

July 2, 2008

5 Circulation and Parking Plan

INTRODUCTION

One of the major goals of the Downtown Plan is to improve pedestrian and bicycle circulation and access to transit while ensuring good circulation for vehicles. In order to achieve this goal, the existing circulation system should be maintained and enhanced to balance the needs and demands of different modes of transportation.

This chapter presents a coordinated system of circulation and parking for Downtown. The Circulation System is based on traffic modeling of current and projected Downtown growth, field work, and analysis of bicycle circulation and focused studies of specific proposals. The focused studies included narrowing segments of local streets and calming traffic in neighborhoods with a focus on 3rd and 5th Avenues. A parking study was done to coordinate vehicle circulation, parking needs and parking destinations.

Following each major section, policies have been established in order to guide decisions regarding the Downtown circulation and parking systems, including public and private improvement projects. Extensive meetings with representatives from the Downtown character areas have resulted in certain policies that are specific to a character area or particular streets.



The Downtown grid pattern of streets establishes a circulation system with a variety of routes and multiple access points.



Arterial – 7th Street at the I-10 on-ramps



Collector – Roosevelt Street between 5th and 7th streets



Downtown Local Street – McKinley Street



Downtown Local Street – Residential Neighborhood (Portland Street between 5th and 7th avenues)

CIRCULATION SYSTEM

Downtown was laid out in a grid pattern resulting in a variety of circulation routes and multiple access points that can minimize congestion. An existing public transit system provides Downtown shuttle service, local bus routes, access to express routes that serve the entire Valley, and a light rail system that provides access to the Downtown. Roadway rights of way are generally wide, providing ample distance and opportunities between the curb and property lines for wider sidewalks and landscaping.

Within the Downtown area, the city of Phoenix designates the roadways as arterials, collectors or local streets. Arterial streets typically carry higher volumes of vehicle traffic and provide major access into and out of Downtown and provide access to the freeway system. Seventh Avenue, 1st Avenue, Central Avenue and 7th Street are the designated north-south arterials. Central and 1st Avenues comprise a one-way couplet with 1st Avenue being one-way southbound and Central Avenue being one-way northbound. McDowell Road, Van Buren Street, Washington Street and Jefferson Street are the east-west arterials. Washington and Jefferson Streets comprise a second one-way couplet. Washington Street is one-way westbound with Jefferson Street being one-way eastbound. The light rail route is on 1st Avenue, Central Avenue, Washington Street and Jefferson Street.

Collector streets typically carry lower volumes of traffic than arterials. A collector street collects and distributes traffic between arterials and local streets. Within Downtown 5th Avenue, 3rd Avenue, 3rd Street, and 4th/5th Street are the north-south collectors with Roosevelt Street, Fillmore Street and Lincoln Street being the east-west collector streets. Fifth Avenue is one-way southbound and can be accessed by the eastbound HOV lanes from the I-10 Freeway. Third Avenue is one-way northbound and provides access to the westbound HOV lanes on the I-10 freeway. There is also access to the HOV lanes at 3rd Street. Portions of 3rd Street and 4th/5th Street are one-way.

Local streets are typically low volume, low speed roadways with a narrower width. The majority of the local streets in Downtown are residential with the balance providing access to commercial and retail properties. The city of Phoenix has existing traffic signals on arterials and collectors. Within Downtown, additional signals are provided at local intersections.

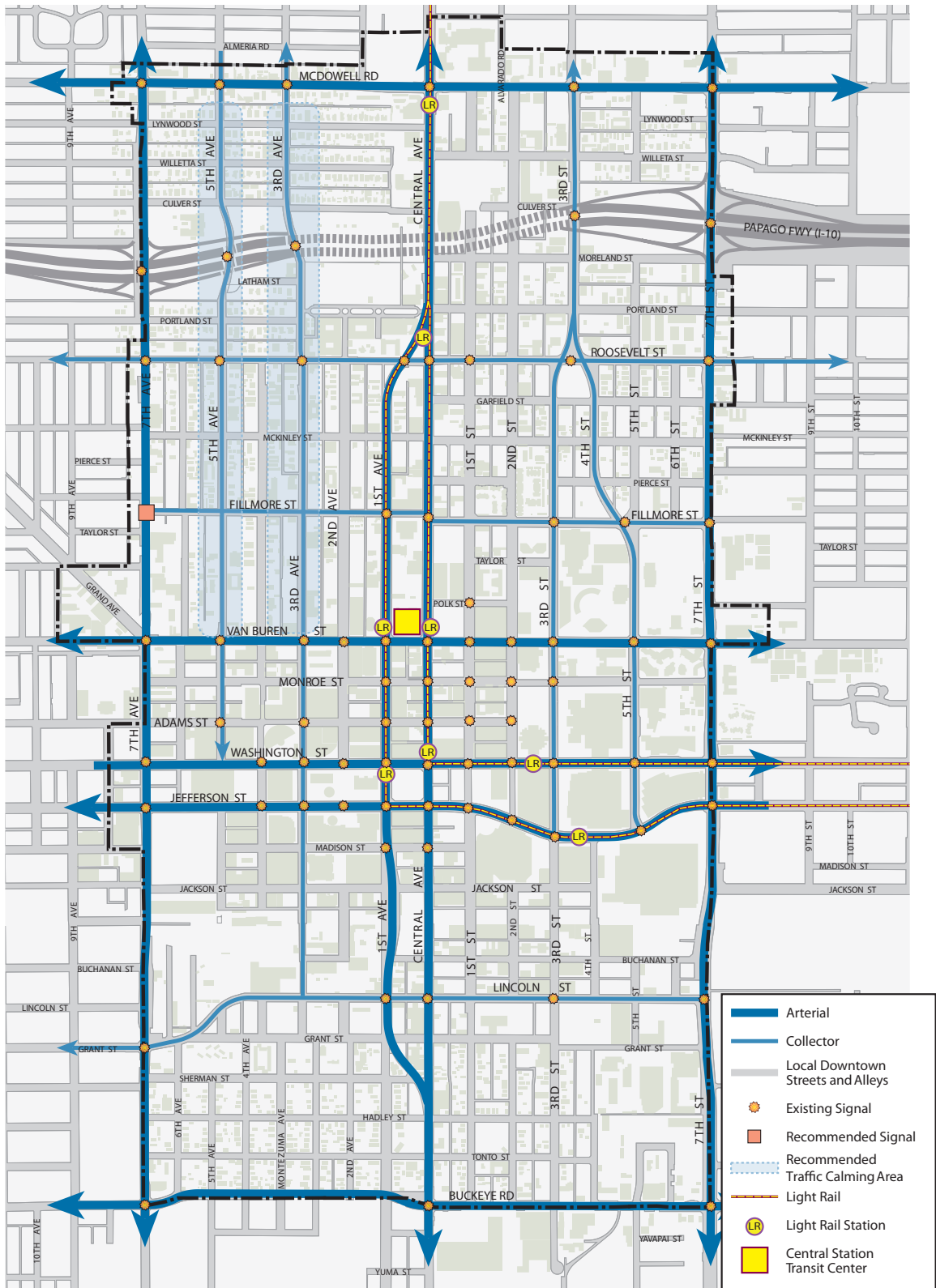


FIGURE 5-1 DOWNTOWN CIRCULATION SYSTEM



The existing road system is well-equipped to carry expected demand from Downtown growth; most streets will continue to operate below capacity. (3rd Street, near Garfield)



As Downtown grows, the major congestion points will continue to be near the access points to the freeway. (7th Street near Roosevelt)



Some segments of east-west streets may experience congestion because there are a limited number of through-streets that run east-west. (McDowell Street between 3rd and 5th streets)

VEHICLES

It is important that convenient and reasonable vehicle circulation be maintained in order to support Downtown as a regional economic center. Although the use of alternate modes of transportation will increase in the future, the majority of traffic in Downtown will continue to be vehicular. The existing roadway system is well-equipped to carry the existing and projected traffic demands. The existing street grid provides multiple routes for drivers. A large number of streets currently operate below capacity and will continue to do so as growth occurs. The major congestion points will continue to be located along the access routes to the freeways and on the north-south arterials (7th Avenue and 7th Street).

There is currently an extensive network of public alleys that provide utility corridors and service vehicle access to parcels in Downtown. New development is encouraged to use the alleys as access to parking garages where feasible, reducing the number of driveways and pedestrian conflicts. Where possible, existing driveways should be closed as alley access is developed.

Existing Traffic Conditions

Appendix X includes diagrams that show the estimated capacity of the arterials and collectors and traffic volumes within Downtown. Comparing the estimated roadway capacities to existing traffic volumes demonstrates that the existing roadway network has sufficient overall capacity to accommodate current demand.

Future Traffic Conditions

Figure X-X in Appendix X shows the Downtown average daily traffic volumes projected 20 years into the future. Comparison of the estimated roadway capacity with the projected traffic volumes shows that existing congestion will likely increase with new areas of congestion developing. Roadways where congestion is likely to increase include 7th Street and 7th Avenue, Roosevelt and McDowell Streets. Roadways where existing capacity is expected to exceed projected future demand include 1st Street and 2nd Street between I-10 and Fillmore Street.

Event Management

The city of Phoenix currently operates a traffic management program for major events called the Sunburst Event Management System. Street circulation is re-routed in order to allow quick and easy access in to and out of Downtown during major sporting and entertainment events.

The potential impacts of the projected Downtown growth on event management policies and practices, as well as the potential impacts of event management activities on the projected Downtown growth, need to be closely and regularly monitored. While the primary ingress and egress routes for events will likely continue to be the arterial and collector street networks, there may be isolated locations where event management practices (e.g., street closures) begin to conflict with new developments, or where the traffic generated by new developments results in the need to modify event management policies.

There may also be the need to put more focus on event management of alternative transportation modes if a large percentage of event attendees travel by light rail or modes other than the private automobile.

Traffic Calming

As traffic volumes increase in Downtown, there may be a need for traffic calming measures on collector streets within the different Character Areas. When requested by the district (neighborhood), any traffic calming measures should be explored in a partnership between the district (neighborhood) and the city. There are various ways to calm/slow traffic including changes to roadway striping, roadway narrowing and roundabouts. The location and type of traffic calming will follow current Street Transportation Department guidelines and policies.

Traffic calming techniques currently being used in Phoenix include chokers/road narrowing and roundabouts. By using lane striping or adjustments to the curb to narrow the roadway, drivers will typically slow down. Chokers could be installed between intersections or driveways, reducing the travel lanes.

Bulb outs at intersections also reduce the travel way. Installation of landscaping and allowing buildings closer to the roadway also create the illusion of a narrower roadway. Chokers and curb return bulb outs have the added advantage of providing a shorter pedestrian crossing and the opportunity for additional landscape or pedestrian amenities.

Roundabouts are raised islands in the center of an intersection that direct traffic in a single direction around the island. They have the ability to provide increased capacity while decreasing speeds and providing better pedestrian access. Bicycle traffic can be accommodated in a roundabout.

Roosevelt Neighborhood residents have expressed concern about vehicle speeds and accidents on 3rd Avenue and 5th Avenue between Van Buren Street and the I-10 Freeway. There is a neighborhood concern



There may be a need for traffic calming devices on 3rd and 5th avenues, because they function as major routes to the freeway through residential neighborhoods



Chokers are traffic calming devices that narrow the roadway, or make it feel more narrow, thereby causing drivers to slow down. One technique is to stripe the travel lanes to be narrower, as shown here on 3rd Avenue near Willetta Street.



Another type of choker involves adding street trees in the parking lane, as was done on Monroe Street, shown here.



Maintain the existing street network in order to facilitate auto, bicycle, and pedestrian circulation in Downtown.

that the traffic volumes have an impact on pedestrian circulation and the residential character of the neighborhood.

Based on traffic studies and neighborhood input, in order to protect the residential character of the Roosevelt neighborhood, traffic calming measures that reduce vehicle speeds and enhance pedestrian circulation are recommended for 3rd Avenue and 5th Avenue. Both streets provide access to the HOV ramps on the I-10 Freeway. These streets are and will continue to be important to the overall vehicle and transit circulation within Downtown.

Adding parking lanes on 3rd Avenue from Roosevelt Street to Latham Street and on 5th Avenue from Willetta Street to McDowell Road will narrow the travel way without reducing lanes. This traffic calming measure will also provide additional on-street parking for residents and businesses.



Do not close streets unless absolutely necessary for a major civic use such as a hospital, convention center, or sports stadium. (Chase Field)

As growth occurs in Downtown, the intersections of Fillmore Street with 3rd Avenue and 5th Avenue are projected to have significant increases in traffic congestion. Currently both intersections are two-way stop controlled for Fillmore with the north-south traffic having the right of way. Converting these intersections to a four way stop could have a negative impact on vehicle circulation. It is recommended that roundabouts be considered as a traffic control device for these intersections.

Policy 5-1 Maintain the existing vehicle circulation system that serves the Downtown area.

Policy 5-2 Maintain the existing block structure and street grid between Garfield and Fillmore Streets.

Policy 5-3 Preserve existing vehicle lanes on arterial and collector streets.

Policy 5-4 Preserve existing streets and alleys whenever possible.

Policy 5-5 Encourage the use of alleys as access to parking garages and service facilities.

Policy 5-6 Alley access and maneuvering should be permitted by right.

Policy 5-7 Work with neighborhood associations to identify possible locations for traffic calming devices, and to review streetscape options.



Retain the one-way couplets on 3rd and 5th avenues, and 3rd and 5th streets. (5th Avenue)

ALTERNATIVE MODES

In order to minimize traffic congestion and foster pedestrian vitality in Downtown, alternative modes of transportation need to be encouraged. The use of alternate transportation to Downtown for work, entertainment, retail and other purposes should be convenient and accessible. Providing facilities and amenities that encourage walking, bicycling, public transit and carpooling can increase the percentage of alternative mode trips and decrease the amount of vehicle traffic in Downtown.

The city should continue to promote the use of alternative modes of travel during peak periods. Higher levels of congestion can actually help encourage the use of alternate modes. Other ways to encourage alternate mode use include parking pricing policies and making public transit convenient and accessible.



Traffic calming measures should be considered on 3rd Avenue and 5th Avenue



Consider adding a new signal on 7th Avenue at Fillmore Street, if warranted, so Fillmore Street can relieve anticipated traffic congestion on Roosevelt and Van Buren streets.



Light Rail Station at Central Avenue and Roosevelt Street



Simulation of Light Rail on Central Avenue



Transit

There is a fairly extensive transit system that serves Downtown. Major bus routes on arterials and collectors provide access into and out of Downtown. The Central Transit Center, located on Van Buren Street between 1st Avenue and Central Avenue, provides a central connection for all of the public transit modes.

Express bus service brings employees and visitors into Downtown from outlying areas of the city and the valley. A light rail route connecting north Phoenix with Tempe and Mesa runs through Downtown. The DASH, a local shuttle system, provides reasonable and convenient local access within Downtown. It connects the Capitol Mall area with Downtown and adjacent neighborhoods.

The Public Transit Department is undertaking changes to DASH that will provide continued access to government agencies, while rerouting through neighborhood areas to meet the needs of downtown Phoenix's new ASU campus, businesses and residents.

The existing public transit network is well established but providing facility enhancements can encourage more users and provide a reasonable alternative to vehicle traffic. Comfortable transit stops at the beginning, end and along a route encourage the use of public transit. Having an inviting and well-designed transit stop at only one point of a route makes it difficult to make that journey.

POLICIES

- Policy 5-8** Maintain and expand the existing public transit system as directed by the Public Transit Department.
- Policy 5-9** Encourage the use of public transit as an alternative to vehicle traffic through marketing and parking pricing.
- Policy 5-10** Retain the Central Station Transit Center as an integral component of the transit system.
- Policy 5-11** Maintain, enhance and add transit stops as needed to provide a standard level of comfort throughout the entire transit system.

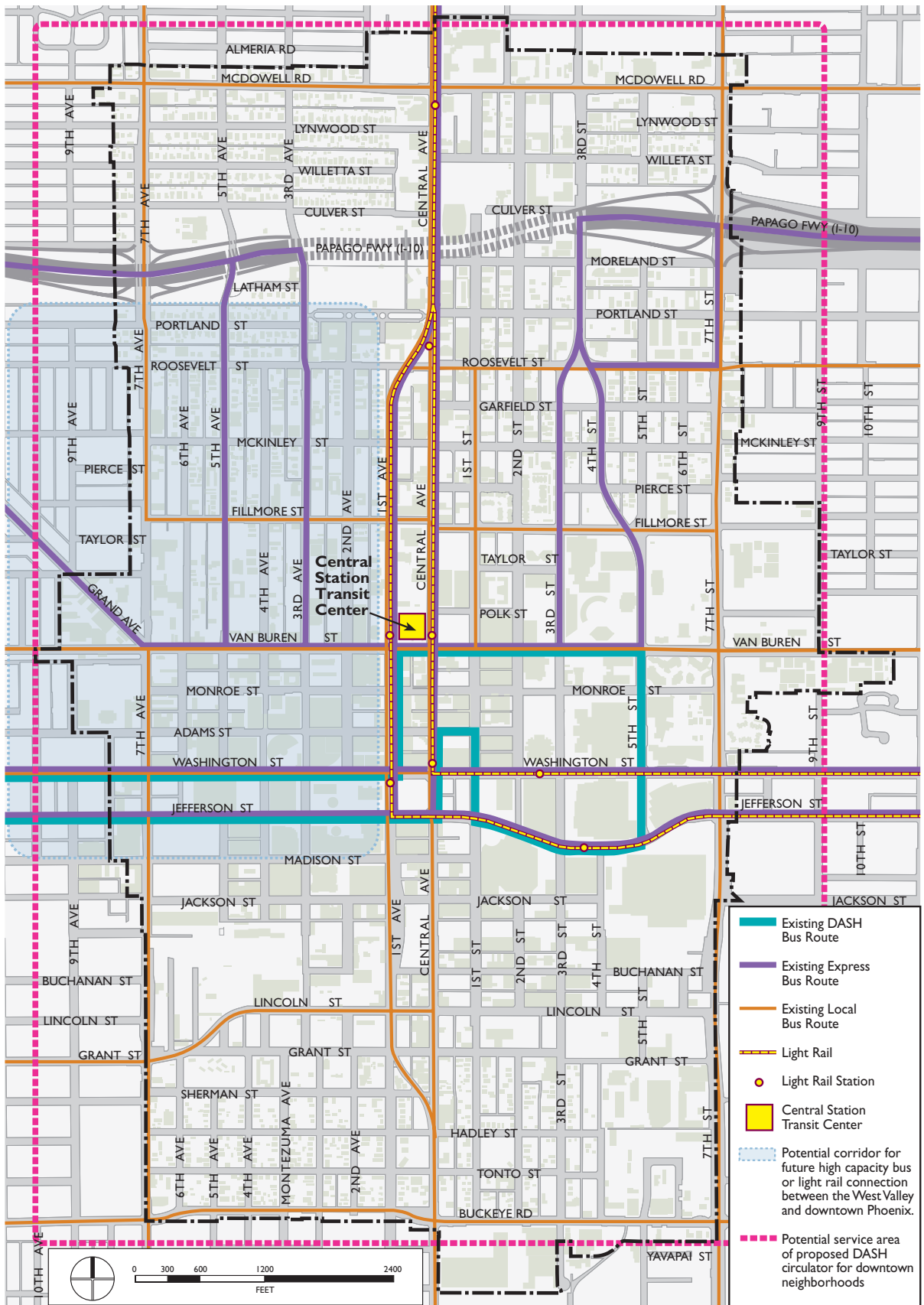


FIGURE 5-2 TRANSIT NETWORK



Bicycle lane on 5th Avenue near Roosevelt Street, part of the Phoenix Sonoran Bikeway, an on-street and off-street paved bike facility connecting South Mountain Park to the Phoenix Sonoran Preserve.



Existing bicycle lanes on 3rd Avenue near Willetta Street.



Existing bike lanes on 3rd Street 3rd Street near McDowell Road.

Bicycles

While all roadways in Downtown are considered suitable for bicycles, currently there is not a continuous designated bike network. Bike lanes exist on 5th Avenue, 3rd Avenue, 7th Street, Central Avenue, Washington Street and Jefferson Street, but they all stop as you enter the Business Core. With the expansion of the ASU Downtown Campus, the addition of employment centers and residential development, the number of bicycle riders is expected to increase. Additional bike lanes and designated bike routes are recommended for arterials and collectors to connect the existing facilities with Downtown destinations, and support those helping to reduce vehicle trips and parking demand.

Connections to the citywide bicycle circulation system are an important component of the Downtown bike network. The Sonoran Bikeway is a major north-south regional connector providing access through Downtown from South Mountain Park to Carefree Highway. With light rail on Central Avenue, 1st Avenue, Washington Street and Jefferson Street, alternate bike lanes or routes may be more attractive to recreational bicyclists. Extending the designated bike network throughout Downtown would fill a major gap in the regional network and provide connections from the surrounding neighborhoods to workplaces, schools, entertainment, recreational facilities and other destinations of interest.

Providing bicycle facilities is an effective way to promote bicycle use in Downtown. Bicycle facilities include bike racks placed close to building entrances, bike lockers for long term bike parking and shower facilities for employees. Figure 5.3 shows the existing bike network and recommended additions. Appendix 5.X provides an evaluation of each recommendation.

POLICIES

Policy 5-12 Maintain the existing bicycle systems and add new bike lanes and routes upon request and after Street Transportation evaluation and approval.

Policy 5-13 Prepare develop standards that require bicycle facilities in all new development.

Policy 5-14 Conduct an outreach program that encourages bicycle use as an alternate mode of transportation.

Policy 5-15 Encourage the addition of bicycle facilities such as bike racks, lockers and showers in conjunction with roadway improvements and new development

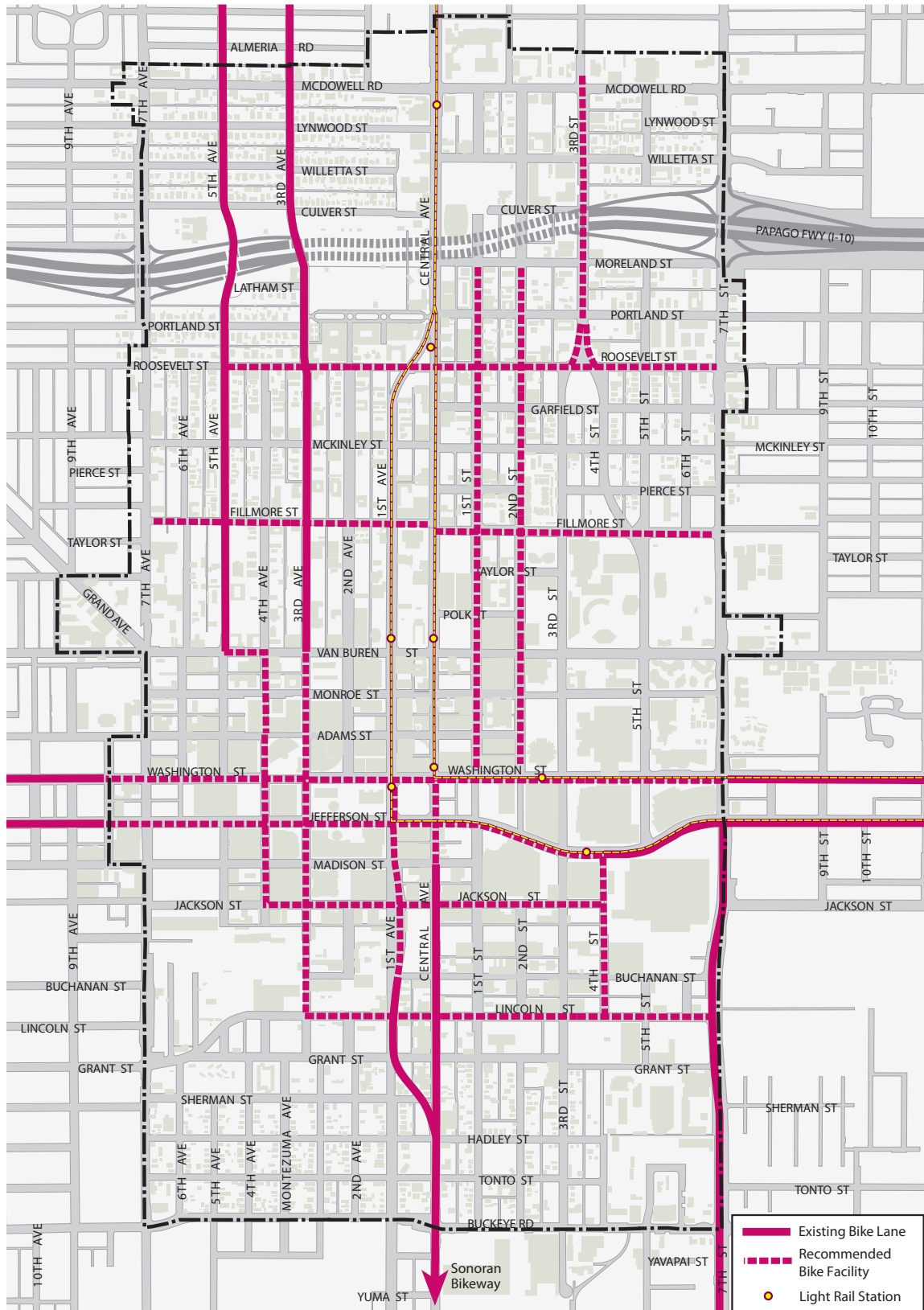


FIGURE 5-3 DOWNTOWN BICYCLE CIRCULATION



Monroe Street is a major pedestrian route that has been enhanced with shade trees and pedestrian amenities.

Pedestrians

While other sections of the Plan address public spaces and the pedestrian environment, this section focuses on streets that can be enhanced to improve pedestrian circulation. The goal is to maintain and create a continuous network of inviting pedestrian corridors that connect major pedestrian generators such as employment, entertainment, retail, transit, education and residential uses.

A key component of the Connected Oasis is to provide shade for pedestrians in order to make walking a comfortable experience. Shade can be provided by building shadows, street trees and shade structures. Shade structures can include awnings, building overhangs, freestanding structures or arcades. Care should be taken with placement, scale and type so that the maximum amount of shade can be provided.

Some street segments in Downtown have very good shade provided by arcades, overhangs or street trees, while other street segments offer little or no shade at all. The Downtown Plan provides strategies for shading pedestrian routes and proposes incorporating sidewalk shading requirements into the Form Based Code.

There are opportunities within Downtown to enhance pedestrian circulation by narrowing streets. Narrowing the curb to curb distance allows for shorter pedestrian crossings, while providing an opportunity for wider sidewalks, more landscaping and pedestrian gathering areas. Based on the Downtown Circulation Study, 1st Street and Jackson Street were identified as streets that have wider curb to curb distances than needed for vehicle circulation and could provide a major amenity to adjacent development if the streetscape is enhanced.

While pedestrian access is provided along every public street within the Downtown area, there are several routes that form a number of connected and continuous loops within Downtown. The routes connect pedestrian intensive areas such as ASU Downtown Campus with the neighborhoods, the neighborhoods with entertainment districts, and entertainment districts with the Central Station Transit Center.

Within the Downtown area there are blocks that are large enough or busy enough to merit additional pedestrian routes and access that are not adjacent to a roadway. Existing off-street pedestrian routes include Taylor Mall through the ASU School of Journalism, Arizona Center, ASU Mercado and Heritage Square. Additional routes are recommended in the Van Buren Neighborhood and the Biomedical Campus Character Area.

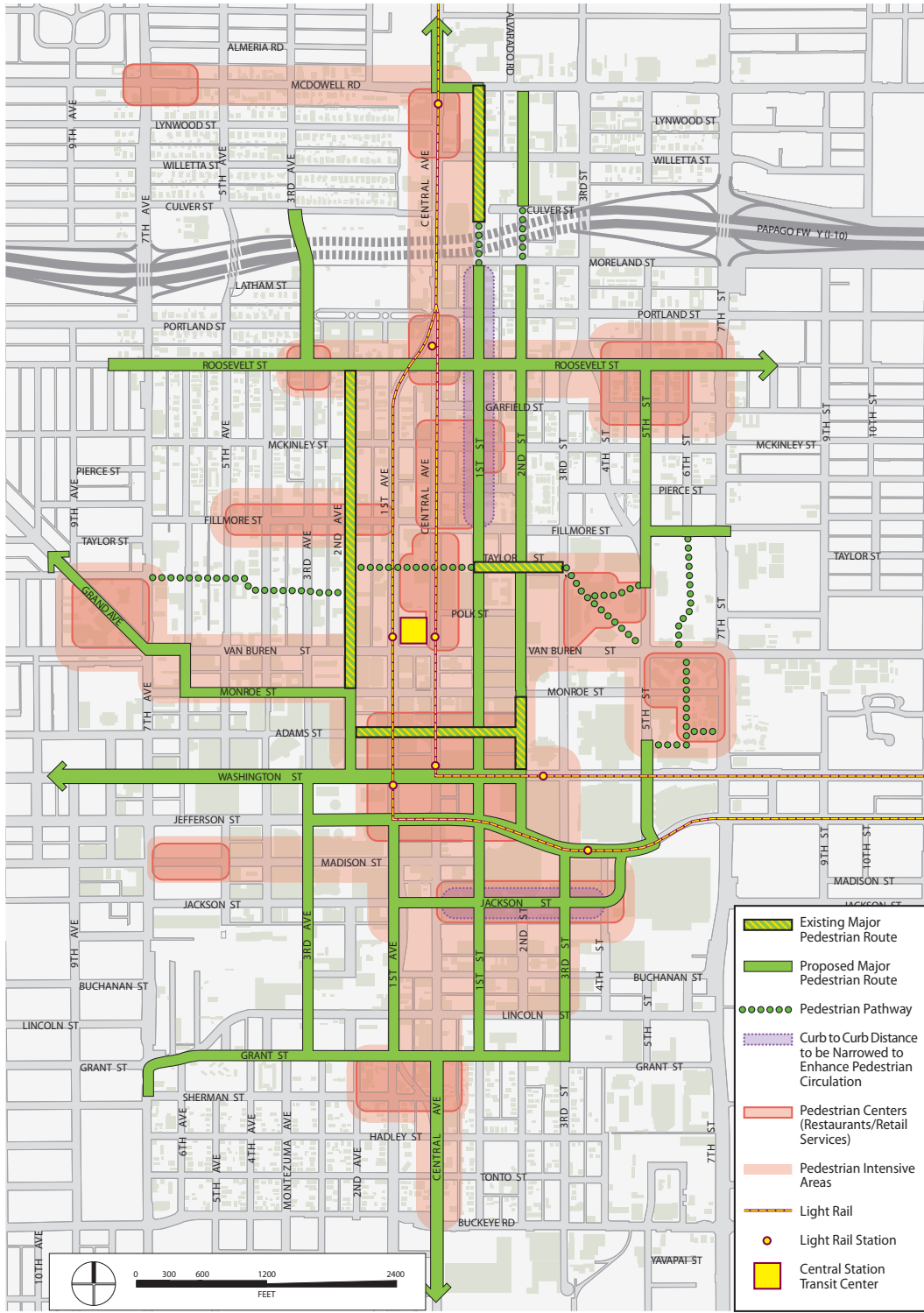


FIGURE 5-4 PEDESTRIAN ENHANCEMENTS

Figure 5.4 shows existing pedestrian routes that could be enhanced:

- Along the light rail corridor – 1st Avenue, Central Avenue, Washington Street, Jefferson Street
- A corridor connecting ASU, the Biomedical Campus and the Van Buren District
- 1st and 2nd Streets
- Connections from employment centers to the Convention Center and Arizona Center
- Connections within the Business Core to destinations such as the sports and entertainment facilities along Jefferson Street
- Connections between the Business Core and surrounding neighborhoods

POLICIES

Policy 5-16 Implement enhancements to the pedestrian corridor routes, including revising street design standards, as identified in the Connected Oasis Plan.

Policy 5-17 Adopt revised roadway and streetscape design standards that help create a comfortable pedestrian environment and reflect current sustainability research and goals.

Policy 5-18 Require that all roadway improvement projects, public and private, be designed in accordance with the Downtown Plan streetscape sections.

Policy 5-19 Revise street design standards to require continuous shade as identified in the Connected Oasis Plan.

Policy 5-20 Consider modification of 1st Street and Jackson Street to enhance pedestrian circulation.

PARKING SYSTEM

Parking management strategies and parking policies should be applied in Downtown to better manage the supply and demand of parking spaces. The goal is to provide enough parking to meet the critical needs for businesses and institutions, while not providing so much that people have no incentive to use other transportation modes such as transit, bicycles, or walking. The location of parking facilities is particularly important because it determines both the ending and starting points for vehicles. It is where the “vehicle-to-pedestrian” or

“vehicle-to-transit” mode change occurs. Parking price, availability and management also have a significant effect on how vehicles and pedestrians circulate throughout the area.

EXISTING PARKING CONDITIONS

According to the Copper Square Parking Study, prepared for the Downtown Phoenix Partnership by Walker Parking Consultants in 2006, the overall parking supply in the Business Core exceeds the current parking demand. There are localized shortages of parking at times, but drivers can usually find available parking in nearby areas. The Business Core constitutes the most densely utilized land and contains almost all of the existing parking structures in Downtown.

On-street parking is generally permitted on local streets as well as on sections of collectors and arterials. Parking meters are installed at many on-street parking spaces, especially within the area bounded by 7th Avenue, Fillmore Street, 7th Street, and Jackson Street. Most of the parking meters are one- or two-hour meters; typical operating hours are 8 am to 5 pm, Monday through Friday.

Table 5-1: Estimated 2005 Parking Conditions

Location of Parking	Number of Existing Spaces	Effective Supply of Available Spaces	Daytime Peak Parking Demand	Existing Excess Spaces
Copper Square	29,879	26,657	(16,710)	9,947
City of Phoenix facilities outside Copper Square	3,000	2,700	(2,000)	700
Maricopa County facilities outside Copper Square	5,000	4,500	(3,600)	900
Remainder of Downtown	4,000	3,600	(1,100)	2,500
Total	41,879	37,457	(23,410)	14,047

It is estimated that the total supply of off-street and on-street parking in Downtown as of December 2005 is approximately 41,879 spaces (see Table 5-1). Parking lots are almost never 100 percent full due to continuous turnover of spaces. The industry standard for optimal utilization is a ratio between 0.85 and 0.95, meaning that a parking lot is considered “full” when 85 to 95 percent of the spaces are in use. The Copper Square Parking Study uses effective parking ratios of 0.90 for off-street parking and 0.85 for on-street parking. Assuming these ratios in the Business Core and a ratio of 0.90 for the remainder

of Downtown, there is an effective parking supply of 37,457 spaces. With the current peak daytime demand estimated at 23,410, there are approximately 14,047 excess parking spaces in Downtown.

PROJECTED PARKING DEMAND

A detailed study of future parking demand indicates that parking needs can be met by parking provided by private development. Moreover, a reduction in the current parking ratios is warranted in Downtown because of the existing excess parking supply and the fact that parking demand will be less in the Downtown urban environment than in other areas of the city. It is estimated that there will be a 30 percent reduction in vehicle trips because of increased multimodal trips, the mix and location of land uses proposed in the Downtown Plan, demand management, and internal trip capture factors. Future parking demand is calculated differently than trip generation, but many of the same underlying principles can be applied to defining reductions.

The following city of Phoenix parking ratios were applied in the parking analysis:

<i>USES</i>	<i>PARKING RATIO</i>
Office	3.5 parking spaces per thousand square feet;
Retail	4.0 parking spaces per thousand square feet;
Other	2.7 parking spaces per thousand square feet;
Residential	1.5 parking spaces per dwelling unit.

Table 5-2 shows the detailed analysis prepared to project future parking demand. The analysis starts with an assumption of standard parking ratios, and then assumes reductions based on projected parking demand in Downtown. The first row in the table assumes the standard parking demand ratio used throughout the city, which currently applies in Downtown outside the Business Core. A reduction is assumed for residential parking demand at 1.25 spaces per unit.

An overall 30 percent reduction in the typical parking demand is assumed for other Downtown land uses. This reduction is likely attainable because vehicle trips are anticipated to be reduced due to internal trip capture from mixed uses, and increased use of light rail and other alternative modes. Approximately 15 percent of trips in Downtown are currently made by alternative modes.

Based on these assumptions, the projected development in Downtown is anticipated to require approximately 61,400 new parking spaces. This quantity of new parking spaces is significant, and represents many new parking structures built as part of private development projects.

The conclusion of the analysis is that minimum parking ratios can be set at 50 percent of the current ratios, based on estimated parking demand reductions, and the excess parking capacity that currently exists (14,047 spaces).

There will be an estimated shortfall of 1,587 spaces which can be met with the construction of two to three new public parking structures in the growth areas of Downtown. There may also be opportunities to meet this shortfall by providing public parking within private garages, for example by allowing office parking during the day in residential parking garages.

The Business Core, Evans Churchill, Townsend Park, and Van Buren character areas are projected to see the largest increase in parking demand. The increase in residential parking demand is expected to be higher in these areas than the increase in parking demand from office, retail, and other land uses.

Parking Ratio Analysis	Future Parking Demand	Future Effective Parking Supply	Subtotal Future Parking Supply Shortfall	Existing Effective Excess Parking Spaces	Total Future Effective Parking Supply Shortfall
Current Ratio-Citywide Standard	82,122	45,771	(36,351)	14,047	(22,304)
Residential Reduction to 1.25 (17%)	77,224	45,771	(31,453)	14,047	(17,406)
30% Reduction on Other Land Uses	61,405	45,771	(15,634)	14,047	(1,587)

PARKING MANAGEMENT

Parking management strategies and parking policies are needed in Downtown to manage the supply and demand of parking spaces, help reduce parking demand and optimize parking supply. In response, consideration should be given to establishing a Downtown Parking Advisory Committee (DPAC) to address parking management, supply, and maintenance issues. The DPAC should include representatives from the city of Phoenix, Maricopa County, the Downtown Phoenix Partnership, business owners, and private parking operators.

The purpose of the DPAC would be to monitor, evaluate, plan, and manage parking. Recommendations on specific Downtown parking policies and code requirements could be developed by this group in response to parking issues that arise. These recommendations could include guiding principles related to public and private parking, shared parking, design changes, on-street meters, parking pricing, and times of operation, meter maintenance, and signage.

To that end, a comprehensive parking assessment should be conducted. This study should assess current and anticipated parking conditions in the entire Downtown area. A report should be generated that includes a detailed inventory of existing and planned on-street and off-street parking supply, demand, and turnover rates. Once completed, the comprehensive parking assessment study should be updated regularly, because parking supply and demand can change significantly over time. New technologies, trends, and strategies could also be incorporated into the updates.

After light-rail is operational, parking rates Downtown should be reviewed and used as a mechanism to encourage travelers to use the light rail and other alternate modes of transportation. The city should consider adopting ordinances that govern privately owned parking as well as public parking structures. The cost and availability of parking directly impact travel behavior. The competitive demand for parking helps to define appropriate parking rates. In addition, identifying the right spaces for time restrictions, by location and number of spaces, is a critical component in managing demand.

POLICIES

- Policy 5-21** Consider establishing a Downtown Parking Advisory Committee within the next five years (by 2013).
- Policy 5-22** Conduct a Comprehensive Parking Assessment Study, and update it at regular intervals.
- Policy 5-23** Define appropriate parking rates and time restrictions; and increase parking fees to encourage use of alternate modes of travel.

ON-STREET PARKING

On-street parking spaces can provide for short-duration parking in the highest demand areas. The city should maintain the existing on-street spaces and identify opportunities to create additional on-street spaces, and/or install parking meters at existing on-street spaces to support ground-floor retail or restaurant uses. On-street parking spaces should

not count as part of the parking supply needed to meet the minimum requirements for large developments and are typically metered and can not be designated for anything but accessible spaces.

The planned expansion of the curb-lane parking program on Grand Avenue, where parking will be allowed in the curb-lane except during peak periods, is currently being monitored to determine its effectiveness. If the expanded curb-lane parking program is successful, the feasibility of implementing similar curb-lane parking programs on other Downtown streets should be evaluated.

Efficient management of the parking supply requires consistent enforcement of meters and time restrictions. Enforcement efforts can also provide revenue for operations and parking system improvements.

Policy 5-24 Maintain on-street parking spaces for short-term parking in critical locations to the maximum extent feasible to support retail, restaurant, and service uses.

Policy 5-25 Consider the feasibility of identifying additional locations where the curb-lane parking program could be expanded.

Policy 5-26 Provide consistent enforcement of parking rates and time restrictions for on-street parking spaces.

ON-SITE PARKING

While the Business Core is exempt from parking requirements, the remainder of Downtown must follow standard parking requirements in the Zoning Ordinance. These parking requirements do not account for dense development and increased use of alternate modes of travel that are typical of the Downtown.

While some have advocated expanding the parking requirement exemption to all of the Downtown area, this strategy has some risks. Currently there are few off-street parking structures outside of the Business Core. If developments outside of the Business Core do not include sufficient new parking facilities, parking demand will greatly exceed the available supply.

To avoid this potential problem while responding to the urban character of Downtown development and greater availability of transit, reduced minimum parking requirements should be developed to provide a “critical mass” of parking throughout all of Downtown. Once that

critical mass has been reached, there may be opportunities to further reduce the minimum parking requirements.

Existing parking ratios should be simplified and reduced, resulting in a handful of categories, such as residential, retail, office, commercial, industrial, and miscellaneous. The ratios within each category should vary depending on the size of the development and the mix of uses. For all land uses, except residential, the current parking ratio should be reduced by 50 percent. For example, office uses should provide parking at a minimum ratio of one space per 500 square feet of gross floor area. This reduction is expected to increase the average and peak occupancy of parking spaces and promote the use of alternative modes of transportation. Residential parking requirements should also be reduced. Residents expect, and developers should be required to provide, at least one on-site parking space per unit. The parking analysis assumes that some developers will choose to provide additional parking, and that some shared parking will be available, thus assuming a ratio of one (1) space per unit in total.

The availability of parking available to the public in areas outside the Business Core is critical to the successful development of these areas. It is much more cost-effective to provide parking in structures that can be used by different users at different times of day, rather than to have single-use parking structures. For example, the majority of parking spaces in residential buildings are empty during the day when people leave for work and parking spaces in office buildings are empty in the evenings after employees leave.

Private development should be required to provide public parking on-site by setting aside spaces for short-term public parking. The amount of public parking to be provided should be at least 20 percent of the required parking. Where provision of on-site public parking is not feasible, developers may make in-lieu contributions.

Small retail, restaurant, and personal service businesses with less than 5,000 square feet of leasable space and located in existing structures should be exempt from parking requirements. The adaptive reuse of existing buildings for these types of businesses enhances the walkability of Downtown, and allows for the preservation of historic structures. Existing parking would be required to be maintained.

Above ground parking structures have a negative impact on the pedestrian environment unless they are wrapped at the street level by active uses such as retail or office. It is also preferred that alleys be used for access to new parking structures in order to minimize the

number of driveways that otherwise conflict with pedestrians on the perimeter streets. These types of design strategies are critical to the achievement of an attractive and comfortable pedestrian environment in Downtown.

- Policy 5-27** Simplify and reduce the parking ratios for future development in Downtown, outside of the Business Core.
- Policy 5-28** Encourage all private development outside of the Business Core to either provide public parking on-site or contribute to an in-lieu fund for construction of public parking structures.
- Policy 5-29** Revise parking standards to exempt the adaptive reuse of existing buildings from on-site parking requirements.
- Policy 5-30** Establish design standards for new above ground parking structures that requires active uses at the ground level where adjacent to the street.
- Policy 5-31** Encourage parking be provided in the rear of the property, underground or wrapped with other uses.



The city has enhanced pedestrian routes in Downtown by adding street trees and pedestrian amenities. (Washington Street)



The 2nd Avenue Streetscape project incorporates landscaping, sidewalk, historic markers and other improvements along the street linking downtown to the Roosevelt neighborhood to the north.



Providing shade along pedestrian routes is critical to pedestrian comfort in the Phoenix climate. (McDowell Road near 7th Avenue)



An existing parking structure in Downtown (Jefferson Street at 4th Avenue)



An existing surface parking lot in Downtown (Monroe Street)

NEW PARKING FACILITIES

To accommodate future parking needs, public parking facilities should be developed. While these will likely be new parking structures, the need could also be met by opening existing or new parking facilities to public use during the off-peak times. The city should work with other public or private agencies to build at least three parking structures available to the general public that provide a total of 1,000-2,000 spaces. This number is based on the parking analysis in Table 5-2 which identifies an estimated parking shortfall of 1,587 spaces.

Public parking facilities would serve the demand generated by several developments in a more cost-effective and land-efficient manner than if each development constructed its own parking facility. In looking at the projected parking demand, if it is assumed that most of the residential parking demand will be met by on-site parking facilities, and that the other land use types can share some degree of their parking, there are a few specific areas where public parking would be most appropriate. Figure 5-6 identifies the areas recommended for public parking structures:

- #1: Biomedical Campus. A public parking structure should be included in the new Biomedical Campus that will also serve the small retail and restaurant businesses in the Roosevelt Row area.
- #2: McKinley/Central Area. A public parking structure should be built in this area to serve ASU, the Public Market, and other retail and restaurant uses in the immediate area.
- #3: Fillmore Street corridor. A public parking structure should be built in this area west of Central Avenue to serve new development planned for the Fillmore Street corridor.

POLICIES

- Policy 5-32** Identify locations for three public parking structures outside the Business Core and build them over the next 25 years.
- Policy 5-33** Investigate the feasibility of constructing a public parking structure that will serve the Biomedical Campus and surrounding commercial uses.
- Policy 5-34** Encourage the development of public parking along Fillmore Streets in the Roosevelt and Van Buren Character Areas
- Policy 5-35** Public parking should be provided within new developments between 3rd and 1st Avenues to serve existing and future commercial development.

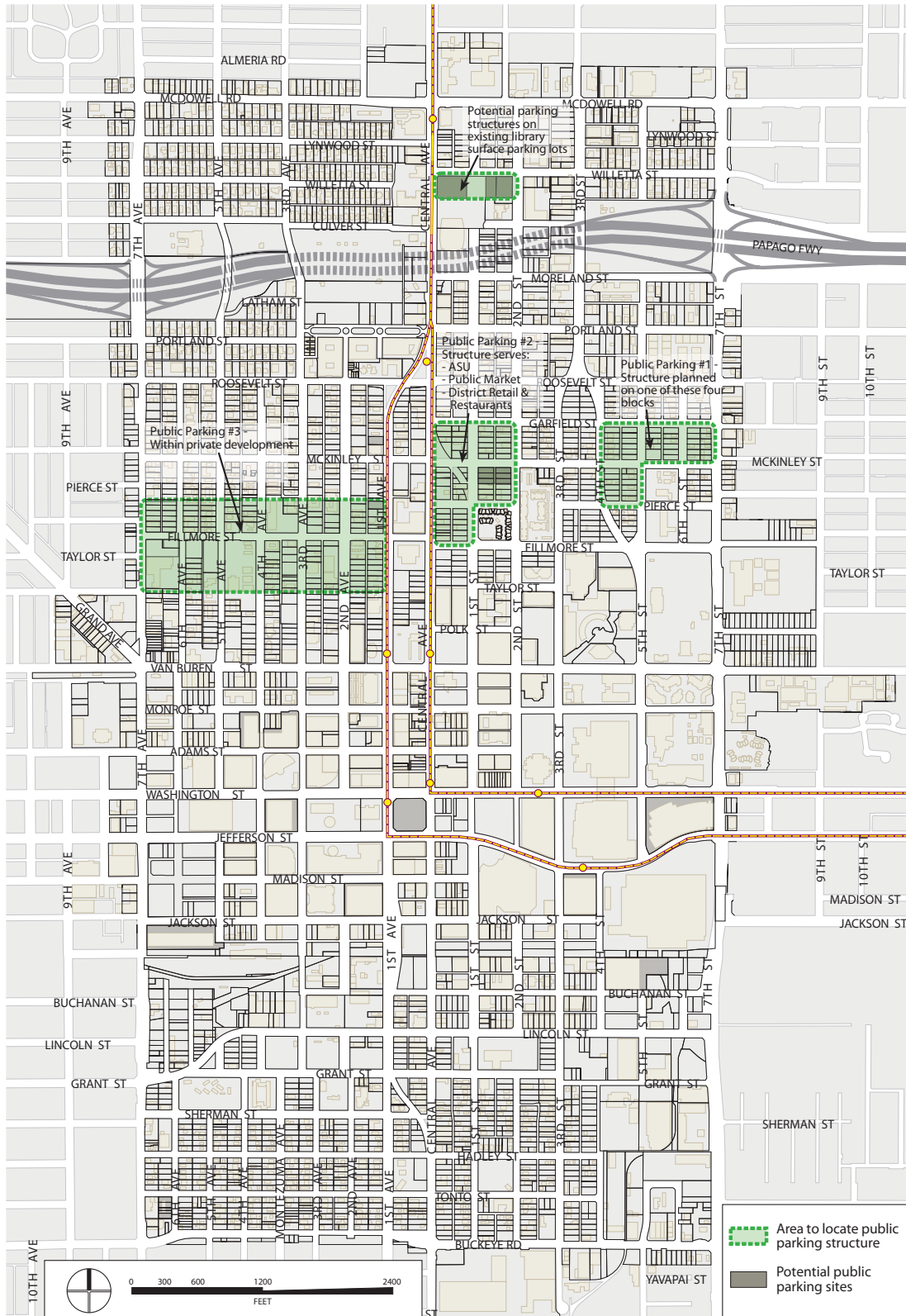


FIGURE 5-5 RECOMMENDED PUBLIC PARKING LOCATIONS