where parking is prohibited, the pavement width is less than today, and wider sidewalk and other amenities are provided.

Figure 9 presents variations on how the two cross sections could be applied in a typical block. In locations where the adjacent property requires on-street parking, the full pavement width can be provided. However, even with this treatment the area at an intersection can include a “bulb out” which allows a shorter pedestrian crossing of Arizona Avenue. In locations where on-street parking is not needed, the pavement width would be less than today and additional sidewalk would be provided. For example, at the southwest corner of Arizona Avenue and Boston Street which is being redeveloped, on street parking is not needed and a wider sidewalk can be provided.

If desirable and consistent with proposed development, mid-block crossings can be considered at locations where intersections are at least 660 feet apart. These locations would also provide for shorter pedestrian crossings of Arizona Avenue.

South Arizona Avenue Traffic Study

Cross Sections

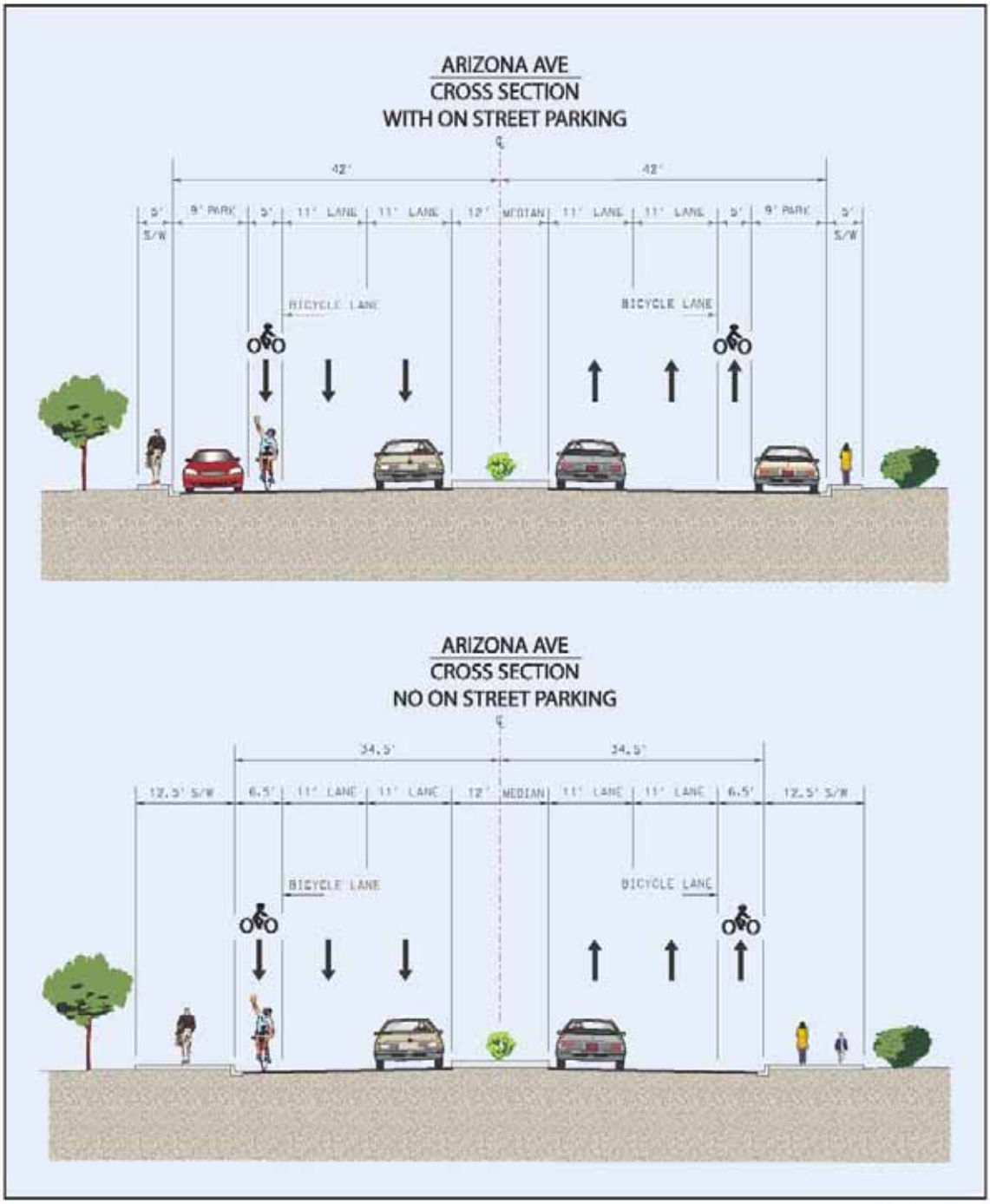
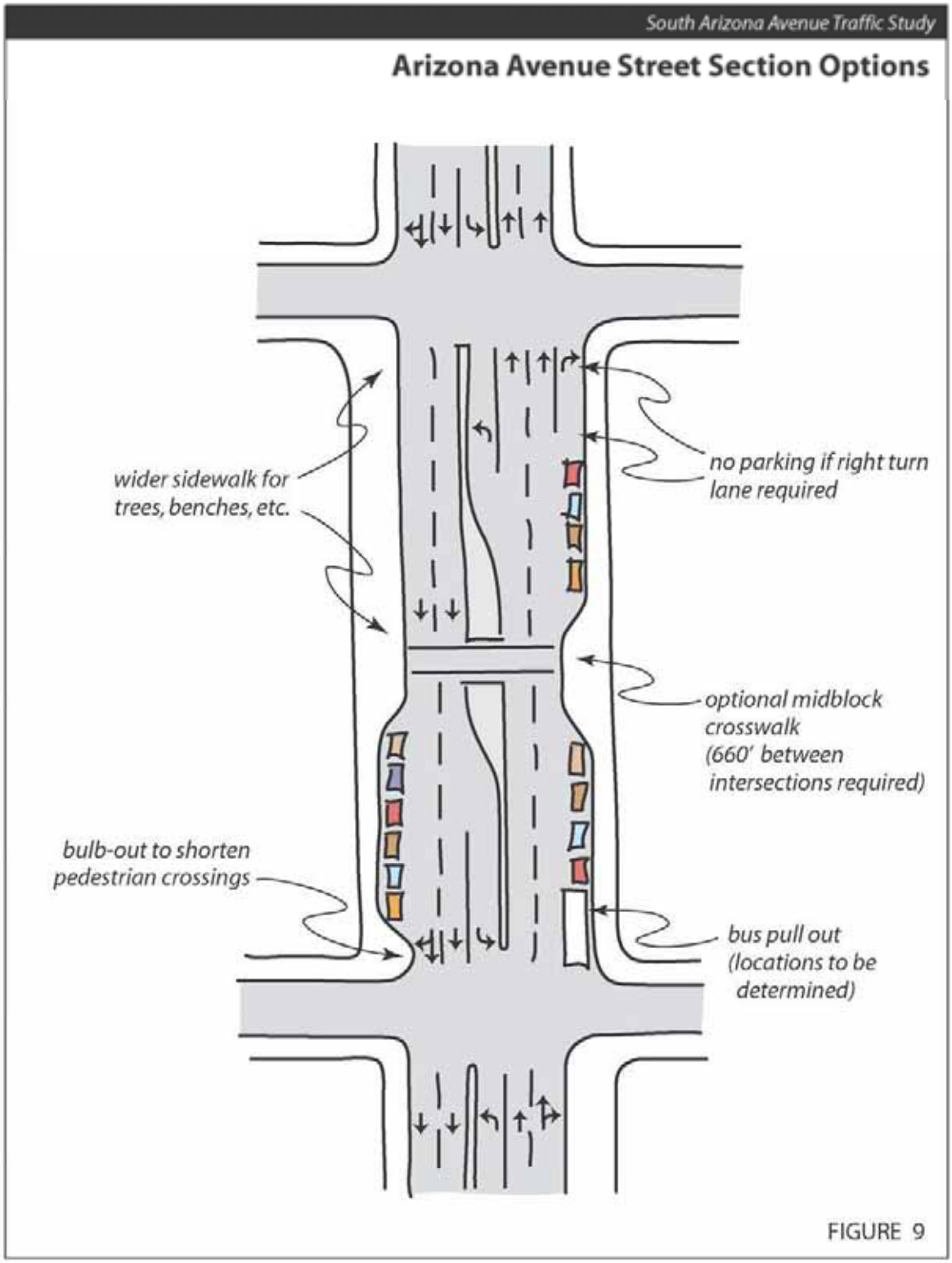


FIGURE 8


South Arizona Avenue Traffic Study
Arizona Avenue Street Section Options
wider sidewalk for trees, benches, etc.
no parking if right turn lane required
optional midblock crosswalk (660' between intersections required)
bulb-out to shorten pedestrian crossings
bus pull out (locations to be determined)
FIGURE 9

Both cross sections can be adapted to intersections that require right turn lanes. To provide a right turn lane, either on-street parking would be terminated or the pavement would be widened.

There is one area that will require further study to determine how to apply the four lane cross section, i.e. southbound at Buffalo Street. The recently completed improvements at Arizona Avenue and Chandler Boulevard provide three southbound through lanes at Chandler Boulevard that continue to Buffalo Street. The third southbound through lane becomes a right turn lane at Boston Street. The intersection of Buffalo Street also includes a southbound right turn lane. There is not sufficient distance to drop the third southbound through lane between Chandler Boulevard and Buffalo Street and other options should be examined.

The implementation of improvements to Arizona Avenue must be done in logical, consistent segments. As redevelopment plans become known, City staff should meet with developers to define their preferred Arizona Avenue cross section, examine continuity with adjacent sections, and establish appropriate construction time frame.

V. SUMMARY AND RECOMMENDATIONS

The City of Chandler continues to experience significant growth throughout the city including the downtown area where redevelopment is beginning to occur. The latest projections indicate that population and employment will increase in the downtown area as redevelopment occurs and the area is built out. Current land use planning for the downtown area indicates that approximately 800 residential units and 565,000 square feet of mixed use development will be added.

In addition to development growth, travel patterns to/from the downtown area have changed. The recently completed Loop 202 has an interchange at Arizona Avenue just south of downtown, which has changed trip patterns to/from downtown. In the future, new mixed-use development will also change peak period travel characteristics.

The 2001 City of Chandler Transportation Plan identifies Arizona Avenue as a six-lane road in the long range planning horizon. Recent land use planning studies, including the City Hall site selection and the South Arizona Avenue Planning Study, have proposed a mixed-use, pedestrian-friendly downtown area, which would include limiting Arizona Avenue to four through lanes between Chandler Boulevard and Pecos Road.

The current intersection levels of service range from A to E in the study corridor. With the additional development and only four through lanes on Arizona Avenue, the corridor level of service is projected to be F in both the AM and PM peak hours at buildout.

Possible intersection modifications to improve future level of service were examined. If the intersection improvements outlined below are implemented, the overall corridor level of service would improve to E in the AM and PM peak hours.

The following summarizes the study recommendations.

* Arizona Avenue and Buffalo Street - Add a left turn signal phase northbound and westbound.
* Arizona Avenue and Frye Road - Add a second through lane eastbound and westbound and a separate right turn lane northbound.
* Arizona Avenue and Pecos Road - Restripe to provide a third through lane northbound and construct a separate right turn lane northbound.
* Conduct speed studies on Arizona Avenue and evaluate the potential for traffic calming measures such as speed tables.
* Coordinate with developers to provide the appropriate intersection cross section and block treatment depending on the need for on-street parking
* Conduct further study to determine the appropriate transition from three to two southbound through lanes between Buffalo Street and Boston Street.
* Meet with developers to define their preferred Arizona Avenue cross section, examine continuity with adjacent sections, and establish appropriate construction time frame.

APPENDIX A – Existing LOS Summary

APPENDIX B – Future LOS Summary

APPENDIX C – Future with Improvements LOS Summary

APPENDIX A – Existing LOS Summary

EXISITNG INTERSECTION LEVEL OF SERVICE

	AM		PM	
INTERSECTION/APPROACH	**LOS**	**DELAY**	**LOS**	**DELAY**
Arizona/Chandler	**C**	**33**	**E**	**71**
NB Approach	C	25	C	22
SB Approach	C	20	C	26
EB Approach	C	23	F	153
WB Approach	E	55	D	39
Arizona/Buffalo	**A**	**6**	**A**	**7**
NB Approach	A	4	A	2
SB Approach	A	1	A	4
EB Approach	D	39	D	35
WB Approach	D	39	D	36
Arizona/Boston	**A**	**5**	**A**	**9**
NB Approach	A	5	B	10
SB Approach	A	2	A	2
EB Approach	D	39	D	36
WB Approach	D	40	D	37
Arizona/Frye	**B**	**18**	**C**	**32**
NB Approach	B	18	D	38
SB Approach	A	10	C	23
EB Approach	C	29	D	42
WB Approach	C	30	C	29
Arizona/Pecos	**B**	**20**	**C**	**29**
NB Approach	B	105	C	28
SB Approach	B	12	C	27
EB Approach	D	36	C	34
WB Approach	C	32	C	33

APPENDIX B – Future LOS Summary

FUTURE INTERSECTION LEVEL OF SERVICE SUMMARY
(buildout land use)

	AM		PM	
INTERSECTION/APPROACH	**LOS**	**DELAY**	**LOS**	**DELAY**
Arizona/Chandler	**E**	**74**	**F**	**86**
NB Approach	F	115	F	98
SB Approach	C	29	F	86
EB Approach	C	31	F	100
WB Approach	F	94	D	52
Arizona/Buffalo	**B**	**16**	**F**	**129**
NB Approach	B	20	F	233
SB Approach	A	6	A	8
EB Approach	C	34	C	24
WB Approach	D	38	F	206
Arizona/Boston	**A**	**8**	**C**	**24**
NB Approach	A	4	C	34
SB Approach	A	9	A	9
EB Approach	D	38	C	26
WB Approach	D	39	D	41
Arizona/Frye	**F**	**112**	**F**	**147**
NB Approach	F	201	F	235
SB Approach	B	13	E	78
EB Approach	C	33	F	125
WB Approach	F	89	F	140
Arizona/Fairview	**B**	**17**	**B**	**15**
NB Approach	C	24	C	21
SB Approach	A	4	A	8
EB Approach	D	39	D	38
WB Approach	D	40	D	36
Arizona/Pecos	**F**	**99**	**F**	**84**
NB Approach	F	241	F	86
SB Approach	C	34	F	104
EB Approach	C	29	F	95
WB Approach	C	34	C	28

APPENDIX C – Future with Improvements LOS Summary

FUTURE INTERSECTION LEVEL OF SERVICE -WITH IMPROVEMENTS (buildout land use)

	AM		PM	
INTERSECTION/APPROACH	**LOS**	**DELAY**	**LOS**	**DELAY**
Arizona/Chandler	**E**	**77**	**F**	**87**
NB Approach	F	126	F	101
SB Approach	C	29	F	86
EB Approach	C	31	F	100
WB Approach	F	94	D	52
Arizona/Buffalo	**C**	**22**	**E**	**69**
NB Approach	C	28	D	53
SB Approach	B	11	D	45
EB Approach	D	38	D	38
WB Approach	C	30	F	217
Arizona/Boston	**A**	**6**	**C**	**24**
NB Approach	A	4	C	34
SB Approach	A	6	A	9
EB Approach	D	38	C	26
WB Approach	D	39	D	41
Arizona/Frye	**D**	**52**	**E**	**65**
NB Approach	E	70	E	78
SB Approach	B	11	D	44
EB Approach	C	32	C	34
WB Approach	F	87	F	126
Arizona/Fairview	**B**	**17**	**B**	**16**
NB Approach	C	24	C	23
SB Approach	A	3	A	7
EB Approach	D	39	D	38
WB Approach	D	40	D	36
Arizona/Pecos	**E**	**73**	**E**	**74**
NB Approach	F	163	D	47
SB Approach	C	27	F	100
EB Approach	C	29	F	95
WB Approach	C	34	C	28

[1] add left turn phase northbound and westbound

[2] add second through lane eastbound and westbound

[3] extend third northbound through lane north of Pecos Road