Parking Study AIMMC Campus

Chicago, Illinois



Prepared For:





1. Introduction

This report summarizes the methodologies, results, and findings of a parking study conducted by Kenig, Lindgren, O'Hara, Aboona, Inc. (KLOA, Inc.) for the Advocate Illinois Masonic Medical Center (AIMMC) campus located in Chicago, Illinois. The campus is generally bounded by Barry Avenue on the north, Halsted Street on the east, Wellington Avenue on the south, and Sheffield Avenue on the west. In addition, several buildings are located on the south side of Wellington Avenue. Currently, the campus contains the following primary buildings:

- The Main Hospital
- The Center for Advanced Care (CAC)
- The Wilton Building
- The Center for Education
- The Dental Center
- The Medical Office Center (MOC)

In addition, the campus has three parking garages and four surface parking lots. **Figure 1** shows an aerial view of the campus and the parking facilities.

Current plans for the AIMMC campus include the addition of two new buildings and the expansion of the CAC, which are summarized below.

- Wellington Pediatric Development and Counseling Center. The existing 21,600 square-foot former Cancer Center building located in the southwest corner of Wellington Avenue with Mildred Avenue is proposed to be replaced with a new 56,000 square-foot building. As proposed, the new building will include outpatient exam rooms and consultation clinics for therapeutic counseling (behavioral health) and a pediatric development center.
- Sheffield Parking Garage. A new parking garage is proposed to be located on the existing 70-space gravel parking lot and a commercial building located on the east side of Sheffield Avenue bounded by Nelson Street on the north and Wellington Avenue on the south. As proposed, the parking garage is to contain approximately 408 parking spaces and an approximate 15,000 square-foot physical therapy center. Access to the parking garage is proposed to be provided via a single access drive on Nelson Street.
- The Center of Advanced Care (CAC) Westward Expansion. Ultimately, the CAC is proposed to be expanded by approximately 64,900 square feet and will replace the 26-space Wilton parking lot and the 27,000 square-foot Wilton building. As proposed, the three-level expansion will include new or additional facilities for the breast center, cancer center, heart center, and procedure, preparation, recovery, and surgical suites.

Figure 2 shows the locations of the two proposed new buildings and the CAC westward expansion.

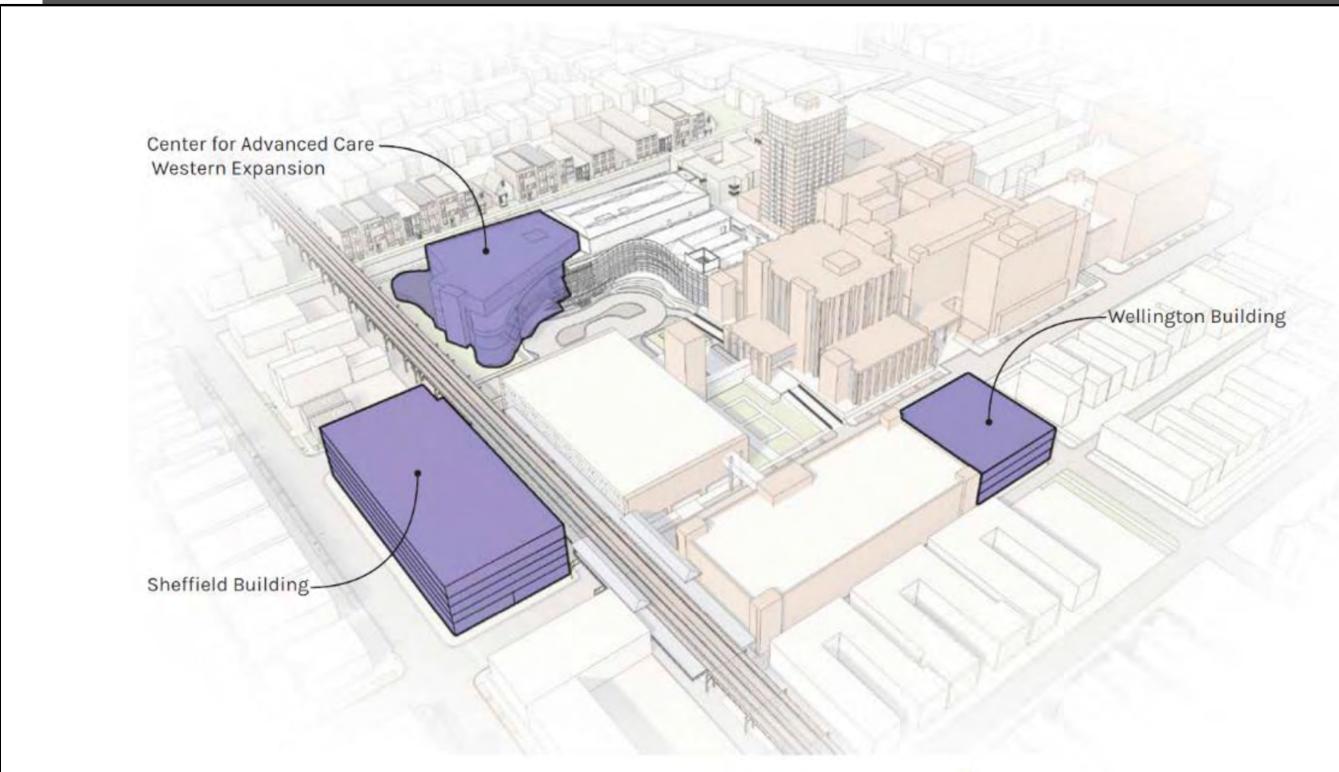
The purpose of the study was to inventory the existing parking conditions on the AIMMC campus and determine the impact that the new buildings and CAC westward expansion will have on the parking conditions.





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2. Existing and Future Parking Inventory

This section summarizes the existing AIMMC campus parking inventory and the changes in the parking inventory with the two proposed new buildings and the CAC westward expansion.

Existing Campus Parking Inventory

AIMMC campus has three parking garages and four parking lots. In addition, AIMMC leases parking at two off-campus parking garages. The following describes each of the parking facilities and **Figure 3** illustrates the location of the AIMMC campus parking facilities.

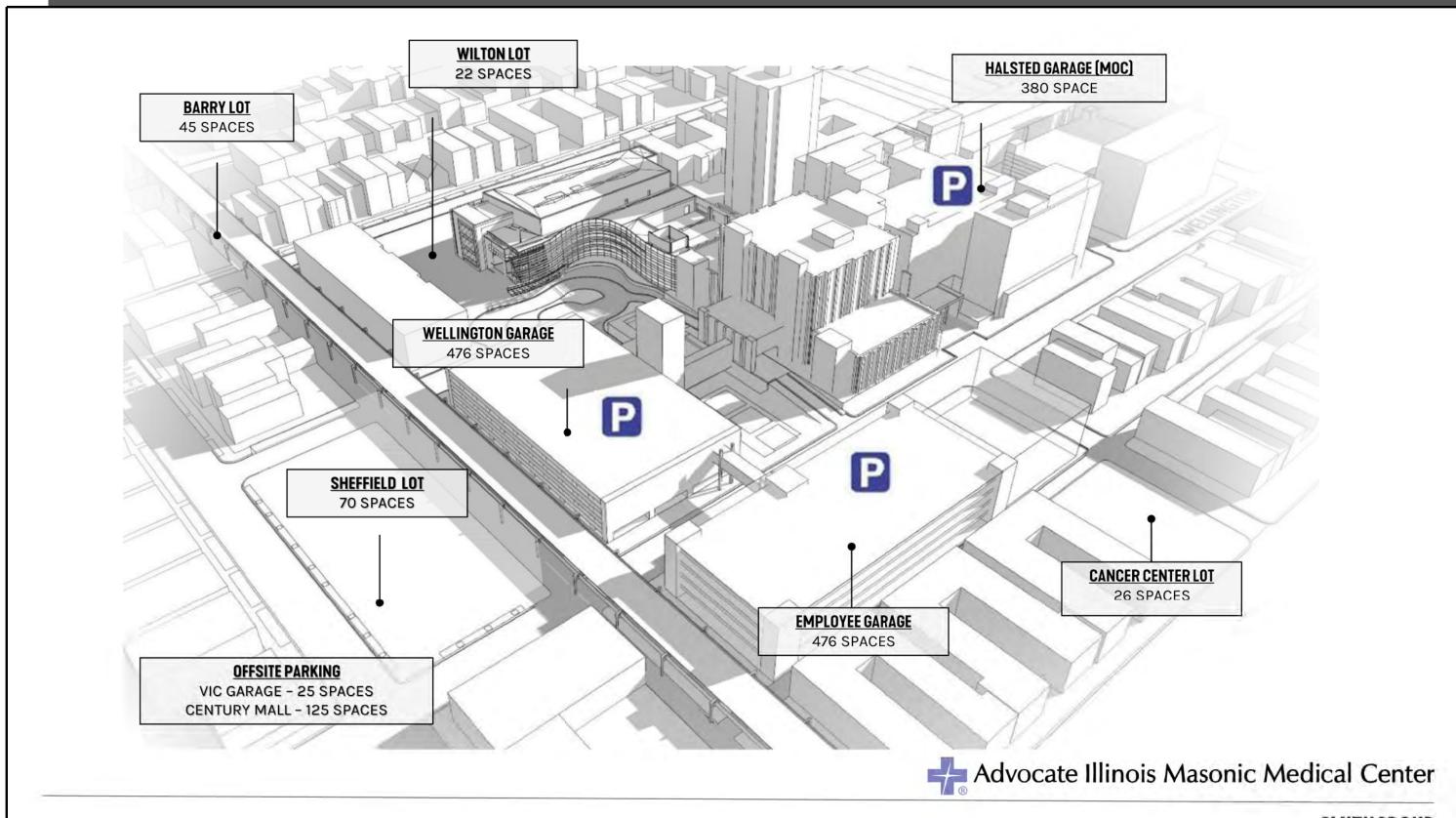
AIMMC Parking Garages

- The Wellington parking garage is located between Wellington Avenue and Nelson Street along the east side of the CTA train tracks and has a total of approximately 476 parking spaces that are primarily used by patients and visitors with a limited number of parking spaces reserved for faculty and staff.
- The *Halsted parking garage* is generally located in the northwest quadrant of the intersection of Halsted Street with Wellington Avenue and has a total of approximately 380 parking spaces that are primarily used by patients and visitors with a limited number of parking spaces reserved for faculty and staff.
- The *employee parking garage* is located on the south side of Wellington Avenue along the east side of the CTA train tracks and has a total of approximately 476 parking spaces that are generally reserved for only faculty and staff.

AIMMC Parking Lots

- The *Cancer Center parking lot* is located in the northwest quadrant of Oakdale Avenue with Mildred Avenue and has a total of approximately 26 parking spaces that are reserved for faculty and staff.
- The *Wilton parking lot* is between Nelson Avenue and Barry Avenue just west of the CAC and has a total of approximately 26 parking spaces that are reserved for valet parking.
- The *Sheffield parking lot* is generally located on the east side of Sheffield Avenue between Wellington Avenue and Nelson Street and has a total of approximately 70 parking spaces that are reserved for valet parking and faculty and staff parking.
- The *Barry parking lot* is generally located on the north side of Barry Avenue under the CTA train tracks and has a total of approximately 45 parking spaces that are primarily reserved for valet parking with some staff parking.





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Off-Campus Parking Facilities

AIMMC leases approximately 125 parking spaces for faculty/staff at the Century parking garage located on the west side of Clark Street just north of Diversey Parkway and approximately 25 parking spaces for faculty/staff at the Vic parking garage located on the west side of Sheffield Avenue just north of Fletcher Street.

Total Parking Inventory

Table 1 summarizes the total parking inventory and the approximate breakdown between patient/visitor and faculty/staff parking spaces. It should be noted that the inventory for the patient/visitor and faculty/staff parking is based on the existing parking restrictions and/or signage in each facility. Further, the number of parking spaces in the Wilton, Sheffield, and Barry lots are estimates as they are generally used for valet parking with some faculty/staff parking and/or are gravel lots. Finally, the number of spaces leased in the Vic and Century garages was provided by AIMMC officials.

Table 1
AIMMC EXISTING PARKING INVENTORY

Facility	Patient/Visitor	Faculty/Staff	Total	
Wellington Garage	389	87	476	
Halsted Garage	339	41	380	
Employee Garage	0	476	476	
Cancer Center Lot	0	26	26	
Wilton Lot	22	0	22	
Sheffield Lot	40	30	70	
Barry Lot	45	0	45	
Vic Garage	0	25	25	
Century Garage	<u>0</u>	<u>125</u>	<u>125</u>	
Total	835	810	1,645	
Total AIMMC Campus	835	660	1,495	

[•] The parking inventory for the patient/visitor and faculty/staff is based on the existing parking restrictions and/or signage in each facility.



[•] Parking inventory for the Wilton, Sheffield, and Barry lots are estimates as they are primarily used for valet parking with some faculty/staff parking and/or are gravel lots.

[•] The distribution of the parking spaces in the Sheffield lot are approximate.

The AIMMC campus has a total of approximately 1,495 parking spaces with 835 parking spaces used for patients/visitors and 660 parking spaces used for faculty/staff. With the 150 parking spaces leased off-campus, AIMMC has access to a total of approximately 1,645 parking spaces with 835 parking spaces used for patients/visitors and 810 parking spaces used for faculty/staff.

Future Campus Parking Inventory

With the proposed two new buildings and the CAC westward expansion several of the existing parking lots will be eliminated and the leases at the Century and Vic parking garages will be terminated and replaced with a new parking garage to be located on the Sheffield parking lot site. The following summaries the changes in the campus parking inventory.

Elimination of Parking Lots and Termination of Parking Leases

As summarized below, approximately 240 to 245 parking spaces currently provided on the campus and/or leased will be eliminated/terminated:

- The 150 parking spaces currently leased at the Century and Vic parking garages will be terminated. This will also eliminate the shuttle bus service that transports faculty/staff between the campus and the two parking garages.
- The approximately 70 parking spaces located in the Sheffield lot will be eliminated to accommodate the proposed parking garage.
- The 22 parking spaces located in the Wilton lot will be eliminated with the future CAC westward expansion. It should be noted that since the Wilton lot is used for valet parking, it generally accommodates more vehicles than the 22 striped parking spaces.

Proposed Parking Garage

The new parking garage that is to replace the Sheffield parking lot is proposed to provide a total of 408 parking spaces. As currently proposed, the parking garage will generally be used for faculty/staff with 30 spaces reserved for patients of the physical therapy center.

Total Future Parking Supply

Table 2 summarizes the AIMMC campus future parking supply which will consist of four parking garages and two parking lots that will have a total of approximately 1,811 parking spaces. The changes in the parking inventory will result in a net increase of approximately 165 total parking spaces provided on the AIMMC campus.



Table 2
AIMMC FUTURE PARKING INVENTORY

Facility	Total			
Wellington Garage	476			
Halsted Garage	380			
Employee Garage	476			
Proposed New Parking Garage	408			
Cancer Center Lot	26			
Barry Lot	45			
Total AIMMC Campus	1,811			
Parking inventory for the Wilton, Sheffield, and Barry lots are estimates as they are used for valet parking and/or are gravel lots.				

Existing Effective Parking Supply

A parking system operates at maximum efficiency when the system is operating at less than full capacity, as the excess parking reduces the searching for available parking and allows for operating fluctuations, vehicle maneuvers, and vacancies created by reserving spaces for certain users and accounts for loss of parking due to mis-parked vehicles, snow cover, etc. As such, most medical campuses have an effective parking inventory of 90 to 95 percent of the total parking inventory. **Table 3** shows the effective parking inventory of the AIMMC campus assuming the current and future parking inventory. Currently, the AIMMC campus has a current effective parking inventory between 1,345 to 1,420 parking spaces and will have a future effective parking inventory between 1,630 to 1,720 parking spaces, assuming the future parking inventory.

Table 3
CURRENT AND FUTURE EFFECTIVE PARKING INVENTORY

	Effective Parking Inventory					
	90 Percent	95 Percent	100 Percent			
Current Parking Inventory						
AIMMC Campus ¹	1,345	1,420	1,495			
• AIMMC Total Inventory ²	1,480	1,563	1,645			
Future Parking Inventory	1,630	1,720	1,811			
 Excludes the parking spaces leased at the Century and Vic parking garages. Includes the parking spaces leased at the Century and Vic parking garages. 						



3. Existing Parking Demand

The parking demand of the AIMMC campus was determined by performing parking surveys at all the campus parking facilities and was compared to previous surveys performed in 2016. In addition, the observed parking demand was increased to represent peak day conditions at the AIMMC campus.

Observed Parking Demand

To determine the existing AIMMC parking demand, parking occupancy surveys were conducted of all the parking facilities on the AIMMC campus. The surveys were performed every hour from 8:00 A.M. to 6:00 P.M. on Thursday, March 15, 2019. Further, the faculty/staff parking at the Century parking garage was estimated based on entry/exit gate data from March 15, 2019 as provided by AIMMC officials. It should be noted that gate information could not be obtained for the Vic parking garage. As such, the number of faculty/staff parking at the Vic parking garage was estimated based on the same parking ratio observed at the Century parking garage. **Table 4** shows the results of the parking surveys.

The AIMMC campus had a maximum parking demand of approximately 1,377 vehicles at 11:00 A.M. It should be noted that KLOA, Inc. performed similar parking surveys at the AIMMC in May 2016 which showed that the campus had a maximum parking demand of approximately 1,416 parking spaces at 11:00 A.M. The average maximum parking demand from the parking surveys performed in 2016 and 2019 was approximately 1,397 vehicles.

Existing Peak Day Parking Demand

According to AIMMC officials, the days on which the parking surveys were performed in 2016 and 2019 do not represent peak days at the campus. Based on census data at the AIMMC campus, the number of patients/visitors is approximately 10 percent higher and the number of faculty/staff is approximately three percent higher on peak days compared to the days the parking surveys were performed. Since the peak parking demand between patients/visitors and faculty/staff are generally the same, the existing parking demand was increased by 6.5 percent to represent a peak day at the campus. **Table 5** shows the estimated existing peak day parking demand at the AIMMC campus.



Table 4
AIMMC CAMPUS EXISTING PARKING DEMAND – THURSDAY, MARCH 15, 2019

	Parked Vehicles										
	8 AM	9 AM	10 AM	11 AM	Noon	1 PM	2 PM	3 PM	4 PM	5 PM	6 PM
Wellington Garage	290	376	413	424	419	399	402	387	316	261	219
Halsted Garage	239	305	348	355	330	330	323	303	255	193	118
Employee Garage	398	393	399	402	404	403	399	400	294	223	116
Cancer Center Lot	15	16	16	15	16	15	16	18	13	7	4
Wilton Lot	9	15	21	17	20	19	13	14	9	11	9
Sheffield Lot	33	59	78	82	75	65	65	59	44	30	26
Barry Lot	4	5	5	5	6	5	5	6	6	2	0
Vic Garage	11	12	12	13	13	13	13	12	11	9	7
Century Garage	53	58	62	64	65	65	64	60	53	46	35
Total	1,052	1,239	1,354	1,377	1,348	1,314	1,300	1,259	1,001	782	534

[•] The number of faculty/staff parking in the Century garage was estimated based on entry gate data from March 15, 2019 as provided by AIMMC officials.



[•] The number of faculty/staff parking in the Vic garage was estimated based on the same ratio of faculty/staff parking in the Century garage.

Table 5
EXISTING ESTIMATED PEAK PARKING DEMAND

	May 2016	March 2019	Average
Observed Parking Demand	1,416	1,377	1,397
Peak Day Percent Increase	6.5%	6.5%	6.5%
Peak Day Parking Demand	1,508	1,466	1,487

The existing estimated peak day parking demand at the AIMMC campus is between 1,466 and 1,508 vehicles with an average of 1,487 vehicles. Further, it is important to note that the actual peak day parking demand of the AIMMC campus is likely higher than the estimated peak day parking demand due to the following:

- The peak parking demand did not include patients, visitors, faculty, and/or staff that are parking on the area streets.
- The medical office center located in the northwest quadrant of Halsted Street and Wellington Avenue was approximately 85 percent occupied when the parking surveys were conducted. It is anticipated that the AIMMC parking demand will increase with the full occupancy of the medical office center.



4. Parking Demand vs Effective Parking Inventory

This section compares the parking demand verses the effective parking inventory to determine if sufficient parking will be provided to accommodate the AIMMC campus peak day parking demand as well as future growth.

Parking Demand versus Effective Parking Inventory

Table 6 presents a comparison of the AIMMC current existing peak day parking demand versus the effective parking inventory under current and future conditions. As indicated previously, most medical campuses desire to have an effective parking supply of between 90 and 95 percent. As such, Table 6 compares the peak day parking demand to both a 90 percent and 95 percent effective parking supply. In addition, Table 6 shows the surplus parking and the percentage of surplus parking under the various conditions.

Table 6
EXISTING PEAK DAY PARKING DEMAND VERSUS EFFECTIVE PARKING INVENTORY

		rent rking Supply	Future Effective Parking Supply			
	90 Percent 95 Percent		90 Percent	95 Percent		
Parking Supply	1,480	1,563	1,630	1,720		
Existing Peak Demand	1,487	1,487	1,487	1,487		
Surplus Parking Spaces	-7	76	143	233		
Surplus Parking Percent	0.5%	5.1%	9.6%	15.6%		

Results and Findings

The following summarizes the results and findings of the comparison of the existing peak day parking demand versus the effective parking supply.

Current Parking Conditions

- The campus has a deficit of approximately seven parking spaces when the existing peak day parking demand is compared to the current 90 percent effective parking inventory.
- The campus has a surplus of approximately 76 parking spaces when the existing peak day parking demand is compared to the current 95 percent effective parking inventory.



• If the 150 spaces leased at the Century and Vic parking garages are excluded from the existing parking inventory, the existing peak day parking demand exceeds both the 90 and 95 percent effective parking inventory provided on the AIMMC campus.

Future Parking Conditions

- The proposed changes in the AIMMC campus will result in a net increase of approximately 165 total parking spaces provided on the AIMMC campus.
- The campus has a surplus of approximately 143 parking spaces when the existing peak day parking demand is compared to the future 90 percent effective parking inventory. This represents an approximately 9.6 percent increase in the existing peak day parking demand or an approximate 1.0 percent per year growth rate over a ten-year period.
- The campus has a surplus of approximately 233 parking spaces when the existing peak day parking demand is compared to the future 95 percent effective parking inventory. This represents an approximately 15.6 percent increase in the existing peak day parking demand or an approximate 1.5 percent per year growth rate over a ten-year period.
- As such, the AIMMC future parking inventory will exceed the existing peak day parking demand which will provide some surplus parking to accommodate future growth at the AIMMC campus. However, when factored over a ten-year period or longer, the surplus parking only provides for limited growth at the AIMMC campus.



5. Conclusion

Based on the preceding analyses and recommendations, the following conclusions have been made:

- The AIMMC campus currently has three parking garages and four parking lots that provide a total of approximately 1,495 parking spaces. In addition, AIMMC leases 150 parking spaces total between the Century and Vic parking garages. With the two leases, the AIMMC campus has access to a total of approximately 1,645 parking spaces.
- With the proposed new buildings and the CAC westward expansion, the Wilton lot and the Sheffield lot will be eliminated and the leases at the Century and Vic parking garages will be terminated and replaced with a 408-space parking garage. As a result, the AIMMC campus will have a future parking inventory of approximately 1,811 parking spaces or a net increase of approximately 165 parking spaces.
- A parking system operates at maximum efficiency when the system is operating at less than full capacity. As such, most medical campuses have an effective parking supply of 90 to 95 percent of the total supply. The AIMMC campus has a current effective parking inventory between 1,345 to 1,420 parking spaces and will have a future effective parking inventory between 1,630 to 1,720 parking spaces.
- Based on March 15, 2019 parking surveys, the AIMMC campus had a maximum parking demand of approximately 1,377 vehicles at 11:00 A.M. Previous surveys performed in May 2016 showed that the campus had a maximum parking demand of approximately 1,416 parking spaces at 11:00 A.M. The average maximum parking demand from the two parking surveys was approximately 1,397 vehicles.
- Based on information provided by AIMMC officials, the observed peak parking demand was increased by 6.5 percent to represent the existing peak day parking demand. The AIMMC campus has an estimated existing peak day parking demand between 1,466 and 1,508 vehicles with an average of 1,487 vehicles. It is important to note that the actual peak day parking demand of the AIMMC campus is likely higher than the estimated peak day parking demand as (1) as it does not include patients, visitors, faculty, and/or staff that park on the area streets and (2) the medical office center was approximately 85 percent occupied when the parking surveys were conducted.
- When the current effective parking supply is compared to the existing peak day parking demand, the AIMMC campus has a surplus between seven and 76 parking spaces. However, if the 150 spaces leased at the Century and Vic parking garages are excluded from the current parking inventory, the existing peak day parking demands exceeds the 90 and 95 percent effective parking inventory provided on the AIMMC campus.



• When the future effective parking supply is compared to the existing peak day parking demand, the AIMMC campus has a surplus between seven and 143 and 225 parking spaces. This represents an approximate 9.6 to 15.6 percent increase in the existing peak day parking demand or an approximate 1.0 to 1.5 percent per year growth rate over a ten-year period. As such, the AIMMC future parking inventory will exceed the existing peak day parking demand which will provide surplus parking to accommodate future growth at the AIMMC campus. However, when factored over a ten-year period or longer, the surplus parking only provides for limited growth at the AIMMC campus.

