

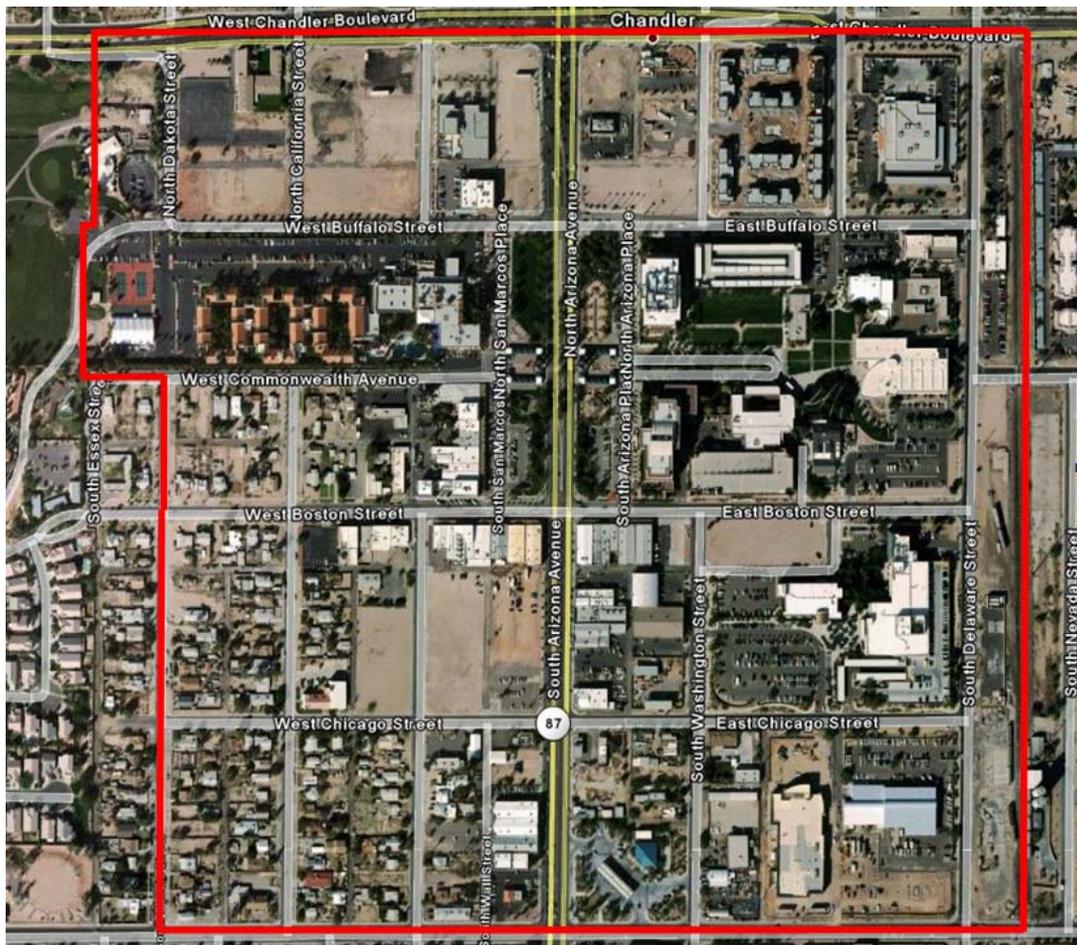


EXECUTIVE SUMMARY OF DOWNTOWN CHANDLER PARKING STUDY

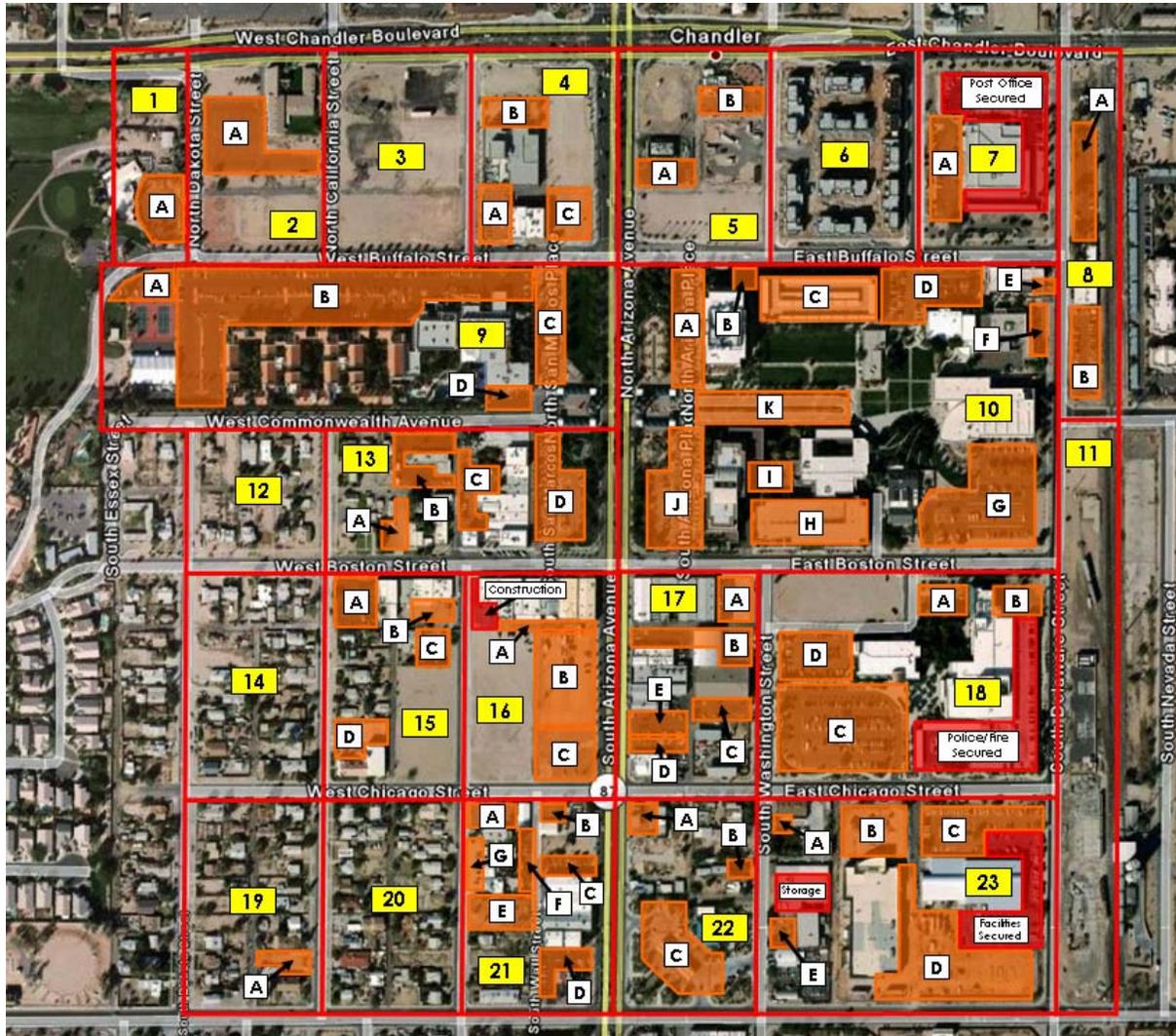
Introduction

The primary purpose of this parking study was to determine short-term and long-term recommendations to improve parking in downtown Chandler. The parking study initially evaluated existing conditions, determined primarily through reviews of background materials, detailed parking inventory and occupancy surveys, and stakeholder input meetings. The examination of existing conditions provided the baseline data from which future development, with its impact on parking supply and demand, could be evaluated. Finally, parking alternatives were considered to address future needs, as well as improve the utilization and efficiency of existing parking resources. Future parking alternatives included potential parking supply changes, as well as general parking management strategies and improvements.

The study area for this project was roughly bounded by Chandler Boulevard to the north, Frye Road to the south, the railroad tracks to the east, and Dakota Street to the west. The following graphic illustrates the study area.



Prior to conducting the parking inventory and occupancy surveys, block numbers were assigned to the various blocks located in the study area. A total of 23 blocks were designated. The following graphic illustrates the block numbering sequence, as well as the location of each surveyed parking facility (as of the date of the survey). Some of the parking areas may have changed since the initial parking inventory counts (e.g. Lot 4C) and capacities may have increased or decreased.



Current Parking Supply

The downtown study area has a total parking supply of 4,134 parking spaces. Of these, 3,655 parking spaces (88%) are in off-street parking areas and 479 spaces (12%) are located on-street.

The study area contained an approximate total of 3,655 off-street parking spaces. There are currently 1,390 city-controlled off-street parking spaces and 2,265 private parking spaces.

Based on current parking space inventories, the city controls approximately 38% of the total off-street parking supply (both general public and reserved spaces).

The study area contains approximately 479 public on-street spaces, all of which are controlled by the city. The on-street parking is available to the public on a first-come-first-serve basis, and a significant portion of the spaces are currently time restricted (up to two hours). The on-street parking located in most residential areas and south of Boston Street is not time limited. Time restrictions are not currently enforced by the City of Chandler.

Current Parking Demand

The overall peak period of parking occupancy for the entire study area occurred at 2:00 p.m. on Wednesday, November 7. During this period, a total of 2,048 parking spaces were occupied in both off-street and on-street parking areas. This level of occupancy translated into 49.5% of the total parking supply. Observed parking occupancies at 10:00 a.m. were very similar to those at the 2:00 p.m. peak.

While the overall parking supply appears adequate for the study area, certain parking lots were more utilized than others. For example, the parking areas surrounding the San Marcos Hotel and nearby stores/restaurants had higher levels of utilization than many other parking facilities – especially during evening hours. The public parking areas on San Marcos Place, as well as nearby on-street parking spaces, were very well utilized throughout each survey day. Parking areas providing public parking near San Marcos Place were regularly full or near full from 10:00 a.m. to 10:00 p.m. each day. The Library parking lot also had higher levels of parking occupancy than other parking facilities located in the study area.

In addition to the parking inventory and occupancy counts, a parking duration survey was conducted in city-designated parking areas. Observed parking durations in the designated areas ranged from .64 hours to 5.27 hours. The overall average amount of time vehicles were parked in designated areas was 2.26 hours. This is longer than the generally posted time limit of two hours for most general public parking spaces. In the parking areas on San Marcos Place, approximately 53 of the available 146 parking spaces were occupied by a vehicle for periods of five or more hours (36% of the available supply). As mentioned previously, time restrictions are not currently enforced by the City of Chandler.

Current Parking Adequacy

Based on the effective parking supply of the entire study area, there is currently a parking surplus of approximately 1,524 spaces or approximately 41% of the effective supply. Overall, there is currently enough unused parking to accommodate current parking needs, assuming people could walk at least one to two blocks to existing parking resources. Parking adequacy is based solely on observed demand as land-use data was not available for this report.

On a block-by-block basis, overall parking adequacies based on the adjusted observed parking demand range from zero spaces to 371 spaces. Currently, there are no blocks with a calculated overall parking deficit during the overall peak period of parking.

With respect to publicly-controlled parking supplies, parking surpluses on a block-by-block basis range from -12 spaces to 113 spaces. There are currently two blocks with estimated public parking deficits, and there are three additional blocks with estimated parking adequacies under 40% of the calculated effective publicly-controlled parking supply.

Around San Marcos Place, most of the available public parking spaces were located on-street (e.g., on Commonwealth Avenue and on Boston Avenue). During evenings and weekends, the available off-street public parking located near San Marcos Place was fully utilized.

Anticipated Future Development Projects

Currently, the City of Chandler has several anticipated future development projects in the construction or planning stages that will impact parking in the study area. These projects include residential, retail, restaurant, and office projects. The anticipated potential developments impacting the parking study area are:

- Sites 1, 2, and 3
 - This development includes both residential and commercial land-uses. As the development is projected to provide a total of 889 new parking spaces, it appears that sufficient parking is provided.
- Sites 4, 5, and 6
 - The city is currently working on evaluating several development scenarios, including a possible downtown hotel and conference center. The development is projected to need up to approximately 508 parking spaces for hotel and conference center land uses and 611 spaces for the residential units (1,119 total parking spaces). If the project does not include the convention center, a need for approximately 611 residential spaces for Sites 4 and 5 would be projected plus any parking needed for other constructed land uses on Site 6. More analysis will be needed once a preferred development concept is finalized.

This development will also result in the loss of a significant number of existing parking spaces in Blocks 13 and 16. Approximately 91 of the 152 public parking spaces that could be lost were utilized during the peak period of parking.

- Site 7
 - This development has been planned in two phases. The first phase of the development has been completed, with 54 new residential units constructed. The second phase of the project will include some mix of office and retail land-uses (exact square footages are not known at this time). Based on the first phase of the development, it appears that the parking provided is sufficient.

- Chandler City Hall
 - The new City Hall is expected to be approximately 120,000 square feet in size and will include a 400-space on-site parking structure. It appears that sufficient parking is being provided for this development. However, current city employee parking in the existing office parking structure may be lost and may need to be relocated (e.g., parking for planning employees).

- New City Museum
 - While currently in preliminary planning, the City Museum is currently anticipated to be constructed north of the new City Hall on Washington Street. It is estimated that approximately 75 spaces will be needed to support this development. The parking demand for this development could be met by improving the utilization of existing supplies or by constructing new parking resources.

- Serrano's Office Building
 - This development is anticipated to include approximately 29,920 square feet of leasable retail and office space. Currently, no new parking is planned for this development. The estimated parking need for this project would be approximately 109 parking spaces for new demand and 23 spaces for existing demand that is displaced. The demand for this development could be met by improving the utilization of existing supplies or by constructing new parking.

- Fire Administration Building
 - The Fire Administration Building is anticipated to be constructed on the southeast corner of Boston Street and Washington Street (14,000 square feet of office space). The city currently anticipates that the new building will create the need for approximately 52 parking spaces. The demand for this project could be met by improving the utilization of existing supplies or by constructing new parking.

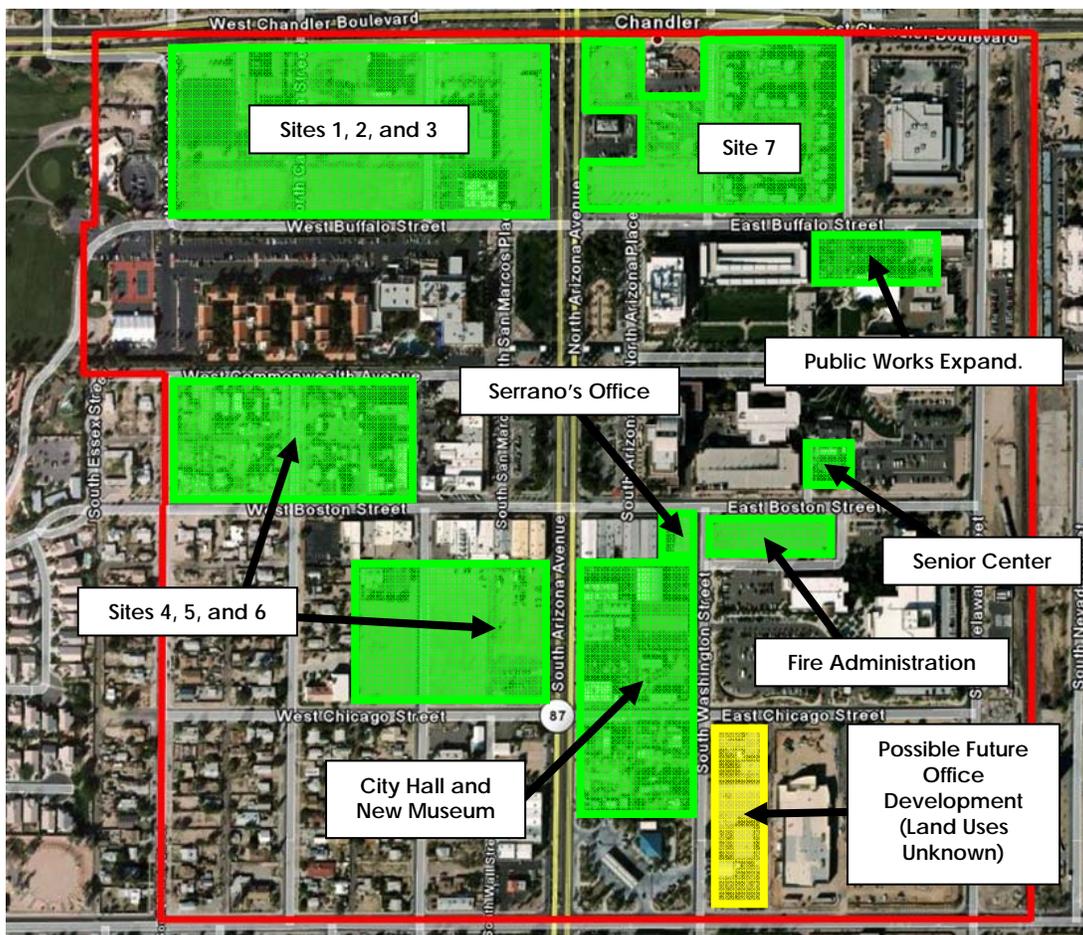
- Public Works Expansion
 - The city is currently contemplating a 9,000 square-foot expansion of the existing Public Works building by 2012. This development has an estimated parking demand of approximately 35 parking spaces. The parking demand for this development could be met by improving the utilization of existing supplies or by developing new parking resources.

- Community Services Expansion
 - A study is currently underway to determine the opportunities to expand the existing downtown Senior Center. It is currently anticipated that an expansion of

the Senior Center could include up to 3,000 square feet of new space. The parking needed for the expansion will depend on how the new space is used. If the new space is used for events/activities, parking demand could be between 5.50 and 20.0 parking spaces per 1,000 square feet (between 17 and 60 parking spaces). The parking demand for this development could be met by improving the utilization of existing supplies or by constructing new parking resources.

In addition to the development projects previously described, other projects planned in the future could also impact parking in the study area. For example, improvements in transit service could help reduce parking demand in the study area, or possibly provide opportunities for multi-modal parking facilities. Changes in streets located in the study area could impact traffic flow and possible locations for public parking facilities (e.g., closing Oregon Street between Chandler Boulevard and Buffalo Street or allowing California Street to cut through the San Marcos Resort). Finally, future development of sites located outside of the study area may also impact downtown parking.

The following graphic illustrates the location of each of the anticipated development projects.



Projected Future Parking Adequacy

Based on the information provided by the city concerning future projects, it appears that some developments will be providing sufficient parking to meet estimated demands. If parking is provided as anticipated, the projects slated for Sites 1-2-3, Site 7 (Phase 1), and the new City Hall should provide enough parking to meet estimated needs. However, some projects could result in parking deficits or do not yet have defined parking components. The following projects have unresolved parking needs (including spaces lost):

- Sites 4, 5, and 6: Estimated need for 1,219 to 2,219 parking spaces (depending on events at the proposed conference center). This includes the replacement of 100 public parking spaces that will be lost when the area is developed. If the project does not include the convention center, a need for approximately 611 residential spaces for Sites 4 and 5 would be projected, plus any parking needed for other constructed land uses on Site 6 and any public parking spaces lost.
- New City Museum: Estimated need for 75 parking spaces.
- Serrano's Office Building: Estimated need for 132 parking spaces, which includes the existing parking demand displaced from Lot 17A (23 spaces).
- Fire Administration Building: Estimated need for 52 parking spaces.
- Public Works Expansion: Estimated need for 35 to 100 parking spaces (if Lot 10D is lost).
- Community Services Expansion: Estimated need for between 17 and 60 parking spaces.
- Possible replacement of lost city employee parking due to the move to the new City Hall building.

Taken in total, the new projects with unresolved or undetermined parking demands could need between approximately 922 and 2,638 parking spaces. The estimated parking demands for these projects could be met through a combination of strategies such as improving the utilization of existing parking resources, constructing additional parking facilities, or implementing new travel demand management strategies.

Possible Parking/Demand Alternatives

To meet anticipated future parking demands, several parking supply alternatives are typically available to municipalities:

- The utilization of existing parking supplies could be improved.
- Additional parking spaces could be created in existing unimproved areas (either on-street or off-street) to provide additional parking.

- The downtown community could require new downtown developments to provide sufficient parking.
- The downtown community could work to reduce parking needs in the study area through the implementation of various transportation demand management and parking supply management strategies.
- The downtown community could utilize a combination of alternatives.

The recommended strategy would involve the downtown community using a combination of parking alternatives. First, the community would work with private parking lot owners to better utilize existing parking surpluses before adding additional parking supplies. If sufficient parking could not be secured using this approach, then the downtown community could consider improving existing parking supplies and/or adding new supplies as appropriate. If new parking spaces were added, either through additional on-street spaces, new or improved parking lots, or parking structures, the downtown community could look to developers to help defray a portion of the costs. Finally, the downtown community would continue encouraging the use of alternative modes of transportation, as well as other parking demand management strategies, to reduce overall parking demands.

Based on the projected parking needs, *Carl Walker* recommends the following:

- Improve the availability of public parking resources by enforcing parking time limits and/or instituting pay parking. Based on the turnover and duration surveys completed in November, 2007, consistent enforcement could help make up to 70 parking spaces more available to downtown visitors. Employee parking should not be provided in areas with high levels of visitor parking demand. In order for increased enforcement to be truly effective, sufficient off-street parking needs to be made available to downtown employees and long-term visitors.
- Valet parking could provide a means to improve the utilization of underutilized parking areas. For example, valet parked vehicles could be stored Lot 16B and/or Lot 16C – improving the utilization of available parking resources without increasing patron walking distances.
- Another opportunity to improve the utilization of existing parking resources is to limit the amount of reserved parking. This recommendation would apply to both public and private parking facilities.
- The storage of city vehicles in the Library Lot (Lot 10G) should be discouraged. Ideally, vehicle storage should be relocated to a secure location that does not impact downtown visitor parking.
- Utilize available surplus parking (e.g., First Credit Union Garage) to support the Serrano's Office Building development until another nearby parking resource is constructed.

- Parking demand for the Senior Center expansion could be met using available parking surpluses in the First Credit Union Parking Structure. The city should investigate opportunities to secure additional parking in this facility.
- Continue planning and development efforts for the parking structure associated with the new City Hall. At least 400 spaces should be provided based on current development plans. If possible, the city should attempt to keep some parking available in the existing parking structure used for City Hall (at least 50 spaces) and direct the remaining demand to Lot 8A. Otherwise, at least 50 parking spaces will need to be provided elsewhere. Options could include space in a new parking structure in Blocks 17 or 18 or the creation of a small surface lot on Block 11.
- A new parking structure constructed with the Fire Administration Building project could provide parking for the new City Museum, Serrano's Office Building, the Senior Center expansion, the Fire Administration Building, and city employees. A parking structure could also provide evening and weekend parking for other downtown businesses and the nearby Inspirador.
- New parking structures to meet the needs of Sites 4, 5, and 6 will be needed. One of the parking structures constructed with this project should include approximately 100 public parking spaces to replace existing public parking supplies that will be lost to development in the future. Additional portions of the constructed parking structure(s) could also provide additional shared parking during evenings and special events.

The development of any parking structures will depend on the timing of future development projects. However, the financial planning for a future parking facility should begin as soon as possible by including in-lieu fees in future developments, instituting pay parking, and/or exploring options for special assessments and other revenue streams.

Action Plan and Recommendations Summary

Currently, approximately 50% of the available parking supply in the downtown study area is unused during the typical peak parking period. However, future developments in downtown Chandler could lead to significant parking supply deficits in some areas. Therefore, future downtown development will necessitate the construction of additional parking resources – both on-street and off-street. With this in mind, *Carl Walker* recommends the following action plan:

Short-Term (Within the Next 24 Months):

1. Improve the utilization of existing parking supplies in the downtown. There is clearly an immediate need to improve parking conditions in Blocks 9 and 13. The utilization of available parking resources can be improved through one or more of the following measures:

- A. Improve parking-related signage and wayfinding in the downtown. First, concentrate on improving signage on Arizona Avenue and near primary public parking areas (e.g., Lots 9C, 9D, 10A, 10J, 10K, 13D, and 16 B/C). This should improve the utilization of available parking resources (e.g., while busy during daytime hours, the public parking areas on Block 10 are significantly underutilized during evening hours and could provide overflow parking). The signage should be distinctive, incorporating a unique and consistent design. Signage for short-term parking areas should reinforce the goal of providing parking for visitors.
- B. Improve the timing of the crosswalk across Arizona Avenue (at Buffalo Street and Boston Street) to make it more pedestrian friendly. Sufficient time should be provided to allow pedestrians to cross, and the frequency of “walk” signals should be increased.
- C. Provide long-term parking for downtown employees and long-term visitors in underutilized areas. For example, employees working in Blocks 13 and 16 should be directed to park behind businesses and/or in Lots 16B and 16C, instead of parking in short-term visitor parking areas. Ensure sufficient long-term parking is provided and require downtown employees to use appropriate parking spaces/facilities.
- D. Consider providing a centralized valet parking service during periods of heavy parking activity to help make parking more convenient. Ideally, this service would be provided in a location convenient to most downtown businesses located in Blocks 13 and 16. One possible location would be the south side of Block 13 on Boston Street. Valet vehicle storage could be located in Block 16. This would help improve the utilization of available parking, as well as minimize customer walking distances. The cost of providing valet parking could be covered by charging customers for the service or funded by local businesses/organizations.
- E. Create downtown parking maps that can be distributed to visitors and employees through the city and local businesses/organizations that illustrate the locations of public parking supplies and long-term parking areas, as well as basic parking policies and regulations. Parking maps should also be available on the Internet.
- F. The city should discontinue the storage of city/public vehicles in the Library parking lot. Relocating city/public vehicle storage will help make up to 14 additional parking spaces available to library and downtown visitors.
- G. During special events, several opportunities are available to improve existing conditions. First, require special events to provide sufficient directional signage on streets to guide visitors to designated special event parking areas. Second,

provide signs in each event parking lot to denote availability and any designated restrictions. Third, minimize the use of parking areas for event staging wherever possible. Fourth, provide some event parking staff to help direct visitors to parking areas, change signage as needed to redirect visitors, and monitor parking activities. Finally, attempt to use off-site parking areas (e.g., the parking associated with the Chandler Center for the Arts) for overflow event parking.

2. While Chandler Police bicycle patrols were very visible during the parking inventory and occupancy counts, additional steps may be necessary to improve safety/security perceptions. Work with community stakeholders to improve both real and perceived safety levels in parking areas and on pedestrian pathways. Parking areas should provide the minimum footcandles per square foot noted in this report. Utilize CPTED design principles in parking areas. Also, local businesses could work together to provide private security patrols and safety escort services.
3. Conduct a maintenance review of existing public parking lots/spaces. Ensure parking surfaces are well maintained, parking space stripes are visible, signage is maintained, landscaping is appropriate, etc.
4. Begin the process to site and design a parking structure for the new City Hall development.
5. Attempt to better utilize existing parking supplies prior to constructing new parking areas. There is currently enough unused parking to accommodate current and projected parking needs in the near-term. The city and the downtown community should work with private parking lot owners to better utilize existing supplies. The continued development of the downtown will warrant the addition of parking supplies within reasonable walking distances of the downtown core.
6. Begin investigating opportunities to create a downtown Chandler parking district, using the study area for this project as the initial district boundary. The creation of the district should incorporate the ability to collect parking fees for both on-street and off-street parking, prepare for the creation of a downtown parking organization to manage the parking system, and provide the necessary authority to begin incorporating related parking functions (e.g., downtown parking operations and management, parking enforcement, parking planning) into a vertically-oriented management structure. All parking-related revenues generated in the district (including enforcement fines) would be designated to cover parking system costs, and if possible, other programs (e.g., transit programs, street/sidewalk cleaning).
 - A. Until the downtown parking organization is created, designate a single city department as responsible for downtown parking planning and management. While the actual operation, maintenance, and planning of the system may be handled by several city departments in the near future, the system will appear to have a single responsible department. This department should work closely with

- the downtown community (as well as nearby neighborhoods) to ensure community concerns are addressed.
- B. Develop and approve a set of guiding principles for the downtown Chandler parking district, using the provided information as a starting point (see Section 4.01). The guiding principles will guide the future development of the district parking system, as well as provide reasonable constraints within which future parking issues can be addressed. The process to define parking system guiding principles should include significant public input.
 - C. Decide how parking will be operated in downtown. Begin the process to determine a preferred method of parking operations (e.g., self-operated or outsourced operations).
 - D. Investigate opportunities to improve customer service by instituting additional service programs, such as battery jumps, lock-out assistance, tire inflation, etc. Vehicles provided to parking enforcement officers (or downtown ambassadors) could be equipped to provide these services.
 - E. Once the parking district is created, consider completing an annual report. The annual report would detail accomplishments, challenges, anticipated needs, parking supply/demand issues, financial issues, etc. This report would serve as a historical record of the year's activities, as well as a way to provide additional information to the downtown community.
7. Investigate opportunities to improve parking enforcement in the study area, especially in the Downtown Core. Parking time limits in Blocks 9, 10, and 13 should be consistently enforced. Parking time limits could be two to three hours. Parking enforcement time periods could be from 8:00 a.m. to 8:00 p.m. Monday through Saturday in Blocks 9, 13, and 16, and 8:00 a.m. to 5:00 p.m. Monday through Friday in other blocks. Improved parking enforcement could improve the utilization of approximately 70 to 80 downtown parking spaces. One Parking Enforcement Officer (PEO) could be provided in the study area during enforcement periods. The PEO could also help provide additional security, as well as provide information to downtown visitors.
- A. Begin the process to discuss and investigate pay parking opportunities in downtown. This process should include both short-term and long-term parking areas. The city should work closely with downtown stakeholders to ensure parking goals/objectives are met.
 - B. Begin to designate where pay parking could be implemented. Initially, consider the primary locations for public pay parking noted in this report. For most public parking areas, *Carl Walker* recommends multi-space meters – preferably pay-by-space meters (with a pay by cell phone option). If desired, the city could also

consider purchasing access control equipment for off-street long-term lots to improve service and reduce enforcement needs.

8. In order to more proactively plan for parking, conduct an update of the parking inventory and occupancy surveys contained in this report. These counts should be updated as necessary (when new developments occur), and updates should be conducted annually (at a minimum). Evaluate the impacts of downtown development on nearby neighborhoods, and authorize the creation of residential permit programs as needed.
9. Ensure the city has sufficient land use data for the downtown parking district, and update annually or as necessary.

Mid-Term (Years Three to Five):

1. Develop a parking marketing program to include information for downtown visitors and businesses. Continue to improve lines of communication between the city and district businesses concerning parking issues. This information should incorporate information on alternative modes of transportation as well. Utilize the existing downtown newsletter to communicate parking goals and issues, as well as upcoming/ongoing construction projects and special events, to the downtown community.
2. Update the city parking zoning code to institute an approved shared parking model/methodology (using the shared parking model provided as part of this study), as well as acceptable parking design criteria. Also, update the parking zoning code, as well as existing municipal codes, to include the following issues:
 - A. Allowing in-lieu fees and setting requirements.
 - B. Improved lighting standard (using the recommendation included in this report).
 - C. Specific requirements for bicycle parking (typically a percentage of vehicle parking requirements).
 - D. Provide options for tandem parking (situations where one space blocks another) for residential parking and/or valet parking, if desired.
 - E. Ensure ADA parking standards adhere to federal ADA guidelines.
3. Work with downtown businesses to determine loading and delivery needs. For example, loading and delivery zones may be needed around the businesses located in Blocks 9, 13, and 16. Where possible, designate specific loading zones and determine adequate hours for delivery vehicle parking. Loading zones could be used for short-term visitor parking after designated loading zone hours.
4. Provide sufficient support for alternative modes of transportation. Provide adequate bicycle racks, comfortable pedestrian paths, bike paths, etc. in the district to encourage a pedestrian-first mentality. A marketing campaign could be created to

encourage people (especially employees located in the district) to walk, bike, carpool, vanpool, or use public transit to travel to the district.

5. Conduct a downtown lighting study to ensure lighting levels support safety and security goals and objectives.

Long-Term (after Year Five):

1. Additional parking supplies should be placed and sized appropriately, using the parking supply and demand analysis methodology detailed in this parking study. When designing additional parking facilities, ensure pedestrian paths to/from the parking encourage use by providing stable walking surfaces, shading, pedestrian amenities (e.g. benches, etc.), and traffic calming measures as needed.
2. Ideally, the development of a parking garage should be closely related with the development(s) it is serving or based on growing parking demands in the downtown. Building a parking garage on pure speculation, with the hope of attracting development, should only occur if sufficient district development demand warrants. Should developments not occur, a garage built on speculation could result in a severely underutilized facility. If a developer is interested in developing a portion of the district, and sufficient parking supplies cannot be provided using other methods, then the city could propose providing the necessary parking along with the construction of the development. In-lieu fees could be used to provide/supplement the funds necessary for parking facility design and construction.
3. Investigate opportunities to incorporate additional parking technologies to improve downtown parking operations and management. This could include variable message systems (to direct parkers to available supplies), MLPR enforcement systems, wireless parking sensors, etc.