PASSENGER RAIL CORRIDOR STUDY
Tucson to Phoenix

STATION AREA PLANNING GUIDANCE FOR COMMUNITIES

ADOT PASSENGER RAIL CORRIDOR STUDY
TUCSON TO PHOENIX

November 26, 2013

Prepared by:

AECOM

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF ABBREVIATIONS

ADOT	Arizona Department of Transportation
APRCS	Arizona Passenger Rail Corridor Study
BRT	Bus Rapid Transit
bqAZ	Building a Quality Arizona
CDBG	Community Development Block Grant
CFD	Community Facilities District
DU	Dwelling Unit
EDA	Economic Development Administration
EIS	Environmental Impact Statement
FAR	Floor Area Ratio
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GPLET	Government Property Lease Excise Tax
LRT	Light Rail Transit
MAG	Maricopa Association of Governments
MARTA	Metropolitan Atlanta Rapid Transit Authority
PARA	Planning Assistance for Rural Areas
SCC	Sustainable Communities Collaborative
STLUIS	MAG Sustainable Transportation and Land Use Integration Study
TIF	Tax Increment Financing
TOD	Transit-Oriented Development
UP/UPRR	Union Pacific Railroad
USDOT	United States Department of Transportation

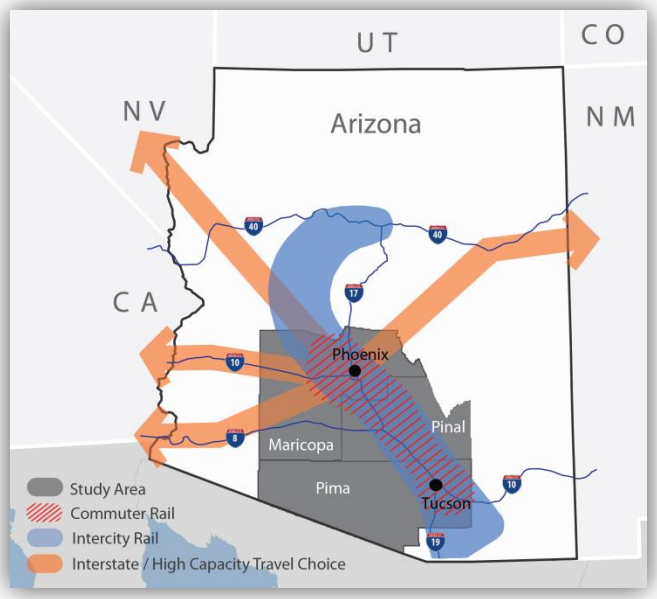
Chapter 1. Introduction to the Corridor

1.1 Project Location and Background

The Arizona Department of Transportation (ADOT) Arizona Passenger Rail Corridor Study (APRCS) consists of an Alternatives Analysis/Tier 1 Environmental Impact Statement (EIS) and Service Development Plan to evaluate potential high-capacity transit improvements between the Tucson and Phoenix metropolitan areas, separated by approximately 120 miles (Figure 1). The proposed Tucson to Phoenix Passenger Rail Corridor (Corridor) comprises three counties: Maricopa, Pima, and Pinal, and is part of the larger Sun Corridor Megapolitan, one of the fastest growing locations in the United States identified by the Brookings Institution and Regional Plan Association in 2005

Tucson and Phoenix are the two largest metropolitan areas in Arizona, representing about three-quarters of the state's population. In addition, approximately 9 out of 10 jobs in the state are found in these two metropolitan areas. With recent population growth in the study area, several statewide and regional planning processes have identified a need for increased transportation capacity between the Phoenix and Tucson metropolitan areas.

Figure 1: bqAZ Recommendations for Passenger Rail



In March 2010, ADOT completed the *Building a Quality Arizona (bqAZ) Statewide Transportation Planning Framework Program,* which concluded that Arizona cannot address future congestion by continuing to rely exclusively on roadways to move people and goods. Rail offers a highly sustainable form of transportation that is more environmentally-friendly and a resource-sensitive method of moving goods and people. The concept of an intercity rail corridor between Tucson and Phoenix was further studied and recommended in the 2011 *Arizona State Rail Plan*. This study, the *Arizona Passenger Rail Corridor Study*, intends to investigate the benefit of this alternative mode of travel through the heart of the Sun Corridor and recommend a program for implementation.

Transit Technologies

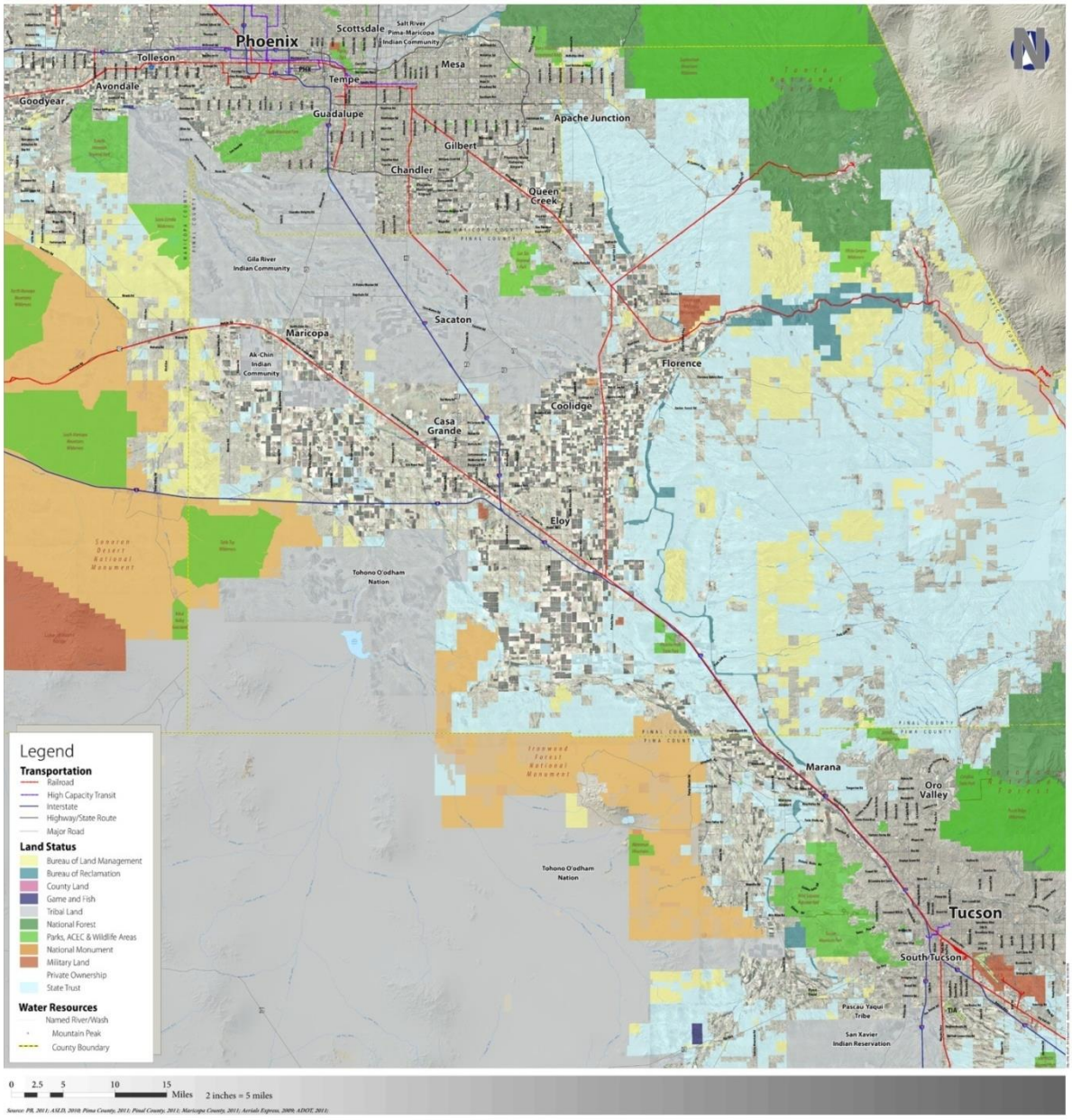
To date, this study has gone through an extensive alternatives development and evaluation process where both regional bus and passenger rail (intercity and commuter rail) alternatives were analyzed between the Tucson and Phoenix metropolitan areas in the overall Alternatives Analysis/Tier 1 EIS document. The recommendation from that process is to implement regional passenger rail service

between Tucson and Phoenix, building first on initial commuter rail service to be implemented initially from the Phoenix Metropolitan Area southward into Pinal County.

Station Typologies

Four types of stations (system hub, regional, local, transit emergent) were identified for the corridor based on the unique southwestern context, existing and potential future growth patterns (including land uses and densities), and community needs and demands. These station types will be further discussed in more detail in later parts of this report.

Figure 2: Study Area



Station Locations

Figure 3 illustrates the universe of station locations considered. The range of preliminary station locations were initially identified through agency and public scoping meetings, and individual community meetings. These were evaluated in Tier 1 based on factors such as adequate population to support the station, travel demand, compatible adjacent land uses and densities, and existing transit connections.

The Tier 2 evaluation of station locations included a three step process. The first step of this process included the "Station Area Planning Exercise" at the Corridor Support Team Meetings held in July and August 2012. The exercise served the purpose of:

- Gaining an understanding of urban form, land use, and transit connectivity elements that contribute to a rail transit-ready environment
- Illustrating public policy and private actions required to proactively prepare for rail transit
- Understanding regulatory and policy changes needed
- Understanding land use thresholds required by the Federal Transit Administration (FTA) to obtain federal funding

The second step included completing the "*Community Readiness Assessment for Rail Transit*", a self-assessment tool that was distributed to all communities in the study area that could potentially host a future passenger rail station (Figure 3). This assessment served to review each community's plans and policies for land use, mobility, connectivity, building design, housing affordability and parking that are required to support and enable successful station area development. Cities and towns were encouraged to involve representatives from their Planning/Community Development, Economic Development, Housing, Transportation, Public Works, and Real Estate departments in the self-assessment.

The third step of this process included individual meetings with candidate station location communities along the rail corridor alternatives where the Project Team discussed the output of the "*Community Readiness Assessment for Rail Transit*" prepared and submitted by the community, updated the community on the alternatives evaluation progress, and elaborated on the implications of a possible station location selection in that municipality.

1.2 Project Goals and Objectives

The *bqAZ Statewide Transportation Planning Framework Program* 2050 travel demand projections indicate that traffic congestion in this corridor could increase the travel time between Tucson and Phoenix to five hours (more than double the average travel time today) by 2050 if significant improvements are not implemented, including some combination of roadway and alternative modes. This includes construction of the ultimate build-out of the Interstate 10 (I-10) corridor to ten lanes (5-lanes in each direction) between the Tucson and Phoenix metropolitan areas and construction of the proposed North-South corridor from I-10 in Eloy to the East Valley of the Phoenix metropolitan area. It is important, therefore, to begin conceptualizing alternative routes and modes to alleviate the congestion along this important artery. The ADOT *Arizona Passenger Rail Corridor Study* intends to develop passenger rail (both intercity and commuter rail) as a viable transportation option that fulfills the state's

long range vision of providing safe, efficient, and sustainable transportation options that serve the needs and aspirations of its communities.

Figure 3: Universe of Station Locations Considered

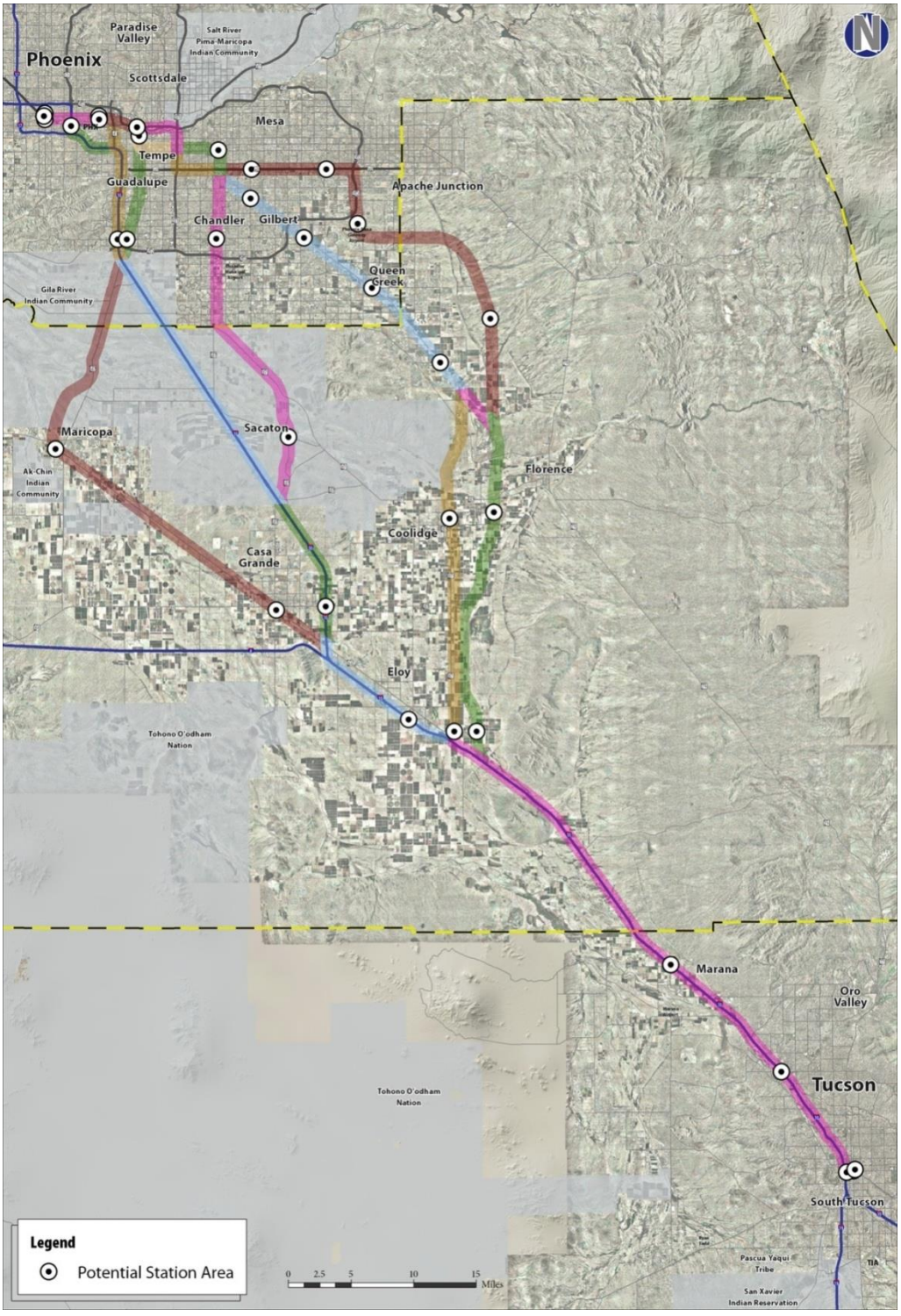


Figure 4: Community Readiness Assessment for Rail Transit

COMMUNITY READINESS ASSESSMENT FOR RAIL TRANSIT

PASSENGER RAIL CORRIDOR STUDY
Tucson to Phoenix

Community: _____

Identified Activity Center Location*: _____

*with the potential to host a passenger rail station (1/4 mile radius Transit Core evaluation only)

Community Assessment Questions		Yes/No	Comment
Land Use			
1	When was your community's General Plan adopted or last updated (if it was approved by the voters, use that date)? Date:_____ Next expected update year:_____		
2	Does your General Plan identify activity centers in the Land Use Element and/or Growth Area Elements? a. Do you have specific policies and/or plans that promote transit use at your activity centers? b. Do your activity centers allow for a variety of land uses to create a 16-hour/day activity (i.e. office, lofts/condominiums, apartments/ townhomes, entertainment venues, commercial services, retail)?		
3	Does your community's Zoning Ordinance encourage (check those that apply): a. Mixed Use Development b. Higher Density Activity Centers c. Transit / Pedestrian Friendly Streetscapes d. Parking Maximums e. Provisions that are Form Based or Hybrid f. Transit Oriented Development Overlay		
4	Does your community have incentives to encourage land use, economic development, and redevelopment strategies? If yes, check those that apply: a. Density bonuses b. Streamlined development processes and permitting c. Public financing for pedestrian and streetscape amenities d. Use of Assessment or Community Facilities Districts		
Mobility and Connectivity			
1	Is the identified activity center currently served (or planned to be served) by any of the following types of transit? (check all that may apply): a. Light rail b. Modern street car c. Express bus/BRT d. Higher frequency local bus e. Local bus f. Circulator bus g. None of the above		

Figure 4 Continued.

Community Readiness Assessment for Rail Transit

PASSENGER RAIL CORRIDOR STUDY
Tucson to Phoenix

Community Assessment Questions		Yes/No	Comment
2	Do streets within the identified activity center vicinity provide access for transit vehicles and their operational needs (i.e. bus pull-outs, adequate turning radius, etc.)?		
3	Do streets within the identified activity center vicinity promote pedestrian activity through any of the following (check all that may apply): a. Small Block Size (between 200 – 400 ft./side) b. Shaded sidewalks c. Street furniture d. Pedestrian scale lighting e. Landscape buffer (between curb and sidewalk) f. On-street parking (parallel or angular configuration) g. Pedestrian signage and crosswalks h. Low to moderate traffic speeds i. None of the above		
Activity Center Building Design			
1	Do you have design guidelines for the identified activity center? If yes, do the guidelines address (check those that apply): a. Buildings oriented towards the street b. Narrow or no building setbacks c. Avoidance of blank walls along sidewalks or streets d. Pedestrian friendly uses along pedestrian pathways (i.e. small professional and services offices or retail facilities, such as dry cleaners, newsstands, coffee shops, restaurants, etc.)		
2	Does the identified activity center have continuous development with absence of large tracts of vacant land and surface parking lots? a. If not, are redevelopment plans or policies in place to encourage redevelopment of these under-utilized sites?		
Housing Affordability			
1	Is affordable housing available within or adjacent (within 10-minute walk) to the identified activity center?		
2	Are there plans or policies to preserve, rehabilitate or encourage new affordable housing development in the activity center?		
Parking			
1	Does the identified activity center allow on-street parking (parallel or angular configuration) that acts as a buffer for pedestrians from street traffic and creates a reserve of short-term parking?		
2	Does the activity center offer multi-storey parking structure(s) and/or shared surface parking lots convenient to a likely rail station/transit center site?		
3	Are priority parking spaces available for multiple occupant and/or alternative fuel vehicles in the identified activity center?		

The following goals and objectives have been developed to guide the station area planning process for potential station locations along the passenger rail corridor in the Sun Corridor:

- Provide a secure and safe station area vicinity for the users during the day and night
- Provide a safe and user-friendly station facility that incorporates supportive facilities such as concession areas, waiting rooms, restrooms, and ticket booths
- Provide aesthetically-pleasing and visually engaging surroundings that people will enjoy before/after their train ride
- Provide station facilities that are accessible and are ADA compliant
- Accommodate for safe and practical circulation methods between the various station components, parking, pick-up/drop-off areas
- Incorporate the use of sustainable planning, building, and implementation practices to ensure long-term use and cost-effectiveness, while also encouraging an environmentally-sensitive approach

1.3 Purpose of Land Use/Urban Form Guidance

The purpose of this Land Use/Urban Form Guidance Document is to provide a framework for station area planning that can be used by host communities (those with a station site selection) to develop plans for their specific station areas. This document is a tool that simplifies the approach to station planning and outlines the recommended criteria for the building of efficient, functional, and coordinated station areas along the passenger rail corridor. The guidance highlights the need for regional coordination and cooperation, and uses an integrated approach to transportation and land use.

This document lays emphasis on the planning aspects of station area development for the four station types identified for the Sun Corridor. The guidelines will help to determine the station type appropriate for a host community based on several factors, including the maturity of a municipality's community development pattern, the level of sophistication in its overall planning framework, the existing and planned local transit system, and other features that promote sustainability and an approach to smarter growth. As communities continue to grow in size and enhance the quality of activity within the station area, they may work with the operating/management agency of the system to "upgrade" to a higher level of station type, based on the recommendations made in this document.

This document includes the following chapters:

1. Introduction to the Corridor
2. Station Typologies Overview
3. System Hub Station
4. Regional Station
5. Local Station
6. Transit Emergent Station Location
7. Station Area Planning Principles
8. Implementation Program Requirements
9. Other Resources

As noted, the Land Use/Urban Form Guidance document begins with a brief description of the project location and background and discusses the history of the regional transportation facilities in the corridor. Chapter 2 provides an overview of the station typologies and station influence area components, and explains the hierarchy of the four station types.

Chapters 3 through 6 discuss the station types in more detail and provide target station area characteristics, such as the mix of land use and development densities, building heights, recommended transit connections, pedestrian and bicycle accessibility, and provision of affordable housing. A prototypical station area plan has been developed for each of the station types to demonstrate the desired interrelationships between the passenger rail station and its surrounding urban context.

Chapter 7 outlines the key station area planning principles that have been identified as the building blocks of a successful passenger rail station, and are recommended as a guide for communities in updating their general plans and in developing detailed specific area plans.

Chapter 8 provides an implementation program with a step-by-step station area planning process, a phased approach for necessary public and private actions, and the agencies that should participate in the planning process. Potential incentives for encouraging infill, new development, and redevelopment in the station area core are also discussed in this chapter.

Chapter 9 provides brief introduction to other similar resources that may serve as reference materials for communities preparing to plan for station areas within their jurisdiction.

1.4 History of Regional Transportation Facilities within the Corridor

The Tucson-Phoenix corridor is part of the Sun Corridor Megapolitan, and connects the two largest metropolitan cities in the state. The population in the three-county study area (Maricopa, Pima and Pinal counties) is expected to grow from approximately 5.2 million in 2010 to about 11.7 million in 2050, with the majority of the population growth expected to be centered on the I-10 corridor or the central “spine” though the Sun Corridor. The I-10 corridor is the main transportation corridor connecting Tucson and Phoenix, with planned widening up to 10 lanes (5 lanes in each direction). The Union Pacific (UP) Sunset Route mainline corridor generally follows the I-10 alignment from Tucson to Eloy, veering to the west through Pinal County and eventually paralleling the I-8 corridor toward Yuma. The UP Phoenix Subdivision connects the Sunset Route with the Phoenix metropolitan area, connecting to Wellton and Eloy on the western and eastern ends, respectively.

Phoenix Union Station

The historic Phoenix Union Station is located in downtown Phoenix just south of West Jackson Street between 3rd and 5th Avenues, and was previously used to serve intercity rail passengers for both the Southern Pacific Railroad and later Amtrak, but no passenger service is currently provided to Phoenix or nearby areas. The Union Station building is currently owned and occupied by a telecommunications company for stationing their wireless communications equipment.

One of the historic rail depots in Tucson is located along Toole Avenue between Congress Street and Pennington Street in downtown, and was previously owned by the Southern Pacific Railroad. The City of Tucson purchased the depot in 1998 and restored the main depot building and the three adjacent buildings to their 1941 architectural style,

Tucson Amtrak Station

completed in 2004. The depot currently serves as a passenger rail station for Amtrak's Sunset Limited Route (connecting Florida to California). The Southern Arizona Transportation Museum is located on the west side of the rail depot.

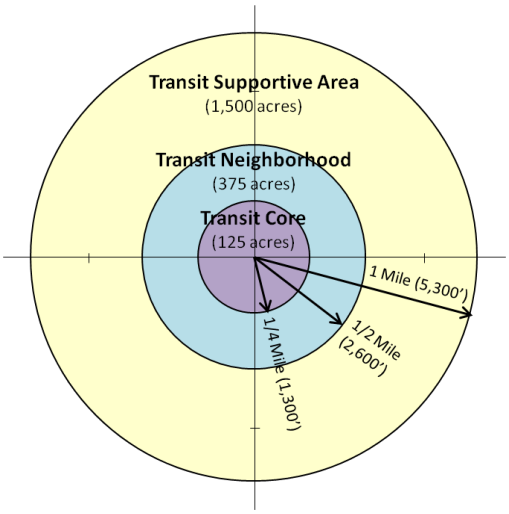
The other historic rail depot in Tucson, formerly of the El Paso and Southwestern Railroad, is located just south of Congress Street and east of I-10. The Phelps Dodge Mining Company extended its El Paso and Southwestern Railroad from El Paso to Tucson in 1912, and the depot was built in 1913. By 1924, the railroad was taken over by Southern Pacific, which did not need two Tucson depots, so this depot was closed after just 11 years of service. More recently, the old depot has been restored and is serving as a restaurant and office building.

El Paso & Southwestern Railroad Depot

Chapter 2. Station Typology Overview

2.1 Station Influence Area Components

Figure 5: Station Influence Area



Station area planning involves designating the area within a five- to twenty-minute walk, or one-mile, of a transit station as a distinct type of place. The area within this one mile threshold is known as the "station influence area." Actual boundaries will vary based upon the unique physical characteristics of each station area. Stations will be generally located at the centers of significant higher-density economic and cultural activity. In addition, each station area should have a well established network of pedestrian pathways connecting the station to nearby high-density residential and employment areas. Such pedestrian pathways should include supportive infrastructure, such as sheltered waiting areas, street furniture, low-scale lighting, shade, bike racks, and retail/service uses tailored towards pedestrian traffic. It is understood that for this corridor, the highest density station areas will primarily occur in the core of the Tucson and Phoenix metropolitan areas, however the intent is to stimulate mixed-use, medium- to high-density development within station areas along the entire corridor, including suburban and rural areas.

The station area consists of (approximately) the 500 acres within the one-half mile surrounding a transit station, composed of the transit core and transit neighborhood. These areas are further surrounded by the transit-supportive area (not part of the station area). Transit geography is illustrated in Figure 4 and further defined below:

- ***Transit Core:*** First one-quarter mile, or approximately 125 acres, of the station area centered at the transit station; generally a five-minute walk from the station.
- ***Transit Neighborhood:*** Second one-quarter mile, or approximately 375 acres, of the station area surrounding the transit core; generally a 10-minute walk from the station.
- ***Transit Supportive Area:*** Next one-half mile radius around transit station (generally a 20-minute+ walk), beyond the transit core and transit neighborhood, comprising an additional 1,500 acres; often experiencing modest increases in density due to station proximity.

2.2 Station Typology and Hierarchy

The following four station types have been developed for intercity and commuter rail service between Tucson and Phoenix. The station types have been defined by considering the unique southwestern context of the study area, the current and planned characteristics of Arizona communities (both urban and rural), combined with requirements based on service and access needs. The four identified station types include:

1. System Hub Station
2. Regional Station
3. Local Station
4. Transit Emergent Station Location

Figure 6 illustrates the four station types and the corresponding passenger rail service associated with them. Intercity rail service is proposed to stop at the system's hub and regional stations; commuter rail service can stop at all four station types. Characteristics of specific station types will be discussed in more detail in the following sections, including the provision of key information, such as the typical urban setting, employment/ commercial/residential land use types, typical transit patronage area, and typical transportation modes and parking types associated with each station type. An overview of these characteristics is presented in Table 1.

Figure 6: Rail Services at Various Station Types

		Station Types			
		System Hub	**Regional Station**	**Local Station**	**Transit Emergent Station**
Rail Service	**Intercity Rail**	●	●		
	Commuter Rail	●	●	●	●

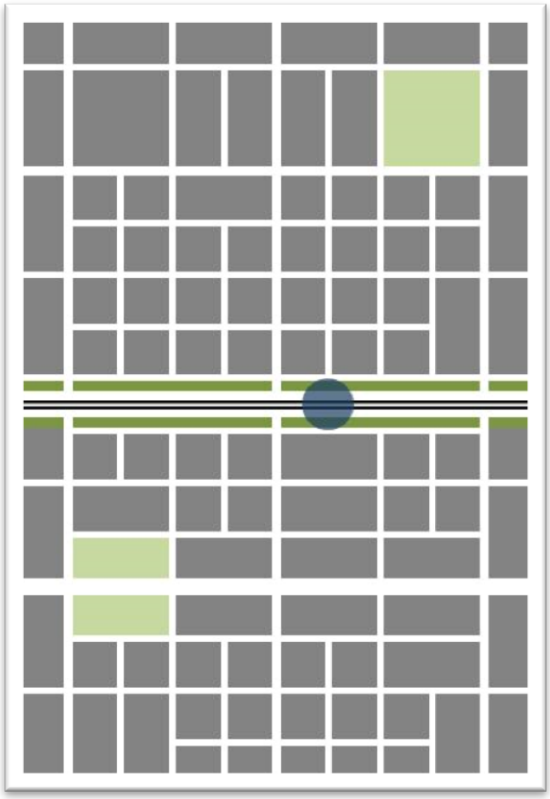
Each of the four station types will have different transit connectivity characteristics, based on the urban context in which they are located, and the passenger patronage area associated with them. An overview of the general patronage area for each station type by location (urban or rural), generally available transit connections (light rail transit [LRT], modern streetcar, bus rapid transit [BRT], local and circulator bus system), bicycle and pedestrian infrastructure, and parking facilities have also been provided for each station type. Typical block sizes and development densities that support walkability within the station area, and enhance the attractiveness of the development are also discussed.

Prototypical station area plans are provided for system hub, regional and local station types. These plans are not site-specific, and depict typical conditions present in the corridor. Each station type is composed of various land uses, facility types, amenities, and their relationships for access and circulation which remain constant; however, these components can be modified to fit site-specific conditions since each station area will present a different set of opportunities and constraints. The prototypical station area plans should only be used as a guidance tool to develop individual station area plans based on site-specific conditions of host communities.

Table 1: Station Area Typology Overview

Station Type	Typical Urban Setting	Employment/ Commercial Land Use Types	Residential Land Use Types	Transit Patronage Area	Typical Transportation Modes and Parking Types
System Hub	Downtown/center of metropolitan area	Primary office, government, and cultural/sports/ entertainment center with supportive retail and services	High-density, multi-family housing	15 to 25 miles	Intermodal facility/transit hub; major regional destination with high- quality feeder transit (light rail, streetcar, bus, circulator); potential park-and-ride location with structured parking integrated into mixed-use development
Regional Station	Sub-regional downtown or major employment center	Regional employment hub and major activity center (retail, services, education, medical, entertainment)	Mid- to high-density residential, often as part of mixed-use developments	10 to 15 miles	May be a sub-regional destination on fixed-guideway transit corridor or sub-regional transit center with high quality feeder bus service, including local activity center circulator; potential park-and-ride location with structured parking
Local Station	Suburban town center, master planned community mixed-use core, or historic downtown of rural community	Office/service/retail economic activity center, potential regional government service center	Mid-density multi-family, and higher-density single family (e.g., townhouses, row houses)	5 to 20 miles (suburban) 20 to 40 miles (rural)	Local activity center linked with high quality feeder bus services (e.g., express bus, regional fixed-route bus routes); potential park-and-ride location with surface parking lots or decked parking
Transit Emergent Station Location	Center of a small town outside a major metropolitan area, or master planned community with mixed-use core, with significant surrounding growth potential	Office/service/retail center, potential civic service center; often a historic “Main Street” activity node	Medium-density multi-family, possibly single family (e.g., row houses, patio homes)	20 to 40 miles	Transit station with future connections to local feeder bus service, and regional bus transit with service to adjacent towns/cities; potential park-and-ride location with surface parking lots

Chapter 3. System Hub Station



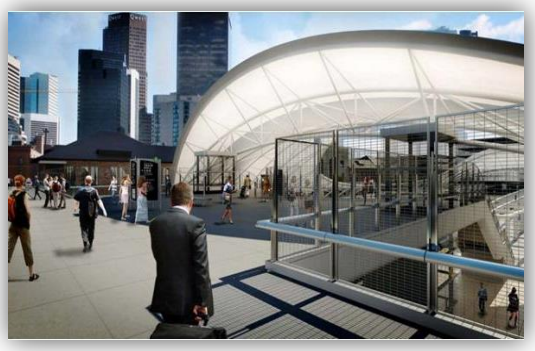
A system hub station would generally be located at the heart of a major metropolitan area, typically a downtown, characterized by a high-density mix of housing and employment types, including:

- Corporate offices
- Government offices
- High-rise apartments and condominiums
- Regional civic uses
- Major mixed-use development
- Cultural and entertainment facilities
- Supportive retail and services

Densities may be higher within a quarter-mile radius of stations than elsewhere. System hub stations would be served by both regional and commuter rail services, and would accommodate substantial intermodal connections to the local transportation network including fixed-guideway transit (light rail, streetcar), buses, shuttles, taxis, cars, bicycles, and pedestrians. System hub stations typically attract ridership from within a 15- to 25-mile radius around the station.

The general planning considerations for hub stations and the typical characteristics of the various modes of access are discussed below. System hub parameters are summarized in Table 2, presented at the end of the chapter.

3.1 Station Characteristics



Mix of Land Uses and Development Densities

Within the first quarter-mile (Transit Core), typical land uses may include:

- Corporate offices
- Government offices
- Regional sports/entertainment
- Convention/conference facilities
- High-rise residential towers

Within the next quarter-mile (Transit Neighborhood), typical land uses may include:

- Mid-high rise office towers

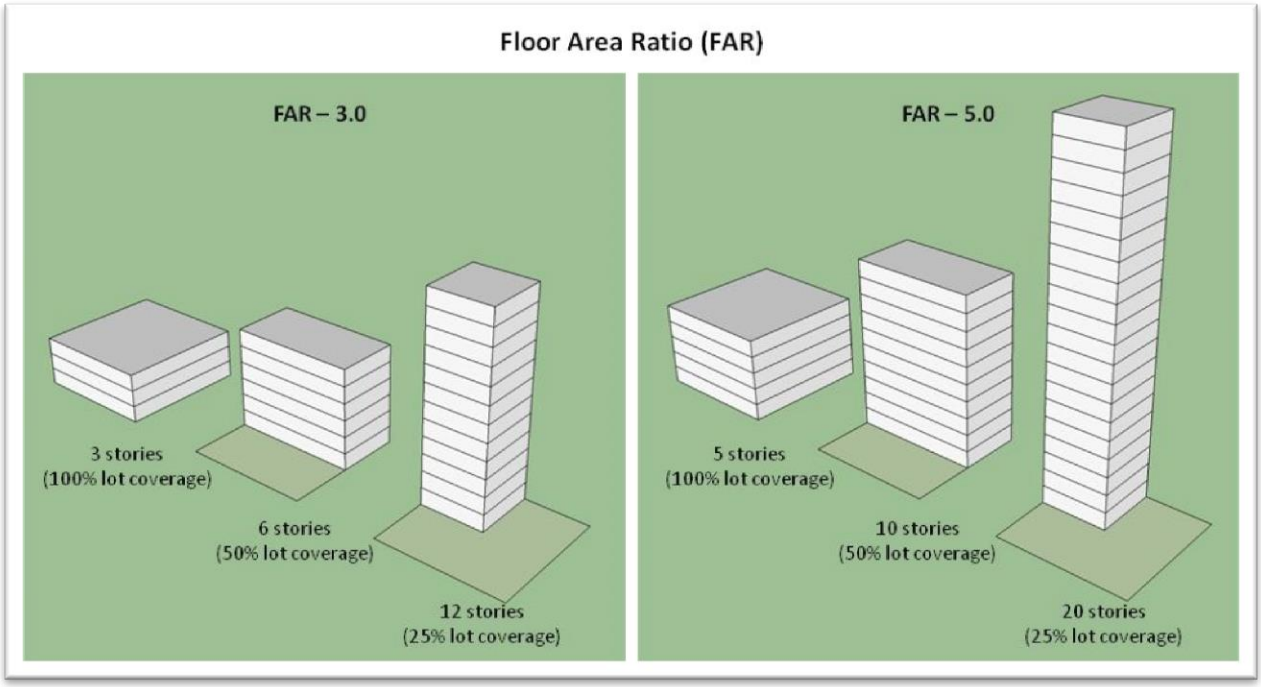
- Mid-high rise residential towers
- Government/educational/employment/research campuses

In the outer half-mile (Transit Supportive Area), typical land uses may include:

- Mid-rise residential towers
- Lofts/condominiums
- Apartments/townhomes
- Office/research park
- Medical facilities
- Lifestyle retail centers
- Other mixed-use developments

Target Floor Area Ratio (FAR)/Building Heights

- 3.0 – 5.0 FAR
- 10 stories or more



Station Footprint and Site Acreage

- Station Footprint – 1.4 to 1.7 acres
- Station Site Acreage – 6 to 8 acres

Parking Requirements

- Multi-story parking structure or parking deck

3.2 Modes of Access

A system hub station will serve corporate and government offices, sports and entertainment venues of regional significance, convention/conference facilities, mid-high rise residential towers, mid-high rise office towers, and educational/research campuses. Areas surrounding a hub station should be walkable and should provide access through a variety of transit and personal transportation modes, to encourage interaction and develop synergies between the different uses. Greatest priority should be given to pedestrian and bicycle connectivity, followed by transit connections. Use of private vehicles to access passenger rail facilities should be discouraged through measures such as provision of limited on-site parking; provision of kiss-and-ride facilities at rail stations in place of park-and ride facilities; and higher parking charges, among others.

General Planning and Design Considerations

- Typical block size: 200’ to 400’ with pedestrian penetration every 200’
- Maximum block perimeter: 1,200’
- Study area reference: existing block sizes
  - Downtown Phoenix: 340’ x 340’
  - Downtown Tucson: 360’ x 300’

Pedestrian and Bicycle Accommodations

- Pedestrian pathways along all streets with shaded sidewalks, buffered from vehicular traffic by landscaping
- Mid-block plazas with pedestrian linkage to streets
- Pedestrian access to transit hubs from within a short (0-1 mile) distance
- Bike lanes and/or paths throughout the station area
- Bicycle access to transit hubs from within a moderate (1-5 mile) distance, which may be on-street, off-street or a combination

Transit Connections

- LRT
  - LRT is a fixed-guideway rail transit that often operates in exclusive right-of-way with stops averaging every one mile, and more frequently, in higher-density activity centers
  - Multiple routes serving regionally-significant activity and employment centers, high-density residential nodes
- Modern Streetcar
  - Modern streetcar is a “lighter LRT” that often operates in mixed traffic in traditional traffic lanes, with stations averaging every half-mile, and more frequently in higher-density activity centers
  - May provide local circulation, as well as commuting functions
- BRT/Express Bus

  - Long distance fixed routes operating in major transportation corridors with stops averaging one to three miles
  - May operate in semi-exclusive right-of-way or mixed traffic
  - Typically operates during peak periods only, or with less frequent mid-day service
- Local Bus
  - All-day, fixed-route local arterial bus service with stops averaging every quarter-mile to half-mile
  - May offer higher frequency during peak periods
  - Accessible buses; articulated where necessary
- Circulator Bus
  - Circulates within activity center and to adjacent neighborhoods
  - Frequent stops (averaging every quarter-mile or less)
  - Provides feeder or distribution service to and from transit centers, activity centers, or rail stations
  - May have multiple routes connecting local activity nodes, parking and rental car facilities in the station district

Vehicular Parking Facilities

  - Multi-story parking structures/decks integrated into mixed-use developments
  - Incorporate rental car agencies and carshare programs

3.3 Prototypical Station Footprint and Station Area Plan

A prototypical station area footprint has been developed for the system hub station, and is presented in Figure 7. The station footprint illustrates the passenger amenities and supporting activity spaces for the system hub station. Figure 7 (as well as subsequent prototypical station area footprints for the other station types) illustrates four rail tracks through the station, which is intended to show the need for both northbound and southbound sidings adjacent to platforms to allow freight trains, as well as passenger trains in skip stop operations to pass as passenger boarding/alighting occurs at stations.

Table 2 provides a summary of the development characteristics for the areas surrounding a system hub station, including land use and activity types, FAR, building heights, development densities, and parking. It is recommended that communities refer to these development characteristics while formulating station area plans for their community. A prototypical station area plan for the system hub station is presented in Figure 8, which illustrates such development characteristics.

Figure 9 illustrates a three-dimensional rendering of the system hub station and the surrounding development using the recommended build-out land uses and densities and includes key considerations, such as:

1. Station is focus of mixed-use activity center
2. Ability to phase-in higher density surrounding development
3. All structured parking, with exception of small short-term surface lot
4. Regional transit hub

Figure 7: System Hub Station Footprint

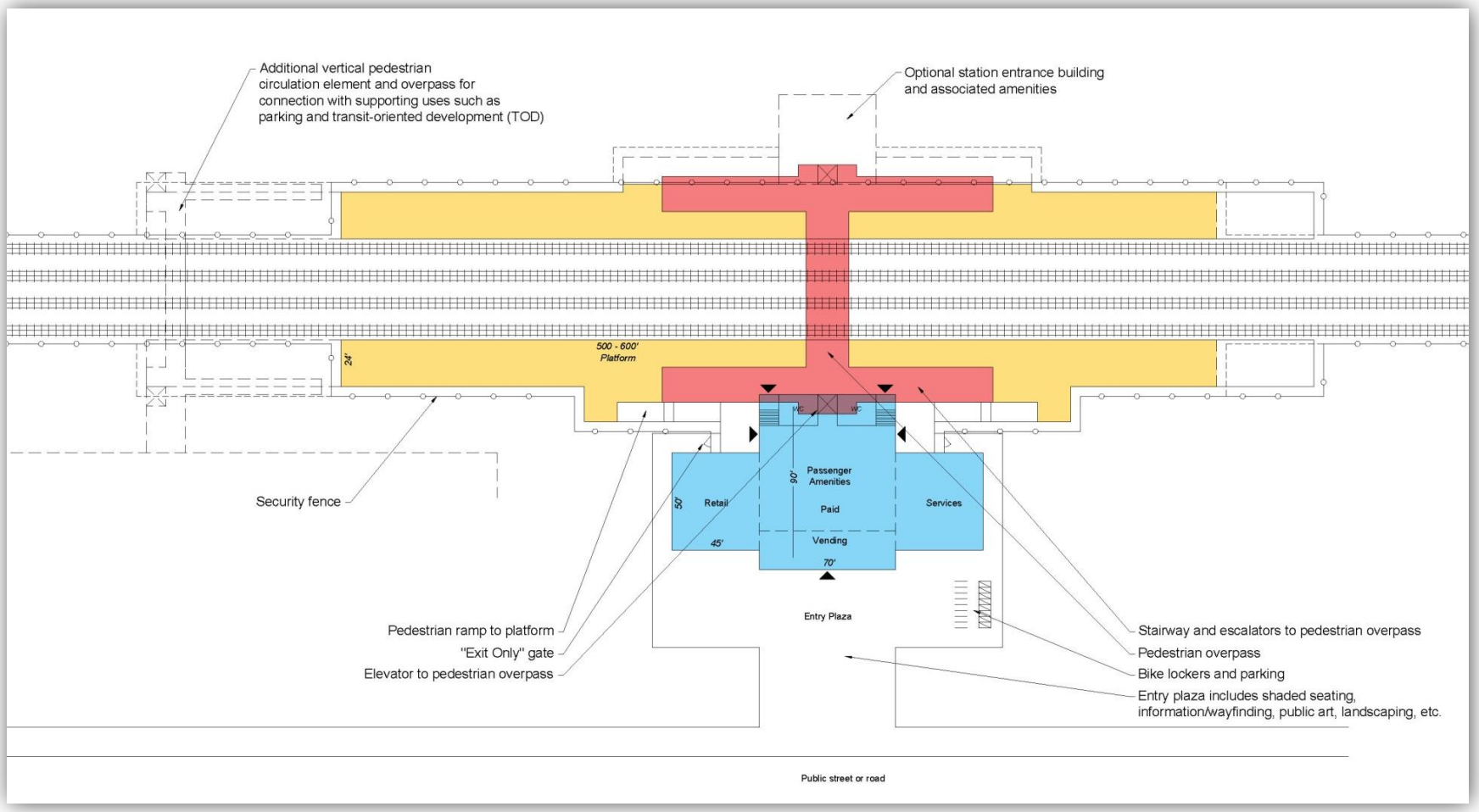
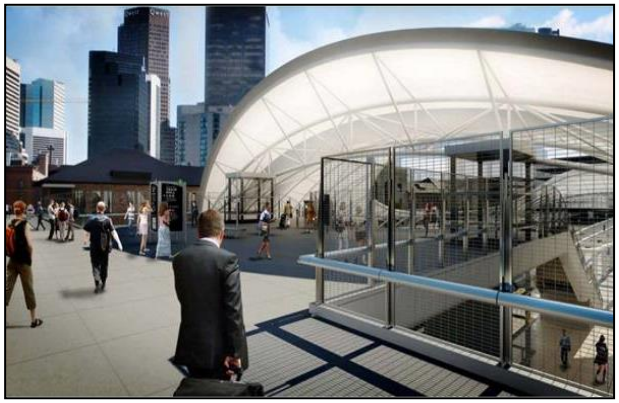


Table 2: System Hub Characteristics



Influence Area Characteristics	Area	Desired Land Use Mix	Typical Land Uses	Typical Building Heights	Average Development Density	Average Residential Density	Parking Types
Transit Core ▪ **1/4 mile radius from station** ▪ **5-minute walk**	125 acres	▪ Up to 75% employment ▪ Up to 35% residential ▪ Up to 10% other	▪ Corporate offices ▪ Government offices ▪ Regional sports/ entertainment ▪ Convention/conference facilities ▪ High-rise residential towers	10 stories or more	3.0 – 5.0 FAR	100+ dwelling units (DU)/acre	▪ Multi-story structure
Transit Neighborhood ▪ **1/2 mile radius from station** ▪ **10-minute walk**	375 acres	▪ Up to 60% employment ▪ Up to 50% residential ▪ Up to 15% other	▪ Mid-high rise office towers ▪ Mid-high rise residential towers ▪ Government/educational/ employment/research campuses	6 stories or more	1.5 – 3.0 FAR	50 - 100 DU/acre	▪ Multi-story structure
Transit Supportive Area ▪ **1 mile radius from station** ▪ **20-minute walk** ▪ **5-minute drive**	1,500 acres	▪ Up to 40% employment ▪ 60% or more residential ▪ 15% or more other	▪ Mid-rise residential towers ▪ Lofts/condominiums ▪ Apartments/townhomes ▪ Office/research park ▪ Medical facilities ▪ Lifestyle retail centers ▪ Other mixed-use developments	4 stories or more	0.5 – 1.5 FAR	25 - 50 DU/acre	▪ Short-term: surface lot ▪ Long-term: parking deck

***Figure 8:** Prototypical Station Area Plan – System Hub Station*

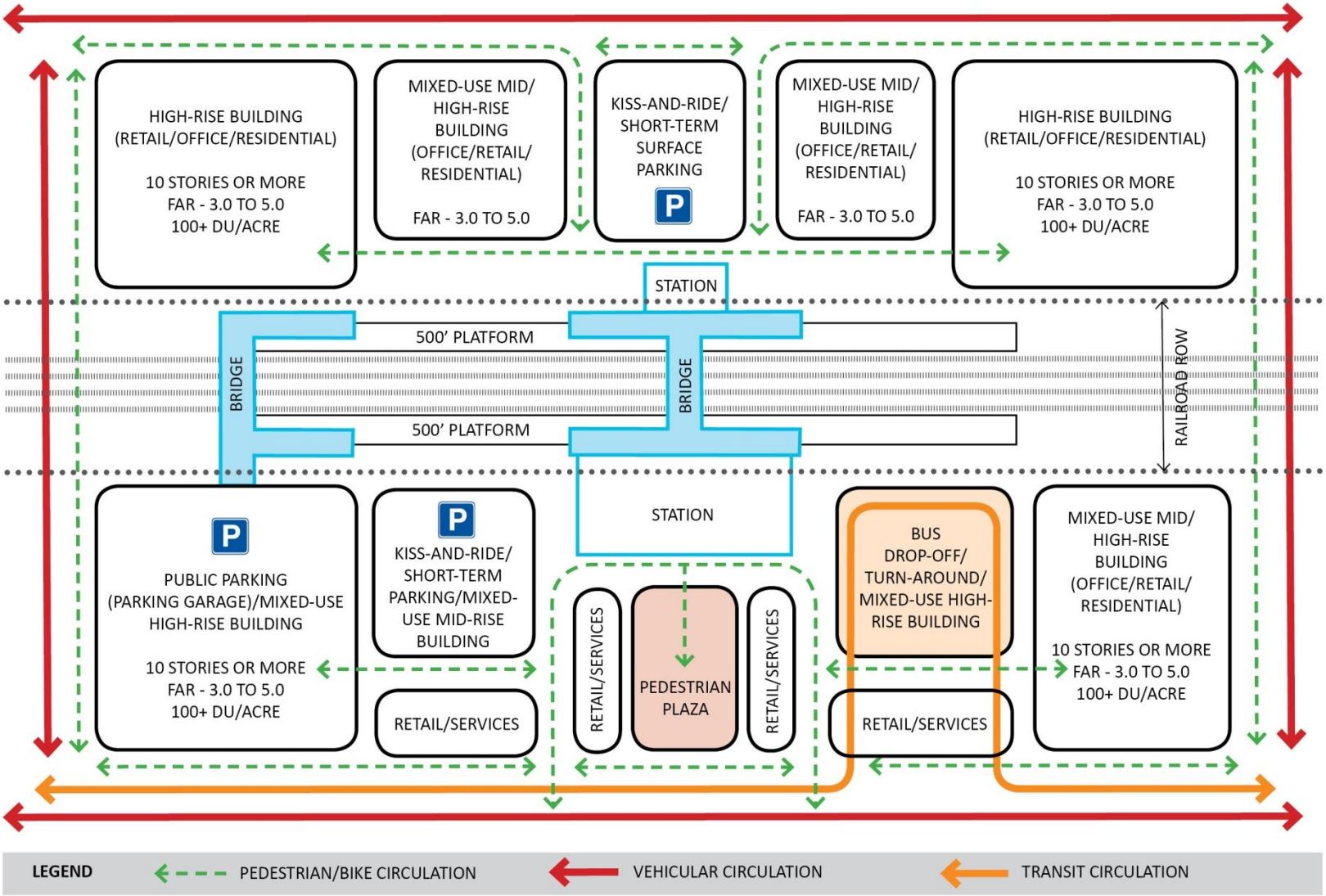


***Figure 9:** Station Area Development Phasing Perspective – System Hub Station*

Initial Development Phase

HUB STATION

Development Phase 1 (Initial)

Development Phase 2

Development Phase 3

Development Phase 4 (Buildout)

Buildout Development

HUB STATION

Chapter 4. Regional Station

A regional station would generally be located at a sub-regional downtown, a town center or a major employment center, characterized by a mix of the following uses, generally at somewhat lower densities and intensities than in system hub locations:

- Medium- to high-density residential and employment
- Mid-rise office and residential towers
- Office/medical/ educational/research campus
- Cultural and entertainment uses
- Supportive retail and services.

Regional stations may be served by both the intercity and commuter rail service. They would serve as commuter hubs for the sub-regions of a metropolitan area, and may be served by multiple transit options, often including fixed-guideway regional transit (LRT, streetcar), high-frequency regional express bus or BRT, as well as local fixed-route bus service. Regional stations may also be served by park-and-ride facilities, usually taking the form of structured parking. In general, they may be less dependent on transit access and more dependent on parking than a system hub. Regional stations typically attract ridership from within a 10- to 15-mile radius around the station.

The general planning considerations for regional stations and the typical characteristics of the various modes of access are discussed below. Regional station parameters are summarized in Table 3, presented at the end of the chapter.

4.1 Station Type Characteristics

Mix of Land Uses and Development Densities

Within the first quarter-mile (Transit Core), typical land uses may include:

- Mid-high rise office towers
- Mid-high rise residential towers
- Government/educational/employment/research/campuses

Within the next quarter-mile (Transit Neighborhood), typical land uses may include:

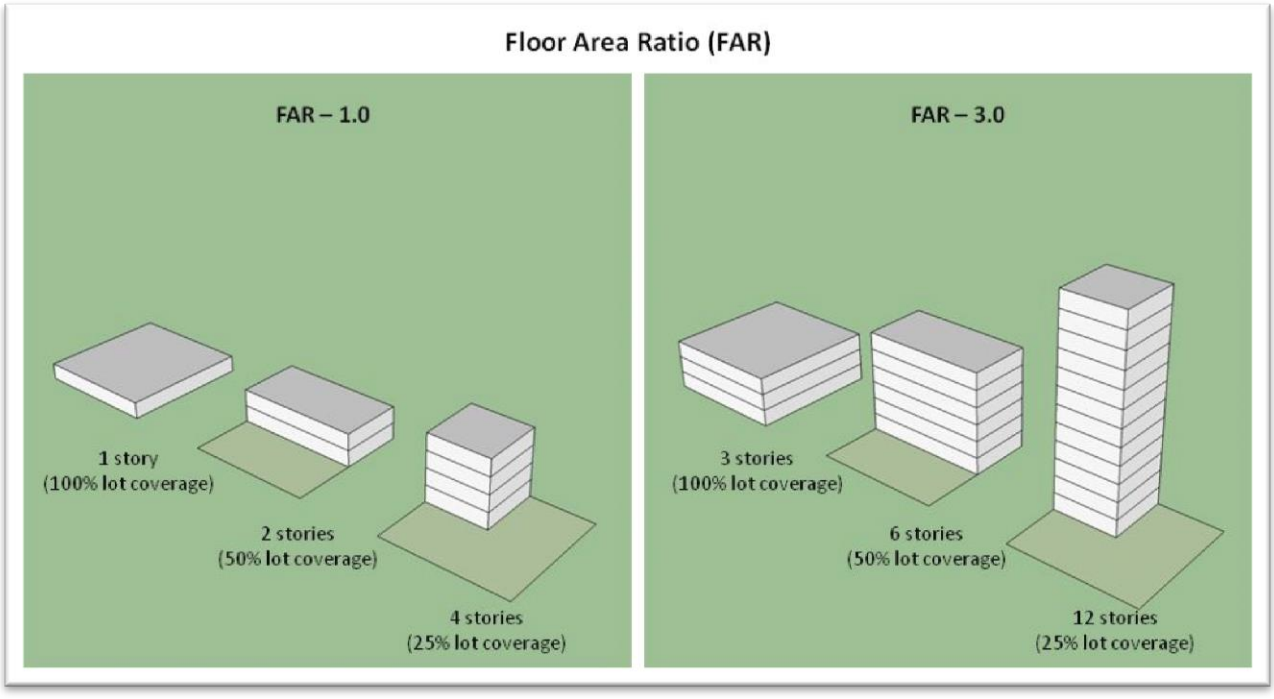
- Mid-rise residential towers
- Lofts/condominiums
- Apartments/townhomes
- Office/research park
- Medical facilities
- Lifestyle retail centers
- Mixed-use developments

In the outer half-mile Transit Supportive Area, typical land uses may include:

- Apartments/townhomes
- Row houses
- Office/research park
- Garden/office buildings
- Multi-use developments

Target FAR/Building Heights

- 1.0 – 3.0 FAR
- 6 stories or more



Station Footprint, and Site Acreage

- Station Footprint – 0.9 to 1.15 acres
- Station Site Acreage – 5 to 6 acres

Parking Requirements

- Multi-story parking structure or parking deck

4.2 Modes of Access

A regional station will serve mid- to high-rise office towers, mid- to high-rise residential towers, government/educational/research campuses, apartments/townhomes, medical facilities, retail centers, and mixed-use developments. Areas surrounding a regional station should be walkable and should provide access through a variety of transit and personal transportation modes, to encourage interaction and develop synergies between the different uses. Greatest priority should be given to pedestrian and bicycle connectivity, followed by transit connections. Use of private vehicles to access passenger rail facilities should be discouraged through measures such as provision of limited on-site parking, provision of kiss-and-ride facilities at rail stations in place of park-and ride facilities, and higher parking charges, among others.

The general planning and design considerations for regional stations, and the typical characteristics of the various modes of access are discussed below.

General Planning and Design Considerations

- Typical block size: 200’ – 400’ with pedestrian penetration every 200’
- Maximum block perimeter: 1,200’
- Study area reference (existing block sizes): Downtown Tempe – 340’ X 370’

Pedestrian and Bicycle Accommodations

- Pedestrian pathways along all streets with shaded sidewalks, buffered from vehicular traffic by landscaping
- Mid-block plazas with pedestrian linkage to streets
- Pedestrian access to transit hubs from within a short (0-1 mile) distance
- Bike lanes and/or paths throughout the station area
- Bicycle access to transit hubs from within a moderate (1-5 mile) distance, which may be on-street, off-street or a combination

Transit Connections

- LRT
  - LRT is a fixed-guideway rail transit that operates in exclusive right-of-way with stops averaging every one mile, and more frequently, in higher-density activity centers
  - Multiple routes serving regionally-significant activity and employment centers, high-density residential nodes

- Modern Streetcar
  - Modern streetcar is a "lighter LRT" that often operates in mixed traffic in traditional traffic lanes, with stations averaging every half-mile, and more frequently in higher-density activity centers
  - May provide local circulation, as well as commuting functions

- BRT/Express Bus
  - Long distance fixed routes operating in major transportation corridors with stops averaging one to three miles
  - May operate in semi-exclusive right-of-way or mixed traffic
  - Typically operates during peak periods only, or with less frequent mid-day service

- Local Bus
  - All-day, fixed-route local arterial bus service with stops averaging every quarter-mile to half-mile
  - May offer higher frequency during peak periods
  - Accessible buses; articulated where necessary

- Circulator Bus
  - Circulates within activity center and to adjacent neighborhoods
  - Frequent stops (averaging every quarter-mile or less)
  - Provides feeder or distribution service to and from transit centers, activity centers, or rail stations
  - May have multiple routes connecting local activity nodes, parking and rental car facilities in the station district

Vehicular Parking Facilities

  - Multi-story parking structures/decks integrated into mixed-use developments
  - Incorporate rental car agencies and carshare programs

4.3 Prototypical Station Footprint and Station Area Plan

A prototypical station area footprint for the regional station type is presented in Figure 10. The station footprint illustrates the passenger amenities and supporting activity spaces for the regional station.

Table 3 provides a summary of the development characteristics for the areas surrounding a regional station, including land use and activity types, FAR, building heights, development densities, and parking. It is recommended that communities refer to these development characteristics while formulating station area plans for their community. A prototypical station area plan for the regional station is presented in Figure 11, which illustrates such development characteristics.

Figure 12 illustrates a three-dimensional rendering of the regional station and the surrounding development using the recommended build-out land uses and densities and includes key considerations, such as:

1. Station is focus of mixed-use activity center
2. Ability to phase-in mid- to high-density surrounding development
3. Most parking structured in garages or two level decks, with small short-term surface lot
4. Regional transit hub

Figure 10: Regional Station Footprint

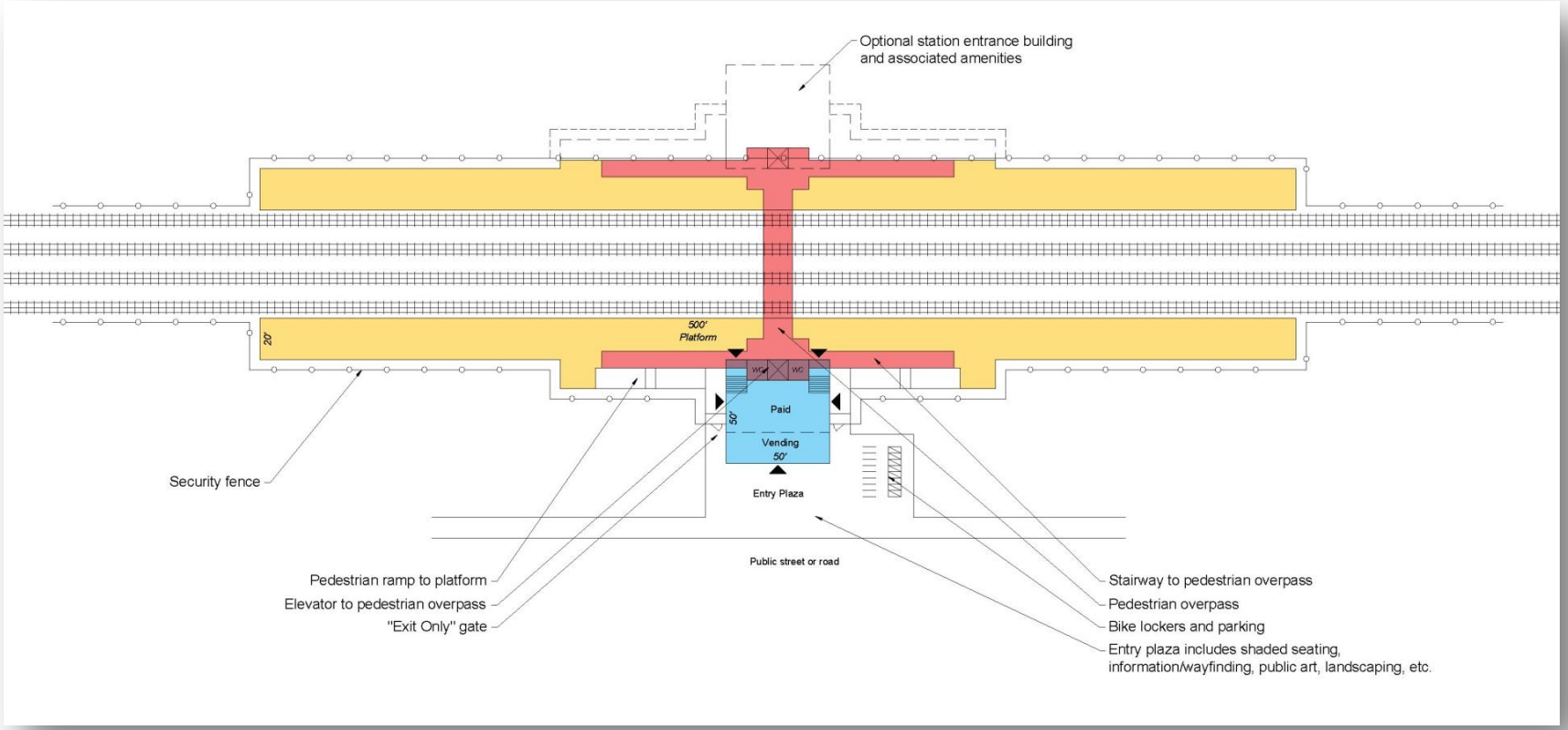


Table 3: Regional Station Characteristics

Influence Area Characteristics	Area	Desired Land Use Mix	Typical Land Uses	Typical Building Heights	Average Development Density	Average Residential Density	Parking Types
Transit Core ▪ **1/4 mile radius from station** ▪ **5-minute walk**	125 acres	▪ Up to 70% employment ▪ Up to 50% residential ▪ Up to 15% other	▪ Mid-high rise office towers ▪ Mid-high rise residential towers ▪ Government/educational/ employment/research campuses	6 stories or more	1.0 – 3.0 FAR	50 - 100 DU/acre	▪ Multi-story structure
Transit Neighborhood ▪ **1/2 mile radius from station** ▪ **10-minute walk**	375 acres	▪ Up to 60% employment ▪ 50% or more residential ▪ 15% or more other	▪ Mid-rise residential towers ▪ Lofts/condominiums ▪ Apartments/townhomes ▪ Office/research park ▪ Medical facilities ▪ Lifestyle retail centers ▪ Mixed-use developments	4 stories or more	0.5 – 1.0 FAR	25 - 50 DU/acre	▪ Multi-story structure or parking deck
Transit Supportive Area ▪ **1 mile radius from station** ▪ **20-minute walk** ▪ **5-minute drive**	1,500 acres	▪ Up to 40% employment ▪ 60% or more residential ▪ 15% or more other	▪ Apartments/townhomes ▪ Row houses ▪ Office/research park ▪ Garden office buildings ▪ Multi-use developments	2 stories or more	0.35 – 0.5 FAR	18 - 25 DU/acre	▪ Long-term: parking deck ▪ Short-term: surface lot

Figure 11: Prototypical Station Area Plan – Regional Station

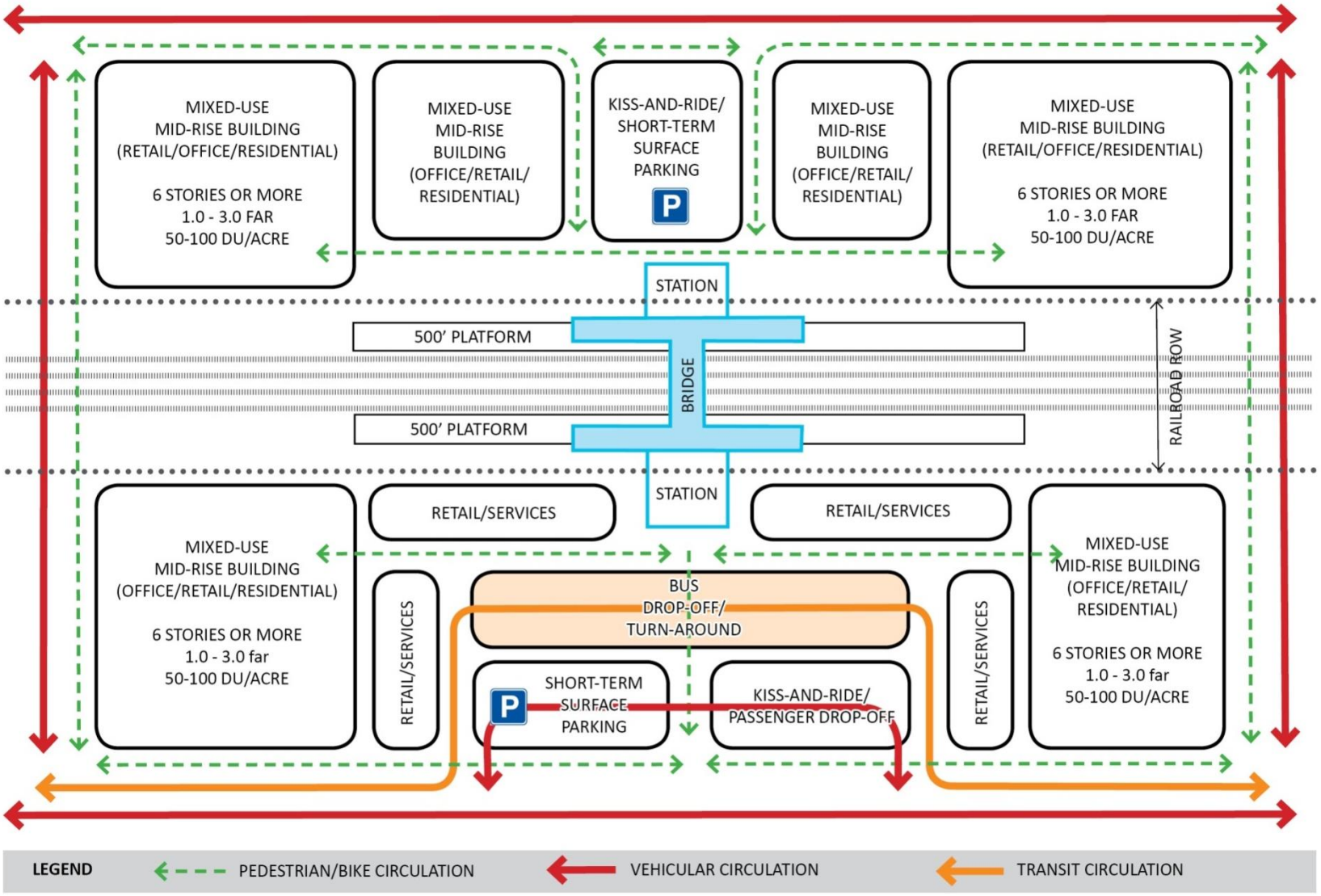
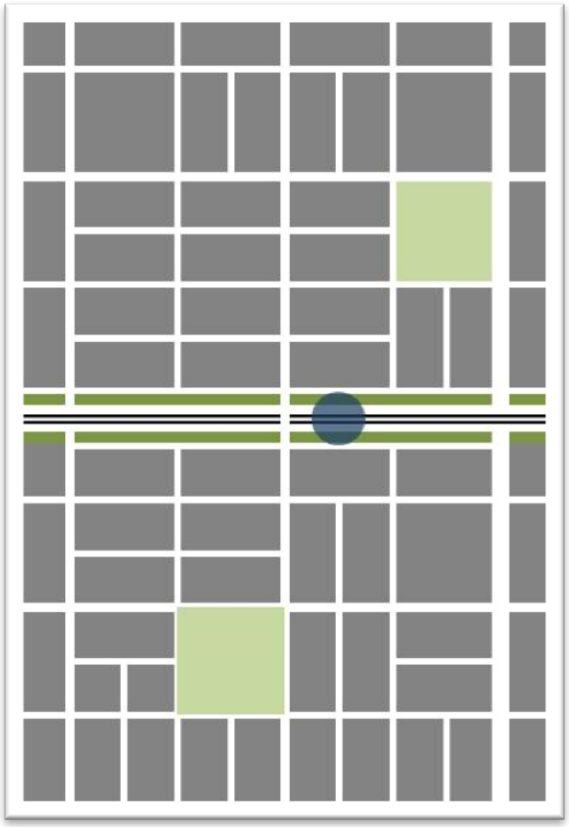


***Figure 12:** Station Area Perspective – Regional Station*

Buildout Development

REGIONAL STATION

Chapter 5. Local Station



A local station would generally be located in a suburban town center, the central activity center of a master planned community or the historic downtown of a rural freestanding community, characterized by a mix of residential, civic, employment, and retail uses (e.g., "Main Street" commercial, garden office buildings), at lower intensities than those around regional stations. They serve as trip generators for commuters; some may serve as attractions as well. Local stations capture inbound and outbound commuters via commuter rail.

Intercity passenger rail typically does not stop at local stations, but may stop at a local station that is strategically located to capture riders from smaller communities between larger metropolitan areas within the Sun Corridor. These stations may, however, be connected to a sub-regional transit network, including downtown circulator routes, fixed-route bus service, and potentially express bus. Local stations are generally supported by park-and-ride facilities. In a suburban setting, local stations typically attract ridership from within a 5- to 20-mile radius around the station. In a rural setting, local stations often attract ridership from within a 20- to 40-mile radius.

The general planning considerations for local stations and the typical characteristics of the various modes of access are discussed below. Local station parameters are summarized in Table 4, presented at the end of the chapter.

5.1 Station Type Characteristics

Mix of Land Uses and Development Densities

Within the first quarter-mile (Transit Core), typical land uses may include:

- Mid-rise residential towers
- Lofts/condominiums

- Apartments/townhouse complexes
- "Main Street" commercial/mixed-use development
- Government service center
- Office/research park

Within the next quarter-mile (Transit Neighborhood), typical land uses may include:

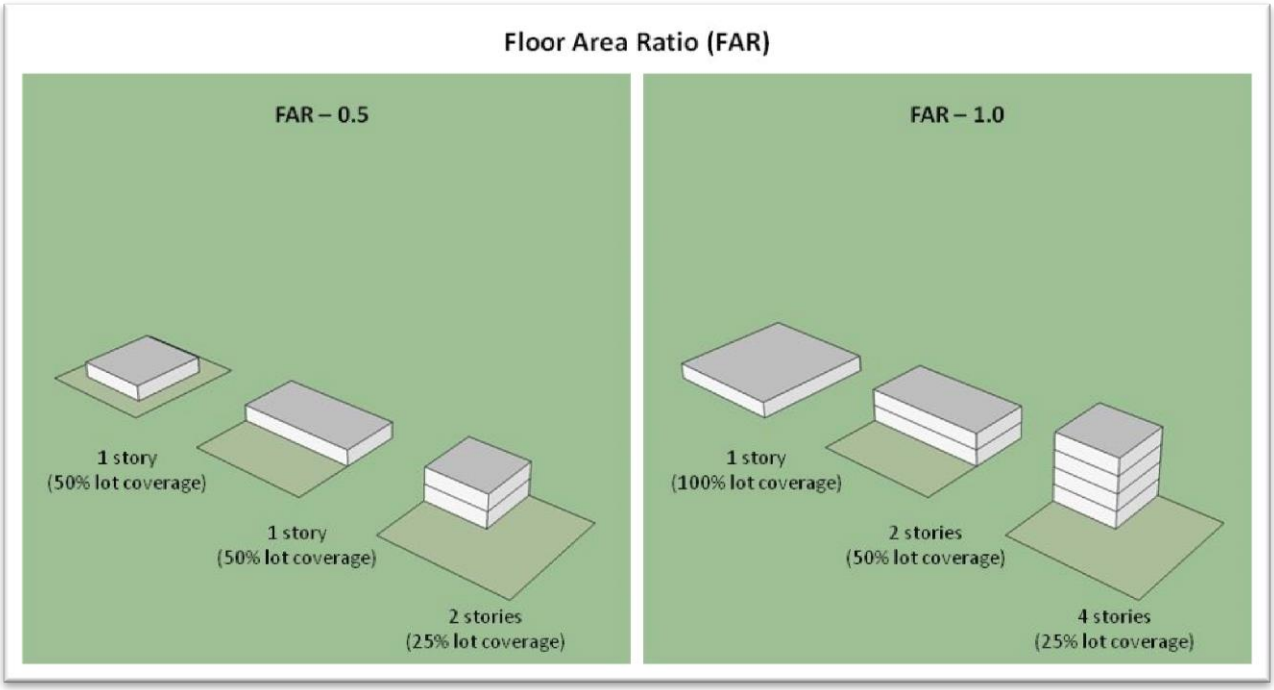
- Apartments/townhomes
- Row houses
- Garden/office buildings
- Multi-use developments

In the outer half-mile (Transit Supportive Area), typical land uses may include:

- Apartments/townhomes
- Patio home/zero lot line residential
- Garden/office buildings
- Multi-use developments

Target FAR/Building Heights

- 0.5 – 1.0 FAR
- 4 stories or more



Station Footprint, and Site Acreage

- Station Footprint – 0.8 to 1.0 acres
- Station Site Acreage – 4 to 5 acres

Parking Requirements

- Surface parking lot, with potential for future structured parking deck, if necessary

5.2 Modes of Access

Unlike a system hub or a regional station, a local station will primarily serve "main street" commercial and mixed-use developments, government service centers, office/research parks, and residential uses such as higher-density apartments, condominiums, townhomes, and row houses. Areas surrounding a local station will, therefore, require shorter distances of connectivity, and put more emphasis on localized transit. Greatest priority should be given to pedestrian and bicycle connectivity and bus transit options that include both locally-oriented service to surrounding neighborhoods and commercial districts such as circulators, as well as limited stop regional transit service to surrounding municipalities. Park-and-ride facilities should be provided to accommodate users who choose to access the passenger rail service through personal vehicles.

The general planning and design considerations for local stations, and the typical characteristics of the various modes of access are discussed below.

General Planning and Design Considerations

- 200' – 400' with pedestrian penetration every 200'
- Maximum block perimeter: 1,200'
- Study area reference (existing block sizes): Downtown Casa Grande – 300' x 300'

Pedestrian and Bicycle Accommodations

- Pedestrian-oriented streets with shaded sidewalks, buffered from vehicular traffic by landscaping
- Mid-block pedestrian linkage
- Pedestrian access to transit hubs from within a short (0-1 mile) distance
- Bike lanes and/or paths throughout the station area
- Bicycle access to transit hubs from within a moderate (1-5 mile) distance, which may be on-street, off-street or a combination

Transit Connections

- BRT/Express Bus
  - Fixed route bus service operating along major highways between communities
  - Limited stop express service between communities
  - Schedule coordination with commuter rail service

- Local Bus
  - All-day, fixed-route bus service along main roads with stops averaging every quarter- to half-mile

  - May offer higher frequency bus service during peak periods

- Circulator Bus
  - Circulates within activity center and adjacent neighborhoods
  - Frequent stops averaging every quarter-mile or less (including flag-down service, to allow stops at undefined locations)
  - Provides feeder or distribution service to and from transit center/rail station

Vehicular Parking Facilities

  - Surface parking lot, with potential for future structured parking deck, if necessary
  - Incorporate car share programs (particularly in communities with significant regional attractions)

5.3 Prototypical Station Footprint and Station Area Plan

A prototypical station area footprint for the local station type is presented in Figure 13. The station footprint illustrates the passenger amenities and supporting activity spaces for the local station.

Table 4 provides a summary of the development characteristics for the areas surrounding a local station, including land use and activity types, FAR, building heights, development densities, and parking. It is recommended that communities refer to these development characteristics while formulating station area plans for their community. A prototypical station area plan for the local station is presented in Figure 14, which illustrates such development characteristics.

Figure 15 illustrates a three-dimensional rendering of the local station and the surrounding development using the recommended build-out land uses and densities and includes key considerations, such as:

1. Station becomes anchor and focal point in mixed-use downtown environment
2. Ability to phase-in modest density immediately surrounding station, including potential structured deck parking
3. Regional transit hub
4. Most parking in surface lots with multi-use potential with adjacent commercial services

Figure 13: Local Station Footprint

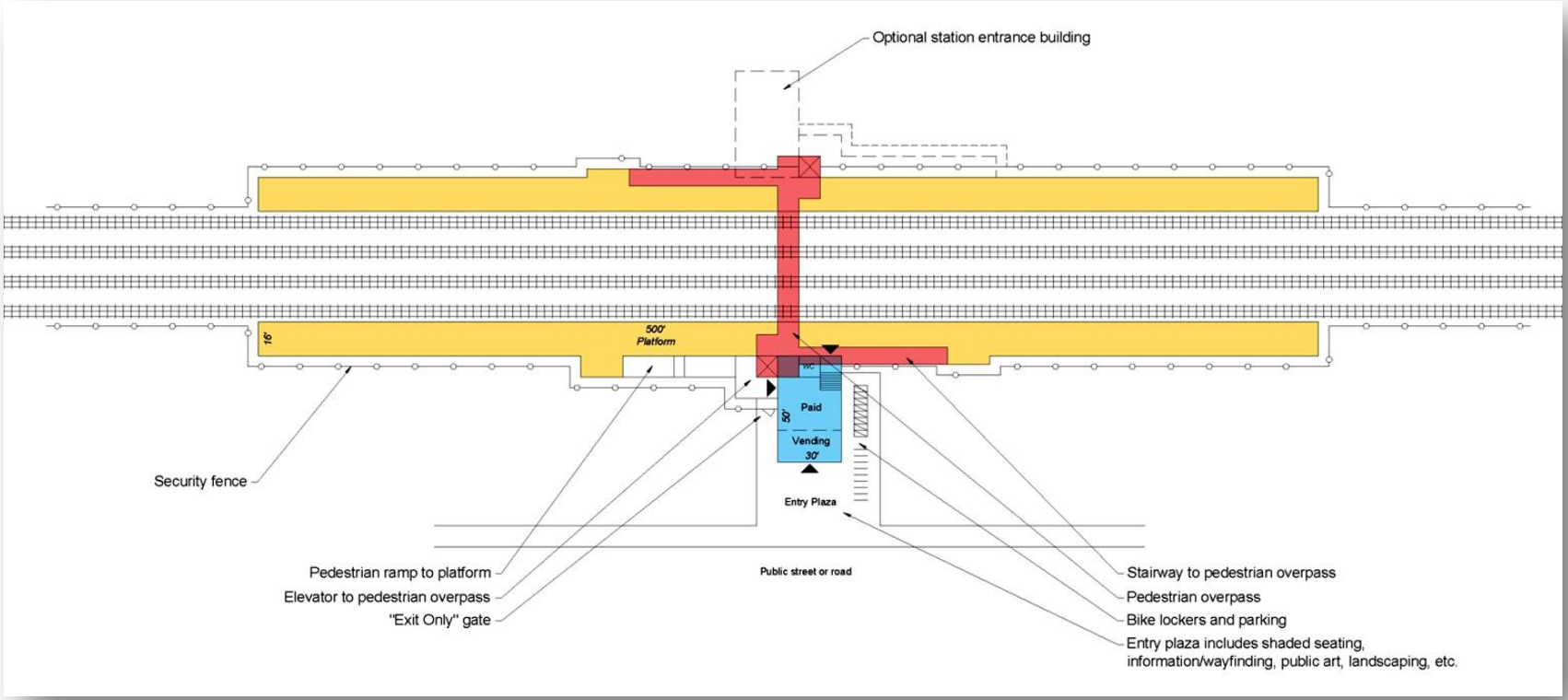


Table 4: Local Station Characteristics

Influence Area Characteristics	Area	Desired Land Use Mix	Typical Land Uses	Typical Building Heights	Average Development Density	Average Residential Density	Parking Types
Transit Core ▪ **1/4 mile radius from station** ▪ **5-minute walk**	125 acres	▪ Up to 60% employment ▪ Up to 50% residential ▪ 15% or more other	▪ Lofts/condominiums ▪ Mid-rise residential towers ▪ Apartment/townhouse complexes ▪ "Main Street" commercial/ mixed-use development ▪ Government service center ▪ Office/research park	4 stories or more	0.5 – 1.0 FAR	25 - 50 DU/acre	▪ Surface lot, with potential to accommodate future structured parking deck
Transit Neighborhood ▪ **1/2 mile radius from station** ▪ **10-minute walk**	375 acres	▪ Up to 30% employment ▪ 50% or more residential ▪ Up to 15% other	▪ Apartments/townhomes ▪ Row houses ▪ Garden office buildings ▪ Multi-use developments	3 stories or more	0.35 – 0.5 FAR	18 - 25 DU/acre	▪ Surface lot
Transit Supportive Area ▪ **1 mile radius from station** ▪ **20-minute walk** ▪ **5-minute drive**	1,500 acres	▪ Up to 30% employment ▪ 80% or more residential ▪ 10% or more other	▪ Apartments/townhomes ▪ Patio home/zero lot line residential ▪ Garden office buildings ▪ Multi-use developments	2 stories or more	0.25 – 0.35 FAR	8 - 18 DU/acre	▪ Surface lot

Figure 14: Prototypical Station Area Plan – Local Station

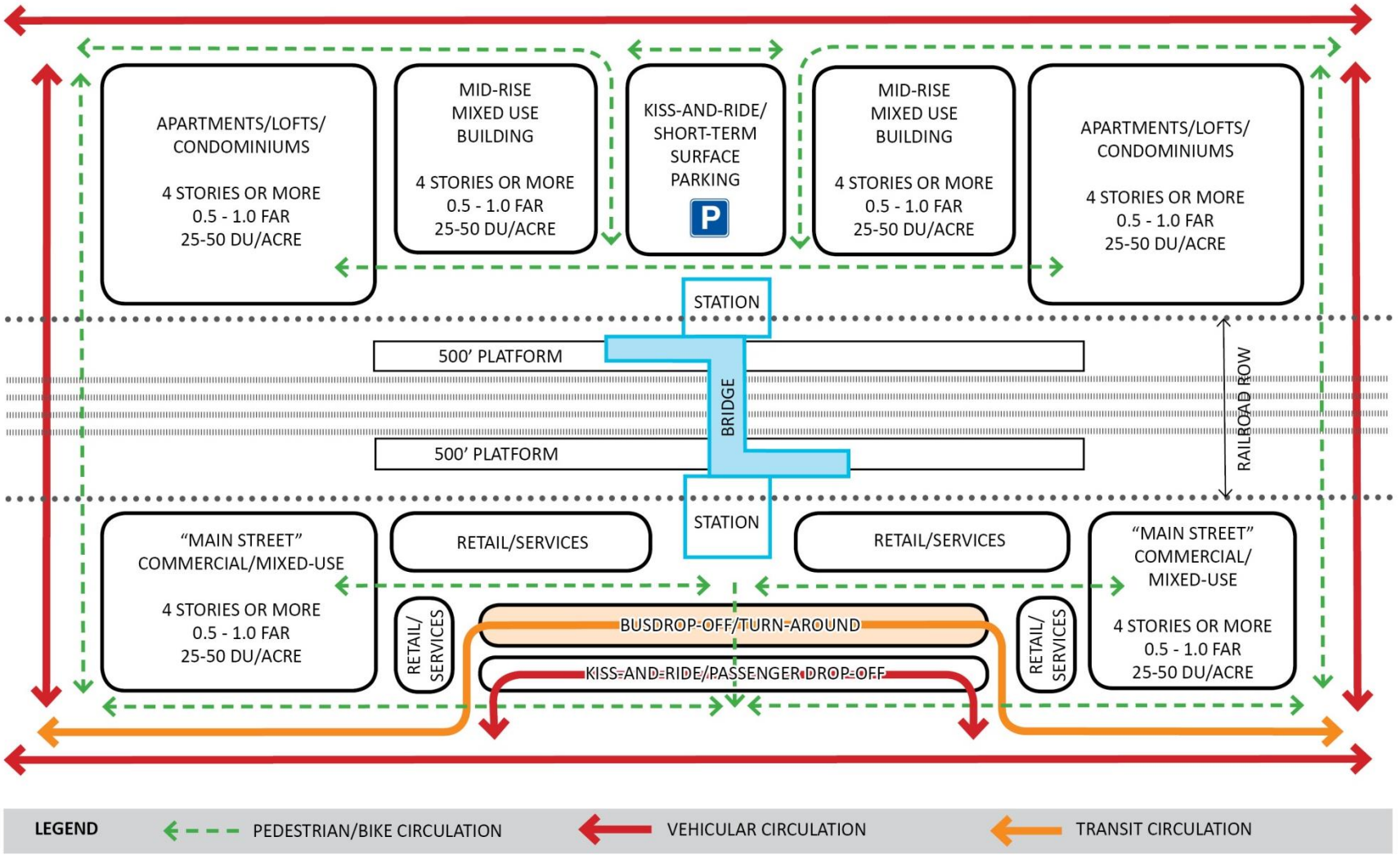


***Figure 15:** Station Area Perspective – Local Station*

Buildout Development

LOCAL STATION

Chapter 6. Transit Emergent Station Location

A transit emergent station would generally be located in the core of a smaller town outside a major metropolitan area, or serve as the mixed-use core activity center of a freestanding master planned community, which is part of a larger regional economy and expects considerable growth to occur in the next 15- to 20-years. The station area would have a mix of retail and service uses, including such residential and civic uses:

- "Main Street" commercial
- Garden office buildings
- Apartments/townhomes
- Row houses

These uses would occur at intensities approaching those around local stations, however, passenger rail service would not yet stop at these stations. "Transit emergent" means that there may currently be little or no local transit service to the activity center, but such service is expected to emerge (e.g., regional transit connections between communities) as local community development activity matures and intensifies, justifying the need for a future local station with commuter rail service.

The general planning considerations for transit emergent station locations and the typical characteristics of the various modes of access are discussed below.

6.1 Station Type Characteristics

Mix of Land Uses and Development Densities

Within the first quarter-mile (Transit Core), typical land uses may include:

- "Main Street" commercial/mixed-use development
- Apartments/townhomes
- Row houses
- Government service center
- Garden/office buildings

Within the next quarter-mile (Transit Neighborhood), typical land uses may include:

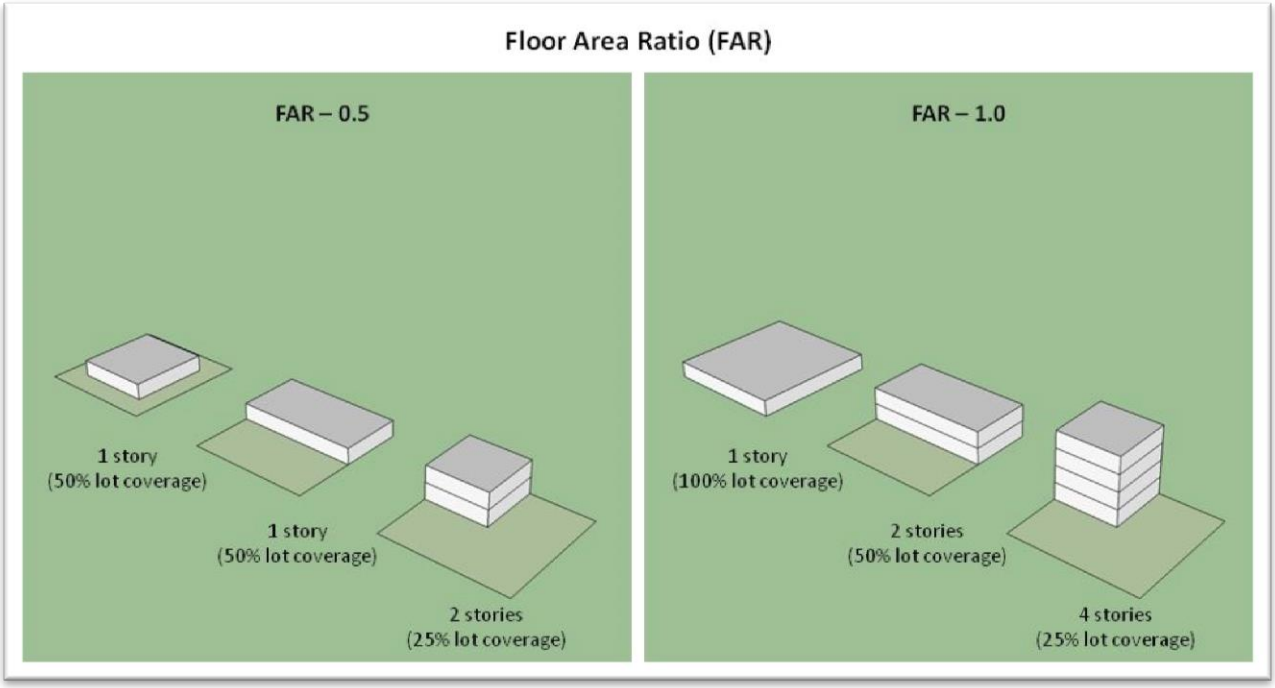
- Apartments/townhomes
- Row houses
- Garden/office buildings
- Multi-use developments

In the outer half-mile (Transit Supportive Area), typical land uses may include:

- Patio home/zero lot line residential
- Row houses
- Garden/office buildings
- Multi-use developments
- Single-family neighborhoods of New Urbanist character

Target FAR/Building Heights

- 0.5 – 1.0 FAR
- 2 stories or more



Parking Requirements

- Surface lot, with potential for future structured parking deck, if necessary

6.2 Modes of Access

Unlike a system hub or a regional station, a transit emergent station location will primarily serve "Main Street" commercial and mixed-use developments, government service centers, office/research parks, and residential uses such as condominiums, apartments, townhomes, and row houses. Areas surrounding a transit emergent station location will, therefore, require shorter distances of connectivity, and should put more emphasis on localized transit. Greatest priority should be given to pedestrian and bicycle connectivity and circulator bus transit options. Park-and-ride facilities should be provided to accommodate users who choose to access the future passenger rail service through personal vehicles.

The general planning and design considerations for transit emergent station locations, and the typical characteristics of the various modes of access are discussed as follows.

General Planning and Design Considerations

- 200' – 400' with pedestrian penetration every 200'
- Maximum block perimeter: 1,200'
- Study area reference (existing block sizes): Downtown Coolidge – 600' x 300'

Pedestrian and Bicycle Connectivity

- Pedestrian-oriented streets with shaded sidewalks, buffered from vehicular traffic by landscaping
- Mid-block pedestrian linkage
- Pedestrian access to transit hubs from within a short (0-1 mile) distance
- Bike lanes and/or paths throughout the station district
- Bicycle access to transit hubs from within a moderate (1-5 mile) distance, which may be on-street, off-street or a combination

Transit Connections

- Express Bus
  - Fixed route bus service operating along major highways between communities
  - Limited stop express service between communities
  - Schedule coordination with commuter rail service

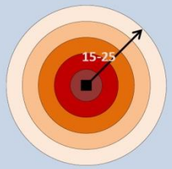
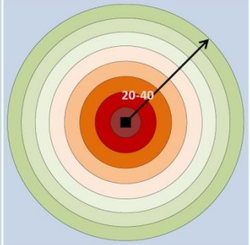
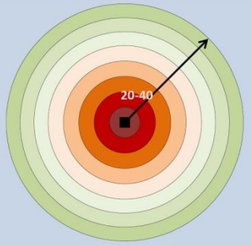
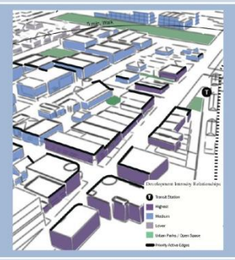
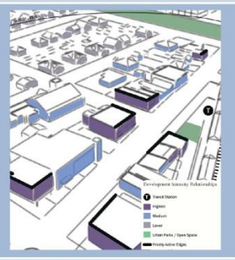
- Local Bus
  - All-day, fixed-route bus service along main roads with stops averaging every quarter- to half-mile
  - May offer higher frequency bus service during peak periods

- Circulator Bus
  - Circulates within activity center and adjacent neighborhoods
  - Frequent stops averaging every quarter-mile or less (including flag-down service, to allow stops at undefined locations)
  - Provides feeder or distribution service to and from transit center/rail station

Vehicular Parking Facilities

- Surface parking lot

Table 5: Supportive Transportation Infrastructure

Passenger Patronage Area					
	15-25 miles	10-15 miles	5-20 miles (Suburban)	20-40 miles (Rural)	20-40 miles
Transit Modes	**System Hub Station**	**Regional Station**	**Local Station**		**Transit Emergent Station**
LRT	• Fixed-guideway rail transit in exclusive right-of-way with stops averaging every 1 mile • Multiple routes serving regionally-significant activity and employment centers, high-density residential nodes	• Fixed-guideway rail transit in exclusive right-of-way with stops averaging every 1 mile • Located along a route serving regionally-significant activity and employment centers, high-density residential nodes			
Modern Streetcar/Hybrid	• "Lighter LRT" operating in mixed traffic with stops averaging 1/2 to 1 mile • May provide local circulation as well as commuting	• "Lighter LRT" operating in mixed traffic with stops averaging 1/2 to 1 mile • May provide local circulation as well as commuting			
BRT/Express Bus	• Fixed routes operating in major transportation corridors with stops averaging 1 to 3 miles • May operate in semi-exclusive right-of-way or mixed traffic • Typically operates during peak periods only	• Fixed routes operating in major transportation corridors with stops averaging 1 to 3 miles • May operate in semi-exclusive right-of-way or mixed traffic • Typically operates during peak periods only	• Fixed route operating along major highways • Limited stop express service between communities • Schedule coordination with intercity and commuter rail		• Fixed route operating along major highways • Limited stop express service between communities • Schedule coordination with commuter rail
Local Bus	• All-day, fixed-route bus service along main roads with stops averaging every 1/4 to 1/2 mile • May offer higher frequency during peak periods • Accessible buses; articulated where necessary	• All-day, fixed-route bus service along main roads with stops averaging every 1/4 to 1/2 mile • May offer higher frequency during peak periods • Accessible buses; articulated where necessary	• All-day, fixed-route bus service along main roads with stops averaging every 1/4 to 1/2 mile • May offer higher frequency during peak periods • Accessible buses		• All-day, fixed-route bus service along main roads with stops averaging every 1/4 to 1/2 mile • May offer higher frequency during peak periods • Accessible buses
Shuttle/ Circulator Bus	• Circulates within activity center and to adjacent neighborhoods • Frequent stops (averaging ¼ mile) • Provides feeder or distribution service to and from transit centers, activity centers, or rail stations • May have multiple routes connecting local activity nodes, parking and rental car facilities in the station district	• Circulates within activity center and to adjacent neighborhoods and communities • Frequent stops (averaging ¼ mile) • Provides feeder or distribution service to and from transit centers, activity centers, or rail stations • May have multiple routes connecting local activity nodes, parking and rental car facilities in the station district	• Circulates within activity center and to adjacent neighborhoods • Frequent stops averaging ¼ mile or less (or flag-down service) • Provides feeder or distribution service to and from transit center/rail station		• Circulates within activity center and to adjacent neighborhoods • Frequent stops averaging 1/4 mile or less (or flag-down service) • Provides feeder or distribution service to and from transit center/rail station
Bikeways	• Bike lanes and/or paths throughout the station district • Provide access to transit hubs from within a moderate (1-5 mile) distance • May be on-street, off-street or a combination	• Bike lanes and/or paths throughout the station district • Provide access to transit hubs from within a moderate (1-5 mile) distance • May be on-street, off-street or a combination	• Bike lanes and/or paths throughout the station district • Provide access to transit hubs from within a moderate (1-5 mile) distance • May be on-street, off-street or a combination		• Bike lanes and/or paths throughout the station district • Provide access to transit hubs from within a moderate (1-5 mile) distance • May be on-street, off-street or a combination
Pedestrian Pathways	• Pedestrian pathways along all streets with shaded sidewalks, buffered from vehicular traffic by landscaping • Mid-block plazas with pedestrian linkage to streets • Provide access to transit hubs from within a short (0-1 mile) distance	• Pedestrian pathways along all streets with shaded sidewalks, buffered from vehicular traffic by landscaping • Mid-block plazas with pedestrian linkage to streets • Provide access to transit hubs from within a short (0-1 mile) distance	• Pedestrian-oriented streets with shaded sidewalks, buffered from vehicular traffic by landscaping • Provide mid-block pedestrian linkage • Provide access to transit hubs from within a short (0-1 mile) distance		• Pedestrian-oriented streets with shaded sidewalks, buffered from vehicular traffic by landscaping • Provide mid-block pedestrian linkage • Provide access to transit hubs from within a short (0-1 mile) distance
Vehicular Parking Facilities	• Multi-story parking structure integrated into mixed-use developments	• Multi-story parking structures	• Structured parking/surface parking lot		• Surface parking lot
Typical Station Area Surrounding Density					
Typical Block Size	200' – 400' with pedestrian penetration every 200' Maximum block perimeter: 1,200' Study area reference: Downtown Phoenix – 340' x 340'	200' – 400' with pedestrian penetration every 200' Maximum block perimeter: 1,200' Study area reference: Downtown Tempe – 340' x 370'	200' – 400' with pedestrian penetration every 200' Maximum block perimeter: 1,200' Study area reference: Downtown Casa Grande – 300' x 300'		200' – 400' with pedestrian penetration every 200' Maximum block perimeter: 1,200' Study area reference: Downtown Coolidge – 600' x 300'

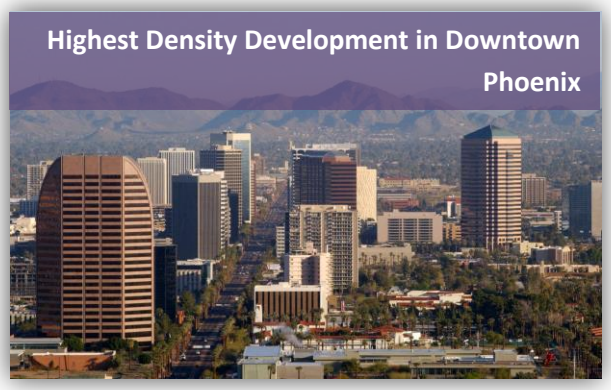
Chapter 7. Station Area Planning Principles

7.1 Land Use

The surrounding mix of land uses plays an important role in making a rail stop a successful station location. Station area plans help communities identify the appropriate scale and type of development that can support both local visions and the regional transit network. Standards for new development or redevelopment should recognize the travel behavior of residents, employees, and others close to transit and appropriately plan for reduced parking demand, local-serving retail/service demand, and the need for pedestrian and bicycle infrastructure.

The following land use planning principles are presented to serve as a basis for communities to develop specific station area plans.

A. Plan for the highest density development to be clustered around the station location or within the immediately adjacent activity center.

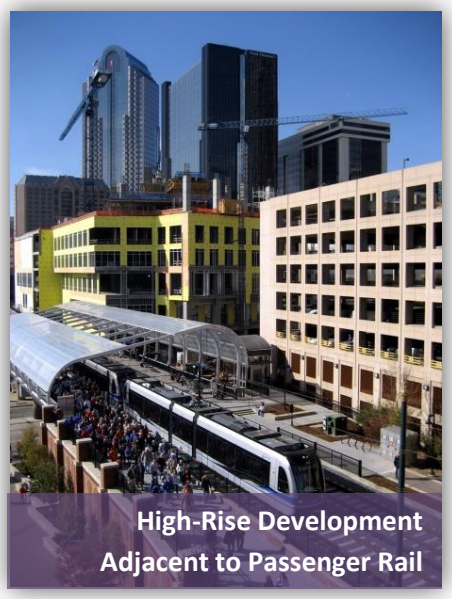


Highest Density Development in Downtown Phoenix

The concentration of medium- to high-density developments (ideally within mixed-use development projects) around station locations fosters transit-oriented development (TOD) and promotes transit ridership and sustainability of the area. These higher density areas should be planned with small block sizes and pedestrian amenities to foster a highly walkable environment. Ideally, uses clustered around the station location should contribute to at least a 16-hour a day activity center (mix of business, commercial, and retail/services open for at least 16 consecutive hours to allow for street activity) (as further elaborated in principle C).

B. Buildings in mixed-use development projects or within a quarter-mile radius of the station location should typically be 6 stories or higher (1.0 to 3.0 FAR; 50-100 DU/acre) for the system hub and regional station type, and 4 stories or higher (0.5 to 1.0 FAR; 25-50 DU/acre) for the local station type.

While land use plans, redevelopment strategies, and zoning codes often specify a range of densities or a maximum density for development, setting minimum densities can help define the character of TOD and help provide flexibility to accommodate changing market demands.



High-Rise Development Adjacent to Passenger Rail

C. The activity center where the rail station is located should offer a variety of land uses that create 16-hour/day activity (e.g., offices, lofts/condominiums, apartments/townhomes, medical facilities, retail/service centers, etc.).

Incorporating a variety of uses in an activity center/core ensures that it remains active for a majority of the 24-hour day and attracts people with diverse interests to conduct business in proximity to transit infrastructure. In addition to creating an active business and social environment, all-day activity increases safety with more "eyes on the street" and enhances the character of the activity center.

Key social services like childcare centers, health clinics and other important destinations should be located close to heavily-used transit stations and hubs to accommodate transit-dependent populations.

Retail Below, Residential Above

D. Employment uses should constitute a descending proportion of the land use within a quarter-mile radius of a rail station as we transition from a hub to a regional to a local station type.

Setting maximum prescribed percentages for land use compositions ensures a balanced activity center with the correct mix of land uses.

Employment Emphasis at Sunnyvale Regional CALTRAIN Station

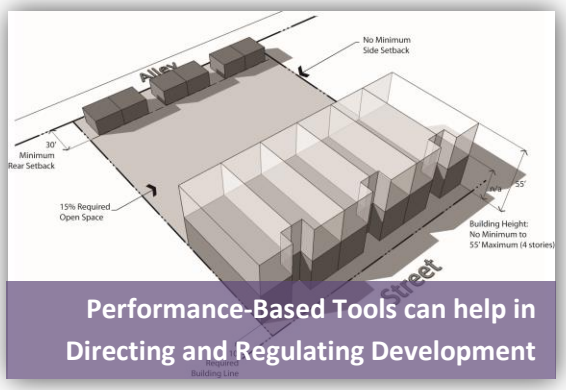
E. Residential uses should constitute an ascending proportion of the land use within a quarter-mile radius of a rail station as we transition from a hub to a regional to a local station type.

Setting maximum prescribed percentages for land use compositions ensures a balanced activity center with the correct mix of land uses.

Residential Emphasis at Local at San Antonio CALTRAIN Station

F. Local municipalities should consider implementing a performance-based tool (e.g., form based development code, regulatory Specific Area Plan, other) to direct and regulate medium- and high-density mixed-use development within the station vicinity.

A regulatory framework that allows for and encourages medium- and high-density mixed-use development is essential for promoting the types of quality development that support a passenger rail station and foster a safe and healthy urban environment.



Performance-Based Tools can help in Directing and Regulating Development

7.2 Mobility and Connectivity

Successful station areas require access to multiple modes of travel, including walking, biking, transit, and vehicular travel. Streets within the station areas should plan for safe mobility for all users, and provide a walkable environment that encourages rail and transit patrons to use pedestrian facilities. This approach to mobility and connectivity may result in trade-offs due to space constraints in close proximity to transit; priority should be given to non-automobile modes whenever possible.

A. The station location for the system hub and regional station types should be served by high-capacity transit (LRT/modern streetcar, express bus/BRT) and higher-frequency local bus, circulator bus systems, and/or a combination thereof. Local station types should be served by local bus and circulator bus systems.

A passenger rail station should be accessible through a range of transit options to make it attractive and convenient for the largest number of potential riders. Availability of convenient intersecting transit connections expands the overall population served by rail, and attracts more rail riders due to the convenience of accessing activity center destinations beyond a reasonable walking distance from the rail station.

Feeder Buses Connect Employment Centers with Commuter Rail Stations in San Francisco

B. Streets, within the station vicinity should provide access for transit vehicles and their operational needs, if applicable (e.g., bus pull-outs, adequate turning radii, pedestrian crosswalks with warning signals).

Streets within station areas should be planned with the ultimate aim of providing easy access to transit services. Narrow travel lanes and slow design speeds, combined with bus pull outs and geometric considerations for easy movement of large transit vehicles such as buses, are desired. Street design should be considered early in the planning process and the advantages weighed against potential impacts such as lower bus operating speeds and higher operating expenses.

Transit Center near Denver Union Station

C. Block sizes within the station vicinity should facilitate a dense street grid pattern such that they support walkability and street side retail/service and business activities (200'- 400' with pedestrian penetration every 200'; maximum block perimeter – 1,200').

Smaller block sizes are often perceived as more easily walkable and accessible to pedestrians. Station areas should be planned with a denser grid street pattern that reduces walking distances and provides easy access to sidewalk retail/services, where applicable.


Smaller Block Sizes Support Walkability and Street-side Business Activities

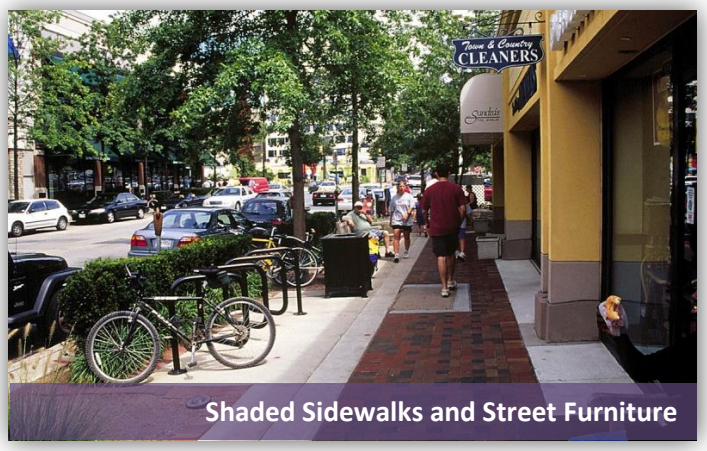
To be walkable, neighborhoods need destinations (schools, grocery stores, jobs) within walking distance. They need a certain density of activity to be functional and active throughout a good portion of the day. They also need to be safe, with good sidewalks, lighting, and buffers for protection from traffic.

D. The inclusion of public spaces is essential to vibrant station activity and should be located appropriate to adjacent uses (e.g., parks and playgrounds in residential areas, public plazas in employment, commercial and campus areas).


Public Plaza in Downtown Phoenix

The provision of open space such as plazas or parks should be an integral consideration in land use planning and urban design scenarios for the station districts. Four key factors for successful public spaces include: they are accessible; people are engaged in activities there; the space is comfortable and has a good image; and it is a sociable place: one where people meet each other and take people when they come to visit. Public art that involves local artists and reflects local history, culture, and aesthetics should be incorporated in public spaces. Open spaces offer the flexibility for accommodating special community events, such as a farmer's market.

E. The station district should incorporate pedestrian-oriented streets with shaded sidewalks and other amenities (e.g., street furniture, pedestrian scale lighting), and should be buffered from vehicular traffic by landscaping.



Shaded Sidewalks and Street Furniture

The sidewalk network within the station area should be buffered from street traffic by landscaping or on-street parking, and should provide pedestrian amenities that are integral to a quality walkable environment, such as shade, lighting, landscaping, benches, etc. Sidewalks should not be placed next to empty building faces. Doors and windows should open onto sidewalks.

7.3 Building Design

Building design (or overall mixed-use project character development) plays an important role in defining the quality and attractiveness of an area and in making it desirable to businesses that depend on pedestrian traffic. Several building design principles can be used for this purpose, with minimal cost implications for property owners or developers. The following key principles have been identified to guide the design of buildings or mixed-use development projects within station areas.

A. Buildings or mixed-use development projects within the station district should be designed to avoid placing blank walls along pedestrian walkways.

Long stretches of blank walls along sidewalks and pedestrian walkways are known to discourage pedestrian activity. Blank walls provide no destinations of activity and minimal lighting. Therefore, they can often be perceived by pedestrians to be unsafe corridors. Buildings within the station district should be designed to avoid placing blank walls along pedestrian facilities and incorporate spaces such as retail and service uses for pedestrians and utilize engaging facades.

Avoid Blank Walls along Sidewalks

B. Off-street parking should be provided behind or adjacent to buildings with well-marked access, or in parking structures lined with other pedestrian-oriented uses, such as retail, services, or residential.

Large surface parking lots in front of buildings (between the building and the street) act as barriers for pedestrian activity. Parking, if required, should be provided behind buildings (with doors and windows opening to the sidewalk, not the parking facility) to make it more attractive for pedestrian access, as well as to create a more engaging sidewalk environment. Parking does not always need to be directly adjacent to the station. Often, local retail can be strengthened if transit riders have to walk along a shopping street to get to and from the station.

Parking Behind or Adjacent to Buildings

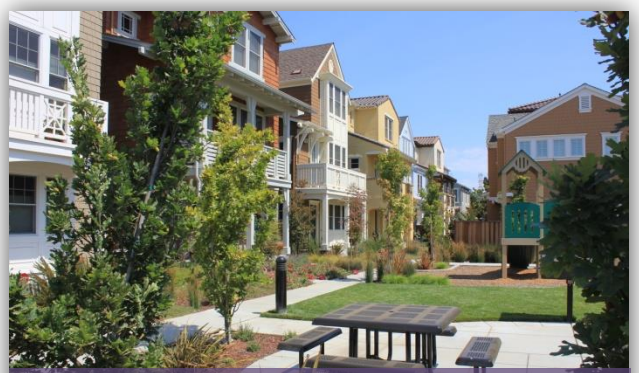
C. Local municipalities should require new and rehabilitated buildings to have pedestrian-friendly uses located along pedestrian pathways.

Retail and other pedestrian-friendly uses located along pedestrian pathways contribute to a high-quality walking environment and are generally attractive to transit users. Such pedestrian-oriented uses allow for more "eyes on the street", increasing safety, community awareness, and community cohesion. In addition, key social services such as childcare centers, health clinics, and service agencies generally provide an economic benefit when located close to heavily-used transit stations and hubs to accommodate transit-dependent populations.

Locate Pedestrian Friendly Uses along Sidewalks

D. Local municipalities should encourage the use of environmentally-sustainable design, creation of public green spaces, and the accommodation of multiple modes of travel within building or mixed-use project developments.

Local municipalities can put into place incentives that encourage the use sustainable design and construction materials, creation of functional public spaces, incorporation of green technologies, and the accommodation of multiple modes of travel through density bonuses, expedited building reviews, and financial assistance. These characteristics generally improve the character of the area.


Encourage Environmentally Sustainable Design

7.4 Housing Affordability

A transit system can only be successful if it is accessible to people from all social and economic backgrounds. The success of a transit-oriented development is, in part, dependant on the availability of housing that is affordable within walking distance of the transit station. The following principles have been identified to incorporate affordable housing in a station area plan.

A. Local municipalities, in partnership with for- and non-profit developers, should ensure that affordable housing is available within walking distance (10-minute walk) from the transit station.

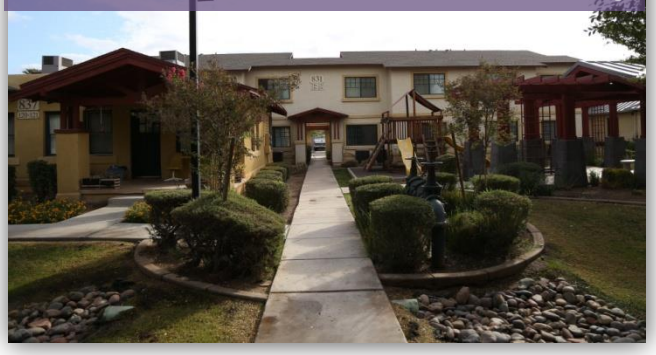
Local municipalities should have policies to encourage affordable housing within the station district. More affordable housing will promote both transit ridership and social equity by lowering the combined cost of housing and transportation is to expand housing opportunities adjacent to transit.

Affordable Housing within Walking Distance

B. It is important to preserve, rehabilitate or replace existing affordable housing over time as new development or redevelopment occurs within station areas.

As station area development or redevelopment occurs, local municipalities should put in place policies for preserving existing affordable housing in the station district, as well as proactively implement policies to encourage development of additional affordable housing opportunities, often as part of other development projects. Maintaining a healthy mix of housing options near transit stations allows communities to produce better economic, social and environmental outcomes for all residents. Mixed-income housing – whether provided within a single project or a neighborhood – enhances community stability and sustainability, and ensures that low-income households are not isolated in concentrations of poverty. Just as important, mixing and mingling of people from diverse backgrounds and experiences promotes innovation by increasing the opportunities for people to share and combine ideas from different perspectives and traditions.

Rehabilitate Existing/Develop New Affordable Housing



C. Local municipalities should provide incentives to encourage the developers of market-rate residential projects to incorporate a proportion of affordable housing within their projects.

Station area plans should set goals for encouraging attainable housing as part of market-rate housing development projects, and proactively implement policies such as inclusionary zoning, density bonuses, expedited review processes, etc. to achieve them. Providing a mix of market-rate and affordable housing units broadens the transit ridership base.

Local Incentives help in Encouraging Affordable Housing as a part of Market-Rate Housing

D. Local municipalities should offer incentives to provide affordable housing as a part of mixed- or multi-use developments.

Local municipalities can use similar incentives to those identified above to encourage the development of affordable housing within mixed- or multi-use developments.

7.5 Parking

Parking facilities within the station area should be planned to complement development projects and support use of rail transit without compromising walkability.

A. On-street parking can serve as a buffer between pedestrians and street traffic and creates a reserve of short-term parking.

Local municipalities should formulate parking policies for the station district that promote short-term on-street parking. On-street parking serves as a buffer between street traffic and pedestrians, and provides easy short-term access to retail/service uses and restaurants.

On-street Parking provides Buffer Between Traffic and Pedestrians

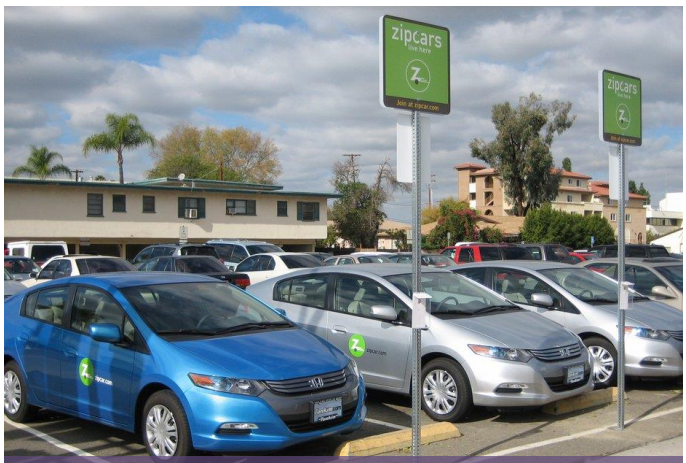
B. Station locations for the system hub and regional station types should incorporate multi-story parking structure(s) with retail/service uses on the ground floor along pedestrian corridors.

The station district should offer structured parking that is easily accessible, but does not always need to be adjacent to the station. Often, local retail and services can be strengthened if transit riders have to walk a short distance along a shopping street to get to and from the station.

Boulder Downtown Parking Structure Wrapped with Retail

C. Parking should be priced to encourage transit use over driving.

Parking within the station district should be provided only as supporting infrastructure, and should be priced to encourage transit use over driving. Innovative parking management strategies such as reduced parking or maximum parking requirements, shared parking, car-sharing, parking assessment and revenue districts should also be considered in station area planning.



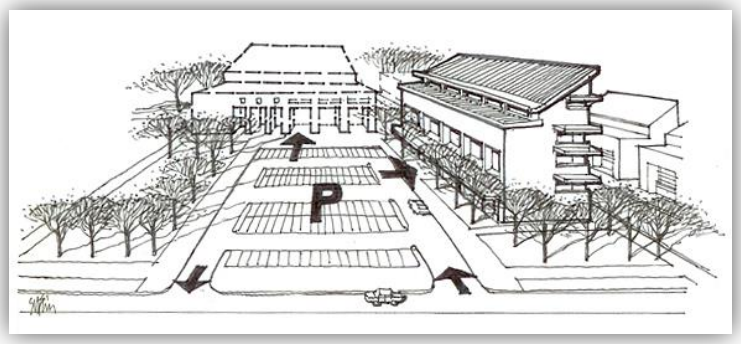
Car-Share Programs Help in Encouraging Transit Use

D. Priority parking spaces should be made available within station districts for multiple occupant and alternative fuel vehicles.

Municipal parking policies should incentivize carpooling and use of alternative fuel vehicles by providing priority parking spaces for residents, employees, and guests within station districts. Such parking spaces could include plug-ins for electric vehicles.

Provide Priority Parking Spaces for Alternative Fuel Vehicles

E. Municipalities should encourage adjacent uses with different peak hours of parking demand to share parking or provide reduced parking to encourage transit use.



Municipal parking policies should incorporate provisions that enable the sharing of parking spaces by adjacent business to maximize the utility of available parking spaces and not to develop unused parking for large portions of the day. An example might be the sharing of parking between an office building (generally occupied most during working hours) and a movie theater complex (generally most occupied during evening hours and on weekends). Additionally, park-and-ride facilities in suburban or rural locations could share parking with nearby commercial properties or public facilities such as libraries or post offices.

Chapter 8. Implementation Program Requirements

8.1 Planning Process for Communities

Planning for intercity and commuter rail stations is new to Arizona communities, with most of the communities having little or no rail transit station planning experience. The planning process must comply with Arizona state statutes and satisfy the requirements of the Growing Smarter framework (created by the Growing smarter Act of 1998) for increased level of public participation, incorporation of new growth-related plan elements, and provision of public hearings for future rezoning actions.

As a guidance tool, a recommended planning process has been outlined that can be used for developing individual station area plans.

Planning Process for Communities

Step 1 – Project Definition

The first step in the station area planning process involves defining the project goals, objectives, and location-specific characteristics. At the beginning of the Tier II analysis of alternatives for the APRCS study, four station types were defined to address the local needs and future vision for the Sun Corridor. A universe of alternative station locations were identified through discussions with partner agencies, stakeholders, counties, and cities/towns. Identified station locations were analyzed for proximity to existing activity centers, surrounding land uses and densities, access to existing or programmed transit services, and ridership potential for commuter and intercity rail services, among other measures. In addition, a "Community Readiness Assessment" was conducted, which served to review each community's plans and policies for transit supportive land uses, mobility, connectivity, building design, housing affordability and parking that are required to support and enable successful station area development. A final set of individual meetings with communities, combined with the other tools mentioned above, helped determine a potential list of station locations. Stakeholder outreach and community involvement should be ongoing, incorporated into each step of the planning process.

With defined station location sites, the project definition stage for cities and towns begins here. This step should have strong emphasis on community and stakeholder involvement. As the ultimate users of the station area, the city/town should lead the planning process for the station area and all key stakeholders should be engaged early on in defining the needs and aspirations of the community as a whole. Additionally, it is important for the municipal government and planning departments to be involved from the beginning since they provide the regulatory background necessary for the success of a station area planning process.

Step 2 – Inventory of Existing Conditions

Step 2 of the planning process involves creating a complete inventory of existing conditions around an identified station location. Mapping of adjacent elements ensures that station designs integrate within the local context and provide continuity in transportation connections.

Elements that should be inventoried as part of this step include:

- Adjacent land uses, zoning, and development densities
- Land use and zoning policies
- Availability of vacant/developable land parcels
- Proximity to community facilities
- Existing roadways (size, elements within the right-of-way) and traffic control devices
- Streetscape policies and aesthetic elements
- Location of parallel and intersecting transit routes (including stops, schedules, and accommodations within street right-of-way)
- Pedestrian and bicycle connections, sidewalks and trails
- Existing bike facilities such as bike lanes, bike racks, etc.
- Existing parking types (e.g., off-street lots, on-street parking stalls, structured parking) and parking capacity

Step 3 –Identification of Opportunities and Constraints and Analysis of Development Potential

Step 3 of the planning process involves investigation and identification of potential opportunities and constraints specific to the station site and vicinity. Analysis of opportunities establishes future development potential for the area, while the constraints help in addressing potential challenges during the station development process.

In addition to ascertaining the future development potential, this stage involves the assessment of future development and capacity needs, such as required parking spaces, public open spaces, etc. An assessment of market and economic conditions is also critical to establish target markets for new and revitalized development activity, and to understand station area elements necessary to attract those markets. Additionally, a market analysis can provide an understanding of reasonable amounts of different land uses to plan for (e.g., what is the saturation of retail uses the station area can withstand?). A study of similar comparable projects or “best practices” in other parts of the country could provide insight into sizing needs, mix of land uses, costs, and other innovative design and implementation techniques used.

Step 4 – Conceptual Station Area Planning

Step 4 of the planning process involves the use of the previous assessment of existing conditions, issues and opportunities, development potential, and market studies to begin defining potential development and revitalization alternatives. This includes concepts for the use of vacant/developable land parcels, ideas for redevelopment of properties, or reuse of underutilized parcels with the ultimate objective of maximizing the utility of the spaces around the station site. This is the stage where agencies and stakeholders should review conceptual designs and provide input regarding consistency with local

planning legislation and guidelines.

Preliminary phasing and conceptual cost estimates are also part of this stage. Since all development around a station site is not expected to occur at the same time, it is important to incorporate the idea of phased development from the conceptual planning stage. Public capital investments may be needed in the initial phases to develop basic infrastructure (e.g., transportation, potable water, sanitary sewer, storm drainage, etc.) and amenities that will in turn attract new development to the area.

Step 5 – Final Station Area Plan

This stage involves refinements to the station area plan concepts leading to the formulation of development alternatives and ultimately the selection and refinement of a final station area plan. The ongoing refinements to conceptual plans typically include identification of site specific program elements, defined spaces, mix of uses, mobility elements, building footprints, etc. The final station area plan includes policies and strategies to encourage identified development types and styles, attract target businesses, and create spaces that encourage transit ridership. The plan also outlines detailed project costs, identifies the funding sources, and lays out development phasing for final implementation.

Step 6 – Community Acceptance and Agency Approvals

Upon completion of a final draft of the station area plan, the station area plan should go through a final vetting and review process prescribed by the city/town, and involve the community, partnering agencies, and all key stakeholders. Any final adjustments to plan details may be made at this stage to ensure that the plan complies with local regulations and meets the desires and needs of the community and stakeholders.

8.2 Public Policy Actions

The following identifies a menu of public policy actions that could be pursued by a city/town to prepare and implement station area plans to guide urban development or redevelopment within station districts around intercity or commuter rail stations. This list is representative and is not meant to be prescriptive, but is intended to provide a "checklist" as to the actions a municipality may want to consider.

1. **Development Policy Considerations**

   A. *General Plan Amendment* – An amendment to the General Plan may be required to:
   - Establish a station district
   - Provide property tax incentives to develop mixed uses
   - Broaden uses permitted under the mixed-use zoning category
   - Facilitate regional revenue sharing to fund pre-development and infrastructure incentives
   - Include an open space strategy for the station area/activity center
   - Promote smaller block sizes; prevent large blocks with similar uses
   - Ensure historic preservation
   - Establish a redevelopment district
   - Encourage more vertical development

- Revise parking standards within station district

B. *Changes to the zoning code* – Communities may require changes to their zoning code to allow mixed-uses; consider Form Based Code (flexible zoning, zero lot lines) within the station district.

C. *TOD Overlay District* – Designation of a TOD overlay district for station area; develop a TOD plan for the station area

D. *Design/Development Guidelines* – Establish design guidelines that encourage mixed uses, include integrated energy practices, promote more vertical development by increasing building heights and allowable densities, and provide development incentives.

E. *Station Area Plan* – Develop a station area plan that locates key public uses in the activity center core, accommodates highest density development in station area core with step-down density moving away from the center, incorporates open space as a key component, and interfaces all modes of transportation with the rail station in a functional and efficient manner. The station area plan will treat the station area and activity center core as one integrated planning area. The plan will also provide appropriate transition between employment and residential uses.

F. *Joint Public Facility Plan* – The community may develop a joint public facility plan in association with the transit authority/agency to guide long-term public investment in the station district.

2. Transportation Policy Considerations

A. *Multimodal Transportation Plan* – A transport agency may be established to facilitate coordinated development of an integrated transportation system. The community will need to develop an integrated multimodal transportation master plan that address pedestrian and bike facilities, rail, public transit, and vehicular traffic needs. The plan may include:

- Multi-use paths
- Open space/trails plan
- Well-designed bike connectivity
- Car share and bike share facilities
- Bike lockers/showers at stations

B. *Transit Connectivity* – The station district should feature an expanded transit system with a variety of public transit options, including high-capacity transit (LRT/modern streetcar) in large communities, and express and local bus systems. Connections between the activity center core, rail station, and adjoining mixed-use, employment and residential uses should be provided through a circulator bus system. A rail station with an integrated transit station is preferred. Bus pull-outs and shelters should be provided. Minimize transit transfers as much as possible; transit connections should go directly to rail station.

C. *Parking Facilities* – Parking facilities should be strategically located and distributed, to avoid under-utilized asphalt islands. Within the station district, parking standards will need to be revised to promote joint/shared parking facilities, reduced parking minimums, promote

vertical parking facilities (multi-story parking decks and garages), and provide on-street parking. Park-and ride facilities may be required. A parking policy may be essential to establish varying rates for short-term and long-term parking. Parking garages could be provided on the edge of mixed-use areas or integrated into those areas to serve multiple purposes.

D. *Rental Cars/Car Sharing Programs* – Rental car agencies and carshare programs should be incorporated into the design of station areas. Explore the feasibility of starting a carshare program, and identify the most desirable location for locating such a service in relationship to the station. Car rental agencies should be located to provide easy access for passengers arriving/departing by rail, while ensuring that the most attractive land around the station is available for active-use developments.

E. *Pedestrian/Street Network* – Revise street standards to provide complete streets (include pedestrian infrastructure, traffic calming measures, bicycle lanes, and bus lanes/pull-outs) throughout the station area, and along major arterial streets. Road diets (lane reduction or road re-channelization to achieve systemic improvements) could be used to accommodate a finer grid pattern (smaller block sizes) and to preserve right-of-way for future development. The station area should feature walkable streets with wider sidewalks, shade and lighting along sidewalks, pedestrian-scale development, and pedestrian connectivity between the station and the activity center core. In addition, the "main street" area should feature enhanced pedestrian streetscape with limited access to vehicular traffic.

F. *Grade Crossings* – Ideally, the local street pattern is aligned parallel to rail corridors to minimize at-grade crossings, however different historical development patterns may exist. Grade separated crossings should be provided to minimize rail/vehicular traffic conflicts, as necessary.

G. *Other Transportation Considerations* – may include:
    - Employee or other special group subsidies for public transportation
    - Establish no whistle zones for trains in the community in coordination with other safety measures

3. Other Considerations

Other considerations for station area development include:

- Promote sustainable practices in all new and rehabilitated construction – solar energy, gray water, green roofs
- Plan for flexibility
- Provide easy connectivity through layering of transportation linkages
- Provide direct highway linkage to station
- Provide affordable housing nearby or integrated into mixed-use developments
- Provide multi-use/greenway trails near major employment areas, and parks near residential areas
- Advance right-of-way preservation to minimize costs and provide development surety
- Implement measures to allow new and rehabilitated development to pay for amenities

in the station area

- Gather political support, and develop "local champions" to provide community leadership in station area planning and development

8.3 Phasing of Public and Private Actions

Formulation of a Station Area Plan is the first of many coordinated steps, both public and private, towards development of a vibrant and attractive transportation node around a passenger rail station. Successful implementation of the plan will require a strong partnership between ADOT, the City, other affected government agencies, property owners, developers, private agencies, community groups, and private citizens. These coordinated efforts will need to be made over several years.

Various public and private actions have been identified, which may be part of an overall development project. However, it should be noted that every development project is different and rarely follows a strictly linear process. The graphic presented with this discussion serves only as a point of reference.

Public Actions

In order to begin the process of implementation of the Station Area Plan, the public agencies will need to work together to develop a regulatory environment suitable for new higher intensity development to occur. This will require working with private property owners and developers to gauge the market demand for various types of development potential within the station area both now and in the future, but will primarily involve decisions and steps to be taken by the public agencies, as illustrated in **Figure 16** on Page 67.

1. ***Prepare a Station Area Plan***
   The City will, in coordination with ADOT, other stakeholder agencies, and community groups, formulate a Station Area Plan that is consistent with the overall goals and objectives of the passenger rail system.
2. ***Incorporate Station Area Plan and Policies into General Plan document***
   The City would need to initiate an update to the existing General Plan to include policies and elements that are fundamental to the implementation of the station area plan. A General Plan update is typically a lengthy process, and hence the City should initiate this effort early on.
3. ***Potentially Designate a Redevelopment District around station***
   The City could identify and designate a redevelopment district around the passenger rail station where it intends to encourage new higher density mixed-use development in the future. In order to designate a redevelopment area, the City must satisfy the following Arizona statutes requirements:
   - One or more slum or blighted areas exist in the station area vicinity
   - The redevelopment of that area or areas is necessary in the interest of the public health, safety, morals or welfare of the residents of the municipality

   The City must ensure that property owners and developers refrain from speculation by delaying redevelopment of their properties.

4. ***Acquire Land for Redevelopment***
   The City could work with property owners to acquire properties within the station district which are candidates for redevelopment and are critical for development of higher intensity uses. ADOT could also potentially acquire land for the rail corridor. The City could work with ADOT to use the remnant parcels from ADOT for future development.
5. ***Incentivize Redevelopment Projects***
   The City could identify policies and incentives to attract developers, encourage property owners to redevelop their properties, and major employers to the area.
6. ***Engage Corporate Attention***
   Corporations can play an influential role in stimulating development around transit. Corporations are increasingly viewing good transit access as a valuable tool for recruiting scarce talent. Engaging corporations in the implementation process can encourage them to locate their offices within the station district, stimulating development of complementary uses around them. An example of corporate engagement is the Transit-Oriented Development associated with Bell South in Downtown Atlanta, where Bell South decided to consolidate 10,500 employees in three centers adjacent or very near to MARTA rapid rail stations, within the City of Atlanta. By design Bell South provided parking only for about half the workforce, with the remaining half expected to use MARTA other transit options. This led to a string of positive spin-off effects with a number of other employers renewing or expanding their commitment to locating jobs at transit-accessible locations.

Private Actions

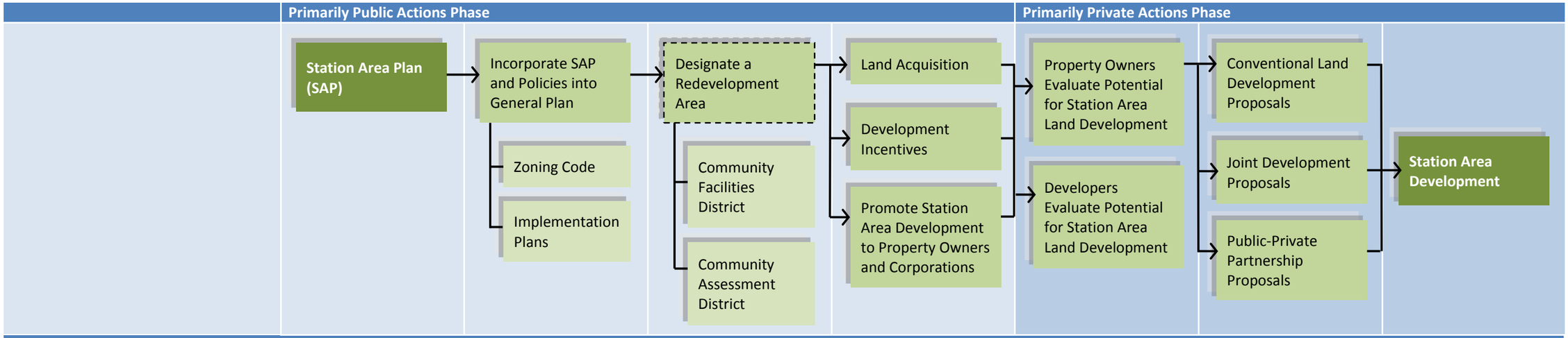
Private property owners, developers, and organizations have a substantial interest at stake in the overall development of a station area. Such stakeholders would typically want to get involved in the planning process from the very beginning to ensure that their interests and concerns are addressed in the plan. During the implementation process, private entities can play an important role in actually bringing new development to the area. In most instances, public efforts for the implementation of the station area plan would be unsuccessful in the absence of interest from private entities.

1. ***Private institutions could promote station area development***
   Private entities, such as the Urban Land Institute, Valley Forward, or Imagine Greater Tucson, may promote station area development through their planning efforts. Such entities may utilize national level resources from organizations, such as the Center for Transit Oriented Development, and Institute for Transportation & Development Policy.
2. ***Property owners seek redevelopment of their property***
   In anticipation of increased activity surrounding the passenger rail station, private property owners may plan development in coordination with the City consistent with the station area plan. This may include market studies, and conceptual site planning for their properties.
3. ***Developers draw plans for new development projects***
   Developers may plan development in coordination with the City consistent with the station area plan. This may include market studies, and conceptual site planning for their properties. The City

may offer incentives to developers for such projects. Municipal incentives for new developments can help in offsetting costs that act as deterrents for developers.

4. ***Approach the City with proposals for Joint Development***
   Joint development is the primary value capture mechanism transit agencies/rail authorities commonly use. It is generally a real estate development project that involves coordination among multiple public and private parties to develop sites near rail transit, usually on publicly-owned land. Typically the transit agency/rail authority and the private developer will agree to share costs of and revenue from the project.
5. ***Use Public-Private Partnerships to plan and construct major development projects and associated key public infrastructure***
   Developers or investors may approach the City with proposals for developing large mixed-use, residential or employment projects through a public-private partnership arrangement. In such situations, the private entity often provides a portion of the capital to finance the project and collects an agreed upon portion of the revenue generated by the project, and the public agency may provide free or low-cost land, access to infrastructure or other incentives for project development. The public sector may also share in the revenue generated by the project.

Figure 16: Public and Private Actions for Station Area Development



Public Entities							
Arizona Department of Transportation	Participate in Planning	Supportive Role	Supportive Role	Lead land acquisition for Rail Transit ROW	Supportive/Advisory Role	Supportive/Advisory Role (Potential Participation)	Supportive/Advisory Role
Host Municipalities	Lead preparation of Station Area Plan	Lead General Plan amendment process	Lead designation of Redevelopment Area or other funding districts	Lead land acquisition for TOD	Supportive/Advisory Role	Sponsoring/Permitting Agency	Sponsoring Agency/ Permitting Agency
Other Affected Agencies[1]	Participate in Planning	Technical Support	Technical Support	Advisory role	Supportive/Advisory Role	Supportive/Advisory Role (Potential Participation)	Supportive/Advisory Role
Private Entities							
Property Owners	Participate in Planning	Stakeholder	Provide feedback, issues/priorities concerning property	Stakeholder	Lead Evaluation of Land Development Potential	Lead preparation of Land Development Proposals	Land Development, Partner with others (as appropriate)
Developers	Participate in Planning	Stakeholder	Provide feedback, issues/priorities concerning property	Stakeholder	Lead Evaluation of Land Development Potential	Lead preparation of Land Development Proposals	Land Development, Partner with others (as appropriate)
Community Betterment Organizations[2]	Participate in Planning	Stakeholder	Provide feedback, issues/priorities concerning property	Stakeholder	Marketing/Promotion, Economic Development	Supportive/Advisory Role	Marketing/Promotion, Economic Development
Community Groups[3]	Participate in Planning	Stakeholder	Provide feedback, issues/priorities concerning property	Stakeholder	Stakeholder	Stakeholder	Stakeholder
Public-at-Large	Participate in Planning	Stakeholder	Provide feedback, issues/priorities concerning property	Stakeholder	Stakeholder	Stakeholder	Stakeholder

[1] Includes state and local agencies, such as the Department of Housing, Commerce Authority, MAG, PAG, CAG, Counties, etc.
[2] Includes Urban Land Institute, Valley Forward, Imagine Greater Tucson, etc.
[3] Includes Neighborhood Organizations, RWAs, etc.

8.4 Roles and Responsibilities

A collaborative approach should be adopted throughout the station area planning and development process, involving the key agencies and stakeholders, to ensure that the development around the station area meets the community's vision and aspirations for the future. At a minimum, the planning process should involve the following key partner agencies:

Table 6: Partnering Agencies and Their Roles

Partnering Agency/Stakeholder		Role
Federal Agencies		
1.	Federal Railroad Administration (FRA)	Oversight and Funding/Advisory
2.	Federal Transit Administration (FTA)	Oversight and Funding/Advisory
3.	Federal Highway Administration (FHWA)	Advisory/Right-of-Way
State, Regional and Private Entities		
1.	Arizona Department of Transportation (1)	State Transportation Regulatory Authority
2.	Arizona Department of Housing	Advisory/Affordable Housing Incentives
3.	Arizona Department of Environmental Quality	Advisory/Regulatory Authority
4.	Arizona Game and Fish Department	Advisory
5.	Arizona State Land Department	Advisory/Land Resource Incentives
6.	Arizona Commerce Authority	Advisory/ Economic Incentives
7.	Maricopa Association of Governments (1)	Planning/Jurisdictional Support
8.	Pima Association of Governments (1)	Planning/Jurisdictional Support
9.	Central Arizona Governments	Planning/Jurisdictional Support
10.	Sun Corridor Metropolitan Planning Org. (1)	Planning/Jurisdictional Support
11.	Maricopa County	Planning/Jurisdictional Support
12.	Pinal County	Planning/Jurisdictional Support
13.	Pima County	Planning/Jurisdictional Support
14.	Union Pacific Railroad (1)	Private Entity/Transportation Stakeholder
15.	BNSF Railway (1)	Private Entity/ Transportation Stakeholder
Municipal Departments		
1.	Planning and Community Development	Planning, Permitting and Implementation
2.	Transportation/Transit Planning	Roadway and Transit Facilities Planning and Implementation
3.	Economic Development	Economic Incentives
4.	Public Works Department	Public Facilities Construction Programming and Implementation

(1) At this time, no particular entity has been identified to prepare final design, construct and implement commuter or intercity rail within the Sun Corridor. Such activities could be undertaken in the future by some combination of state and regional agencies, potentially in partnership with the private sector.

8.5 Potential Incentives for Infill, Revitalization, and Redevelopment

Through the "Community Readiness Assessments", communities throughout the Tucson to Phoenix corridor have demonstrated that there are opportunities for infill development; revitalization of activity centers, historic downtowns and town centers; and redevelopment of properties within otherwise vibrant activity nodes. Various incentives are available which can be used to incentivize the location of new development or redevelopment in these areas. A few such potential incentives have been discussed in this chapter.

8.5.1 Public Financing for Site Acquisition and Consolidation, Infrastructure, Parking and Pedestrian/Streetscape Amenities

Most public agencies are experiencing severe fiscal constraints at this time. In a time like this, communities are looking for ways to make the best use of local government revenue, such a property and sales taxes, and generate new revenue to fund TOD infrastructure. A key step in creating a TOD infrastructure financing strategy is to evaluate which tool will work best for a particular project or in a particular development context.

8.5.2 Historically-Used Funding Tools

Density Bonus

A density bonus is an incentive-based tool that permits developers to increase the maximum allowable development on a property in exchange for helping the community achieve public policy goals. Increasing development density may allow for increases in developed square footage or increases in the number of developed residential units. This tool works best in areas where growth pressures are strong and land availability limited or when incentives for attaining the goals outweigh alternative development options.

Density bonuses can help encourage lower cost market-rate housing in areas with high land costs. Density bonus programs encourage developers to create affordable dwelling units in areas where the local government has identified a shortage of housing affordable to low- and moderate-income households. Density bonuses can also be used to entice development to specific neighborhoods or zones, such as transit-oriented development in station areas or housing in urban centers, or provide amenities, including open space or transit and non motorized transportation features.

Applicability: Affordable housing, housing for people with special needs, childcare facilities, structured/underground parking, open spaces and public plazas, landscaping, preservation of historic

structures, guide development to preferred location

Streamlined Development Process and Permitting

Delays during any stage in the development process add to the final costs of new development. Reducing the costs incurred by developers during the development review process makes locating in a community more attractive to developers. Expedited permitting is a cost-efficient and very effective way of reducing developer costs. Fast-tracking review and permitting of development projects reduces developer costs at no-cost to local jurisdictions.

Applicability: Affordable housing development, preservation of historic structures, guide development to preferred location

Community Development Block Grant (CDBG) Program

The CDBG Program, administered by the U.S. Department of Housing and Urban Development (HUD), is intended to ensure decent affordable housing, community services to vulnerable neighborhoods, and job creation and retention of businesses. CDBG provides annual formula grants to local government agencies and states in several program areas. This tool is not focused on TOD infrastructure but could be used in combination with other funding and financing tools for a larger TOD project that meets CDBG criteria.

Applicability: Affordable housing development, neighborhood revitalization and housing rehabilitation and infrastructure development, streetscape projects

Economic Development Administration (EDA) Grants

The EDA, an agency in the U.S. Department of Commerce, provides grants to economically distressed communities to generate new employment, help retain existing jobs, and stimulate industrial and commercial growth. Some EDA funding is reserved for public works projects, which can include a wide range of infrastructure types provided the project has an economic development purpose. Local governments apply directly to the EDA when grants are available.

Applicability: Small business loans and grants, site acquisition and preparation for economic development, infrastructure to support economic development

Assessment District/Business Improvement District

An Assessment District (sometimes known as a Business Improvement District) is a tool through which municipal governments exact revenues from property owners based on the market value of the properties within an established district. The assessment is made up of two components – the improvement or building value, and the land or site value. Assessment districts can be formed in undeveloped areas to build roads and install water and sewer infrastructure, or they might be formed in

established commercial districts (Business Improvement District) to finance new public improvements.

Applicability: Special district infrastructure, streetscape or joint use parking projects, district maintenance, marketing/promotions, security, site acquisition and consolidation

Community Facilities District (CFD)

A Community Facilities District is an area specially designated by a municipality to issue general obligation bonds, special assessment bonds and revenue bonds or any combination thereof, that are repaid with a mechanism that taxes (or assesses) only the lands directly benefitted by the new infrastructure. CFDs are formed to finance the construction or acquisition of certain designated capital facilities (infrastructure) and/or to finance public services by levying special taxes included in the CFD. This allows much needed community development which would otherwise be unfeasible due to the prohibitive costs imposed by extensive infrastructure burdens. CFD taxes are collected as direct levies on property tax bills of included parcels.

Applicability: Water and sewer projects, police and fire facilities (and sites), public buildings (and sites), flood control and drainage projects, street facilities/roadways, public parking structures, landscaping, lighting and traffic control, parks and recreational facilities, schools and school sites, pedestrian malls, enhanced public services

Designation of a Redevelopment Area under Arizona Statute

Arizona redevelopment law is bound in Arizona Revised Statutes (ARS) 36-1471, “Slum Clearance and Redevelopment.” State statutes recognize the need for redevelopment of blighted areas and allows for the development of a “slum clearance and redevelopment commission”, or form of redevelopment committee. Redevelopment initiatives require the preparation of a redevelopment plan – its contents prescribed in the statute – and its adoption into the municipal general plan. Then, a municipality may begin to acquire property for redevelopment purposes and fund redevelopment initiatives.

“Slum and blight” is define by an area in which there is significant evidence of buildings or other improvements (e.g., streets, sidewalks, lighting) which, because of age or other reasons, have deteriorated, are inadequate, unsafe, impair sound growth, and retard economic development. Examples of “blight” include inadequate street layout, substandard lotting, and the existence of many owners, making parcel assembly difficult for development. Examples of “slum” include unsafe structural conditions (fire hazard), crime, unsanitary sewer conditions, and the existence of water, soils, and noise pollution.

While many options exist to finance redevelopment projects, public projects must be consistent with other public facility project funding, which requires the approval of the voters through the electoral process.

Applicability: May be used for encouraging and promoting new development or redevelopment within

the station district, central business district, or activity center if it qualifies as a redevelopment area

Developer Fees and Exactions

(Impact fees, system development charges, facility fees, infrastructure reimbursement agreements, developer exactions)

Development impact fees and exactions are charges assessed on new development to defray the cost to the jurisdiction of expanding and extending public services to the development. The fees are generally collected once and are used on a pay-as-you-go basis to offset the cost of providing public infrastructure and facilities such as new streets, utilities and other public facilities. Because they are one time fees, they cannot be used for ongoing facility operations and maintenance.

Applicability: Public infrastructure and facilities development (e.g., streets, potable water, sanitary sewer, storm drainage, libraries, parks, and police and fire stations)

Joint Development

Joint development is the primary value capture mechanism transit agencies commonly use. It is generally applied to a real estate development project that involves coordination among multiple parties to develop sites near transit, usually on publicly-owned land, and can take many forms, ranging from an agreement to develop land owned by the transit agency to joint financing and development of a project that incorporates both public facilities (e.g., parking garages) and private development. Typically the transit agency and the private developer will agree to share costs of and revenue from the project.

Applicability: Real estate projects, affordable housing development, parking, public amenities as part of development projects

Public-Private Partnership

Public-private partnerships are contractual agreements between a public agency and a private-sector entity whereby “the skills and assets of each sector (public and private) are shared in delivering a service or facility for the use of the general public.” In addition to the sharing of resources, each party shares in the risks and rewards in the delivery of the service and/or facility. In a typical public-private partnership, the private entity provides the capital cost to finance a public project, such as a parking facility, toll road, or airport, then collects some portion of the revenue generated by the project. In most public-private partnerships, the public sector partner guarantees payment to the private sector partner even if the project does not deliver the expected level of revenue or if the expected revenue does not cover the entire cost of debt repayment.

Applicability: Large roadway projects, mixed-use development, high-rise residential towers with affordable housing component.

8.5.3 Emerging Community Development and Infrastructure Financing Tools

Structured Funds

Structured funds are investment funds that are configured with an intentional mixture of both fixed-income securities as well as equity products. The general idea behind this type of fund configuration is to provide the investor with the security that is provided by the fixed-income assets, since those assets can help offset potential losses sustained with the up and down movement of the equity securities. At the same time, the inclusion of the equity securities allows the investor to generate significant returns when and as those equities appreciate. Structured funds pool money from different investors with varying risks and return profiles. Communities have been increasingly interested in using structured funds as a property acquisition tool to support affordable housing, particularly near transit.

Applicability: Specific real estate development projects (e.g., affordable housing, mixed-use development) near transit stations

Land Banks

Land assembly and acquisition can be a challenge for TOD because land near transit is often scarce and generally of high costs. Although not a financing tool, communities' interest in the applicability of land banks to TOD has been growing in an effort to find additional property acquisition tools. While land banks have not typically been used for TOD infrastructure, assembling developable land in station areas could make TOD and the associated infrastructure projects more feasible.

Applicability: Neighborhood stabilization and revitalization, affordable housing development

Redfields to Greenfields

Redfields to Greenfields is a concept of converting underused or distressed properties into an asset. A local municipality acquires underused properties (redfields) and converts them to new parks (greenfields). Redfields to Greenfields is not tied to any particular funding or financing source; in fact, the municipality would have to identify a funding source to pay for property acquisition and to convert the property into a park, which could include parks that are a part of a mixed-use TOD project. The new park could boost property values of surrounding properties, increasing property tax revenue.

Applicability: Public space development used to incentivize adjacent real estate development.

Government Property Lease Excise Tax

The Government Property Lease Excise Tax (GPLET) is an excise tax based on the square footage of the building, rather than on value. It is to be collected by the city where the property is located. GPLET applies to properties when:

- The building (or parking structure) is owned of record by a city, town, or county.
- The building or other structure is leased in whole or part by a private party.

- The leased space is occupied and used for commercial or industrial purposes, including but not limited to, office, retail, restaurant, service business, hotel, entertainment, recreational or parking uses.

The structure of a GPLET involves deeding property to a local government. This results in the property being removed from the property tax rolls. The property is then leased back to the private owner with a lease that confers all incidents of ownership. The government merely holds title, but has no financial responsibility for the property. Such properties enjoy a cheaper property tax rate than privately-owned properties.

The favored use of GPLET is for major downtown or commercial redevelopment projects. Such projects, if located in a redevelopment area of the municipality, are exempt from the GPLET tax for a period of eight years from receiving a certificate of occupancy. This exemption essentially confers an eight year tax abatement on such development as an explicit, legislatively-conferred, redevelopment incentive.

Planning Assistance for Rural Areas (PARA)

The Planning Assistance for Rural Areas (PARA program is sponsored by the Arizona Department of Transportation Multimodal Planning Division (MPD) and provides federal funds to assist tribal governments and counties, cities and towns located outside Transportation Management Area (TMA) planning boundaries with multimodal transportation planning needs.

PARA funds are limited to planning applications and may not be used for the design or construction of transportation facilities. PARA funds may be applied to address a broad range of planning issues related to roadway and non-motorized transportation modes. Funds may also be applied to studies dedicated solely to the planning of public transportation services. PARA funds can be used for station area planning studies where the total project cost is $50,000 or less.

8.5.4 Infrastructure Financing Tools Used in Other States

Tax increment financing (TIF)

TIF captures the increase in property tax revenue (and, in some states, sales tax revenue) that occurs in a designated area after a set year. Tax Increment Financing dedicates tax increments within a certain defined district to finance the debt that is issued to pay for the project. TIF was designed to channel funding toward improvements in distressed, underdeveloped, or underutilized parts of a jurisdiction where development might otherwise not occur. TIF creates funding for public or private projects by borrowing against the future increase in these property-tax revenues. The tax increment is collected for an established period (usually between 15 and 30 years) and the tax increment can be used to secure bonds, allowing the issuer to collect the money up front, or it can be used on a pay-as-you-go basis over time. TIF is most commonly used for local infrastructure, environmental cleanup, and land assembly.

Applicability: Public amenities, streetscape and landscaping, parking, affordable housing development

Chapter 9. Other Resources

Transportation agencies in other states have developed similar guidance for station area planning in their local communities with standards specific to their regional/local context. Similarly other agencies within Arizona have prepared important reference documents that can be very helpful to communities in Arizona that are planning for rail stations and supporting transit/transportation infrastructure. This section provides information about some such resources that may serve as additional reference.

Sustainable Transportation & Land Use Integration Study (STLUIS), Maricopa Association of Governments, AZ

The MAG Sustainable Transportation and Land Use Integration Study is a recently completed project that answers questions such as: How can transit investments increase the MAG region's economic competitiveness? What is sustainable transportation and how does it fit into the region's future? Which development policies can encourage transit-supportive places? And what kinds of transportation investments can support sustainable neighborhoods and business districts "without" high-cost transit investment?

The study builds on previous MAG studies that identified the need to better coordinate regional transportation planning with land use decisions, growing interest in sustainability by MAG member agencies, and greater emphasis on sustainability in transportation funding criteria. The study focuses on high-capacity transit within the Phoenix metropolitan area.

A very relevant product of this study is the "Community Pathways to Sustainable Transportation" tool, which is an interactive tool designed to help users understand what actions need to be put in place to develop transit-supportive land uses by assessing their community's current status and future vision for land use, urban design and transportation using a variety of planning data, focusing on community sub-areas such as a station area, employment center, downtown, or neighborhood. This tool is complemented by the Prototypes Catalogue, which includes illustrations of model and actual development projects that support sustainable transportation.

Web URL: http://www.bqaz.org/pdf/sustainable/BQAZ-STLU_2013-03-29_Key-Findings-and-Recommendations.pdf

Pinal County Activity Center Guidelines and Draft Zoning Ordinance, Pinal County, AZ

In 2009, the Pinal County Board of Supervisors adopted a revised Comprehensive Plan. This plan involved a tremendous amount of public input, resulting in a comprehensive vision for future development of the county. A core element of the land use plan was the organization of the county into various activity centers – mixed-use developments that incorporate residential, commercial/service, and employment uses, as well as cultural amenities. These clusters were organized at different scales and could have different foci, depending on their location (e.g., more industrial/logistics-oriented, commerce centers, tourism, etc.).

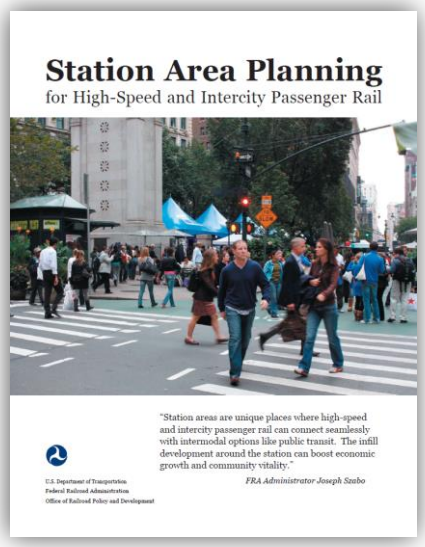
The "Pinal County Activity Center Development Guidelines" seek to provide development parameters for the different scales and types of proposed activity centers. These guidelines were codified in an updated Pinal County Zoning Ordinance, which has a specific chapter dedicated to three intensities of activity center zoning districts.

The Activity Center Development Guidelines and Zoning Ordinance provide a foundation for urban form guidance relative to station area site selection in Pinal County, although an additional level of refinement and new policy recommendations will be required for sufficient transit readiness. Once accepted in Pinal County, it would be the intent for local jurisdictions to equally adopt the revised zoning language to provide a consistent manner of activity center development region-wide.

Web URL:
http://pinalcountyaz.gov/Departments/PlanningDevelopment/Documents/Activity%20Center%20Development%20Guideline%20Manual.FINAL.pdf

Station Area Planning for High-Speed and Intercity Passenger Rail, USDOT Federal Railroad Administration (FRA)

This station area planning document is a reference tool for state transportation departments and local and regional jurisdictions working in partnership with transportation agencies implementing high-speed and intercity passenger rail (HSIPR) projects. The document includes topics, concepts and ideas to assist local jurisdictions and others accomplish successful station area planning and achieve an optimal integration of the station in its context; to ensure ridership growth; and to capture livability, sustainability, and economic benefits. This document also provides three common principles and recommended strategies for the creation of places that invite people to stay and enjoy, and that enhance the economy and sustainability of the region.



Web URL: http://www.fra.dot.gov/eLib/details/L03759

Station Area Planning Manual, Center for Transit-Oriented Development

This manual is intended to serve as a companion to the Metropolitan Transportation Commission's TOD Policy for Priority Development Areas under the *Focusing Our Vision* program, to assist jurisdictions in the San Francisco Bay area with decision-making as they complete planning efforts around transit hubs and corridors. The Station Area Planning Manual provides a good description of various place types/station typology (particularly the range of place types, from regional center to transit town center), with suggested target densities for housing and commercial developments.

Web URL: http://www.bayareavision.org/pdaapplication/Station_Area_Planning_Manual_Nov07.pdf

Urban Design Guidelines, California High-Speed Train (CAHST) Project

These urban design guidelines are intended to assist local jurisdictions and to integrate the CAHST project into their communities. The guidelines are based upon international examples where cities and transit agencies have incorporated sound urban design principles as integral elements of large-scale transportation systems. The document provides urban design techniques that will promote successful high-speed rail. The urban design techniques include guidance to create context sensitive solutions (CSS) that are specific to and reflect the characteristics of each geographic zone, emphasize development of a pedestrian influence area within one-quarter to one-half mile of the station, and focus on preservation of specific areas as well as infill and redevelopment.

Web URL: http://www.cahighspeedrail.ca.gov/assets/0/152/269/a89ed24f-b312-4cf4-b7d1-059541bb57f1.pdf

Community Plan, Urban Land Institute, Arizona

Community Plan is a resource for communities and regions to learn the foundational aspects and finer nuances of issues affecting land use, planning, and development. Community Plan is intended to build leadership capacity for informed local decision-making to enhance sustainable communities. Community Plan is a partnership of eight statewide organizations who have come together to lead this educational curriculum for public officials. Partners include the Urban Land Institute-Arizona District Council, the Arizona Chapter of the American Planning Association, the Arizona Departments of Housing, Transportation, and Health Services, the Arizona Association for Economic Development, the League of Arizona Cities and Towns, and the County Supervisors Association of Arizona.

Community Plan is a 2- to 4-hour interactive workshop for public officials that provides effective tools for addressing important community and regional issues. The workshops are intended to develop a

better understanding of land use planning and zoning, housing, multimodal transportation and mobility, real estate development, economic development, and, finance and infrastructure; outline the connectivity between community building blocks (high capacity transit, land use, pedestrian-friendly streetscape), their importance within the community or region, and the necessity for using a holistic approach to achieve long-term goals; create a toolbox of information, case studies, and online resources that can enhance community decision-making; and, develop an action plan to apply what was learned.

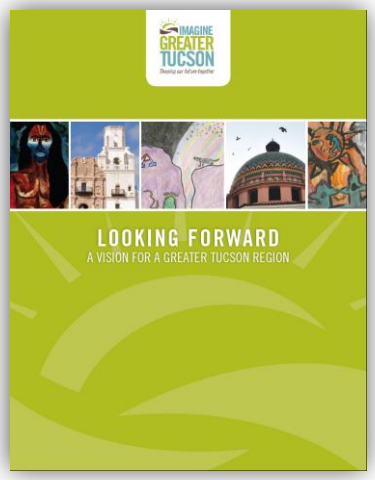
Web URL: http://arizona.uli.org/community/communityplan/

Reinvent PHX, City of Phoenix

Reinvent PHX is a collaborative partnership between the City of Phoenix, the U.S. Department of Housing and Urban Development (HUD), Arizona State University (ASU), St. Luke's Health Initiatives and local organizations committed to growing a sustainable city. The Reinvent Phoenix program aims to eliminate physical and institutional barriers to TOD and catalyze livable, sustainable development through planning, regulatory reform, innovative infrastructure designs, economic development incentives, capacity building, and affordable housing implementation activities; demonstrate regional benefits of transit oriented development through the design and implementation of pilot projects for economic development, housing and infrastructure; and involve residents in identifying strategic improvements that will enhance safe, convenient access to quality, affordable housing; well-paying jobs; education and training programs; fresh food and healthcare services.

Web URL: http://phoenix.gov/pdd/reinventphx.html

Imagine Greater Tucson, Tucson, Arizona



Imagine Greater Tucson is a collaborative, community-driven effort that fosters collaboration towards a regional vision and aligns the region's future with the shared regional values. In 2008, a group of community members, business and civic leaders, jurisdictional representatives, local organizations, and others came together to discuss the critical needs for the region's future. Imagine Greater Tucson (IGT) was launched to listen to the community and create this shared Vision based on the values and goals of the residents. Imagine Greater Tucson has three main phases. TALK. THINK. ACT. The IGT process began in October 2010 by listening to residents through group conversations and surveys to learn what they value as a region. Next, IGT asked people to think about and express how future growth can be accommodated in the region in accordance with the shared values.

Web URL: http://www.imaginegreatertucson.org/

Sustainable Communities Collaborative, Arizona

The Sustainable Communities Collaborative (SCC) is a non-profit partnership powered by a privately-financed fund. SCC is creating an economic catalyst for three Valley cities (Phoenix, Mesa and Tempe) connected to the Valley METRO light rail. The SCC has taken a lead in promoting Transit-Oriented Development (TOD) along the Light Rail Transit (LRT) alignment. The SCC has attracted a combined $20 million of private investment from two key partners: Local Initiatives Support Corporation (LISC) and Raza Development Fund (RDF). In June 2011, SCC joined the Mayors from Phoenix, Tempe, and Mesa and the President/CEOs of LISC and RDF to launch the $20 million Sustainable Communities Fund. The SCC's policy focus is on stimulating affordable housing, promoting public health, encouraging sustainable community development, providing financial tools for TOD, and realizing a complete multimodal transportation network within its program area.

Web Link: http://www.sustainablecommunitiescollaborative.com/