Prepared for the City of Wauwatosa, Wisconsin

Village Area Parking Analysis

October 31, 2024

Updated Draft Report

WALKER CONSULTANTS

303 West Madison, Suite 1650
Chicago, IL 60606
312.489.0603

October 31, 2024

Mr. David Simpson
Director of Public Works
City of Wauwatosa
7725 W. North Avenue
Wauwatosa, WI 53213

Re: *Village Area Parking Analysis – **Updated Draft Report***
Wauwatosa, Wisconsin
Walker Consultants Project #31-009728.00

Dear Mr. Simpson:

Walker Consultants is pleased to submit for your review this updated draft report for the Village Area Parking Analysis.

We appreciate the opportunity to serve you on this project. If you have any questions or comments, please do not hesitate to call.

Sincerely,

WALKER CONSULTANTS

Andrew Baglini

Andrew Baglini
Project Manager / Parking and Mobility Consultant

Report Contents

List of Figures

Executive Summary

To be completed with the final report and in conjunction with TAC presentation feedback.

01 Current Conditions Analysis

Project Understanding

Mandel Group ("Developer") has proposed a 157-unit residential development on the site of the current Blanchard Street surface lot in Wauwatosa, Wisconsin. The Developer is also proposing 288 parking spaces with the development through a mix of public and private spaces (190 private spaces and 98 public spaces) in and around the building. The City of Wauwatosa ("City") engaged Walker Consultants ("Walker") to assist in determining how the loss of the Blanchard Street Lot, plus the addition of the new residential development, will impact the supply of and demand for parking in the Village area of Wauwatosa. Additionally, Walker was tasked with analyzing the greater Village area ("Village") parking system and offering best practices and potential improvements for gaining operational efficiencies and improving the resident/employee/visitor level of service from a parking and mobility perspective.

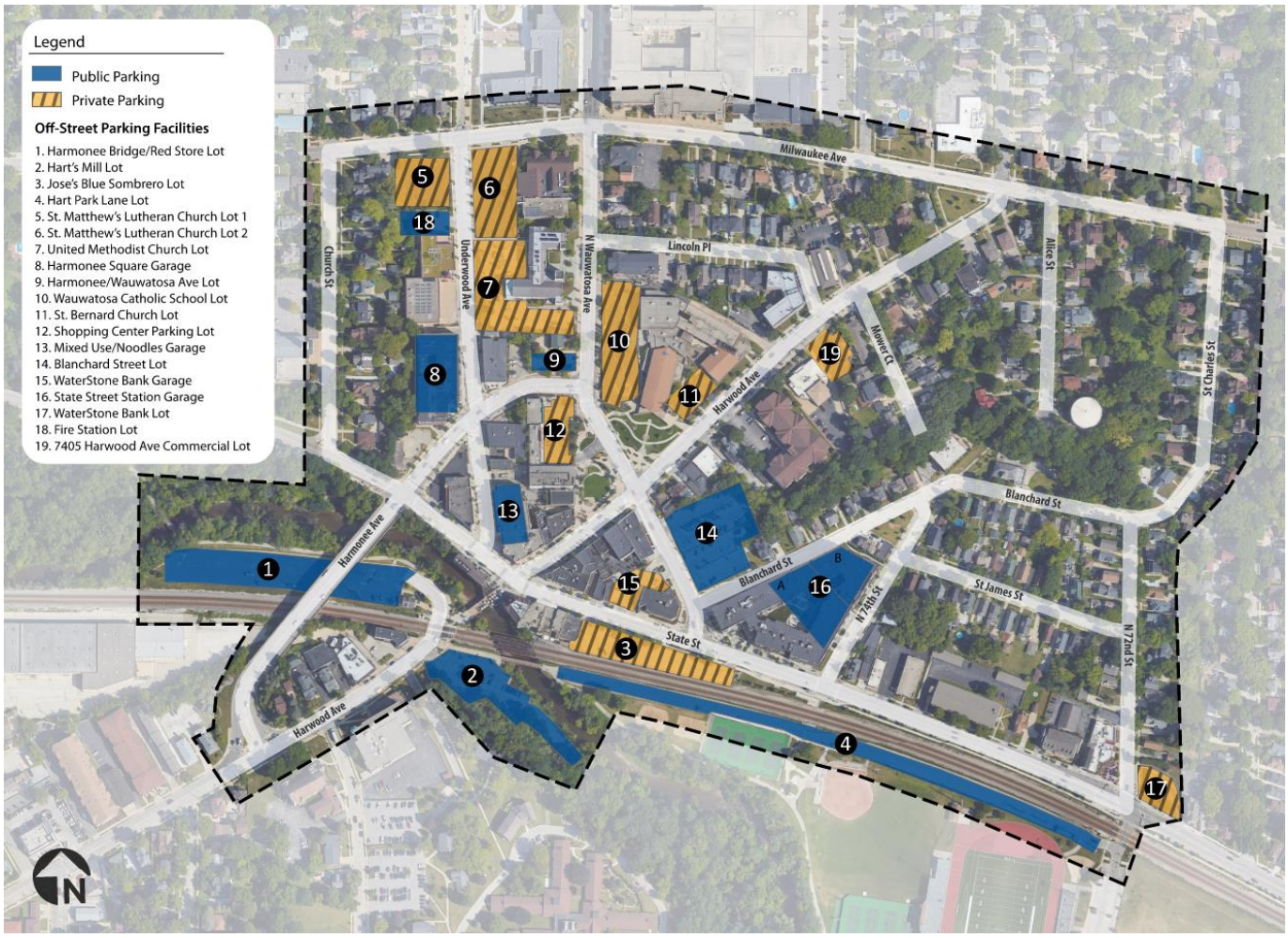
Village Area Context

The Wauwatosa Village area is the downtown mixed-use commercial and residential hub of the City. The roughly 15-block Village area is located in the central-eastern portion of the City, centered on the intersection of Underwood and Harwood Avenues, and State Street. The charming and pleasant Village area is active with pedestrians, vehicular traffic, and the occasional train, and offers a mixture of dining, retail, cultural, and business establishments, surrounded by moderately dense multi-family and single-family residential land uses. The Village area is approximately five miles west of downtown Milwaukee and Lake Michigan, and approximately three miles north of Interstate 94, America Family Field (Milwaukee Brewers baseball), and the Wisconsin State Fair Park.

A map highlighting the project study area is provided on the following page in **Figure 1.** The study area is generally bounded by Milwaukee Avenue to the north, Church Street and Harmonee Avenue to the west, Harwood Avenue and the Hart's Mill Lot to the south, and 72nd and St. Charles Streets to the east. The entirety of the core Village commercial area is included in this study area, including areas on both sides of the Menomonee River. Residential areas closest to the Village were studied as well, particularly along Church Street and the neighborhood immediately east of the Village (including Blanchard Street, 74th Street, St. James Street, and 72nd Street).

All significant publicly available parking is examined in the analysis and is identified on the map in **Figure 1**. Public parking facilities are shown in blue and private parking facilities are shown in orange. The numbered parking facilities correspond to the facility names in the map legend and align with the facility numbering system used later in this report. Within the study area, the Walker Team documented the existing supply of public and private parking, as well as observing how those spaces are used throughout the course of a typical weekday and a Farmer's Market Saturday.

Figure 1. Wauwatosa Village and Project Study Area



Source: Google Earth, Walker Consultants, 2024

Existing Parking Conditions

The following section provides an overview of existing parking conditions in the Village, as documented by the Walker Team, including:

- Public vs. private parking supply
- Weekday and weekend parking demand conditions
- Event (Farmer's Market) parking demand conditions

The findings of the field data collection effort act as one of the foundations of an effective downtown parking plan. Before it is possible to identify opportunities to develop or improve parking or recommend changes to existing parking policies, it is first necessary to have a solid understanding of existing conditions within the study area. This allows recommendations to be made based on data, as opposed to perceptions of parking supply and demand conditions or anecdotal evidence of a lack of available parking inventory.

Field Data Collection

The Walker team surveyed the entire Village study area over the course of late August and September 2023, documenting the location of each off-street parking facility (surface lots and parking garages), as well as the locations of legal on-street parking spaces. In addition to the locations of existing parking supply, Walker also gathered data on the inventory of each off-street parking facility, the number of on-street spaces on each block, any posted parking restrictions within the off-street facilities (e.g., reserved spaces, ADA spaces, time limits, etc.), time limits or other restrictions at on-street spaces, among other information.

Once the parking inventory data was documented, Walker conducted several days of on-site observations to document how the public and private parking inventory in the Village area is currently used. Over the course of two weekdays and one Farmer's Market Saturday, Walker personnel documented the number of parked vehicles in each off-street parking facility and on-street space. While it is not best practice to design downtown parking infrastructure to accommodate special events, observations were conducted during a Farmer's Market to get a sense of the impact that events can have on Village area parking.

These types of surveys are often used when analyzing parking in a core commercial district like the Village and are aimed at answering the following questions:

- How much parking is available to the public?
- How much parking is available only to certain user groups such as employees, customers, residents, etc.?
- What is the typical peak demand for each type of parking?
- Do parking surpluses or deficits currently exist in the Village and, if so, where and when do these conditions occur?
- Is off-street parking underutilized while on-street parking is full?
- Is additional parking required? If so, how much and where is this parking best located?
- Is the parking program achieving its goals of on-street parking space turnover and availability?

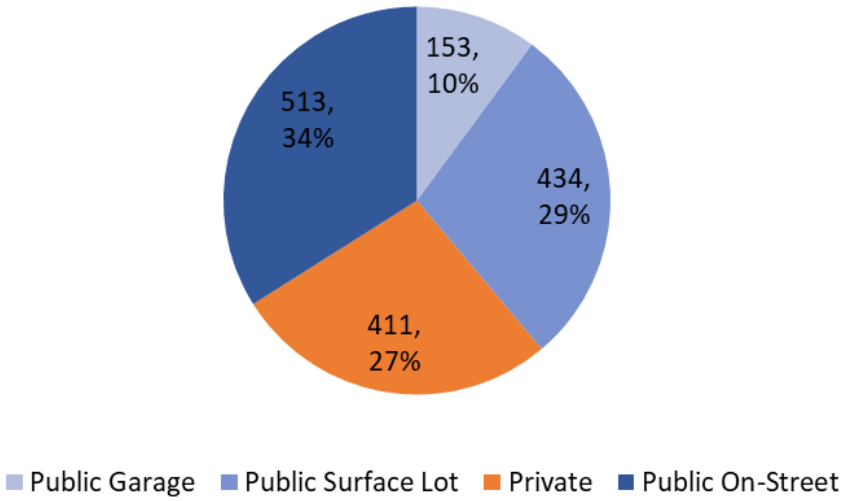
Existing Parking Inventory in the Village Area

Knowing the allocation of parking supply within the Village helps us better understand where future strategies and recommendations need to be focused. For this study, parking inventory data was gathered for all public on-street and off-street facilities, as well as most significant private off-street facilities. The Walker team identified approximately **± 1,511** total parking spaces in the downtown study area:

- **± 513** on-street spaces
- **± 434** spaces in public surface lots
- **± 153** spaces in publicly available garages
- **± 411** private parking spaces
- **± 1,511 total parking spaces**

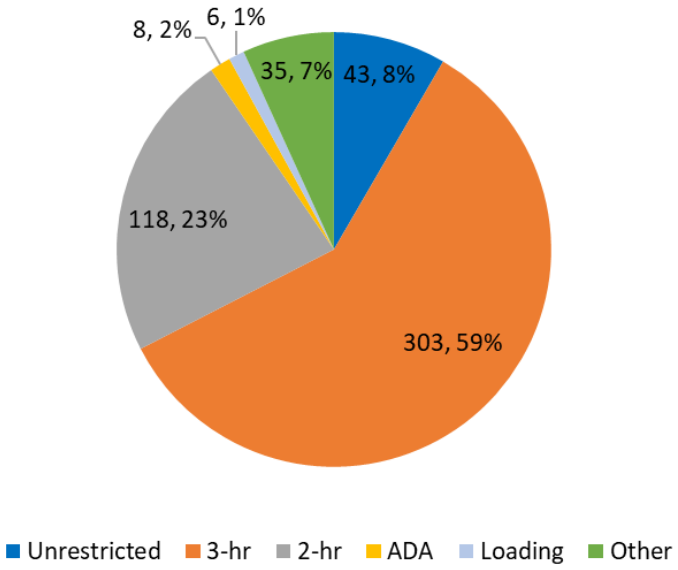
The following figures depict the existing parking inventory by type of parking (on-street, off-street public, and off-street private) for the entire Village study area.

Figure 2. Village Area Parking Inventory by Type



Source: Walker Consultants, 2024

Figure 3. On-Street Parking Inventory by Restriction



Source: Walker Consultants, 2024

Current Parking Demand

The Walker team conducted parking space occupancy surveys at 2:00 p.m. and 6:30 p.m. on Thursday, September 14th, 2023, and at 10:00 a.m., 2:00 p.m., and 6:30 p.m. on Friday, September 15th, 2023, to capture typical weekday parking conditions within the Village study area. Walker staff also performed a parking occupancy survey

at 10:00 a.m. on Saturday, August 26th, to capture parking activity associated with the Tosa Farmer's Market (located in the Hart's Mill Lot) and observe how the market affects parking demand patterns throughout the Village. These surveys involved counting the actual number of parked vehicles in each off-street parking facility and on-street space during the identified periods. The survey days and time periods were chosen based on discussions between the Walker Team and the City, with the goal of selecting periods that were likely to reflect "typical" levels of parking demand in the Village, while avoiding any holidays, major events, or other unusual circumstances that might skew the results. Additionally, the survey plan was flexible to allow the Team to avoid any days on which inclement weather might negatively impact the survey results. All field survey days were typical of late Summer and early Fall conditions with partly or mostly sunny skies with temperatures ranging from 70 to 85 degrees.

The summarized results of the occupancy surveys are presented below, and the complete results, by parking facility, can be found in the Appendix of this report.

Observed Peak Parking Demand

Within the Village study area, **parking demand peaked around 6:30 p.m. on the Friday survey day when 645 parked vehicles were observed.** When compared to the Village parking inventory of 1,511 spaces, this equates to 43 percent parking occupancy. For comparison, there were 462 parked vehicles at 2:00 p.m. and 421 parked vehicles at 10:30 a.m.

Like Friday, parking demand also peaked at 6:30 p.m. on the Thursday survey day, with 614 vehicles parked at this time (41 percent parking occupancy). For comparison, 385 vehicles were observed parked within the study area on Thursday at 2:00 p.m. (lowest observed parking occupancy of 25 percent).

The Saturday Farmer's Market survey yielded an observed total of 556 parked vehicles (196 vehicles, or 38 percent occupancy on-street, and 360 vehicles, or 36 percent occupancy off-street). Versus the study area inventory of 1,511 spaces, this equates to a total parking occupancy of 37 percent during the Farmer's Market.

Based on these surveys, it appears as though parking occupancy levels in the Village are relatively consistent on weekday and weekend evenings. Occupancy levels are slightly lower during Saturday morning and Saturday afternoon, despite demand from the Farmer's Market. Additionally, the geographic concentrations of parking demand vary from weekdays to weekends.

While individual parking facilities or areas of on-street parking may have experienced higher levels of demand outside of these survey periods, these are the times during which the greatest number of vehicles were parked across the entire Village area.

A summary of the observed parking demand across all survey periods is presented in the following tables and parking occupancy "heat" maps. The parking occupancy percentage color coding used in the heat maps (by on-street block face and off-street parking facility) is the same as the shading found below and in the following tables.

Figure 4. Village Area Observed Parking Demand

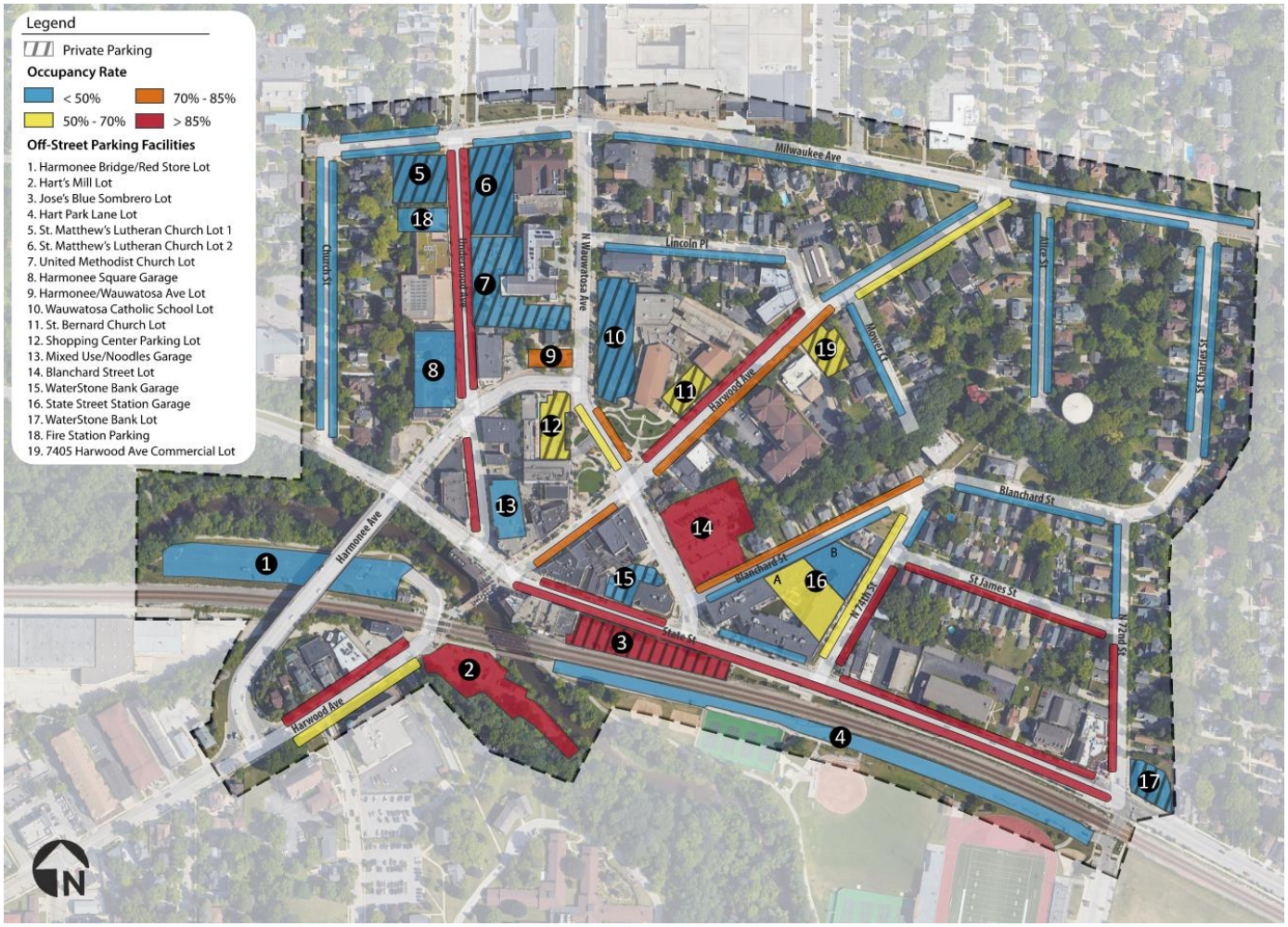
	Inventory	Thursday				Friday						Saturday	
		2:00 PM	Occ. %	6:30 PM	Occ. %	10:30 AM	Occ. %	2:00 PM	Occ. %	6:30 PM	Occ. %	10:00 AM	Occ. %
On-Street	513	144	28%	255	50%	143	28%	156	30%	228	44%	196	38%
Off-Street	998	241	24%	359	36%	278	28%	306	31%	417	42%	360	36%
Total	**1,511**	**385**	**25%**	**614**	**41%**	**421**	**28%**	**462**	**31%**	**645**	**43%**	**556**	**37%**

Parking Occupancy
< 50%
50%-70%
70%-85%
> 85%

Peak Observed Parking Demand:
Friday, 6:30 p.m.

Source: Walker Consultants, 2024

Figure 5. Peak Observed Parking Demand – Friday, 6:30 p.m.



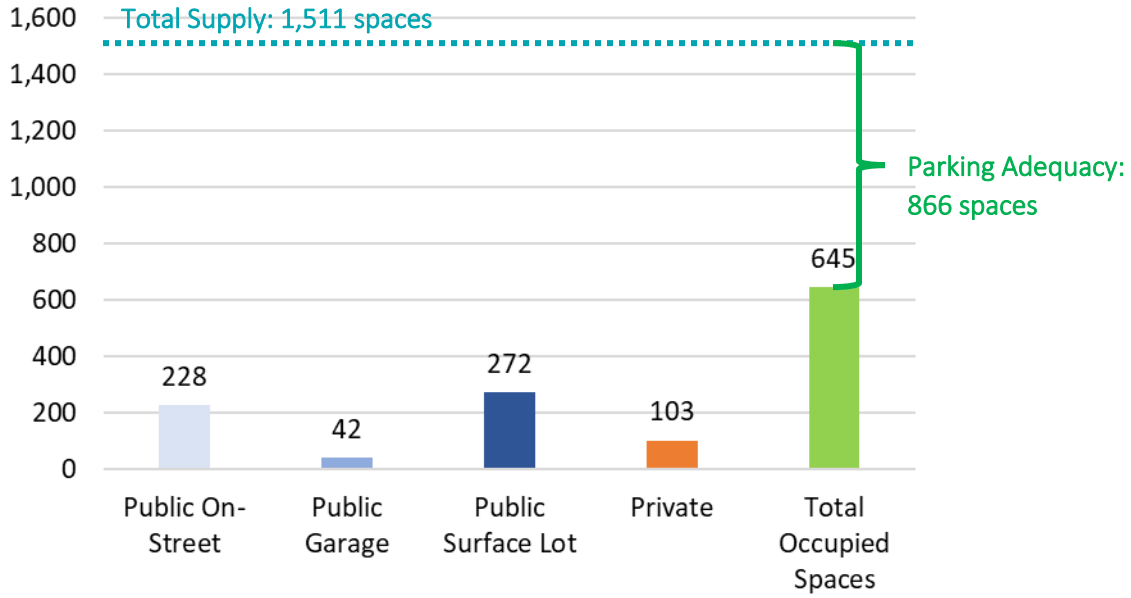
Source: Google Earth, Walker Consultants, 2024

Figure 6. Peak Observed Parking Demand (Entire Study Area) – Friday, 6:30 p.m.

Parking Type	Inventory	Peak Parking Occupancy	
Public On-Street	513	228	44%
Public Garage	153	42	27%
Public Surface Lot	434	272	63%
Private	411	103	25%
Total	**1,511**	**645**	**43%**

Source: Walker Consultants, 2024

Figure 7. Peak Observed Parking Demand (Entire Study Area) – Friday, 6:30 p.m.



Source: Walker Consultants, 2024

When considering only public parking, the peak observed parking occupancy rises to 49 percent. Public surface lot parking experienced the greatest demand, with 63 percent of spaces occupied at peak. This is still considered a significant amount of available parking inventory (85-90 percent parking occupancy is a goal metric that allows for the most efficient use of parking facilities while still leaving spaces open). Only 27 percent of the publicly available garage spaces were occupied during the peak observation period.

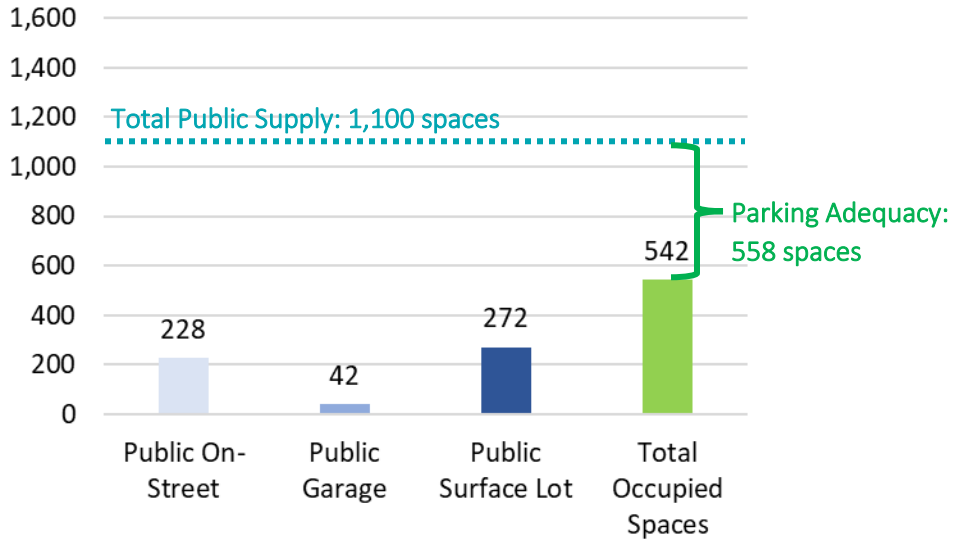
Figures 8 and 9 provide tabular and visual representations of peak parking occupancy levels observed at the public parking facilities within the study area.

Figure 8. Peak Observed Parking Demand (Public Parking Only) – Friday, 6:30 p.m.

Parking Type	Inventory	Peak Parking Occupancy	
Public On-Street	513	228	44%
Public Garage	153	42	27%
Public Surface Lot	434	272	63%
Total	**1,100**	**542**	**49%**

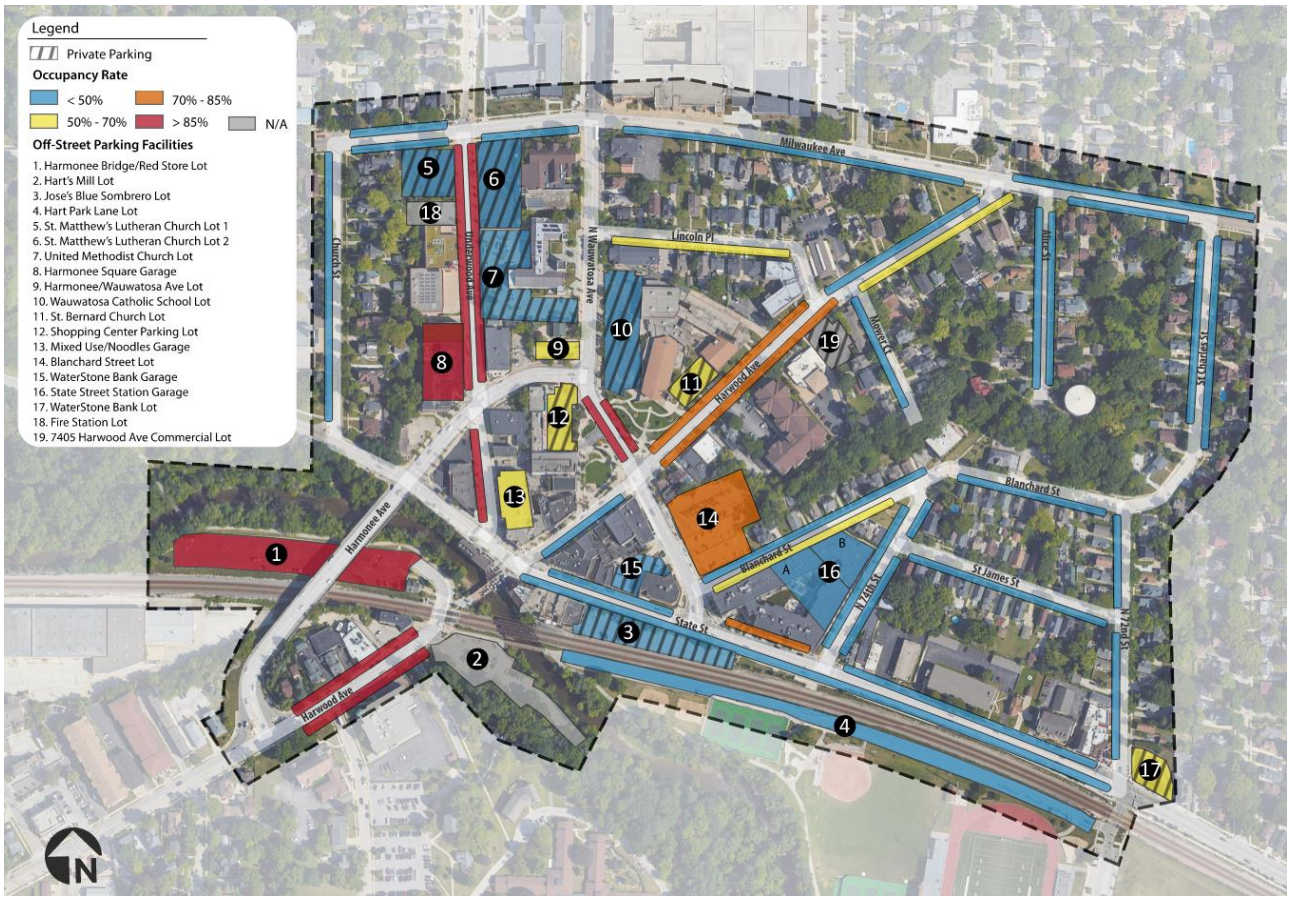
Source: Walker Consultants, 2024

Figure 9. Peak Observed Parking Demand (Public Parking Only) – Friday, 6:30 p.m.



Source: Walker Consultants, 2024

Figure 10. Observed Parking Demand (Heat Map) – Saturday, 10:00 a.m. (Farmer's Market)

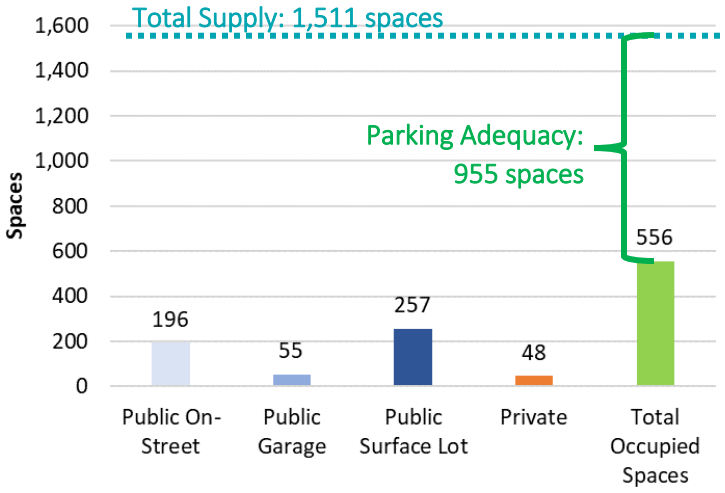


Source: Google Earth, Walker Consultants, 2024

Figure 11. Observed Parking Demand (Tabular and Graph Format) – Saturday, 10:00 a.m. (Farmer's Market)

Parking Type	Inventory	Peak Parking Occupancy	
Public On-Street	513	196	38%
Public Garage	153	55	36%
Public Surface Lot	434	257	59%
Private	411	48	12%
Total	**1,511**	**556**	**37%**

Source: Walker Consultants, 2024



During peak parking demand periods on both a weekday and Farmer's Market Saturday, Walker observed significant parking availability in off-street parking facilities (except the Blanchard Street Lot, which stays relatively full throughout the day) and on-street parking areas on the outskirts of the Village area. On-street spaces are often available even in the central Village area throughout portions of the weekday, particularly before the late afternoon and dinner rush.

Parking facilities in commercial areas are often perceived as full when occupancy levels approach 85-90 percent. When peak parking occupancy exceeds this level, a parking facility begins to function poorly, with drivers circling to find the last few remaining spaces, increasing traffic, vehicle emissions, and the potential for vehicle-vehicle or vehicle-pedestrian conflicts. Maintaining a cushion of available parking spaces at peak allows newly arriving parkers to more easily find an available space, reducing these potentially harmful conditions.

Area-wide parking occupancy never exceeded 50 percent in the Village during any of Walker's survey periods, nor did the occupancy of the off-street parking inventory. Only on-street parking approached or met the 50 percent mark, which occurred during the 6:30 p.m. survey periods on Thursday (50 percent) and Friday (44 percent). While Walker observed occasional parking demand "hot spots," especially in on-street areas on Underwood and Harwood Avenues and in the Blanchard Street Lot, **there is currently sufficient parking supply to meet existing levels of demand in the Village.**

A nearly full back-in angled parking area on Harwood Avenue looking south towards the Menomonee River.

Walker explores parking supply and demand in the Blanchard Street Lot and adjacent areas in the Future Parking Needs Analysis.

Village Walkability

The Village area is a dense and compact urban core. A mix of uses are in close proximity to one another and walking between these uses is typically easy and pleasant, leading to high walkability scores for the area, according to Walkscore.com. Similarly, walking to and from the area parking supply to major destinations and points of interest is similarly easy and characterized by short walking distances. A significant proportion of on-street spaces are available in the core Village area nearest to shops and restaurants, and a large portion of the off-street inventory is within a short walk of core Village businesses and points of interest. Industry standards and best practices allow for a one to two-block walk (approximately 2–4-minute walking time) to be considered a short distance and appropriate for denser urban environments. The majority of the public parking inventory in the Village is within a one- to two-block walk of the center of the Village area (intersection of Harwood Avenue and State Street). Even the Harmonee Bridge and Hart's Mill Lots (and portions of the Hart Park West Lot) across and south of the Menomonee River are within a short walk of the center of the Village and the nearby retail, restaurant, and bar establishments. The walk is easy and pleasant for pedestrians, crossing over the pedestrian-only former road bridge that is somewhat unique in the Midwest (and the entire United States) alongside outdoor dining and drinking patios for Café Hollander and Buckatobon Tavern and Supper Club, connecting with other retail and dining establishments across State Street.

"Noodles and Company" Garage and Underwood Avenue, looking north.

Looking north across the Menomonee River Bridge from the entrance to the Harmonee Bridge Lot.

In addition to the walkability of the Village area, public parking garages in the central Village are well-positioned to provide overflow and supporting parking supply for the neighboring on-street spaces and surface lots. Public parking garages are positioned adjacent to the three densest and busiest areas of the Village: the "Noodles and Company" garage at the previously mentioned intersection of Harwood and State, the Harmonee Square Garage on Underwood Avenue just north of Harmonee, and the State Street Station garage

between Blanchard Street and 74th Street, just north of State Street. These three facilities provide a proximate and often-available reservoir of ancillary parking for the central Village area.

Community Outreach

Community outreach is one of the most important aspects of the planning process. Wauwatosa City Communications staff took on primary responsibility for conducting community outreach for this project. City staff utilized various methods to inform the community of the project and to solicit feedback related to the Village Area Parking Analysis. City staff created a flyer containing information about community meetings related to the study and advertising an opportunity to provide input through an online project survey. The letter was mailed to all residents and businesses within the project study area. Additionally, emails were sent to key City staff members and departments alerting stakeholders of the opportunity to contribute thoughts and opinions via in-person meetings and the online survey. Flyers were posted at multiple Village businesses and City Hall. The City Communications Manager and Communications Specialist visited Village businesses to share the flyer and communicate the opportunity for stakeholders to contribute electronically. The Communications team also posted an article regarding the survey and engagement opportunities at Wauwatosa.net and posted in newsletter articles in November and December, and through social media blasts twice in November. Lastly, a project webpage was created on Social PinPoint, which allowed community members to post pinpoints with comments on the online map of parking locations and destinations within the Village.

As part of the outreach process, Walker staff presented preliminary parking inventory and occupancy findings to the Village Business Improvement District ("BID") at their regular meeting on Thursday, November 9th, 2023. During the meeting, parking planning and operation best practices and possible improvements were also presented. Additionally, Walker facilitated a discussion among the business representatives and answered questions about the Village parking system and potential enhancements.

Later on Thursday, November 9th, Walker and City staff hosted a public open house at the Wauwatosa Woman's Club. The team facilitated discussion among community members and answered questions about the parking system and the project. Parking occupancy heat maps of the Village were provided to allow for comment and additional "pinpointing" using stickers and markers. Additional project flyers and comment sheets were provided for those who were unaware or unable to comment and contribute via the electronic survey.

Village Area Parking Survey

Wauwatosa City staff developed and hosted an online Village Parking Survey that was open to responses for approximately three months, from November 2023 through January 2024. Walker staff helped revise and consolidate survey questions in conjunction with City staff. The survey allowed for electronic "pinpointing" of frequent parking locations, popular destinations, and points of interest within the Village. The survey garnered responses from 107 individual contributors. This is a somewhat typical response rate for a downtown parking study survey in a municipality of Wauwatosa's size.

In addition to the online survey, Walker staff conducted street "intercept" surveys in the Village area on November 8th and 9th. Walker personnel assisted community members with filling out the survey through a City-

provided tablet, or, in some cases, filled out the survey for community members as they provided spoken answers to the questions and map prompts.

The following bullets highlight key findings and takeaways from the survey.

- Most survey respondents stated that weekday evenings are the most common time to go to the Village, which mirrors the observed parking demand patterns from Walker's parking occupancy surveys.

- Most respondents' primary reason to visit the Village is for dining, with the second most common reason being shopping. Several business owners/employees responded to the survey (stating "work" as a common reason to go to the Village), and a handful of respondents stated going to a service-oriented business as their primary reason for visiting the Village. Five respondents stated that they lived in the Village.

- The majority of respondents visit the Village more than five times per month, with the next most common responses being roughly split between visiting 1-2 or 3-4 times per month.

- The vast majority of respondents arrived to the Village via car, however, a few indicated walking or biking as their primary mode of transportation to and from the Village.

- Once in the Village, the majority of respondents stated that they are willing to walk up to two blocks to their destination after parking. A significant number indicated a willingness to walk four or more blocks, however. A two to three-block walk is generally considered within a reasonable walking distance from a parking location to a final destination in a downtown mixed-use environment.

- Interestingly, most respondents stated that parking in the Village area "feels" more than 70 percent full. Some even indicated that the parking feels 90-100 percent full. This is likely due to most users' interactions with the on-street parking on Harwood and Underwood Avenues being full during the evenings (and to a lesser extent during lunch), and/or the Blanchard Street Lot being full or near full during the evenings. Other nearby facilities have availability during these busy times, and even some on-street spaces in northern areas of the Village, the user may have to walk half a block or block further to and from their destination.

- Most respondents felt indifferent to the back-in angled parking on Harwood and Underwood Avenues.

- The following were listed, in ranked order 1-4, as the most important parking factors for respondents:
    - Distance to destination.
    - Price.
    - Total number of parking spaces.
    - Whether the parking is time-limited or not.

The following figure summarizes the respondent's overall satisfaction with parking in the Village area using a ranking of 1 to 5, with 5 being the most satisfied.

Figure 12. Survey Results: Village Parking Satisfaction

Source: Walker Consultants, 2024

In the following section, Walker analyzes the impacts of the proposed Harlow and Hem development and future parking needs within the Village.

Wauwatosa community members and Walker staff examining a parking heat map at the project open house.

Static and digital Village maps displayed at the public open house.

02 Future Parking Needs Analysis

Future Parking Needs Analysis

Harlow and Hem Development

The Village area has had several mixed-use redevelopment and infill projects completed in recent years. These projects have contributed to the densification and vibrancy of the Village. Continuing the development trend, the Mandel Group is proposing the new Harlow and Hem residential development at the current site of the Blanchard Street Parking Lot. A 2022 design that was approved by the City was re-designed with preliminary plans submitted in February of 2024. A conceptual layout of the development re-design is shown in the following figure.

Figure 13. Harlow and Hem 2024 Development Concept

Source: Mandel Group, 2024

Development Program

Figure 14 describes the revised 2024 development program for the project.

Figure 14. Harlow and Hem Development Program

Land Use Type	Units	
Harlow and Hem (February 2024 Design)		
Residential	Studio	59
	One-Bedroom	53
	Two-Bedroom	28
	Three-Bedroom	17
Total		157

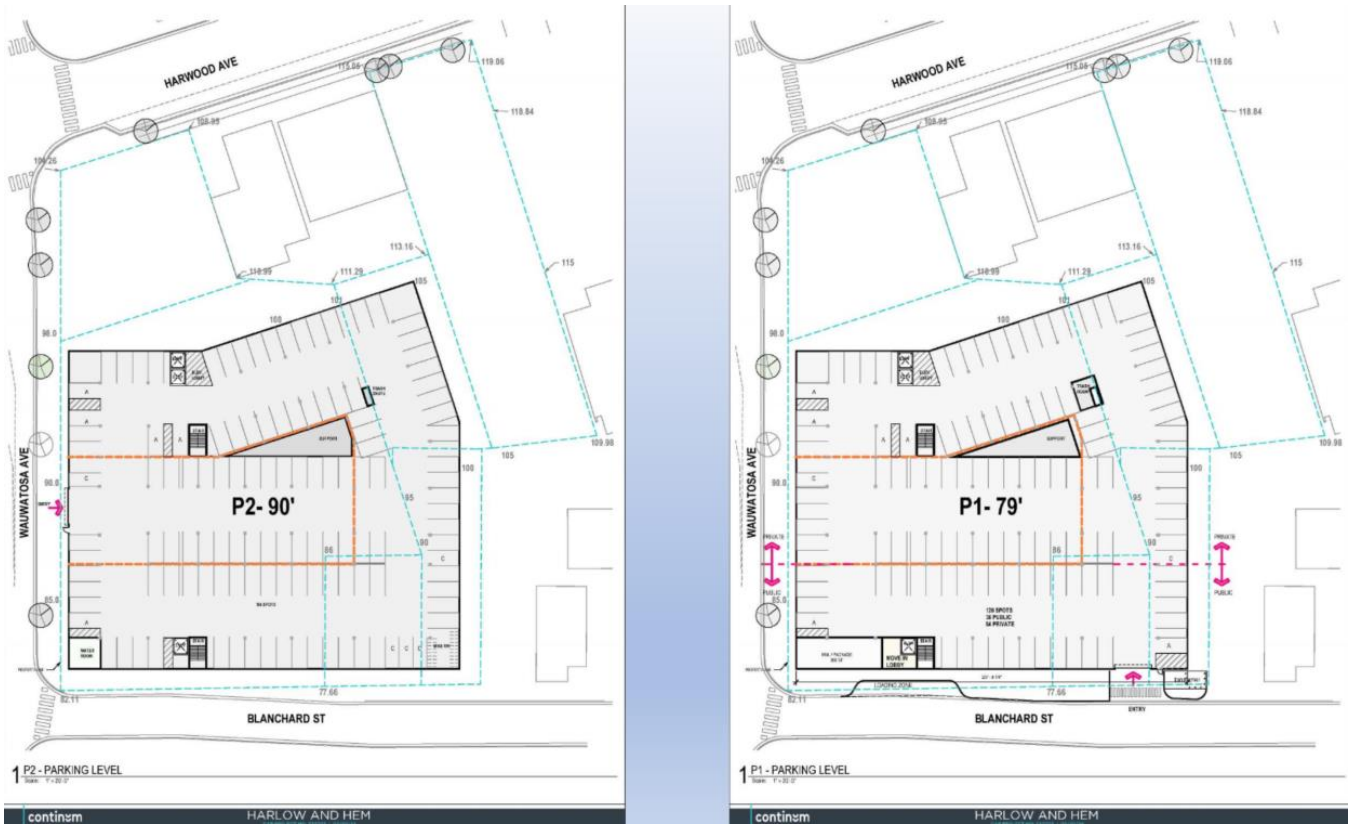
Source: Mandel Group, 2024

The latest development concept calls for a mix of studio, one-bedroom, two-bedroom, and three-bedroom units. Development plans state that the total unit count could fall anywhere between 150 and 157 units. A green roof and other resident amenities are planned for the development as well.

Walker utilized the 157-unit count in the following analysis of potential future parking demand that could be generated by the development.

The conceptual parking layout for the attached (and partially underground) two-story podium-level parking garage is provided in Figure 15.

Figure 15. Harlow and Hem 2024 Development Concept, Parking Levels



Source: Mandel Group, Continuum Architects, 2024

In addition to the two-level podium garage, an adjacent surface lot on Harwood Avenue is also planned for a total proposed parking supply of 288 spaces, with pedestrian and vehicular entries on both Harwood and Wauwatosa Avenues.

A breakdown of the proposed parking for the development is provided below.

Figure 16. Harlow and Hem Development On-Site Public and Residential Parking

Parking Type	Spaces
Public Parking (Harwood Ave. Surface Lot)	47
Public Parking (Upper Level of Garage)	51
Total Public Parking	**98**
Private Parking (Upper Level of Garage)	70
Private Parking (Lower Level of Garage)	120
Total Private (Resident) Parking	**190**
Total Parking Spaces	**288**

Source: Mandel Group, 2024

Future Projected Parking Needs

Harlow and Hem Multi-Family Residential

To project future parking needs for the residential development, Walker utilized its shared parking model, which uses industry-standard residential parking ratios, to determine the approximate need for parking at different times of day during a weekday and weekend day. Walker utilized the U.S. Census Bureau's American Community Survey (2022) data to adjust the model to account for the percentage of Wauwatosa residents who own a car. Based on that data, approximately one percent of Wauwatosa residents and five percent of Milwaukee County residents do not own a car. For this analysis, Walker assumed a blended three percent of residents at Harlow and Hem would not own a car. Further, Walker utilized Census-provided transportation mode choice data to determine the proportion of resident visitors who may not drive to the development; Walker assumed two percent of visitors would not drive to the development on a weekday, and five percent would not drive on a weekend day. It was assumed that this small percentage of visitors would arrive and depart from the site by walking, biking, public transportation, Uber/Lyft/taxi, or other mobility alternatives.

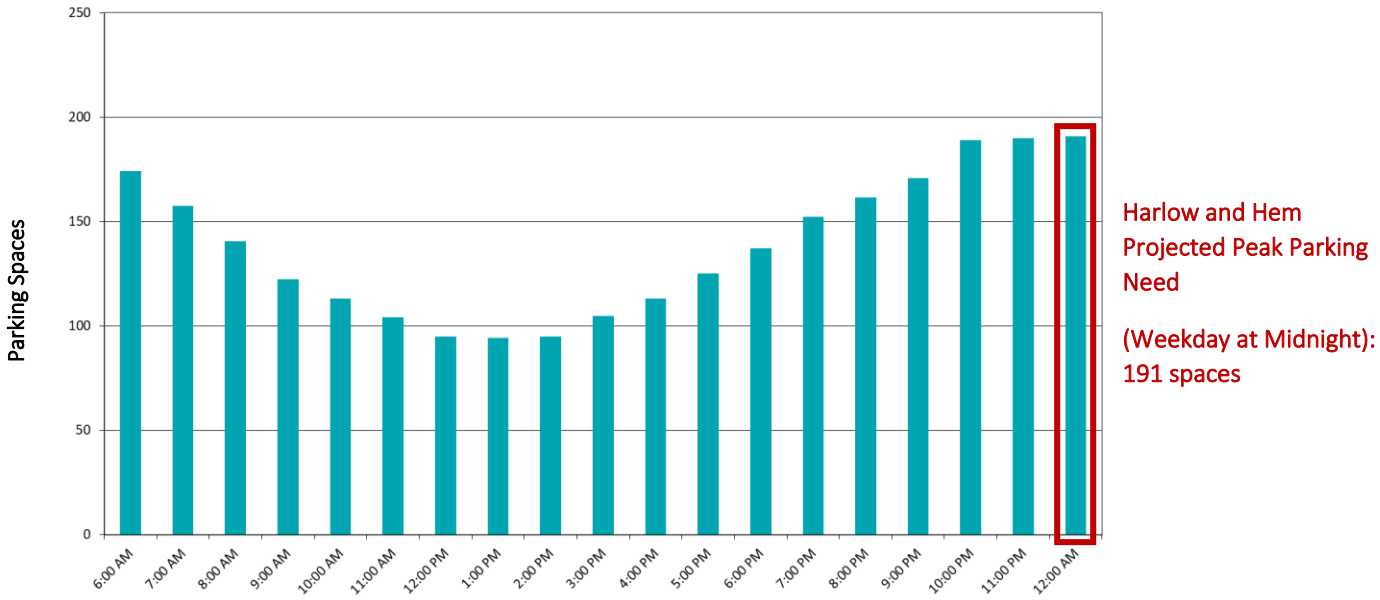
The following table and graphs summarize the projected future peak parking demand that could be generated by the Harlow and Hem Development at full buildout and occupancy, based on Walker's parking demand model.

Figure 17. Harlow and Hem Projected Peak Parking Needs, Weekday and Weekend

Land Use	Project Data		Weekday			Weekend		
			Peak Hr Adj	Peak Mo Adj	Estimated Parking	Peak Hr Adj	Peak Mo Adj	Estimated Parking
	Quantity	Unit	12 AM	January	Demand	12 AM	January	Demand
Multi-Family Residential								
Studio	59	units	100%	100%	49	100%	100%	49
1 Bedroom	53	units	100%	100%	47	100%	100%	47
2 Bedrooms	28	units	100%	100%	46	100%	100%	46
3+ Bedrooms	17	units	100%	100%	42	100%	100%	42
Visitor	157	units	50%	100%	7	50%	100%	11
			Customer/Visitor		7	Customer/Visitor		11
			Employee/Resident		184	Employee/Resident		184
			Total		**191**	**Total**		**195**

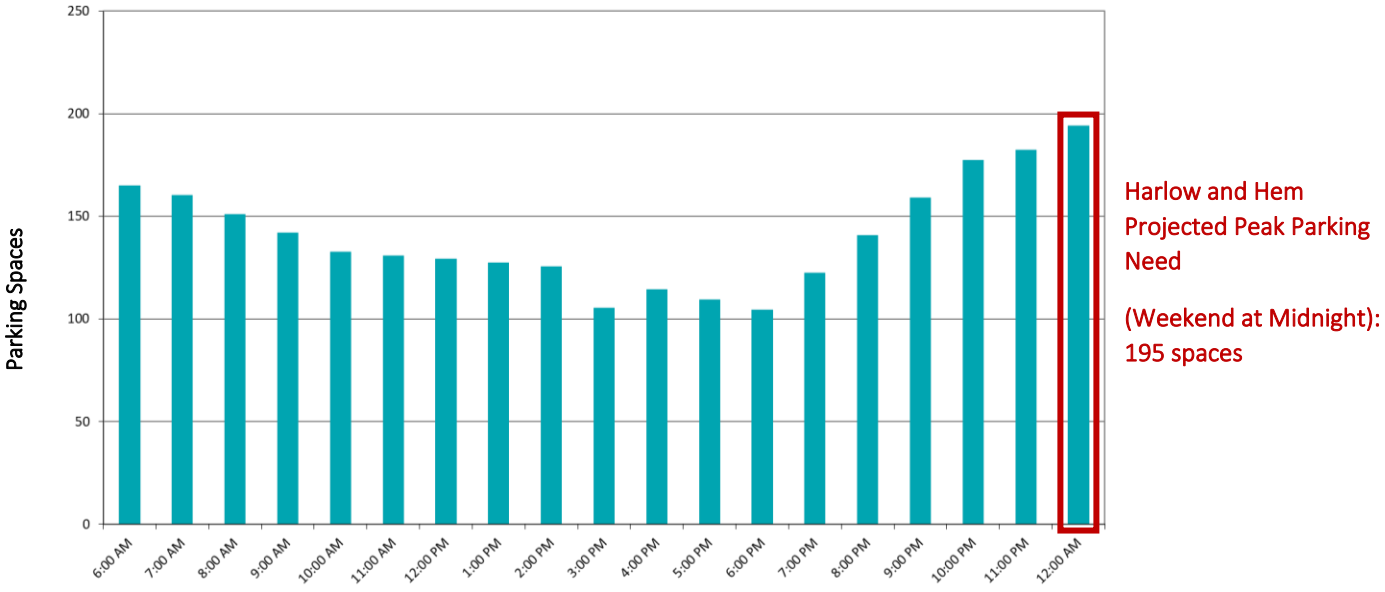
Source: Walker Consultants, 2024

Figure 18. Harlow and Hem Projected Peak Parking Needs by Hour, Weekday



Source: Walker Consultants, 2024

Figure 19. Harlow and Hem Projected Peak Parking Needs by Hour, Weekend



Source: Walker Consultants, 2024

Market Parking Surplus/Deficit

As the Blanchard Street surface parking lot is slated to be removed to make way for the Harlow and Hem development, Walker analyzed the impact of this supply being eliminated and the cars that currently utilize this facility daily being displaced. The Blanchard Street Lot is the most centrally located unpaid surface parking lot in the Village. The facility provides a necessary reservoir of parking for patrons, visitors, and the occasional employee. Because of the facility's importance to public parking in the Village area, the City asked the developer to at least partially replace this displaced public parking supply.

Walker utilized the following assumptions when developing its market parking analysis:

- Analysis assumes typically busy weekday and weekend conditions. It does not account for special events and peak-of-peak parking needs, as it is inefficient and wasteful to design new parking supply for the occasional very busy day or special event (i.e., building retail parking for "Black Friday" levels of demand).
- Assumes on-street parking would remain on the north side of Blanchard Street and both sides of Harwood Avenue.
- Assumes current parking levels in the market will remain relatively stable in the near future, aside from the new demand associated with the Harlow and Hem development.
- City staff provided Walker with overnight camera footage of the Blanchard Street Lot for Thursday through Sunday, July 11-14, 2024. This was a typically busy, non-holiday summer weekend. Walker counted parked vehicles in the lot for several overnight periods. To best capture the overlap between projected residential and existing commercial/transient parkers in the lot, Walker utilized the peak 11:00 p.m. overnight parking count of 18 parked vehicles for both the weekday and weekend conditions.

- Walker **applied an effective supply factor** to the proposed parking supply to more realistically project future parking usage within the market:

    - This factor accounts for mis-parked vehicles, construction, routine maintenance, and queuing vehicles that are blocking the last few remaining spaces. Effective inventory adjustments vary based on the amount and type of parking but typically represent 95 to 98 percent of the total capacity of the system. As downtown residents, employees, and regular visitors are typically familiar with the available parking options in the Village area, and the parking facilities will likely be used and filled as efficiently as possible, Walker utilized an effective supply factor of 97 percent, reducing the proposed parking inventory by three (3) percent.

The following table summarizes the projected future parking market conditions around the Harlow and Hem development on a weekday.

Figure 20. Projected Market Parking Surplus/Deficit, Weekday

Parking Type	Unit Type	Proposed Parking Supply	Effective Parking Supply (-3%)	Projected Parking Need	Parking Surplus / (Deficit)	Spaces Needed per Unit
Residential	Studio	190	184	49	0	0.83
	One-Bedroom			47		0.89
	Two-Bedroom			46		1.64
	Three-Bedroom			42		2.47
Resident Sub-Total		**190**	**184**	**184**	**0**	
Public + Resident Visitor [1]	-	98	95	**25**	**70**	
Development Total		**288**	**279**	**209**	**70**	

Source: Walker Consultants, 2024

[1] Public + Resident Visitor projected parking need includes the peak existing 11 p.m. parking occupancy plus the projected overnight visitor parking need.

During a weekday (evening) peak demand condition, the development is projected to experience a parking surplus of 70 spaces (a need for 209 spaces versus an effective parking supply of 279 spaces). This scenario is representative of a typically busy weeknight condition, with all residents at home and parking on-site. The residential portion of the parking supply is projected to be approximately at equilibrium (projected need for 184 spaces versus 184 effective resident parking spaces). The parking surplus is expected to occur in the public portion of the facility. The public parking portion will likely experience higher parking occupancy levels earlier in the evenings as retail and restaurant patrons have not yet departed for the night.

Figure 21 summarizes the projected future parking market conditions around the Harlow and Hem development on a weekend.

Figure 21. Projected Market Parking Surplus/Deficit, Weekend

Parking Type	Unit Type	Proposed Parking Supply	Effective Parking Supply (-3%)	Projected Parking Need	Parking Surplus / (Deficit)	Spaces Needed per Unit
Residential	Studio	190	184	49	0	0.83
	One-Bedroom			47		0.89
	Two-Bedroom			46		1.64
	Three-Bedroom			42		2.47
Resident Sub-Total		**190**	**184**	**184**	**0**	
Public + Resident Visitor [1]	-	98	95	**29**	**66**	
Development Total		**288**	**279**	**213**	**66**	

Source: Walker Consultants, 2024

[1] Public + Resident Visitor projected parking need includes the peak existing 11 p.m. parking occupancy plus the projected overnight visitor parking need.

During a weekend evening, **Walker is projecting a parking surplus on-site of approximately 66** spaces (a need for 213 spaces versus an effective parking supply of 279 spaces). Similar to the weekday, this represents a typically busy weekend night, not a special event/festival or peak-of-peak demand condition. As noted earlier, the parking surplus is expected to occur in the facility's public parking area. The public parking area will likely experience higher parking occupancy levels earlier in the evenings as retail, restaurant, and bar patrons have not yet departed for the evening.

While Walker is projecting sufficient on-site parking during weeknights and weekend nights, the new and revised parking supply will offer a lower level of service for public parkers in the village. Walks will be slightly longer to/from the Harwood Avenue surface lot portion of the new public supply and other public users will now have to park in a garage instead of a surface lot. With the new development, the public parking dynamic and use patterns will shift slightly in the Village. More parkers may choose to utilize the large surface lots south of the river, while others may choose to park in the State Street Station garage or other structured parking alternatives, while others yet may search for on-street spaces located further afield, especially during busy weeknights and weekends. However, the proposed number of new public and residential spaces is projected to satisfy typical parking demand conditions in the market.

03 Parking Policy and Recommendations

Parking Policy and Recommendations

Parking Signage

Walker understands that many users of the parking system only come to the Village occasionally or during busy lunch or dinner periods. Effective signage and wayfinding contributes greatly to the efficient operation of a parking system (allowing more parkers a greater use of spaces) and an enhanced perception of the system. Walker recommends that new signage be added near the intersection of State Street and Harwood Avenue directing drivers to the underutilized public parking garages and to the Harmonee Bridge and Hart's Mill Lots south of the river. Rather than only seeing full on-street spaces on State, Harwood, and Underwood Avenues (during the busy lunch and evening rush), drivers would see directions to other off-street parking alternatives.

Additional parking directional signage should also be installed at the southern edge of the Village at the intersection of Harwood and Harmonee Avenues, directing drivers down the hill to the large supply of parking at the Harmonee Bridge and Hart's Mill lots. This sign could be included as part of a gateway sign package welcoming drivers and pedestrians into the Village area. This sign could be similar to the ones that exist on the eastern and western edges of the Village on State Street, directing drivers to public parking locations. Additional gateway signage with parking information could also be added on Wauwatosa Avenue as drivers approach the Village from the north, perhaps near the existing Village of Wauwatosa streetscape pedestal.

New wayfinding signage here at the intersection of Harwood Avenue and State Street would help direct drivers and pedestrians to underutilized, peripheral parking supply (i.e. garages and Harmonee Bridge and Hart's Mill lots).

A Wauwatosa Village-branded "pedestal".

Facility Entrance Signage

While the public parking garages are positive assets for the Village, one of the reasons they are underutilized is likely because it is not always clear to potential parkers if these facilities are available for public parking or not. While all garages feature the universal blue parking "P" sign, Walker recommends naming the facilities and making it clear via entrance signage that the garages are available to the public. Brief time-limit information or a list of nearby establishments or points of interest could be provided as well. Clear and visible naming conventions, with signage that is consistent with current Village wayfinding signage, should help push more users to the garages.

Harmonee Square Garage entrance.

The Harmonee Square Garage, in particular, would benefit from additional entrance signage and/or labeling identifying it as a public parking facility. The long entranceway and lack of clear signage make it unclear who is allowed to use the facility. During Walkers' site visits, unofficial-looking sandwich board signage with hand-written information was placed at the entrance, as seen in the image to the right.

Two of the three garages (Harmonee Square and State Street Station) have rolling (garage) doors at their entrances. Walker recommends keeping these open as often as possible, potentially all year. Few public parking facilities have rolling doors at the entrance; this likely deters some parkers from parking. If the garages are heated, the doors could be closed during the winter months, especially if it is clear that regular parkers and/or employees use these spaces. In addition to keeping these doors open, Walker also recommends additional entrance signage that ties in with existing Village signage and naming conventions.

"Noodles and Company" Garage entrance.

Additional entrance signage and Village branding could help increase utilization of the Harmonee Square and "Noodles and Company" garages, as shown here.

Walker also recommends replacing the sign at the small public lot at the northwest corner of Harmonee and Wauwatosa Avenues, as seen in the picture to the left, as it is inconsistent with the rest of the Village signage system. Parking and wayfinding signage systems are most effective and best understood when they are consistently designed and branded.

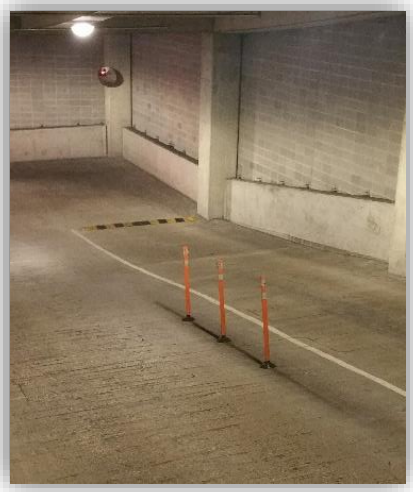
Inconsistent entrance signage to the small public surface lot located at the northwest corner of Wauwatosa and Harmonee Avenues.

The current Wauwatosa signage and wayfinding package is simple, attractive, and consistently branded and designed; any future parking and wayfinding signs should match.

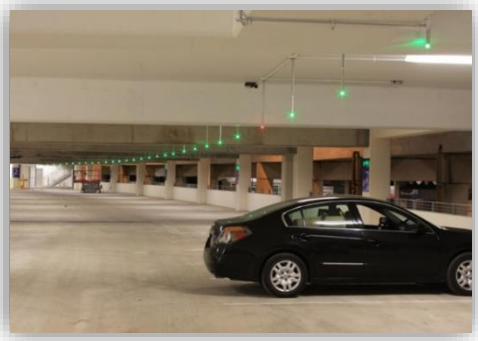
Effective and clear parking level theme and color scheme at a multi-level parking garage.

Automated Parking Guidance Systems (APGS)

The public parking garages in the Village do not currently communicate the number of available spaces to patrons. This communication is often accomplished with an Automated Parking Guidance System ("APGS") that counts vehicles by facility, level, or space and displays the number of available spaces externally via electronic signs, websites, and mobile apps.



Garage lane delineation.



Single-space APGS.

Walker recommends the City consider implementing a single-space or level-count APGS at the State Street Station Ramp. Single-space APGS are very accurate but typically cost between $600 and $1,000 per space to implement. Level-count systems typically cost between $15,000 and $25,000 per counter, which are typically located at each garage entrance and exit lane. Single-space systems are generally near 100 percent accurate and are self-correcting. Level-count systems are at best 90 percent accurate and will require both lane delineation to ensure vehicles are counted, and manual adjustment on a daily basis. As the public garages in the Village are all a single level, a level-counting system may be sufficient.

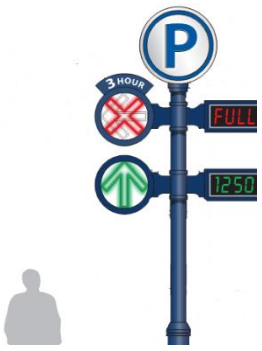
At the State Street Station garage, space occupancy counts could be directed to a digital sign at the corner of 74th Street and State Street to inform drivers of space availability. State Street is heavily trafficked, and heavily parked; informing drivers of an additional off-street parking option would be beneficial in this area of the Village. While the Hart Park Lot is located immediately to the south, it is not accessible due to the railroad tracks and the vehicular entrance is at the opposite end of the long block. A more consistently utilized State Street Station garage could help relieve parking demand pressures in this area.

After a trial period, if the State Street Station garage is more consistently utilized and/or parker response is positive, the Village should consider level count APGS at the Harmonee Square and “Noodles and Company” garages as well. Both of these facilities are one lane-in, one lane-out on a single parking level; a level count system would be ideal for these straightforward facilities and the APGS would be easy to maintain and calibrate.

The positive effects of these counting systems would be especially pronounced during the busy dinner and evening rush period.

Guidance, Wayfinding, and Analytics

Should the City elect to procure and install some level of APGS for the parking garages, a downtown signage and wayfinding system could be enhanced through digital signage directing patrons to the garages with available capacity. Signs could be attached to visual or navigational elements at key roadway decision points, such as the intersection of 74th and State Streets, Harwood Avenue and State Street, or Harmonee and Underwood Avenues. Additionally, electronic signage could be placed near the entry points of the garages to communicate the location of the parking near key destinations. This would assist in enhancing entrance signage and location branding, as discussed



Sample electronic (“dynamic”) signage.

earlier. An APGS at one or more of the garages would help to balance Village parking demand between on-street and off-street facilities.

With the addition of accurate occupancy data, the City could provide greater decision-making capabilities to parking patrons, and potentially offer pre-booking services for event parking. Patrons can decide where to park in advance of their trip, instead of searching and circling near their destination, adding to traffic and congestion. Additionally, shared usage between different groups of parkers becomes more easily implementable.

An additional benefit to collecting detailed occupancy information is the ability to capture and analyze this data. With these systems, the City would have access to detailed occupancy information, provided on an hour-by-hour basis that can be used to plan staffing and enforcement hours, indicate when changes in the allocations of parking between uses may be needed, help City staff evaluate the potential impacts of future paid parking, inform decisions about garage expansion or the need to build new garages, and aid in decision making related to the removal of parking inventory. This type of reporting could be provided by an APGS vendor, the City's business technology staff, or a third-party firm specializing in business intelligence and analytics.

Sample electronic ("dynamic") signage.

Optimization of Pick-Up / Drop-Off (PUDO) Access

As the Village is a popular dining and drinking area, particularly on the weekends, the City should consider designating a 2-3 space pick-up and drop-off ("PUDO") zone for Uber/Lyft (Transportation Network Company, or "TNC") passenger loading and unloading. The zone should be located in the heart of the Village, near to many of the restaurants and bars, perhaps on Harwood Avenue between State Street and Wauwatosa Avenue. A second, smaller PUDO zone could be considered by Leff's Lucky Town on the east end of the Village.

A growing percentage of nightlife and entertainment patrons are choosing to use TNC's as their mode of travel, particularly in the evenings. As such, the City should have a way to manage this pick-up/drop-off activity that limits the impacts on other vehicular traffic. The "best case scenario" for the operation of a TNC-dedicated PUDO would be to secure a dedicated number of spaces in an on-street area (not immediately adjacent to the Harwood/State intersection due to congestion and safety considerations) for coordination of pick-up and drop-off of TNC riders. The on-street PUDO zone would need to be identified with signage and/or pavement and curb markings to make it obvious to the drivers and passengers. Parking enforcement personnel should add the PUDO zones to their enforcement checks to ensure that the only vehicles stopping in the PUDO area are TNC drivers.

Alternatively, the PUDO zone could be opened to all drivers as one large loading zone, signed as "Passenger Pick-Up and Drop-Off Only" or "Loading/Unloading Only". This area would be in addition to the loading zone spaces on State Street near Harwood Avenue (three of the spaces are loading only between 6:00 a.m. and 10:00 a.m.).

Loading Zones

Walker identified only six (6) loading zone spaces in the Village area (five of which are near the intersection of State Street and Harwood Avenue). This equates to one (1) percent of all on-street spaces in the Village. In a dense and active commercial district like the Village, more loading zone spaces can help limit vehicles blocking traffic and creating hazardous conditions for other drivers, pedestrians, and bicyclists. In addition to the PUDO/loading zones discussed above, Walker recommends one or two 10-minute loading zone spaces each on Underwood Avenue just north of Harmonee Avenue, on Harwood Avenue just east of Wauwatosa Avenue, on Harwood Avenue south of the railroad tracks adjacent to St. John's Lutheran School, and in the area of Colonel Hart's and Leff's Lucky Town.

During off-hours (overnight or morning, in particular) these spaces should be utilized for commercial loading and unloading of goods and equipment. If the zones are not needed for loading/unloading activity at particular times of day, they could be designated as flexible loading zones that are used for loading/unloading at some times and as regular parking spaces at other times. Potential loading/unloading and traffic conflict points should be inventoried and analyzed before making a final decision on operating hours, if the spaces are not designated for 24-hour loading. It is recommended that the same naming convention be used across the Village for both new and existing loading zone spaces (e.g., "Loading," "Loading Zone," or "15-minute" space). Any of the example naming conventions is acceptable, but consistency is crucial to reducing user confusion.

Loading Zone, ADA, and Other Parking Infrastructure Requests

Municipalities like Wauwatosa receive requests to modify the public parking infrastructure (often on-street in or near residential areas) from the many stakeholders within the community. To improve the management of these requests and the operation of these spaces, it is best practice for these requests to all be channeled to one department to ensure a continuity of response, review of the applicable standards, coordination with other departments, and to provide a thorough analysis. Within most communities, in the absence of a parking department, parking-related issues are managed by the Public Works Department.

In Wauwatosa, it is recommended that any requests from citizens, local officials, departments, or developers for these types of accommodations be routed to the Public Works Department when received by any entity within the Village. Each request should be documented and analyzed in coordination with other recent or adjacent requests and studied for applicability with streetscape improvement or road resurfacing projects. Analyzed requests could then be routed to other departments for their input if needed, before a final decision is made regarding approval.

Metered (Paid) Parking

Due to significant availability in peripheral on-street parking areas and most off-street parking facilities, in addition to a very concentrated demand "hot spot" mostly localized in the central Village area, and in conjunction

with increased enforcement of the existing time-limited parking (to further increase vehicle turnover and thus increase space usage efficiency), Walker does not recommend paid parking in the Village at this time. However, as a consideration for the future, Walker has provided the following on-street metered parking best practices and considerations.

Instead of traditional single-space meters (one meter head at every parking space), the vast majority of new municipal on-street paid parking installations have been multi-space meters ("MSM"), which allow for a technology-forward approach and mobile payment system to simplify operations and heighten the parker experience. MSM-based systems provide one piece of payment equipment to serve eight (8) or more parking spaces versus single-space systems where one meter serves one space.

The most common MSM approach is a "pay-by-plate" technology and operation. In this model, patrons will park their car and pay for parking either via a mobile app or at a multi-space meter located on the block. If they choose to pay at the meter, they will enter their license plate number, select the duration of time to pay for, and make a payment. Receipts are emailed or text messaged to the patron. This service feature eliminates moving parts inside of the meters, reducing maintenance requirements and wear on the units. If a parker wished to pay using their smartphone they would register their vehicle with the mobile payment app, providing the license plate for each vehicle they register. After parking, the patron would select the vehicle they are parking (if they have multiple vehicles in their profile), optionally select the zone, select the time to purchase, and complete their transaction. Patrons may be able to complete this process before leaving their car, depending on if zones are used and the on-street signage developed for these zones.

In the Village, one or two MSM's per block would likely be needed on Underwood Avenue, Harwood Avenue, and State Street (three to four on the State Street block between 72nd and 74th Streets). The cost range for meters of this type is between $8,000 and $16,000 per meter depending on payment methods accepted and additional features. The meters are most typically battery-powered and use cellular devices to communicate. Walker estimates approximately 12-15 total multi-space meters would be needed to serve the central Village area. If this type of system were implemented, various types of new informational signage would be needed to inform parkers of their payment options, direct them to the MSMs, etc.

Using a "pay-by-plate" system would provide a benefit to the City in the form of simplified enforcement of on-street parking violations. Since all vehicles parked on the street have their payments tied to a license plate, enforcement can be completed exclusively using mobile License Plate Recognition ("LPR") equipment. Walker understands that the City already utilizes a camera-based enforcement system, this same system may be able to be modified to accept LPR enforcement and payment capabilities/license plate data from both the new meters and the mobile app. After the two payment technologies have been integrated with the existing (or new, if an additional system is required) mobile LPR system, the enforcement operation would be as simple as driving the streets and issuing tickets through the software when a violation is detected. The citations can be mailed to the

Mobile LPR hardware.

violating vehicle owners automatically. If the violating vehicle is tied to a mobile app account, the citation can be paid through the app.

This type of enforcement model is typically significantly faster than an on-foot approach to enforcement. Potential issues with the technology that may require limited manual or on-foot enforcement include vehicles parking too close to each other and heavy snowfall that obscures license plates.

Should a new mobile LPR system be required, Walker estimates the cost to be between $30,000 and $50,000, not including the cost of an enforcement vehicle on which to mount the equipment.

Paid Overnight Parking

The City requested that Walker examine the possibility of paid overnight public parking in the Village garages. The following are the potential pros and cons of implementing an overnight paid parking permit program.

Pros

- The volume of overnight parking violations (no parking in on-street or municipal off-street spaces between 3:00 a.m. and 6:00 a.m.) would potentially decrease as residents would have an additional off-street parking option.
- Streets would be less cluttered in the overnight hours, and police resources could be devoted to more important issues than issuing overnight parking violations.
- Overnight parking would likely be more secure in the garages than in surface parking lots.

Cons

- Enforcement staffing would need to increase in the overnight hours from part-time to full-time. This could take resources away from the busier daytime and evening hours.
- Vehicle towing would likely be needed in the overnight hours to remove vehicles that are parked illegally. Towing vehicles out of parking garages can be physically difficult to do and has the potential to create significant customer service/public relations issues.
- Encouraging a significant number of residents to participate in the overnight parking program could be difficult, especially if there is sufficient parking in the private parking areas of downtown residential developments.
- The cost to staff the additional required overnight enforcement would likely greatly outweigh the revenue generated by the permit program itself.

If the City considers an overnight paid parking program, Walker recommends starting with one facility on a trial basis to test the market demand for paid overnight parking. With the construction of the Harlow and Hem development, the State Street Station garage could be piloted for overnight paid parking permits. Second and third car owners living in this development would be ideal candidates for this type of program, along with residents of State Street Station and other nearby multi-family residential developments.

With no paid parking in the rest of the Village area (besides the private Jose's Blue Sombrero lot), the City does not currently have any permitting technology that could be applied to implement paid overnight parking. For this reason, Walker recommends utilizing hangtag permits or stickers affixed to windows for the permit system. This would eliminate the need for expensive technological 2solutions, especially for a small pilot program. If, in the future, this program expands and the City desires a technology solution to manage the program or other paid parking in the Village, these overnight permits would need to be integrated into the new system.

As the Village is largely not a paid parking environment, the monthly permit price would likely have to start low, in the $50 per month or less range. If overnight parking capacity becomes an issue, this permit price could increase. Direct comparables are difficult to find as paid overnight parking is typically seen in downtown environments with paid daytime parking, or the cost for parking is included in the cost of purchasing or renting a residential unit.

In Walker's opinion, the cons of implementing an overnight permit parking program outweigh the pros, and we would not recommend the program at this time.

Employee Parking Time Limit Override

Walker recommends eliminating the existing overnight business parking time limit override permissions and encouraging employees and business owners to park in the outer surface lots and garages. Employees and business owners parking in on-street spaces prevent these spaces from turning over and being used by potential customers. Businesses are hurting themselves and each other by having employees override the time limit to park in proximate, convenient on-street (and off-street) parking that is better suited for shorter-term, revenue-generating customers. Further, the business time limit override list seems arbitrary and subjective, with no revenue being gained for the City.

Long-term employee/business owner parking should be in off-street surface lots and garages ideally located away from the Village center. The highest value spaces (those closest to shops and restaurants) should be reserved for those spending money at local businesses. Business owners and employees can use nearby loading zones or 30-minute spaces for occasional deliveries, short stays/meetings, or pick-up and drop-off.

If the City chooses to continue with this system, Walker recommends charging a significant fee to business owners/employees for the ability to override on-street time limits to disincentivize this practice. Additionally, if the City continues with the program, only less convenient, off-street spaces should be an option for these vehicles.

Parking Time Limits

On-Street

Wauwatosa's on-street parking restrictions are in line with best practice in that loading zones and ADA spaces are at the end of blocks (corners) where possible, and the one- and two-hour spaces are closer to the dense commercial/activity centers (i.e. intersection of State Street and Harwood and Underwood Avenues). Additionally, the longer duration three-hour and unrestricted spaces are in outer areas with longer walk times to/from

vehicles. If on-street parking capacity in the village continues to be a concern (and to be consistent with the rest of Underwood Avenue and other central Village blocks), the City could consider transitioning Underwood Avenue between Harmonee and Milwaukee Avenues from three-hour to two-hour parking.

Inversely, if parking demand ever decreased in the area, or if more straightforward enforcement were a goal, Walker recommends transitioning all one-hour spaces in the Village to two hours. One-hour spaces are difficult to enforce effectively, and many Village visits are likely longer than one hour (particularly during evenings and weekends). In Walker's experience, it is confusing and sometimes overwhelming for parkers when a city has more than two primary on-street parking restriction types in downtown areas.

In the future, if parking capacity in the Village continues to be a concern, particularly in on-street areas, the City should consider extending enforcement hours to 8:00 p.m. This would enable the on-street spaces to turn over at least once after 6:00 p.m., assuming enforcement is consistent and still operating near the end of the enforcement period. Late afternoon retail patrons and early dinner/bar patrons would need to move their vehicles before 8:00 p.m. if parked for longer than two or three hours (depending on the location), opening up these spaces for late dinner and bar customers (after 8:00 p.m.). Downtown parking demand tends to decrease significantly after 8:00 p.m., so there is less of a need for vehicle turnover after this point.

Off-Street

With the proposed new public parking at the Harlow and Hem development, Walker recommends a two-hour maximum time limit in the public parking garage and a three-hour maximum time limit in the new public surface lot off Harwood Avenue. These facilities will be some of the most convenient and centrally located public parking options north of the Menomonee River and they should be time-limited and consistently enforced to encourage vehicle turnover.

Walker also recommends converting some unrestricted off-street parking inventory to a three-hour time limit. Walker recommends converting the small public parking lot at the northwest corner of Harmonee and Wauwatosa Avenues and the entirety of the Hart's Mill Lot (south of the river, just east of Harwood Avenue) to three-hour parking. To partially offset the loss of these unrestricted spaces, the three (3) three-hour spaces in the Harmonee Bridge Lot (south of the river, just west of Harwood Avenue) should be converted to unrestricted spaces (to limit restriction confusion and be consistent with the rest of the lot). The Hart Park West lot (immediately east across the river from the Hart's Mill Lot) would also remain unrestricted parking.

Additionally, the north portion of the State Street Station garage should be converted to unrestricted spaces. This portion of the garage is lightly utilized and is far enough removed from the heart of the Village to allow for unrestricted parking. Time-limited parking would remain in the southern portion of the State Street Station Garage and in the new Harlow and Hem garage across the street.

Consistent and Increased Enforcement

If budget allows (and in addition to continuing the full-time daytime enforcement position), Walker recommends the Police Department increase the part-time evening enforcement position to full-time, covering Tuesday through Saturday nights, 2:30 p.m. to 8:30 p.m. Consistent enforcement of time-limited parking is a proven way of encouraging vehicle turnover in on-street parking spaces. Increased (and consistent) enforcement would help

alleviate on-street parking demand pressures in the central Village area, particularly during the busy evening and dinner rush periods, opening up more spaces to more parkers (shorter lengths of stay, long-term parkers not abusing the system, etc.). Further, it would encourage more patrons to utilize the available (and underutilized) off-street parking inventory.

Shared Parking Agreements

Walker understands that St. Bernard's Church and School is slated for demolition and redevelopment, meaning the associated surface parking available to public use through an unofficial shared parking agreement with the City will no longer be an option for parkers. The redevelopment project will likely provide its own on-site parking for residents and their visitors. Walker recommends the City pursue another (ideally official) shared parking agreement with Wauwatosa Avenue United Methodist Church, St. Matthew's Lutheran Church, and/or St. John's Lutheran School to provide overflow or satellite parking options for Village parkers during these institution's off-hours. These off-hours (after 5:00 p.m. at the school, after 8:00 p.m. at the churches, and all day and evening at the school and churches on Saturdays) would balance nicely with the increased parking demands of the Village during these times.

Appendices

Appendix A – On-Street Parking Data

On-Street Parking Inventory									Thursday Parking Occupancy				Friday Parking Occupancy						Saturday Parking Occupancy	
									2:00 PM		6:30 PM		10:30 AM		2:00 PM		6:30 PM		2:00 PM	
Block ID	Block Face	Unrestricted	3-hr	2-hr	ADA	Loading	Other	Total Inventory	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %
A	North	0	11	0	0	0	0	11	1	9%	1	9%	2	18%	0	0%	3	27%	0	0%
A	North (across)	0	10	0	0	0	0	10	0	0%	0	0%	0	0%	0	0%	0	0%	1	10%
A	East	0	7	0	0	0	3	10	5	50%	8	80%	0	0%	1	10%	9	90%	9	90%
A	South- No Parking							0												
A	West	0	21	0	0	0	0	21	3	14%	4	19%	4	19%	1	5%	0	0%	12	57%
A	West (across)	0	22	0	0	0	0	22	14	64%	0	0%	3	14%	2	9%	2	9%	20	91%
B	North	0	6	0	0	0	0	6	2	33%	3	50%	0	0%	3	50%	1	17%	1	17%
B	East- No Parking							0												
B	South- No Parking							0												
B	West	0	20	0	0	0	0	20	10	50%	18	90%	16	80%	11	55%	19	95%	19	95%
C	North	0	12	0	0	0	0	12	3	25%	8	67%	1	8%	3	25%	3	25%	0	0%
C	North (across)	0	11	0	0	0	0	11	0	0%	0	0%	1	9%	1	9%	1	9%	1	9%
C	East	0	10	0	0	0	0	10	0	0%	1	10%	0	0%	0	0%	0	0%	0	0%
C	South- No Parking							0												
C	West- No Parking							0												
D	North	0	14	0	0	0	0	14	1	7%	3	21%	1	7%	0	0%	7	50%	9	64%
D	East	15	0	0	0	0	0	15	0	0%	0	0%	7	47%	5	33%	0	0%	3	20%
D	South- No Parking							0												
D	West- No Parking							0												
E	North	0	11	0	0	0	0	11	0	0%	1	9%	0	0%	0	0%	1	9%	0	0%
E	East	0	17	0	0	0	0	17	1	6%	1	6%	1	6%	1	6%	0	0%	1	6%
E	East (across)	0	20	0	0	0	0	20	1	5%	1	5%	0	0%	1	5%	1	5%	1	5%
E	South- No Parking							0												
E	West	0	11	0	0	0	0	11	0	0%	2	18%	1	9%	0	0%	0	0%	1	9%
F	North	0	0	15	0	0	0	15	0	0%	10	67%	1	7%	3	20%	5	33%	8	53%
F	East	0	14	0	0	0	0	14	11	79%	12	86%	5	36%	9	64%	12	86%	11	79%
F	South	0	0	4	0	0	0	4	2	50%	3	75%	2	50%	2	50%	3	75%	4	100%
F	West- No Parking							0												
G (Triangle)	East	0	0	12	1	1	2	16	7	44%	13	81%	10	63%	11	69%	16	100%	16	100%
G	South- No Parking							0												
G	West- No Parking							0												
H	North- No Parking							0												
H	East	0	0	3	0	0	0	3	0	0%	2	67%	2	67%	2	67%	2	67%	3	100%
H	South- No Parking							0												
H	West- No Parking							0												
I	North	0	12	0	0	0	8	20	9	45%	19	95%	9	45%	7	35%	16	80%	16	80%
I	East	0	0	13	0	0	0	13	0	0%	3	23%	0	0%	1	8%	1	8%	5	38%
I	South	0	0	12	0	0	0	12	5	42%	10	83%	2	17%	3	25%	9	75%	0	0%
I	West- No Parking							0												
J	North- No Parking							0											2	
J	East	9	0	0	0	0	0	9	3	33%	8	89%	1	11%	6	67%	0	0%	0	0%
J	South- No Parking							0												
J	West	4	0	0	0	0	0	4	0	0%	1	25%	0	0%	0	0%	0	0%	0	0%
K	North- No Parking							0												
K	East- No Parking							0												
K	South- No Parking							0												
K	West- No Parking							0												
L	North- No Parking							0												
L	East- No Parking							0												
L	South- No Parking							0												
L	West	0	3	0	5	0	3	11	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%
M (Triangle)	East- No Parking							0												
M	South	0	0	5	0	3	0	8	7	88%	7	88%	4	50%	2	25%	8	100%	0	0%
M	West	0	0	14	2	0	2	18	10	56%	15	83%	15	83%	11	61%	14	78%	0	0%
N	North	0	0	6	0	0	0	6	0	0%	4	67%	0	0%	0	0%	0	0%	4	67%
N	East	0	0	6	0	0	4	10	2	20%	4	40%	0	0%	0	0%	5	50%	0	0%
N	South	0	0	5	0	0	0	5	4	80%	0	0%	0	0%	3	60%	0	0%	4	80%
N	West- No Parking							0												
O	North	0	0	15	0	0	0	15	1	7%	14	93%	2	13%	5	33%	17	113%	1	7%
O	East	15	0	0	0	0	0	15	9	60%	14	93%	7	47%	12	80%	13	87%	4	27%
O	South	0	21	0	0	0	0	21	12	57%	18	86%	6	29%	15	71%	19	90%	9	43%
O	West	0	0	0	0	0	13	13	2	15%	10	77%	3	23%	2	15%	12	92%	2	15%
P	North- No Parking							0												
P	East	0	9	0	0	0	0	9	2	22%	2	22%	6	67%	6	67%	8	89%	9	100%
P	East (Across)	0	17	0	0	0	0	17	5	29%	5	29%	13	76%	6	35%	11	65%	16	94%
P	South- No Parking							0												
P	West- No Parking							0												
Q	North	0	24	8	0	2	0	34	12	35%	30	88%	18	53%	21	62%	10	29%	4	12%
Q	East- No Parking							0												
Q	South- No Parking							0												
Q	West- No Parking							0												
Total		43	303	118	8	6	35	513	144	28%	255	50%	143	28%	156	30%	228	44%	196	38%
Percent of Total		8.4%	59.1%	23.0%	1.6%	1.2%	6.8%	100%												

Source: Walker Consultants, 2024

Appendix B – Off-Street Parking Data

Off-Street Parking Inventory													Thursday Parking Occupancy				Friday Parking Occupancy						Saturday Parking Occupancy	
													2:00 PM		6:30 PM		10:30 AM		2:00 PM		6:30 PM		10:00 AM	
Facility ID	Name	Regular	3-hr	2-hr	ADA	Permit/ Reserved	10-min	30-min	1-hr	Compact	Visitor	Total Inventory	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %	Total Cars	Occ. %
1	Harmonee Bridge Lot	124	3	0	5	0	0	3	0	0	0	**135**	27	20%	34	25%	22	16%	25	19%	50	37%	135	100%
2	Hart's Mill Lot	37	35	0	3	0	0	0	0	0	0	**75**	2	3%	25	33%	30	40%	42	56%	75	100%	0	0%
3	Jose's Blue Sombrero Lot	55	0	0	2	1	0	0	0	0	0	**58**	5	9%	30	52%	10	17%	17	29%	58	100%	4	7%
4	Hart Park West Lot	112	0	0	3	0	0	0	0	0	0	**115**	6	5%	55	48%	3	3%	10	9%	45	39%	40	35%
5	St. Matthew's Lutheran Church Lot 1	44	0	0	0	0	0	0	0	0	0	**44**	33	75%	2	5%	36	82%	33	75%	0	0%	0	0%
6	St. Matthew's Lutheran Church Lot 2	45	0	0	4	0	0	0	0	0	0	**49**	5	10%	4	8%	9	18%	7	14%	0	0%	1	2%
7	United Methodist Church Lot	65	0	0	3	0	0	0	0	0	4	**72**	5	7%	17	24%	2	3%	1	1%	1	1%	6	8%
8	Harmonee Square Garage	0	0	27	2	10	0	0	0	10	0	**49**	10	20%	8	16%	14	29%	14	29%	6	12%	14	29%
9	Harmonee/Wauwatosa Ave Lot	11	0	0	0	0	0	0	0	0	0	**11**	9	82%	9	82%	7	64%	5	45%	8	73%	7	64%
10	Wauwatosa Catholic School Lot	53	0	0	3	0	0	0	0	0	0	**56**	1	2%	1	2%	2	4%	1	2%	3	5%	0	0%
11	St. Bernard Church Lot	20	0	0	1	1	0	0	0	0	0	**22**	1	5%	4	18%	3	14%	0	0%	13	59%	12	55%
12	Shopping Center Parking Lot	0	0	0	2	0	3	0	28	0	0	**33**	21	64%	18	55%	18	55%	17	52%	23	70%	20	61%
13	Mixed Use Garage 1	0	0	20	2	0	0	0	0	0	0	**22**	10	45%	15	68%	14	64%	8	36%	1	5%	14	64%
14	Blanchard Street Lot	39	52	0	4	3	0	0	0	0	0	**98**	57	58%	91	93%	57	58%	70	71%	94	96%	75	77%
15	WaterStone Bank Garage	26	0	0	0	0	0	0	0	0	4	**30**	8	27%	2	7%	12	40%	10	33%	2	7%	3	10%
16A	State Street Station Garage (South)	0	23	0	4	12	0	0	0	0	0	**39**	26	67%	29	74%	26	67%	30	77%	7	18%	17	44%
16B	State Street Station Garage (North)	0	43	0	0	0	0	0	0	0	0	**43**	-30	-70%	15	35%	11	26%	11	26%	-15	-35%	10	23%
17	WaterStone Bank Lot	0	0	0	1	2	0	0	0	0	0	**3**	2	67%	0	0%	2	67%	2	67%	0	0%	2	67%
18	Fire Station Parking	17	0	0	1	0	0	0	0	0	0	**18**	0	0%	0	0%	0	0%	3	17%	3	17%	-	-
19	7405 Harwood Ave Commercial Lot	24	0	0	0	2	0	0	0	0	0	**26**	0	0%	0	0%	0	0%	0	0%	0	0%	-	-
Total		**672**	**156**	**47**	**40**	**31**	**3**	**3**	**28**	**10**	**8**	**998**	**198**	**20%**	**359**	**36%**	**278**	**28%**	**306**	**31%**	**374**	**37%**	**360**	**36%**
Percent of Total		**67.3%**	**15.6%**	**4.7%**	**4.0%**	**3.1%**	**0.3%**	**0.3%**	**2.8%**	**1.0%**	**0.8%**	**100.0%**												

Source: Walker Consultants, 2024