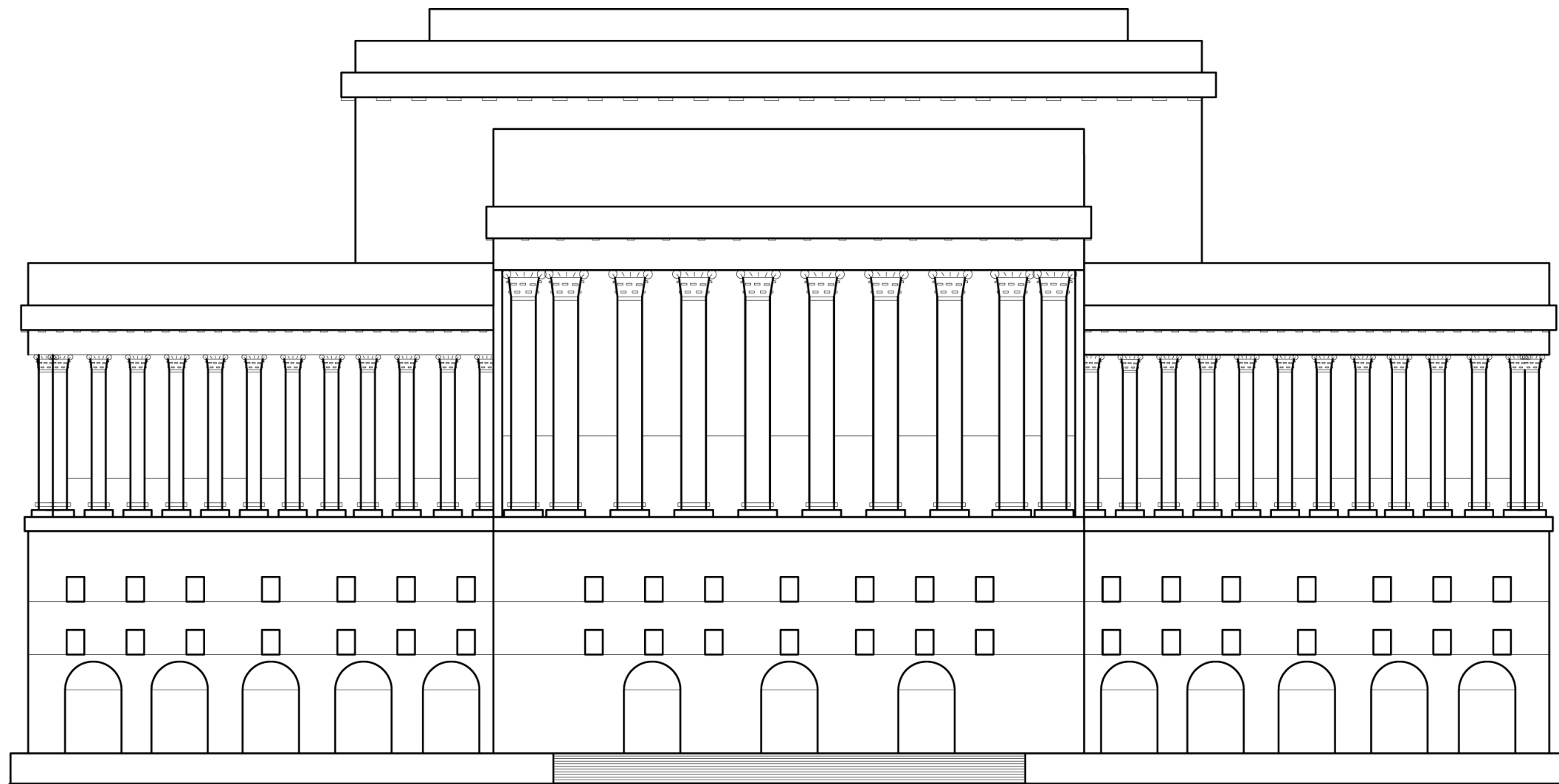


MACARTHUR SQUARE: VOLUME II

A STRATEGIC REDEVELOPMENT PLAN FOR CIVIC INFRASTRUCTURE AND ECONOMIC GROWTH

JULY 2018



MILWAUKEE, WISCONSIN

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I. EXECUTIVE SUMMARY

MacArthur Square: Volume II is the most recent approach to a vision that was born in 1894. This vision is one of reinventing a grand Civic Center that offers an active and attractive location for cultural, recreational, and institutional activities.

The prolonged dormancy of this potentially great place does not diminish its possibilities. As with many great ideas, timing is everything. Milwaukee is presently undergoing a renaissance not seen in decades, and development pressure is spreading to areas previously viewed as nonviable. This development pressure should be understood as both an opportunity and a challenge.

MacArthur Square must be redeveloped purposefully with its own vision, not just as a reaction to the new pressures from surrounding change.

MacArthur Square: Volume I was completed by GRAEF in 2009 in response to structural challenges to the MacArthur Square parking garage. Rather than spending over \$20 million in preliminary costs to repair the garage, the City of Milwaukee commissioned a redevelopment plan to look beyond structural repairs to explore how a broader vision of substantive changes could improve the functionality and vibrancy of this Civic Center.

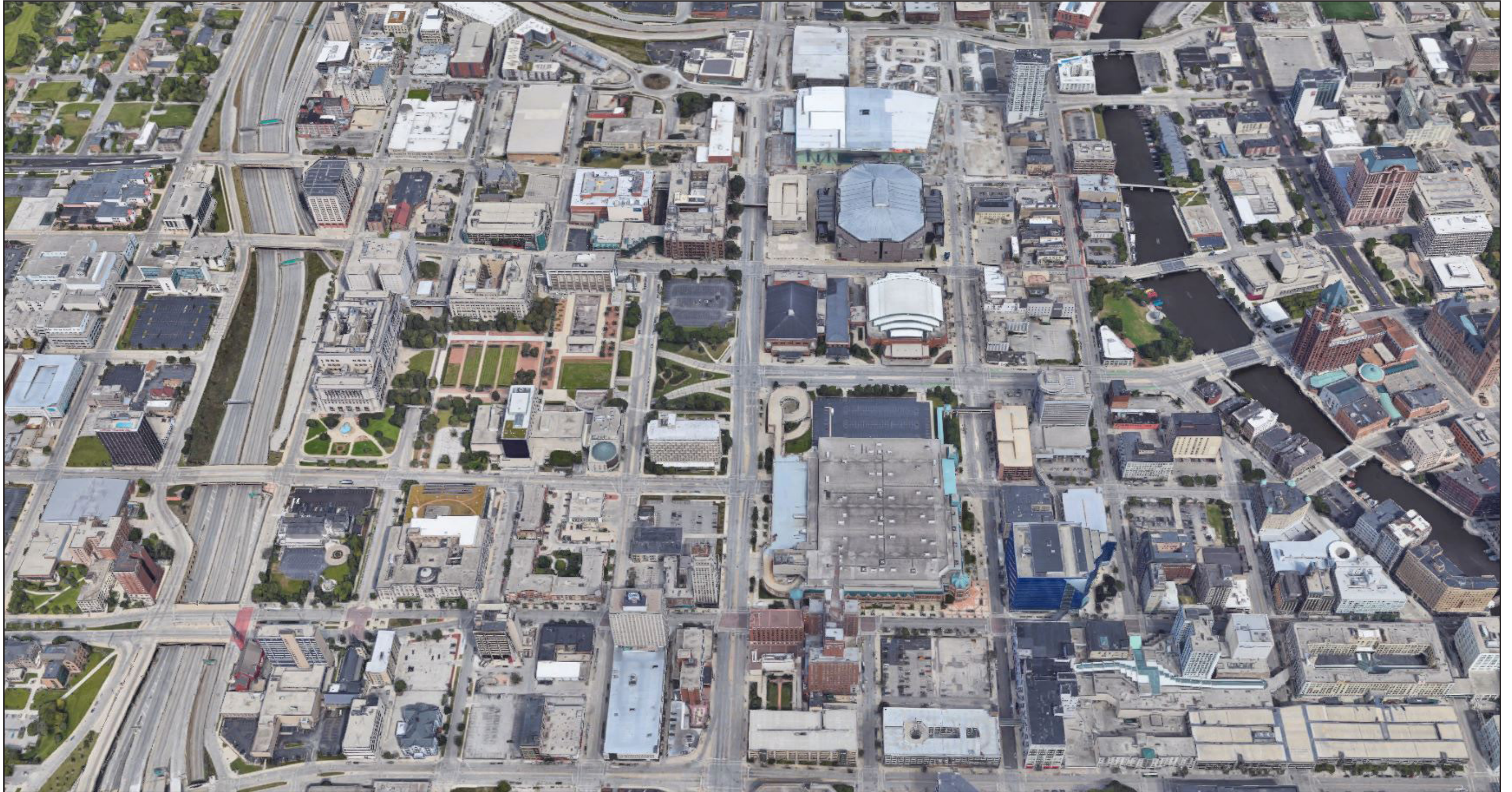
MacArthur Square: Volume II carries this broader vision of meaningful changes forward. Contained in this Plan are two development frameworks that provide urban design solutions for coordinating the redevelopment of MacArthur Square. These development frameworks are paired with site-specific recommendations for encouraging new taxable development, creating socially active public spaces, and fostering a collaborative mixed-use Civic Center.

Many of the sites within MacArthur Square are currently planning for individual changes that will impact the redevelopment potential of the whole. These changes must be synchronized in order to create an active, attractive, high-value Civic Center.

MacArthur Square has the potential to become one of the most exciting places in the City of Milwaukee — **if we act now.**



Source: GRAEF, 2018.



Source: Google Maps, 2018.

II. THE VISION

REALIZING THE VISION

There are three critical steps that must occur in order to transform MacArthur Square into a visually appealing, socially active, high-value Civic Center. Multiple parties must participate in these steps in 2018 and beyond.

1. Reconnect the streets

Elevate Kilbourn Avenue and reconnect the street grid on top of the Square.

2. Add multi-purpose development

Create developable parcels for new development.

3. Activate a human-scale public place

Build active public spaces along the edges of MacArthur Square conducive to year-round street activity.

By 2021, MacArthur Square will become a year-round public place that is **socially active** with busy local streets, surrounded by **high-value** public and private sector development, and **visually appealing** for a mix of residential, commercial, institutional, hospitality, and educational uses.



Source: Franz Heitzer Thesis, UWM, 2006.

Socially Active

Unlocking the potential of this dormant Civic Center is dependent on extending and elevating Kilbourn Avenue and reconnecting an active city circulation grid. Revitalization of the Square can happen only if it induces daily circulation of people in and around the area (rather than just for highly-programmed special events).

High-Value

A reconnected street and circulation system will create new opportunities for development, draw more people to MacArthur Square, and consequently increase its economic and social value. What is presently known as a vacant dead-zone could be reborn as a vibrant, profitable 24/7 district.

Visually Appealing

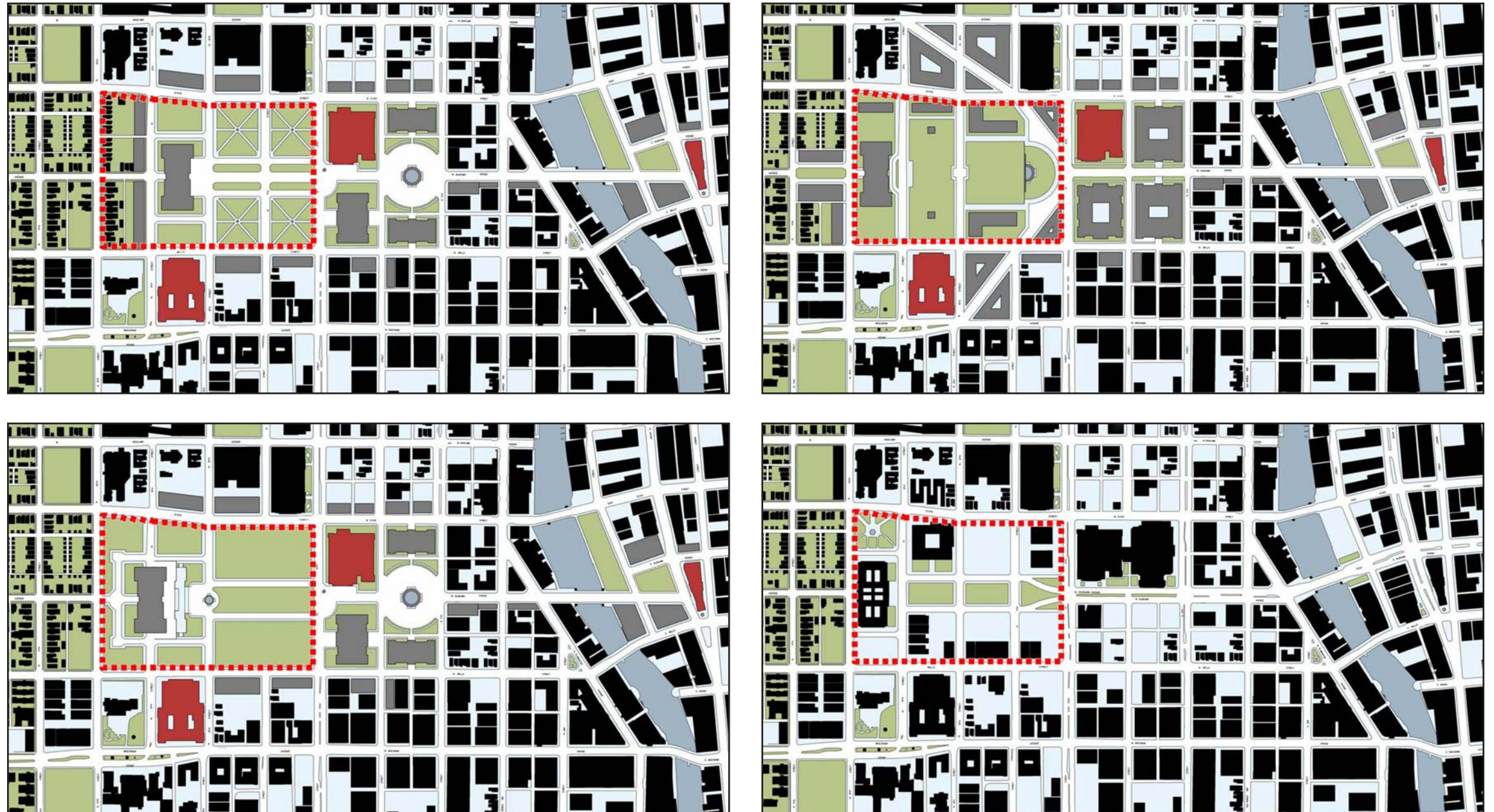
To make effective changes, the transformation of MacArthur Square must be the result of cooperative and coordinated investment among the multiple stakeholders who control the land and buildings. A collaborative redevelopment process will produce a coherent Civic Center that appeals to a variety of users.

THE TIME IS NOW

MacArthur Square needs new life. Once envisioned as a grand Civic Center, MacArthur Square sits today like a large vacant hole in an old-fashioned donut – revitalization is swirling all around in the form of a new Bucks Arena and Live Block, expansion of Marquette University, and continued development in the Brewery. Little is happening in the middle of this resurgence. Milwaukee’s Civic Center has been vacant for too long and has embedded a status quo of dormancy.

A rebirth of MacArthur Square can weave the surrounding pieces together and, along with West Kilbourn Avenue, create a celebrated urban district renowned for its multiplicity of venues, businesses, and residences. The district can become a highly appealing ensemble of active urban functions.

The possibilities are almost endless, **if we act now**. Some of these opportunities are already becoming unachievable – in five years they will be gone. MacArthur Square must either redefine itself proactively, or be defined reactively by external forces.



The above diagrams display the genealogy of the vision for MacArthur Square: (Top-left) The Clas Proposal; (bottom-left) the Olmsted and Nolen Proposal; (top-right) the revised Metropolitan Park Board Proposal; (bottom-right) the Urban Renewal Plan of 1956. For more information on these past plans, refer to MacArthur Square: Volume I.

Source: GRAEF, MacArthur Square: Volume I, 2009.

III. PLANNING BACKGROUND

PLANNING AREA

MacArthur Square is bordered by 10th and 6th Streets to the west and east, and State and Wells Streets to the north and south, respectively. This Plan covers that area, and also extends east along Kilbourn Avenue to where it meets the Milwaukee River, and west to include the I-43 freeway ramps.

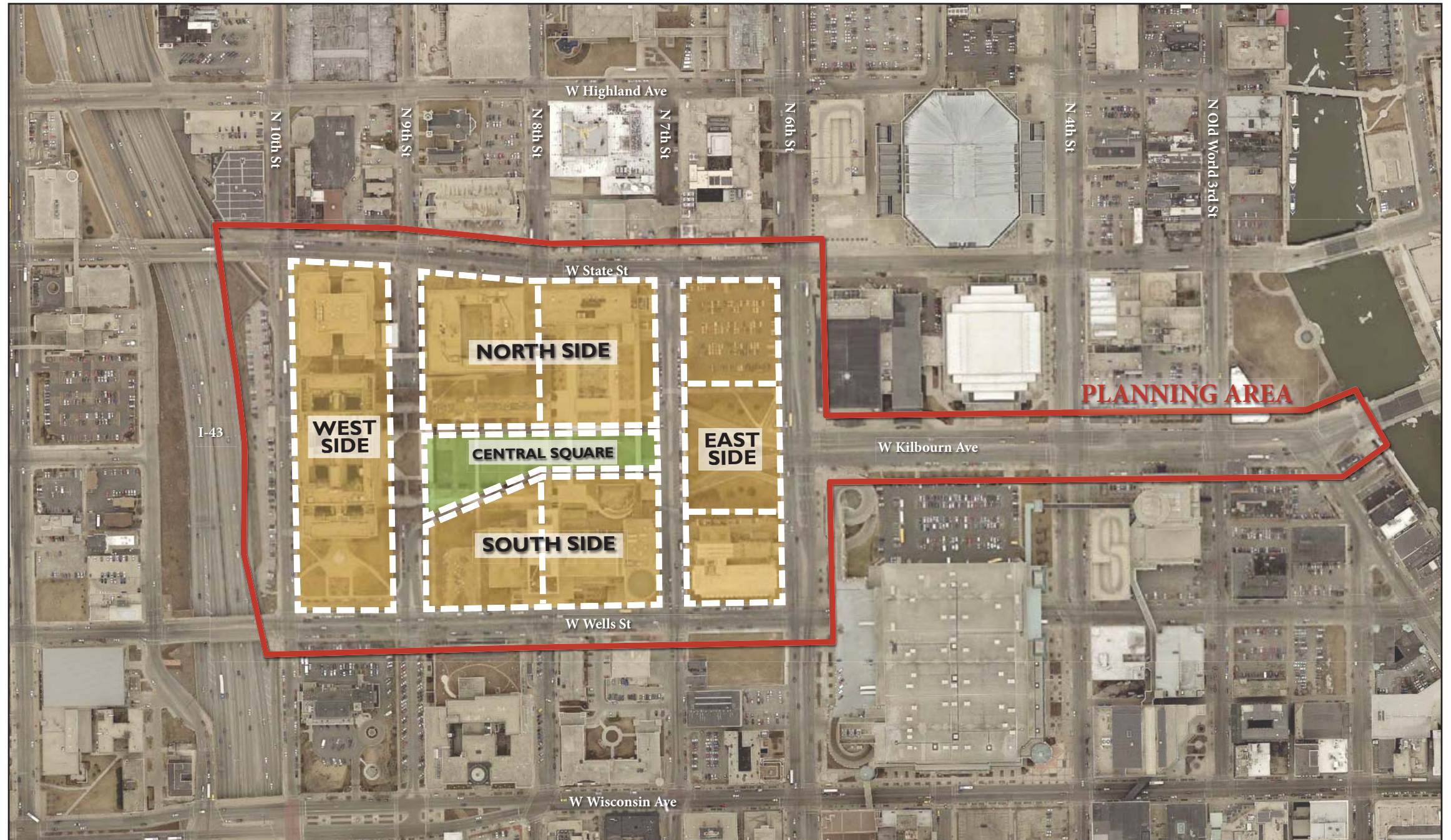
As the diagram on the right illustrates, the Planning Area views MacArthur Square as five different subareas defined by their geographies and the development opportunities that exist.

PREVIOUS PLANNING

This Plan (MacArthur Square: Volume II) should be viewed as the second volume of a body of work that has already been conducted with respect to a re-envisioning of MacArthur Square. As Volume II, this Plan updates the assumptions for and conditions of MacArthur Square that guided the original plan, including:

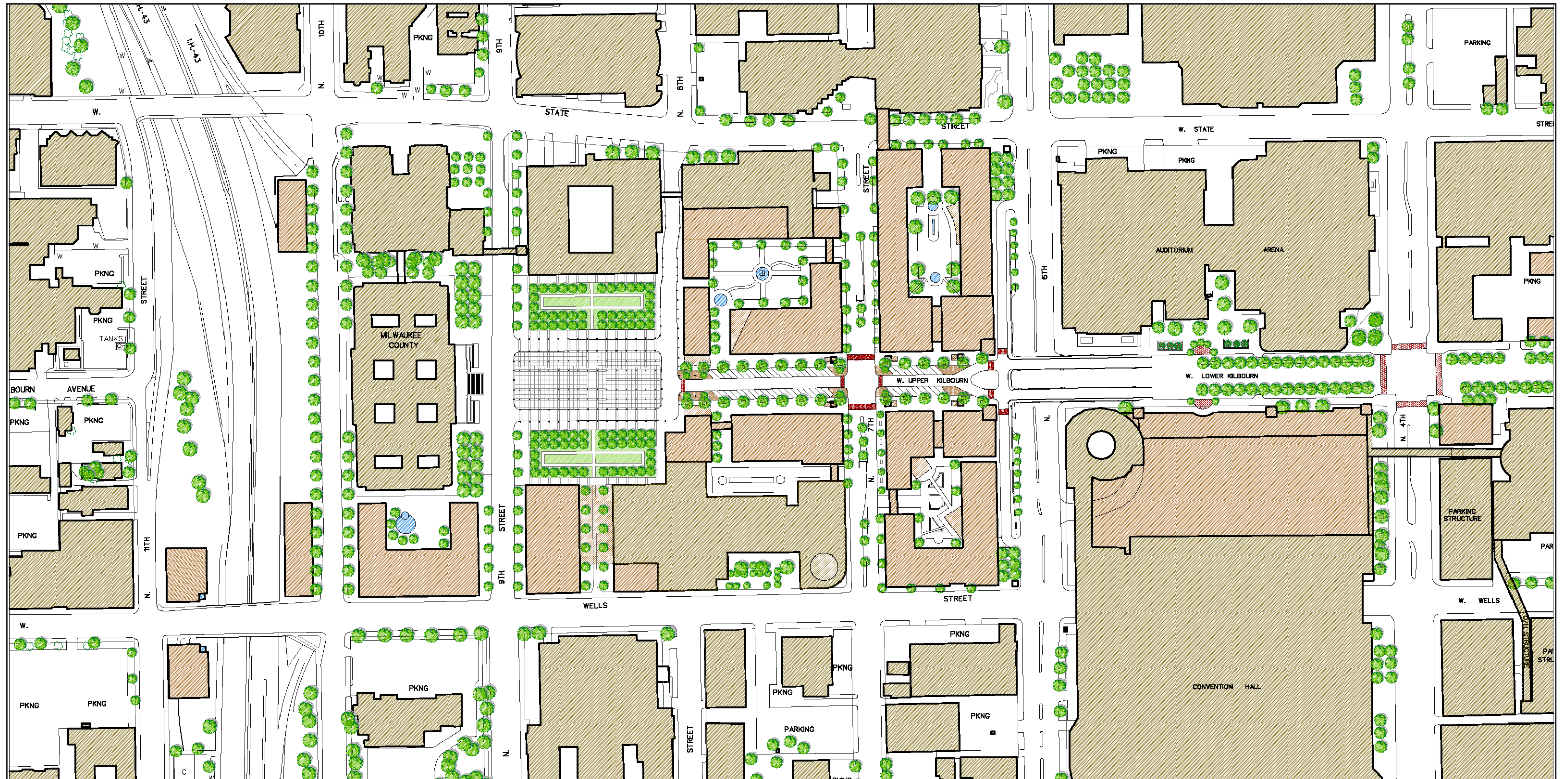
- Volume I assumed the Public Museum would remain as is; Volume II assumes the Public Museum will be demolished and replaced;
- Volume I assumed the State Office Building would remain as is; Volume II assumes the State Office Building will be demolished and replaced;
- Volume I assumed the Safety Building would remain as is; Volume II assumes the Safety Building will be demolished and replaced; and,
- Volume I assumed the parking structure could be demolished and rebuilt; Volume II assumes the parking structure can only be modified.

Volume II is also informed by significant nearby developments that will undoubtedly impact the future of the Square. The vision produced in Volume I was created at a time with little development pressure in adjoining areas. In contrast, this second volume includes a vision that responds proactively to new opportunities. This actionable vision can help balance the potential for revitalizing MacArthur Square with the impending needs of surrounding redevelopment.



The Planning Area and subareas within MacArthur Square.

Source: GRAEF, 2018.



Redevelopment of MacArthur Square as envisioned in 2009.

Source: GRAEF, MacArthur Square: Volume I, 2009.

SITE ANALYSIS

Ownership

There are only three owners of MacArthur Square – all governmental units that cooperate on a regular basis. However, within this overall pattern of land control there are many competing missions, operating procedures, and organizational needs that require very careful review before change can occur. As an example, the Public Museum, Courthouse, and Safety Building are all County-owned properties, yet each is dedicated to a different mission with different internal levels of review, budgeting, operations and approval procedures.

Land Use & Parceling

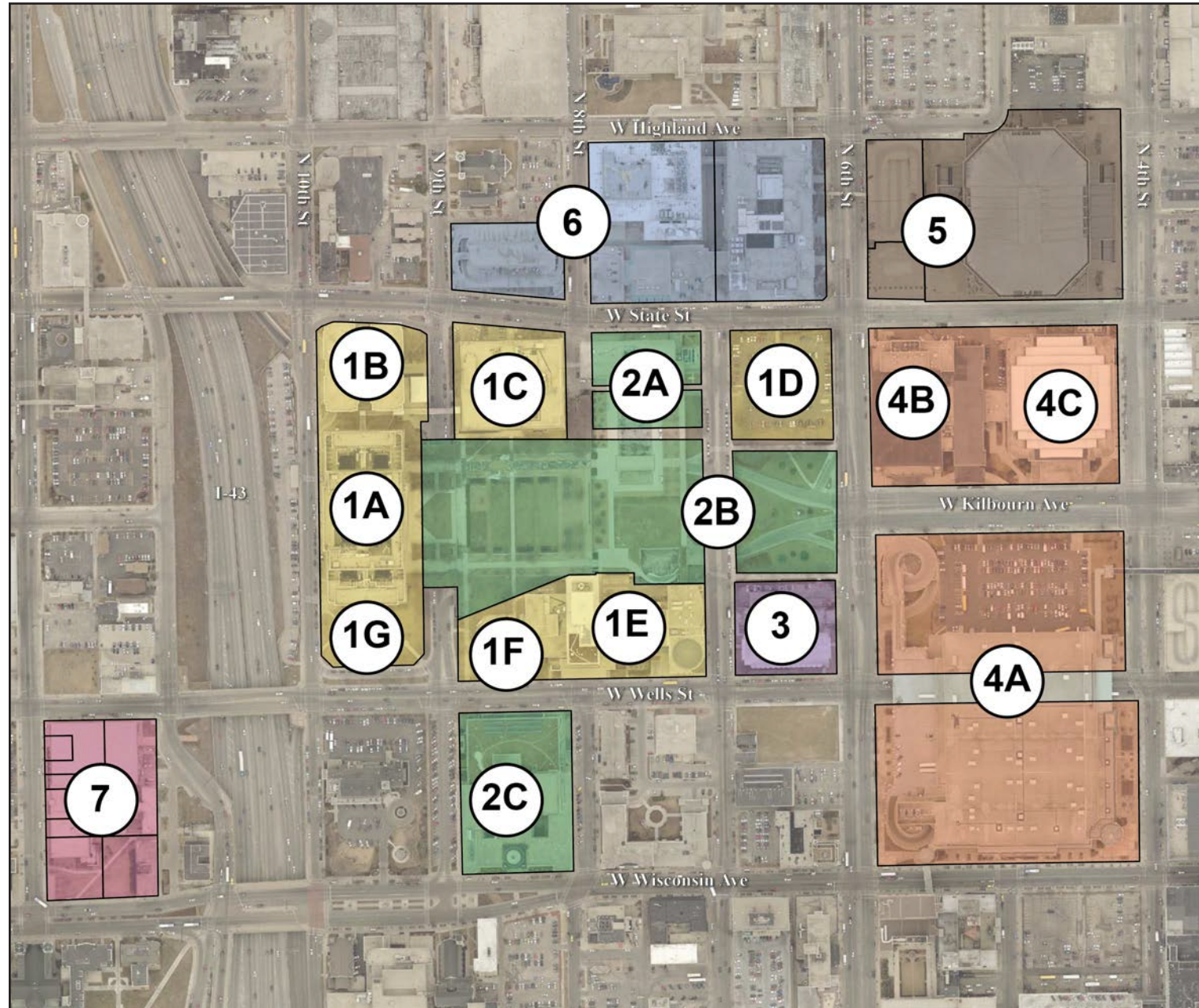
Presently, MacArthur Square is home to City, County, and State facilities. These institutional uses are tax-exempt and contribute no direct revenue to the City’s property tax base, in spite of the high value of downtown real estate. With the exception of the parking lot (1D to the right), the existing layout and circulation of MacArthur Square does not provide desirable conditions for new taxable development. Instead, the existing configuration of buildings has created a variety of irregular remnant parcels that are largely inaccessible and undevelopable.

Pedestrian Activity

As Milwaukee’s Civic Center, MacArthur Square’s open space does not fulfill a “civic” mission. Almost all of the existing facilities on the Square have turned their backs on the central, open space that was designed to be populated by workers, residents, and visitors alike. As a symbolic acceptance of the “dead zone” that is MacArthur Square, many of these uses have indefinitely closed their entrances, perpetuating a cycle of under utilization.

Circulation

For those who do traverse MacArthur Square, navigating from place to place can be cumbersome, if not impossible. Multiple grade changes and barriers create incoherent and uninviting options for pedestrians and vehicles alike. No effort is made to undo these barriers, in part because minor improvements would be futile without a major overhaul and coordinated plan.



Changes to MacArthur Square must involve the surrounding stakeholders.

Source: GRAEF, MacArthur Square: Volume I, 2009.

Ownership and Land Use Key

- 1: Milwaukee County
 - 1A: Milwaukee County Courthouse
 - 1B: Milwaukee County Criminal Justice Facility
 - 1C: Safety Building
 - 1D: Parking lot
 - 1E: Milwaukee Public Museum
 - 1F: Open space
 - 1G: Clas Plaza
- 2: City of Milwaukee
 - 2A: Police Administration Building (PAB)
 - 2B: Open space / underground parking
 - 2C: Milwaukee Public Library
- 3: State of Wisconsin Office Building
- 4: Wisconsin Center
 - 4A: Wisconsin Convention Center
 - 4B: Milwaukee Theatre
 - 4C: UW-Milwaukee Panther Arena
- 5: Bradley Center
- 6: Milwaukee Area Technical College
- 7: Marquette University

Source: GRAEF, MacArthur Square: Volume I, 2009.

Note: This study is expressly intended for initial consumption by the City of Milwaukee and Milwaukee County; therefore, this study is designed around the notion that property owners and tenants of the MacArthur Square Planning Area will be engaged in subsequent discussions.

Employment & Visitor Estimates

In spite of the present void of activity on MacArthur Square, the ingredients for a highly active and populated Civic Center are readily available. The uses directly on the Square contribute approximately 3,000 employees each day and over 16,000 visitors. Uses surrounding the Planning Area (e.g., MATC, Marquette, Aurora) draw approximately an additional 38,000 visitors, students, and employees to places within 1/2 mile of MacArthur Square.

Parking Capacity

An equally important ingredient for a highly active Civic Center is the availability and proximity of parking. In this sense, MacArthur Square is well-equipped. With both an underground garage and a surface parking lot, accommodating parking needs for the uses on and around the Square is not a challenge. Though new development on the Square would likely tighten the supply of parking, there are a variety of creative and innovative approaches for managing future demand.

Traffic

Extending and elevating Kilbourn Avenue and reconnecting 7th, 8th, and 9th Streets within MacArthur Square will involve major changes to the infrastructure. The most critical and essential change is the reconfiguration of the intersection at 6th Street and Kilbourn Avenue. According to a traffic study conducted in 2015 for the planning of the new Bucks Arena, this intersection is not regularly congested, thus allowing for flexibility in design. Additionally, the closure of through traffic on 4th Street adjacent to the new Bucks Arena will result in 6th Street becoming the primary N-S arterial in Westtown. The high visibility for property along 6th Street will support increased marketability for redevelopment.

Utilities

Existing utilities are primarily located subsurface within road rights-of-way within the Planning Area. Large sanitary and combined sewers do extend west of 6th Street in alignment with Kilbourn Avenue and are located below the lowest level of the existing parking ramps at MacArthur Square. A primary interceptor sewer line runs below the existing 9th Street. Potential redevelopment sites and a reconnected street grid as proposed in this MacArthur Square Plan is intended to avoid major conflicts.

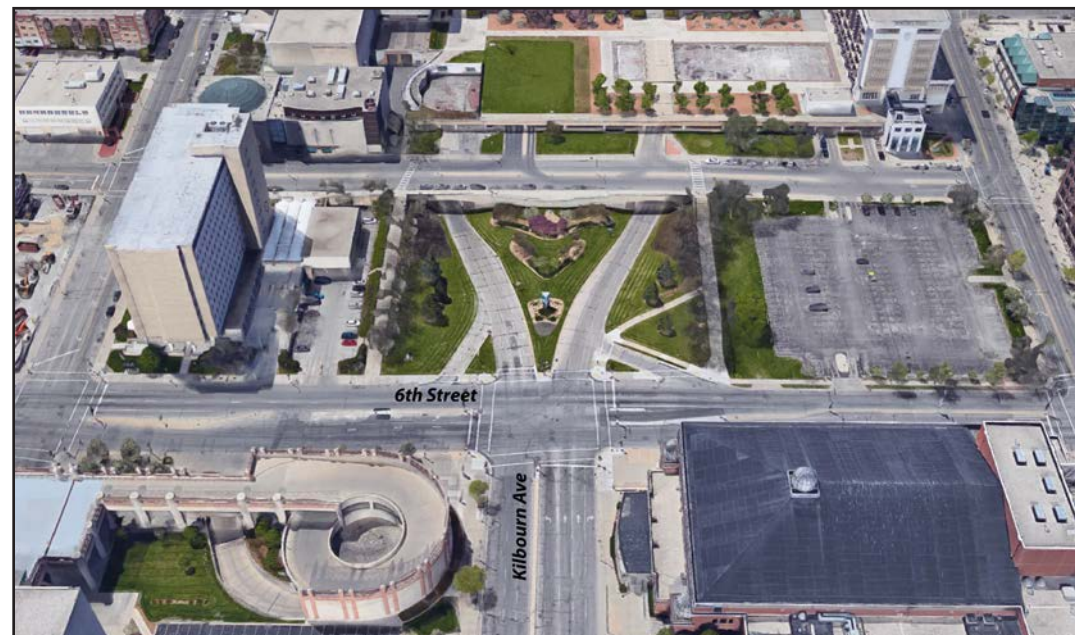
Estimated Daily Employees, Visitors and Students <i>In/Adjacent to Planning Area</i>	Total Employees (FTE + PTE)	Average Visitors + Students (Per Day)
Courthouse Complex (Courthouse, Public Safety Building, and Criminal Justice Facility)	1,113	4,400
Milwaukee Public Museum	128	1,432
MATC	1,664	11,085
Public Administration Building	*	*
State Office Building	*	*
Wisconsin Center District (all three facilities)	288	*
Total	3,193	16,917

Estimated Daily Employees, Visitors and Students <i>Within 1/2 Mile of the Planning Area</i>	Total Employees (FTE + PTE)	Average Visitors + Students (Per Day)
Marquette University	2,881	11,426
Aurora Sinai	1,337	*
Bradley Center	*	3,288
Total	4,148	14,714

Estimated Daily Employees, Visitors and Students <i>Total</i>	Total Employees (FTE + PTE)	Average Visitors + Students (Per Day)
Employees, Visitors and Students in/adjacent to Planning Area	3,193	16,918
Employees, Visitors and Students within 1/2 mile of Planning Area	4,148	14,714
Total	7,341	31,632

** Employee, visitor, and/or student daily population estimates are not available, though these institutions undoubtedly have significant contributions to the daily use of MacArthur Square.*

Source: "The Economic Impact of Aurora Health Care in Wisconsin," UW-Milwaukee, 2013; "MATC Fast Facts," MATC, 2016; "Wisconsin Center District Operations Review Volume II of II," Barrett Sports Group, LLC and Crossroads Consulting Services, LLC, 2017; correspondence with City and County staff, 2018.



The existing intersection of 6th Street and Kilbourn Avenue.

Source: Google Maps, 2018.



MacArthur Square has been the subject of much negative attention over the years. The above picture comes from an article highlighting "ugly" parks in Milwaukee.

Source: "Political Parks," Milwaukee Magazine, June 15, 2012.

Parking Capacity in the Planning Area	Available Spaces
MacArthur Square Garage	1,437
Parking Lot (State + 6th Street)	184
Total	1,621

Source: GRAEF, MacArthur Square: Volume I; Google Maps, 2018.

IV. DEVELOPMENT FRAMEWORK

This Plan includes two development frameworks that both meet the vision identified for MacArthur Square. Framework plans identify redevelopment sites, park space, and circulation routes (streets and bike/ped paths). The primary difference between the two framework plans (shown on the following two pages) is the street pattern and park space between 9th Street and James Lovell Street. Discussed in greater detail in the following section on Streets and Circulation, this central area of the Planning Area overlaps with the existing MacArthur Square parking decks. The long-term uncertainty of the decks (to be retained or demolished) requires this Plan to identify solutions that both work if the parking decks remain (with minor alterations) or are demolished and replaced with new parking facilities.

RECOMMENDATIONS: GENERAL GUIDELINES

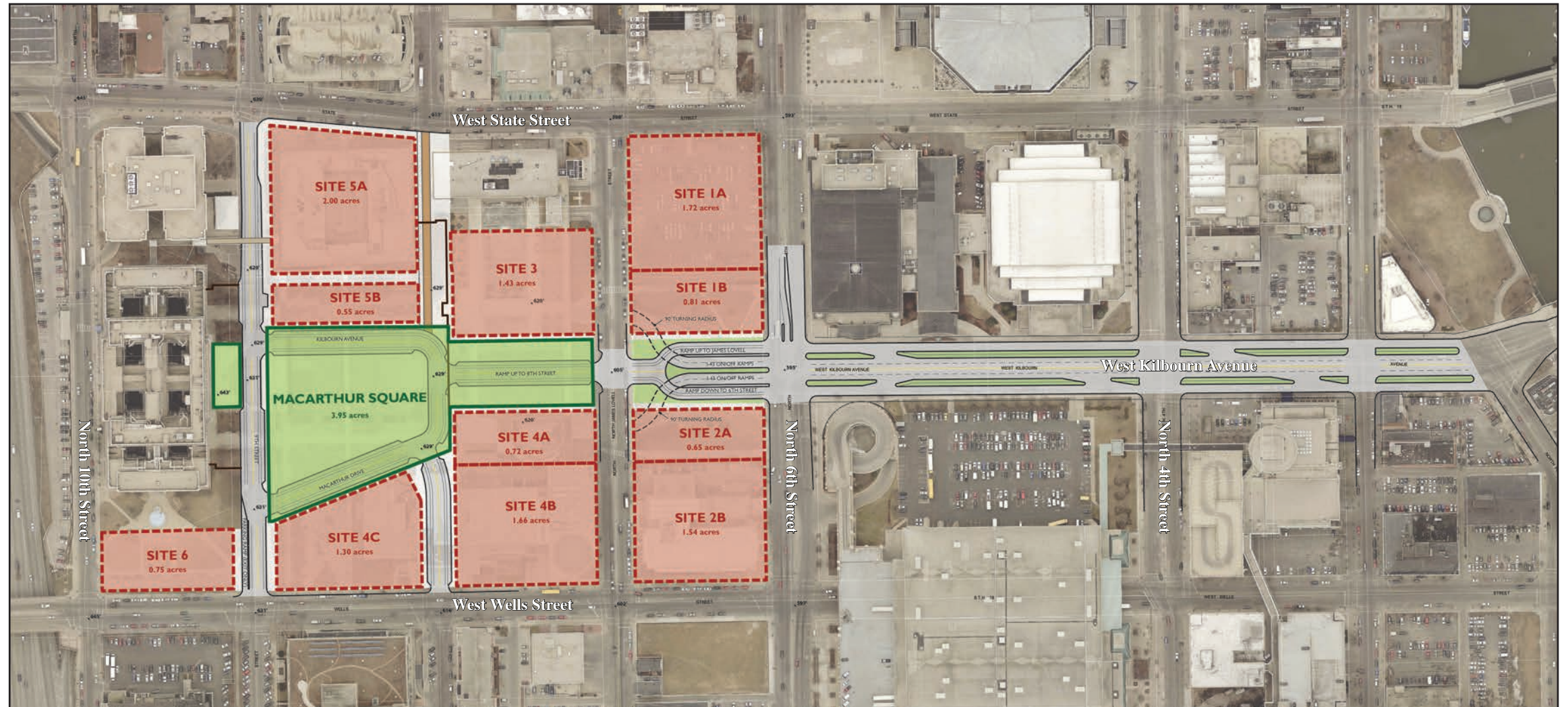
In achieving the goals defined by this Plan, the following strategies must be employed to coordinate development on and around MacArthur Square:

1. Generate Both Economic & Social Value

New tax base can be generated through the development of new structures and the renovation of existing structures, all of which could house a stronger mix of institutional, office, residential, retail, hospitality, and entertainment uses. Development should avoid using premium sites and locations for uses that neither provide major tax revenue to the City nor accommodate street level interior activities that enliven sidewalks along the abutting streets. Plans should encourage taller buildings (at least four stories) to both unlock more economic value and foster a sense of enclosure around the new Central Square and adjacent streets.

2. Use Parking for Multiple Developments

The provision of parking should be used as an incentive for new private sector development. Revenues from the parking structure should be evaluated in terms of both direct and indirect economic benefits to the City (such as incentivizing a new hotel or mixed-use development).



Development Framework Plan - Alternative 1

Source: GRAEF, 2018.

3. Coordinate Development with an Ad Hoc Committee

A collaborative steering committee or ad hoc group of owners/stakeholders formed through the support of the City of Milwaukee and Milwaukee County should coordinate ongoing development.

4. Build Upon Short-Term Susceptibility to Change

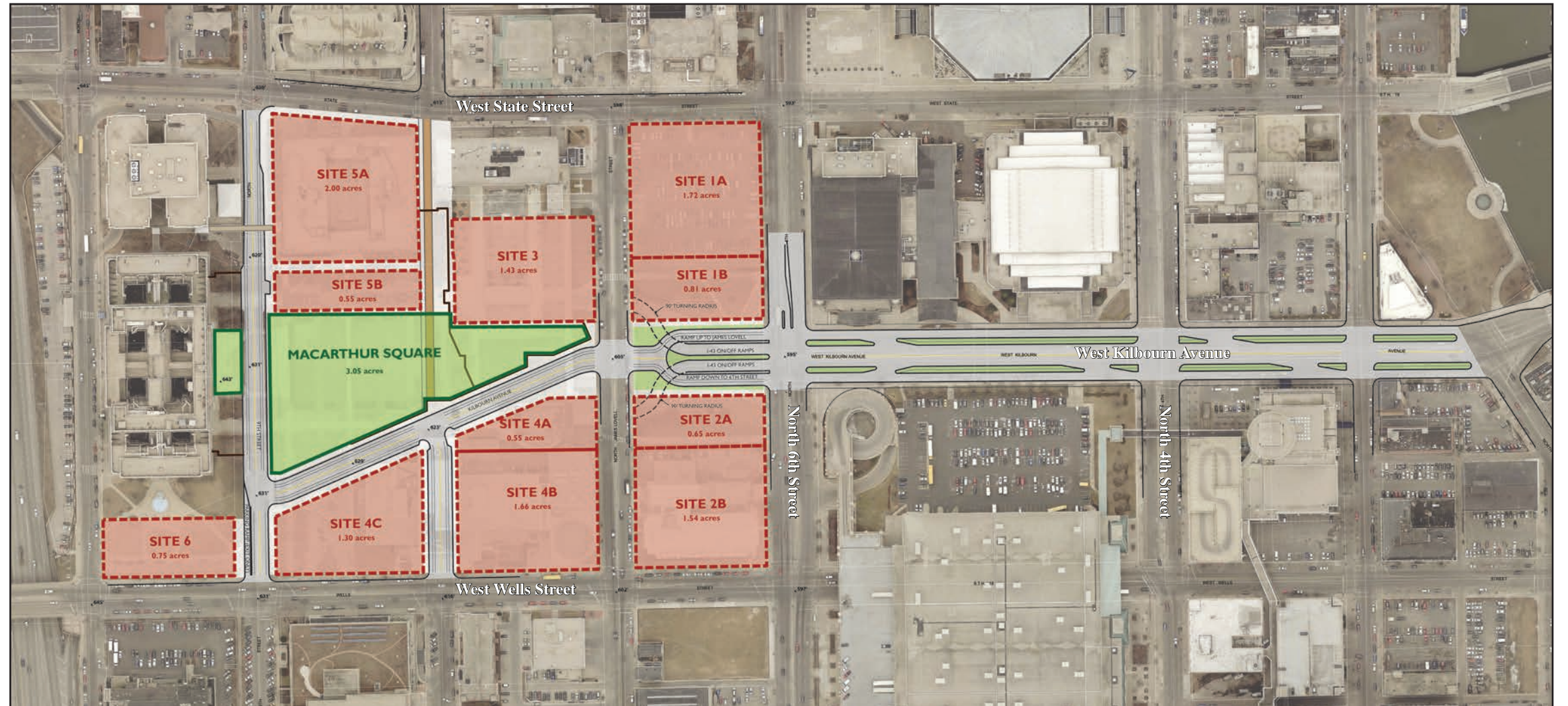
Ten years ago, almost all of the buildings surrounding MacArthur Square were viewed as long-term facilities that were inflexible and impossible to change. Today, more than half of the buildings and parcels are likely to change substantially over the next decade, further emphasizing the present need to establish a coordinated, workable phasing plan. Without such a vision, short-sighted decisions surrounding individual plans for growth could tighten the Gordian Knot of inflexible design and close the window of opportunity for meaningful change.

5. Phase Projects Independently

All of the projects are physically linked by existing roads, ramps, and structural conditions. From the standpoint of facility functionality and organizational missions, however, the different buildings and land parcels are only marginally interlinked. In situations like this, effective phasing for redevelopment requires planning multiple projects that can both function independently and, at the same time, be linked back together. For example:

- It will be important to allow for a major parking facility to be included in the East Side subarea while still allowing for future functional links to parking in the South or North Side subareas.
- The area just south of the Police Administration Building (site 3) should almost immediately serve as an interim site for events and festival activities (such as the planned Oktoberfest and the use of a Ferris Wheel) to attract people to the Square and make activity highly visible. As new projects develop in subsequent phases, these functions might be integrated as long-term, more permanent activities.

The last section of this study has a more detailed analysis of phasing concepts.



Development Framework Plan - Alternative 2

Source: GRAEF, 2018.

RECOMMENDATIONS: STREETS & CIRCULATION

Restructuring the street system on and around MacArthur Square is key to maximizing the value of the Square. While many of the recommendations that follow are geometrically complex, they are not infeasible — minor sacrifices for traffic management conditions and vehicular efficiency may need to be made in order to achieve the goals in this Plan.

1. Relink Kilbourn Avenue to the Courthouse

As stated above, the primary change to the streets and circulation should be to reconnect Kilbourn Avenue, James Lovell, 8th, and 9th Streets on the Square as narrow, traffic-calmed, bicycle-friendly streets with on-street parking and other amenities. While the development framework plans identify two specific circulation patterns, several options for street reconnection exist and further design development and engineering will be required to determine the appropriate solution. New street connections will increase the percentage of MacArthur Square that can accommodate meaningful development opportunities, as well as introduce new avenues for circulation throughout the Square that will contribute to a reactivated Civic Center. An elevated Kilbourn Avenue will create opportunities to utilize the front doors and main entryways of the buildings that surround the Square, which currently are either underutilized or inaccessible. All of this will contribute to a Civic Center that generates a wealth of social and economic value.

An additional opportunity that the City of Milwaukee should evaluate is the creation of a second level pedestrian street (i.e., skywalk) along the southern edge of Kilbourn that would connect MacArthur Square to the Convention Center and streetcar stops along 4th Street. While this concept does, in part, contradict some of the City's effective policies against skywalks, there are some factors that may make this concept far more meaningful and appropriate. In particular, this concept would facilitate the use of multiple venues, maintain a stronger link to the sidewalks and ground-level activity, improve pedestrian circulation, and increase the potential for parking revenues. A grander vision of the skywalk could include small kiosks along the walk.

2. Reconstruct the Freeway Entrance/Exit to fit the Street

As the freeway on/off ramps at 6th Street are reconfigured, it will be essential to minimize lane width and maximize space for new development. A key to the vision of this Plan will be to allow for Kilbourn Avenue to slope up on ramps to the top of James Lovell Street, while maintaining entry/exit lanes that to connect to I-43. These entry/exit lanes should be configured in the center, with the Kilbourn Avenue ramps configured to the sides, to keep fast moving traffic away from the sidewalks and to allow for a complete street edge and curb for sites 1B and 2A.

3. Create Active, Multi-Modal Streets that Fit the City's Grid

Streets must not only facilitate multiple modes of travel, but also link to social and economic activity along the ground-floor level of buildings near the edge of the right-of-way. At the same time, to improve access for service and emergency vehicles, more detailed actions include:

- Follow the City's Complete Streets Policy, with a focus on increasing street activation.
- Use the principles embodied in the City's standard street cross-section with parking lanes and two-way traffic.
- Expand the use of bicycle lanes both integrated with vehicular streets and separated as bikeways. Utilize bikeways in locations that cannot accommodate motor vehicles but can provide useful linkages for bicyclists, managed streets, and pedestrians.
- Employ approaches that fit the unique opportunities for developing a highly-active public destination (e.g. parklets, regular and rhythmic entries to buildings, etc.).

For example, the current configuration of 6th Street is not conducive to multi-modal activity. Revisions to the design configuration should be pursued to better accommodate all modes of traffic (i.e., bicycles and pedestrians). A possible street section could include separated bikeways as shown in the cross-section in the figure to the right.

4. Design Traffic for Pedestrian Activation

Standard professional practice for traffic analysis may not support the types of higher-quality pedestrian and bicycle movement required for this project. Consequently, lower levels of service for motor vehicles (such as LOS D or E) may be necessary in order to create a higher level of service for pedestrians.

5. Accommodate Service, Emergency, & Delivery Vehicles

The previous redevelopment proposal (Volume I) included expanding the basement level of the parking garage with a two-story ceiling to allow access for trucks, buses, and service vehicles. In contrast, this proposal assumes that such access would instead be provided via a reconnected surface street system and a series of context-based service access points that would differ for each building.

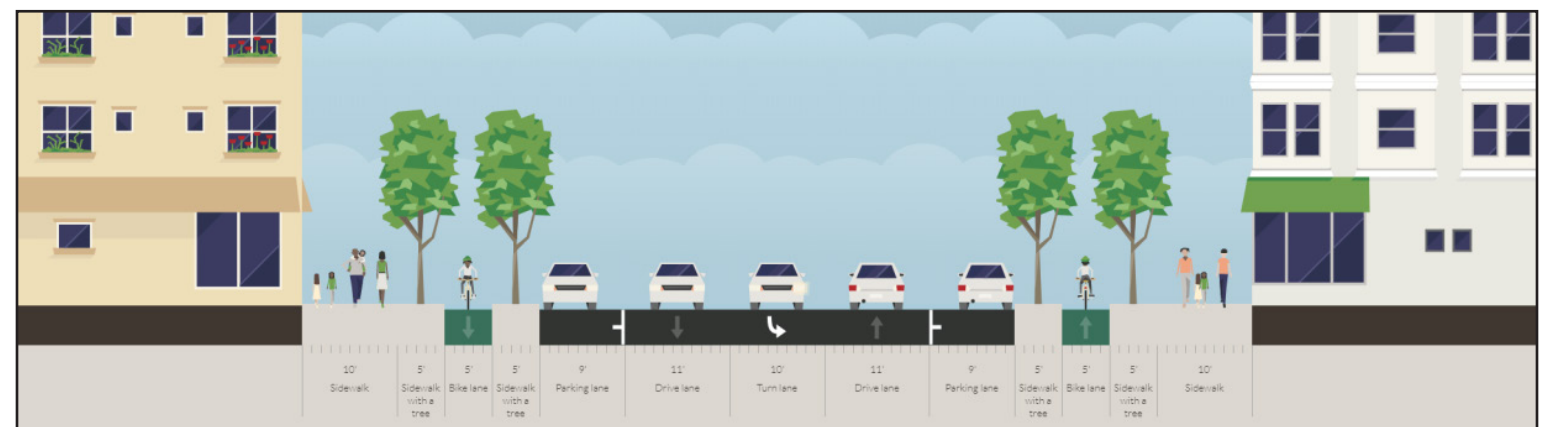
6. Design Effective Grades, Slopes, & Terraces

The land on which MacArthur Square has been configured was originally sloped and hilly. As the Central Square, parking structure and terraces were developed, the slopes, grades, and height differentials were not adjusted effectively to enable effective circulation needed for successful public places. Some grades are too steep, some terraces are restricted by unattractive walls, pedestrian stairs are located in places that have become dysfunctional, and ADA access is poorly accommodated (if at all). To alleviate these problems, several principles should be employed that both follow general practices and, at times, seek novel, non-traditional solutions. These principles include:

- Vehicles should still enter the parking structure below the new 9th Street, which is now on "top." Vehicles should exit the parking deck, for example, through a new drive lane that connects to Wells Street.
- Landings for ADA slopes should differ from slopes that accommodate motor vehicles. Designing varying slopes will entail creative use of street and curb walls.
- The use of elevators for public movement on sloped areas should be avoided unless both the functionality and the quality of experience can be maintained. Opportunities for pedestrian elevators may be possible if, for example, elevators for the parking structure also connect vertically to the top of the Central Square. Alternatively such elevators may be incorporated into a building in which ongoing maintenance and service is feasible on a 24/7 basis.
- The freeway on/off ramps from 6th Street to James Lovell are currently at grade so there are few structural concerns. The State owns this portion of the roadway, however, and they are planning to repave these ramps in 2020.

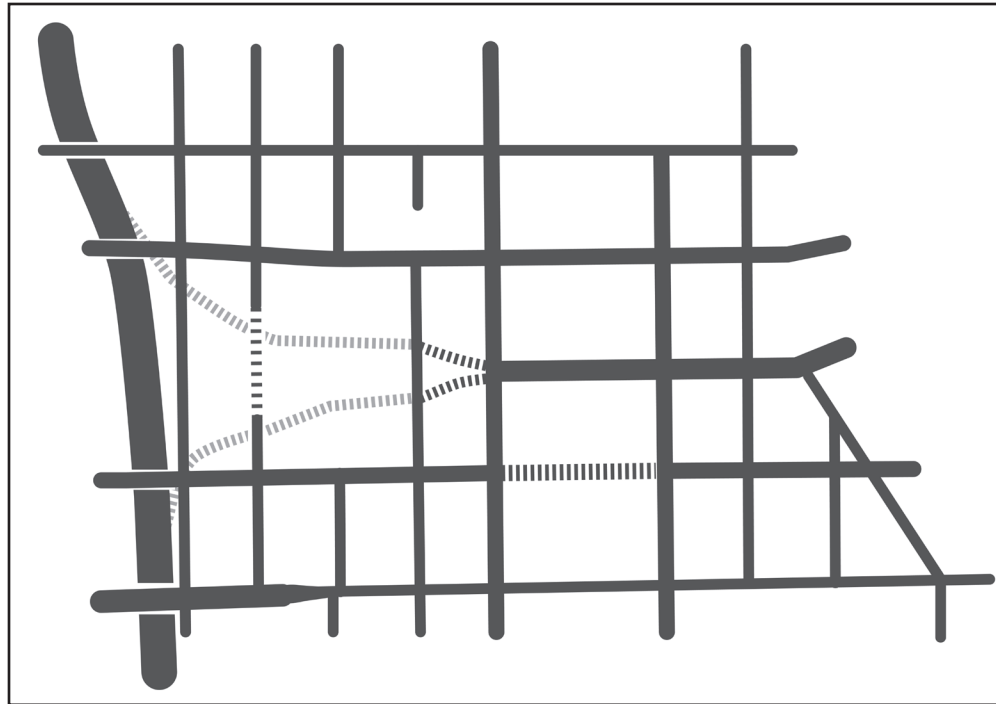
7. Fit the Parking Structure to the Place

As the City rehabilitates the parking structure, the geometric configuration of the facility should accommodate the street reconfiguration options outlined in this Plan. Doing so will require special attention to slopes, ADA access, and other accommodations, which may reduce the viability of some parking spaces. One option is adding new access from James Lovell in conjunction with some modifications to 9th Street, Kilbourn Avenue, and the extension ramps.



Potential 6th Street Cross Section

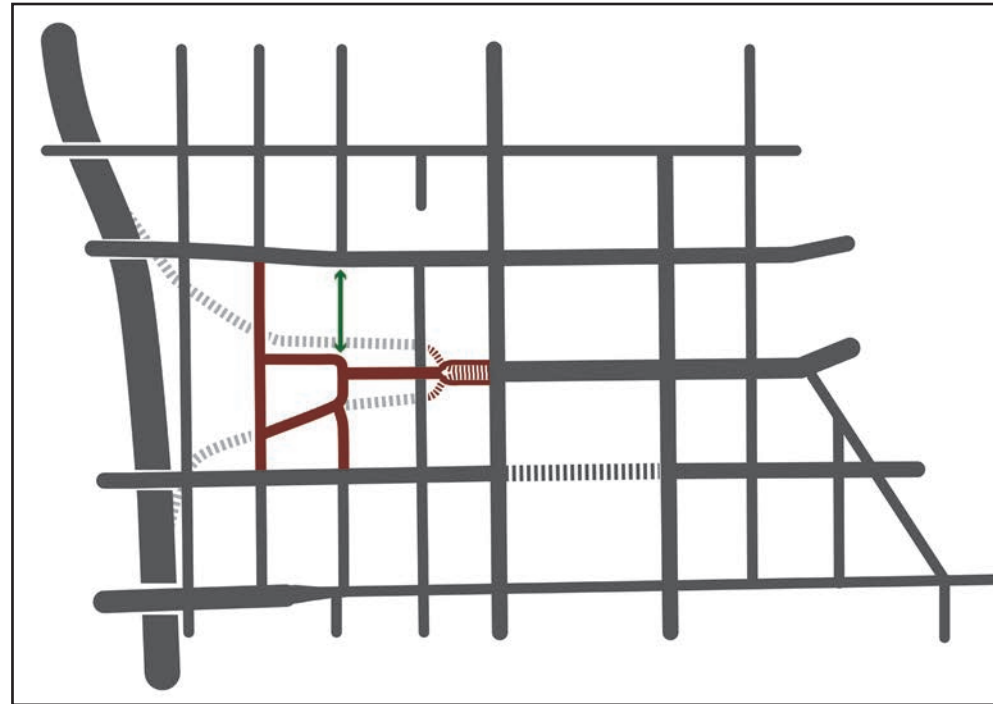
Source: City of Milwaukee, 2018.



Street Grid Pattern - Existing (dashed lines represent tunnels)

Multiple streets terminate at the edges of MacArthur Square and cause a disconnect in the circulation system.

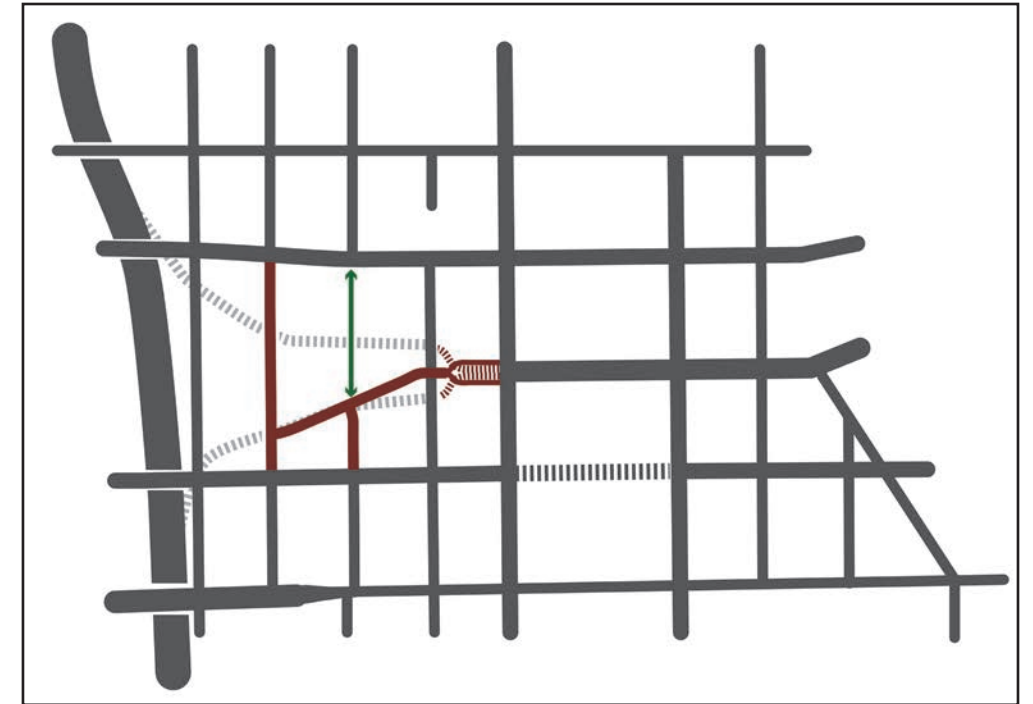
Source: GRAEF, 2018.



Street Grid Pattern - Alternative 1 (dashed lines represent tunnels; red lines represent new street configurations; green lines represent pedestrian mall)

Kilbourn Avenue extends west and rises to an activated public park surrounded by local streets. 9th Street and 8th Street now extend into and through the MacArthur Square site, creating an interconnected circulation system.

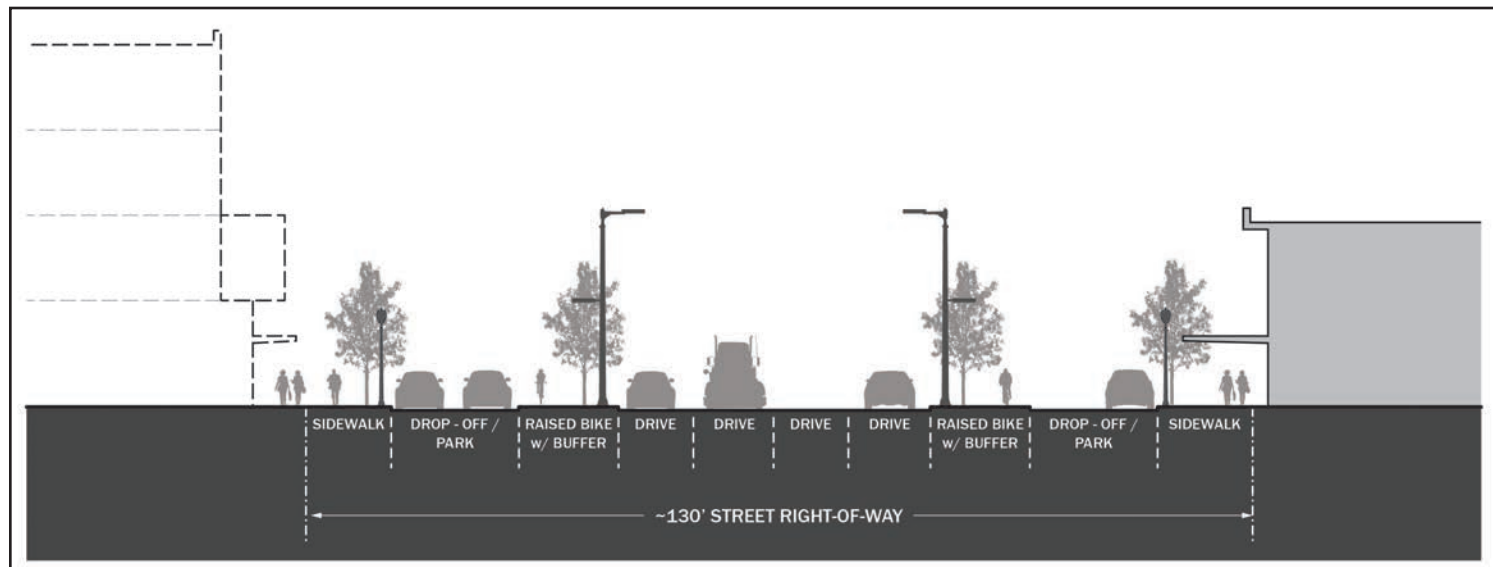
Source: GRAEF, 2018.



Street Grid Pattern - Alternative 2 (dashed lines represent tunnels; red lines represent new street configurations; green lines represent pedestrian mall)

Kilbourn Avenue extends west and slowly rises to the elevated height of a reconstructed 9th Street. 8th Street extends into the MacArthur Square site, creating an interconnected circulation system.

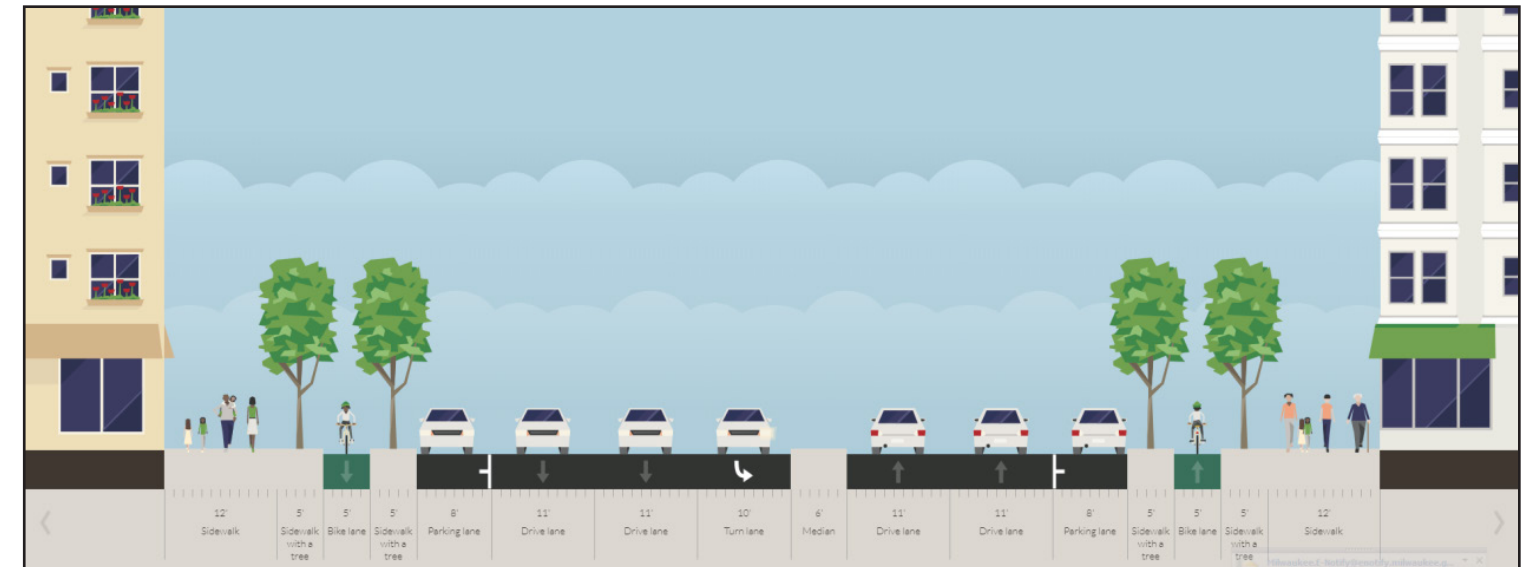
Source: GRAEF, 2018.



Kilbourn Avenue Cross Section - Proposed

This proposed street design adds tree-lined bicycle "boulevards" that (1) separate through traffic from local street traffic, and (2) create a physical and visual connection to MacArthur Square that reflects the original design intent of connecting the Courthouse to the Milwaukee River and City Hall.

Source: GRAEF, 2018.



Alternate Kilbourn Avenue Cross Section - Proposed

This proposed street design adds tree-lined bicycle "boulevards" that separate from vehicular traffic. The design creates a physical and visual connection to MacArthur Square that reflects the original design intent of connecting the Courthouse to the Milwaukee River and City Hall.

Source: City of Milwaukee, 2018.

RECOMMENDATIONS: PARKING STRUCTURE

Maintaining the ample availability of parking at MacArthur Square is important in order to maximize the value propositions for redevelopment.

1. Modify the Parking Structure to Allow Required Changes for this Plan

In order to reconnect the street and circulation systems, and to provide opportunities for new development, modifications to the parking structure will be needed. These modifications may lead to reductions in the amount of parking, as well as require internal changes to the structure, such as allowances for new columns and reconceived internal circulation for vehicles and pedestrians.

Modifications must also retain the functionality of the current vehicular entry/exit system. This does not mean that the existing configuration of entries and exits must remain the same, but that the number and operation of entry and exit points must be able to accommodate the proposed changes. For example, in some cases it may be appropriate to have “reversible” lanes to facilitate the flow of vehicles during peak conditions.

2. Evaluate the Parking Structure Using a Long-Term Cost Benefit Model

Given the unique location and use of this parking structure, an economic evaluation of the structure is essential. Moreover, the cost-benefit of the analysis must be tied to the costs and benefits of the surrounding development. For example, if the remaining useful life of the structure is approximately 10 to 15 years, the cost of early replacement might be worthwhile if it can increase the potential value of surrounding development.

The City must also consider several critical cost factors. For example, increasing the costs for some aspects of the parking structure might facilitate much greater benefits – both economic and social – including unlocking the potential for development built atop the edges of the structure. This might be the case for the North Side subarea and the South Side subarea. In addition, the cost of facilitating structures atop the parking deck might vary

with the type of structural system being considered (e.g., a new column system versus reinforcement of the existing structural systems).

The City and partners also need to evaluate scenarios that might involve additional costs, but, at the same time, lead to substantially higher benefits of new developments.

Overall, a cost-benefit analysis of the parking structure will ultimately become a cost-benefit analysis for the entire MacArthur Square development area. Both quantitative and qualitative values will need to be considered. In addition to the costs and benefits within the study area, outside costs and benefits to nearby developments will also need to be acknowledged and, to the extent possible, quantified.

3. Monitor Occupancy for Management

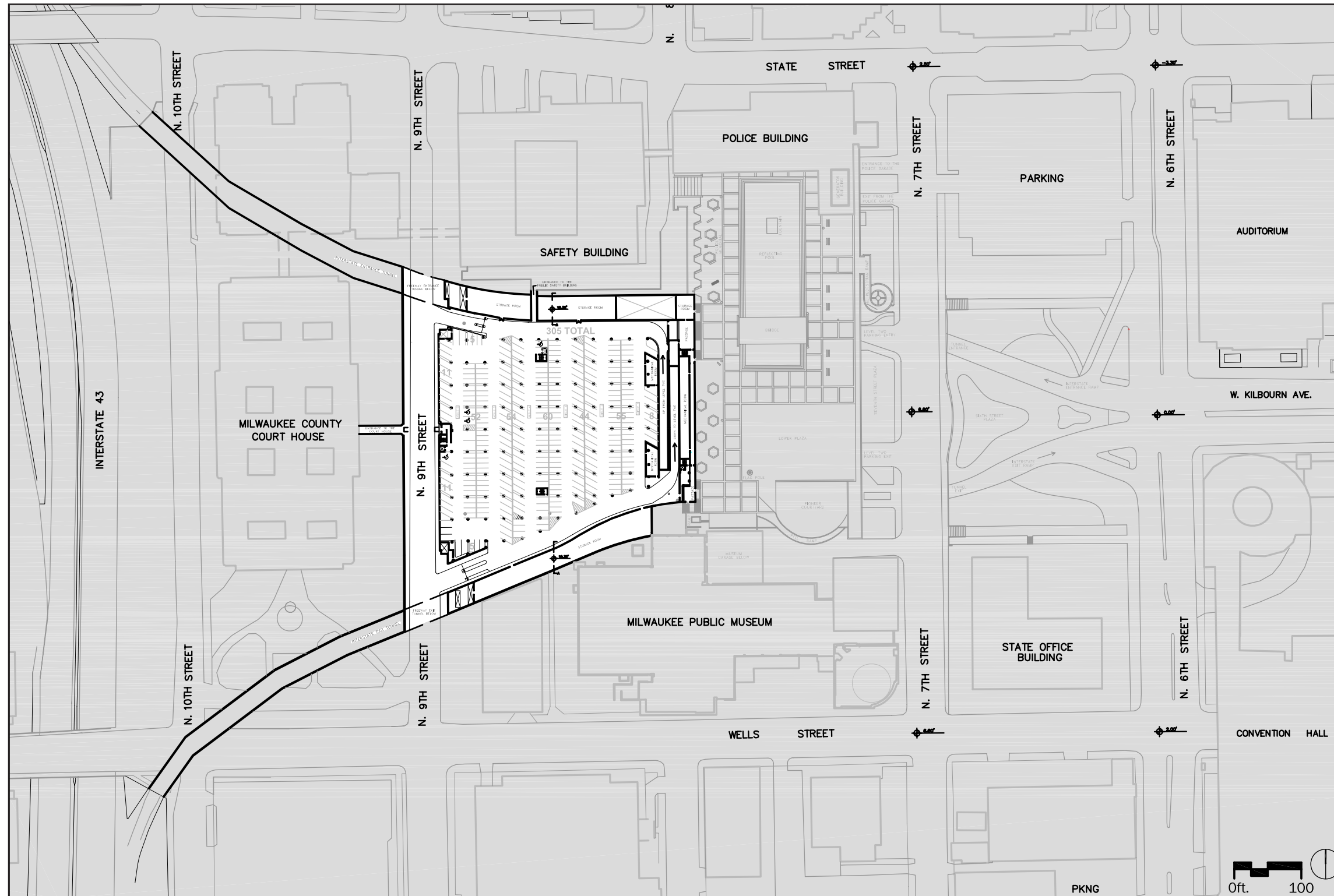
The current parking facility provides value to users of MacArthur Square and the surrounding area. The City and its current parking management company should conduct an occupancy and revenue analysis. The analysis should look at the existing revenue stream to ascertain whether higher occupancy or increased parking rates would be possible, and how various pricing schemes might facilitate uses (and revenues) for new development.

4. Add New Parking as Needed

New parking facilities can and should be added, especially if they can be linked in an effective system for managing parking for higher rates of occupancy, revenues, and redevelopment. The entire East Side subarea represents over 200,000 square feet of surface area that could accommodate either sub-surface and/or elevated parking decks. New parking in this East Side subarea could either supplement or replace the existing parking facilities at MacArthur Square.

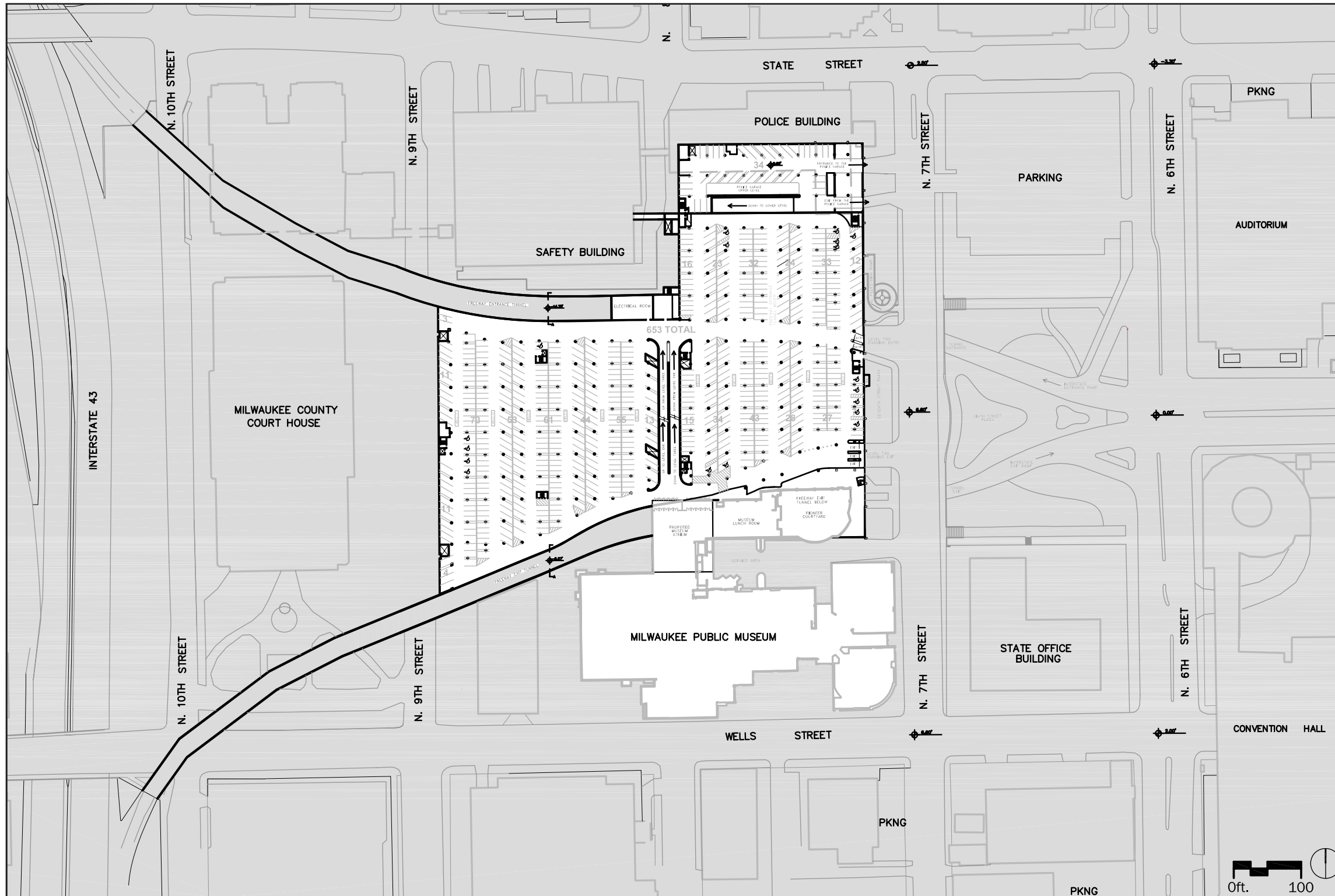
5. Keep Parking Management Flexible

The City should consider short-term agreements for parking with users and institutions that can be monitored, reviewed, and revised periodically. For example, if demand dwindles and occupancy declines, new parking leases/permits should be administered; on the other hand, if demand starts to outstrip capacity, the parking rates should rise to maximize public revenue.



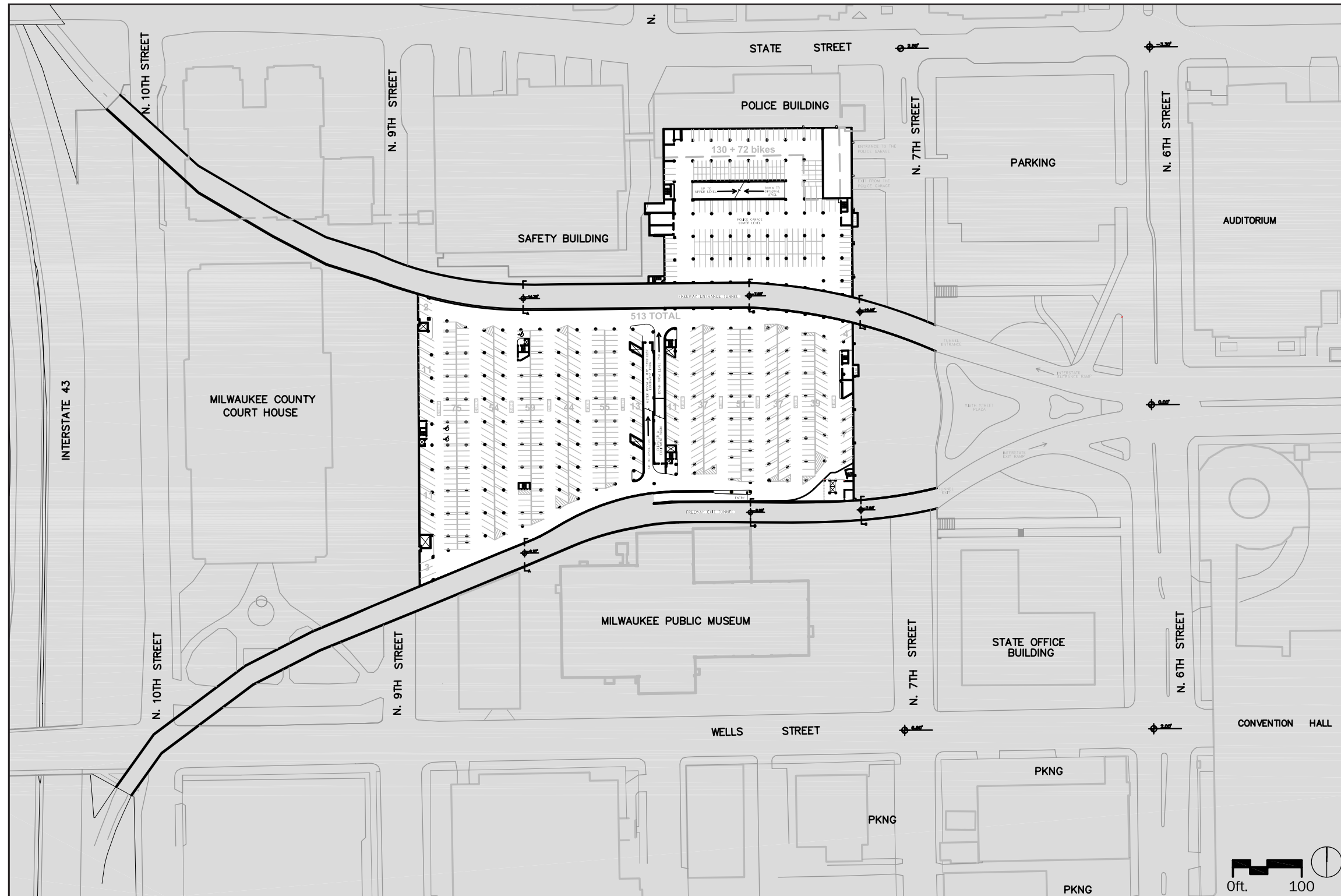
Existing parking decks at MacArthur Square (upper level).

Source: GRAEF, MacArthur Square: Volume I, 2009.



Existing parking decks at MacArthur Square (middle level).

Source: GRAEF, MacArthur Square: Volume I, 2009.



Existing parking decks at MacArthur Square (lower level).

Source: GRAEF, MacArthur Square: Volume I, 2009.

RECOMMENDATIONS: CENTRAL SQUARE

The grand central space envisioned in the early plans for MacArthur Square was born from ideals generated by the City Beautiful movement. Though impressive, these monumental public places are not as effective in generating activity as smaller, more humanly-scaled places.

1. Scale Down the Size of the Square

The overall size of the Central Square does not encourage daily spontaneous activity or small-group social uses. Instead, the City and County should create a smaller, reshaped public space with a stronger definition. The reshaped Central Square may still contain terraces and retaining walls – such walls, even if they are relatively tall, can contain features and design details that make them visually attractive and appealing to pedestrians and passersby. Scaling down the Square does not require the elimination of large, programmed events.

2. Reshape the Square

Both development frameworks show a non-symmetrical design. Asymmetries provide planners, designers, artists, and programmers a wide array of diverse opportunities to activate multiple places. For example, one corner might contain a temporary tent for a group social function, while a bigger area is used for informal active recreation.

3. Create Multiple Uses that Fit the District

A highly active Civic Center must allow for multiple tiers of activity, the most important of which is spontaneous activity. Opportunities for activity should complement, rather than compete with, the highly programmed uses nearby (e.g. new Bucks Arena and Live Block). Small, intimate spaces with flexible seating should be designed within the Central Square to encourage impromptu social contacts.

The Central Square could accommodate smaller, short-term festivals and events that would not monopolize the use of the space. One such opportunity includes an annual Oktoberfest with outdoor entertainment. The current proposed concept features a Ferris Wheel, which, if visible from Kilbourn, would have a dramatic impact on local perceptions of the possibilities for this dormant public place.

The space for programmable activities must not come at the expense of the space for spontaneous activity. While the Central Square should emphasize spontaneous uses by individuals and small groups, other activities should be facilitated as long as they are not made into dominant permanent uses.

4. Evaluate Construction Challenges

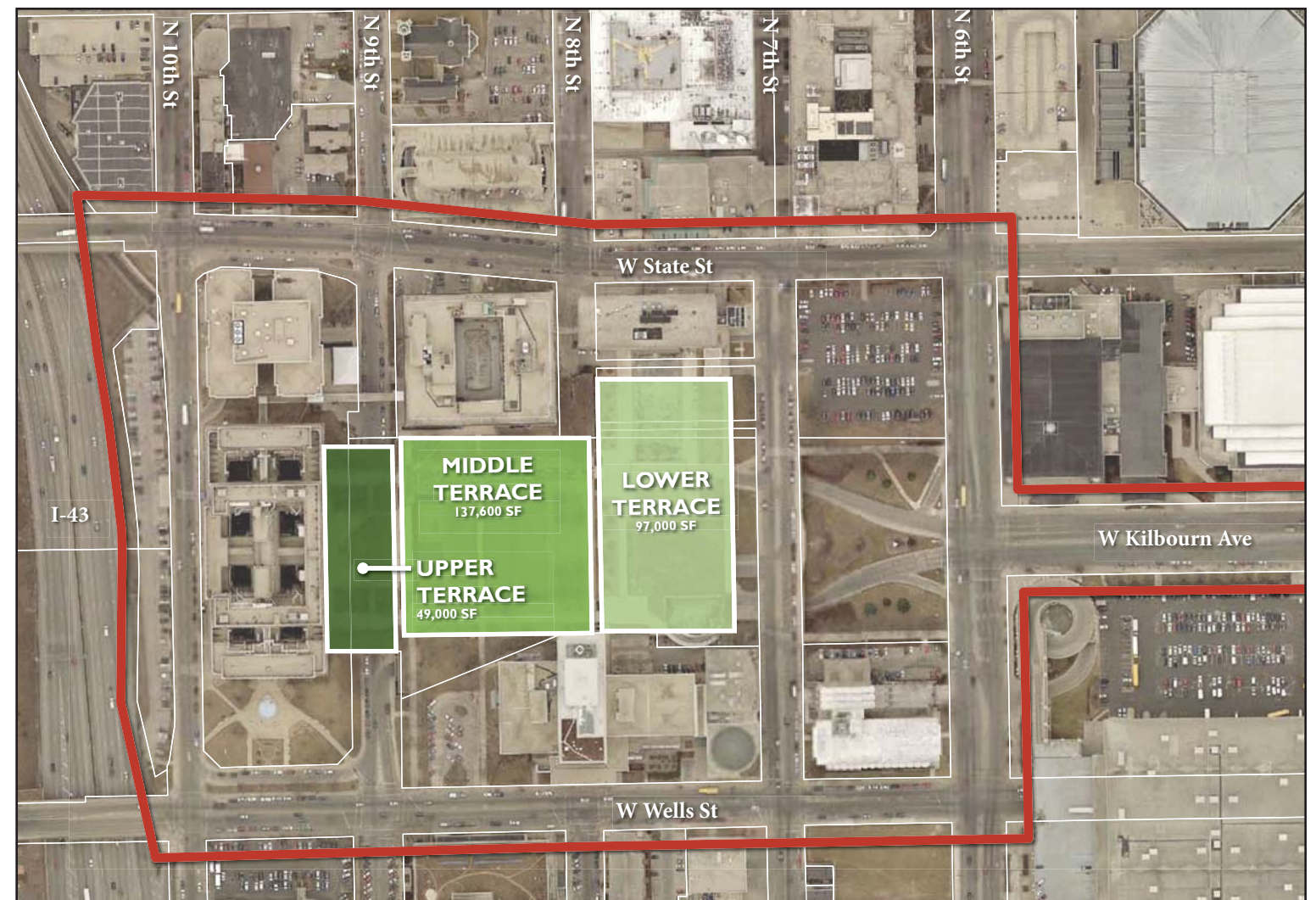
The Central Square subarea, given its unique location as the major structure that abuts almost all of the other major facilities, represents the most unique set of construction challenges. Redevelopment may involve changes to the structural systems of the freeway tunnels, parking structure, stairwells and elevators, pedestrian tunnels, and related mechanical and utility systems. Construction staging on top of the plaza will also be limited due to the existing loading constraints. Some of these issues may be addressed through a more comprehensive design for additional shoring and/or new systems to support the loads from their equipment.

Central Square Size

- Existing MacArthur Square: 6.5 acres (283,600 SF)
- Development Framework (Alternative 1): 3.95 acres
- Development Framework (Alternative 2): 3.05 acres

Other Downtown Park Sizes

- Burns Commons: 1.5 acres
- Cathedral Square: 2.1 acres
- Pere Marquette: 1.9 acres
- Red Arrow: 1.2 acres



Existing MacArthur Square Size.

Source: GRAEF, 2018.

RECOMMENDATIONS: EAST SIDE, 6TH STREET, KILBOURN AVENUE

The East Side subarea (from State Street to Wells Street, and 6th Street to James Lovell Street) is perceivably the most socially and economically valuable project area, and should be recognized as a logical nexus of activity. 6th Street is arguably the busiest arterial in the downtown, and its connection to Kilbourn Avenue should be, in many ways, the “hundred-percent corner” west of the river. In practice, however, this block is devoid of pedestrians and any activities, largely due to the dominance of freeway-based traffic planning.

1. Reconfigure the Existing Freeway Ramps

The existing freeway ramps must be reconfigured to allow for the extension of Kilbourn Avenue up to James Lovell Street while maintaining access to and from the freeway. In addition, the ramps must be configured to ensure priority crossings for pedestrians. Since the redesign of the ramps is, in part, under the authority of WisDOT, any reconfiguration will require coordinated planning and phasing. It has been noted that the State is planning to make improvements to the ramps in 2020.

2. Create 24/7 Pedestrian Activities Along 6th Street

Buildings along the eastern edge of 6th Street should encourage ground-level commercial uses with multiple entries that activate the street. At the same time, the sidewalk along 6th Street should be widened and options for small pedestrian plazas should be considered.

3. Include New Parking Facilities

New buildings on the northern and southern portions of this subarea should include multiple options for additional parking levels, except along the active edge of 6th Street, where an internal ground-level commercial space should be created.

The previous redevelopment proposals (Volume I) included a more aggressive expansion of the existing parking structure (west of James Lovell) all the way eastward to 6th Street. This more expansive concept has some advantages that the City may wish to pursue, especially if it is developed in concert with new uses and structures that demand more and/or flexible parking. If this direction is considered desirable, then new freeway on/off ramps would need to accommodate a more complex parking garage configuration below grade.

4. Develop Major Private Sector Buildings

A variety of uses should be coordinated in this subarea, including a conference hotel, a major office structure, an institutional use, and options for combined uses that include mixed-use residential. New development should avoid dedicating space for not-for-profit uses that do not provide property taxes, unless combined with for-profit uses (e.g., a new public museum built in combination with a residential tower; rehabilitation of the State Office Building by a private developer; MATC student housing built by a private developer).

5. Begin with Cost & Revenue Opinions

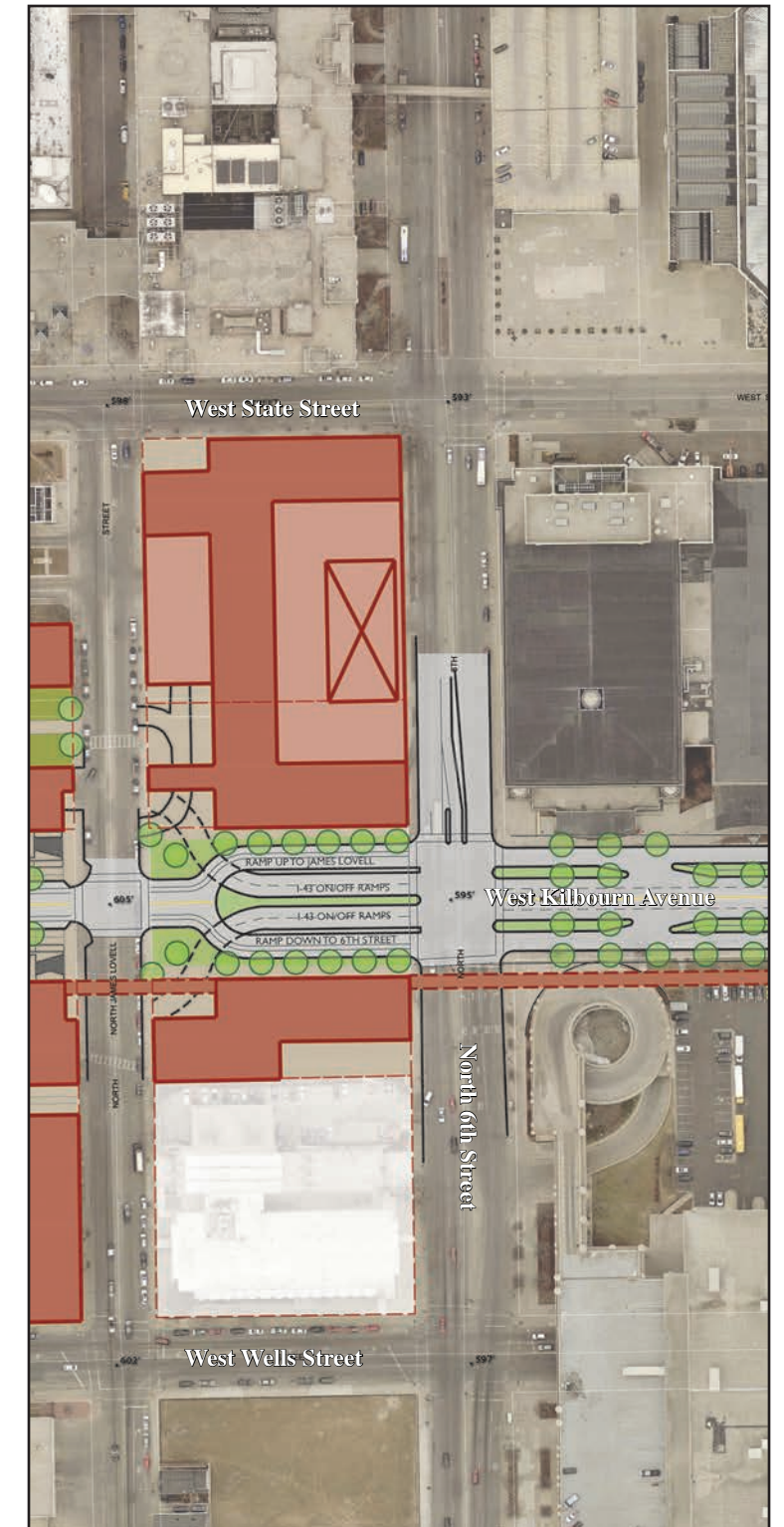
Redevelopment of the East Side subarea will require both private and public sector expenditures. To be meaningful, discussions surrounding redevelopment of this subarea should include general cost options about the most significant expenditures, including:

- Revitalization of the State Office Building for new uses within the existing frame, or demolition and construction of an entirely new structure.
- Modification of freeway on/off ramps, as well as the abutting street ramps, leading up from Kilbourn to James Lovell Street (7th Street).
- Construction of two levels of below grade parking for both Sites 1A and 1B (across from MATC) and options for sites 2A and 2B with, or without, the existing State Office Building. In addition, this cost might vary based on the design of the ramps, which will either involve freeway lanes in the center and street lanes on the outer edge, or street lanes in the center and freeway lanes on the outer edge.



East Side development framework.

Source: GRAEF, 2018.



East Side site design concept.

Source: GRAEF, American Design, 2018.

RECOMMENDATIONS: WEST SIDE, CLAS PLAZA, 10TH STREET

The Historic Courthouse must remain as the preeminent civic building defining the Square. However, its current isolation, lack of proximity to other uses, and visual monumentality do not add to its potential cultural value. The West Side of the project area is the least amenable to change, largely due to the Historic Courthouse. In spite of this, there are some redevelopment options that would improve the use of this subarea.

1. Revise Existing Traffic Operations

Raising 9th Street to the grade level of the Central Square should be a priority. The street can become a slow, two-way circulation element that helps increase the visibility of the Square, reemphasizes the east façade of the Courthouse as a primary civic statement, and, in general, becomes the first catalytic improvement. Additional analysis should also be conducted for the conversion of 10th Street to two-way traffic operations.

2. Improve the Use of Clas Plaza

Clas Plaza should be retained as the southern entry into the Courthouse. Its use should be improved by combining the park with uses on the Central Square, or by adding some new development that would increase and complement activities in the park. A variety of building patterns could be employed to encourage social activity and create new public spaces, including courtyards or pavilions. New development would also provide property tax revenue.

3. Relink the Courthouse to the Square

A simple yet highly symbolic change must be the reopening of the entrance to the Courthouse from the east. This would also complement the elevation of 9th Street to the top of the Square as the “front door” to the Courthouse. These changes would, however, require careful balancing with safety and security issues.

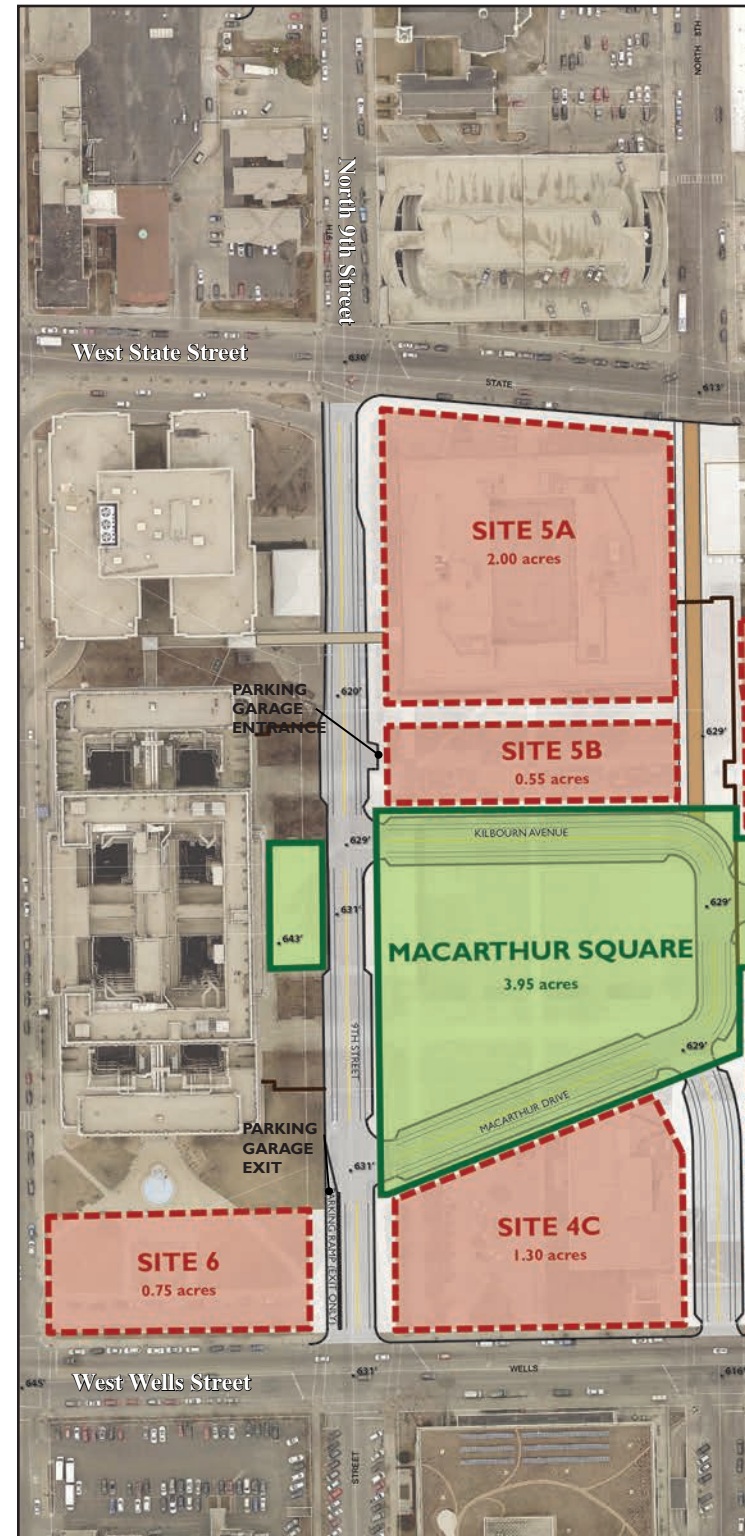
4. Allow Additional Uses on the West Side of 10th Street

The land along 10th Street could be used in new ways. 10th Street is presently empty, with an almost foreboding character defined by the freeway and the monumental Courthouse. Though this area is currently viewed as relatively unusable given its narrow geometric shape, the high-value central location of this land will likely prompt private sector development opportunities as the rest of the Square and surrounding area experiences redevelopment. Concepts for the land west of 10th Street are not illustrated. The level of design concepts portrayed in this Volume II show conceptual building footprints, and in this instance, the development pad need not be displayed for readers to understand the development potential of this narrow site.

5. Evaluate Construction Challenges

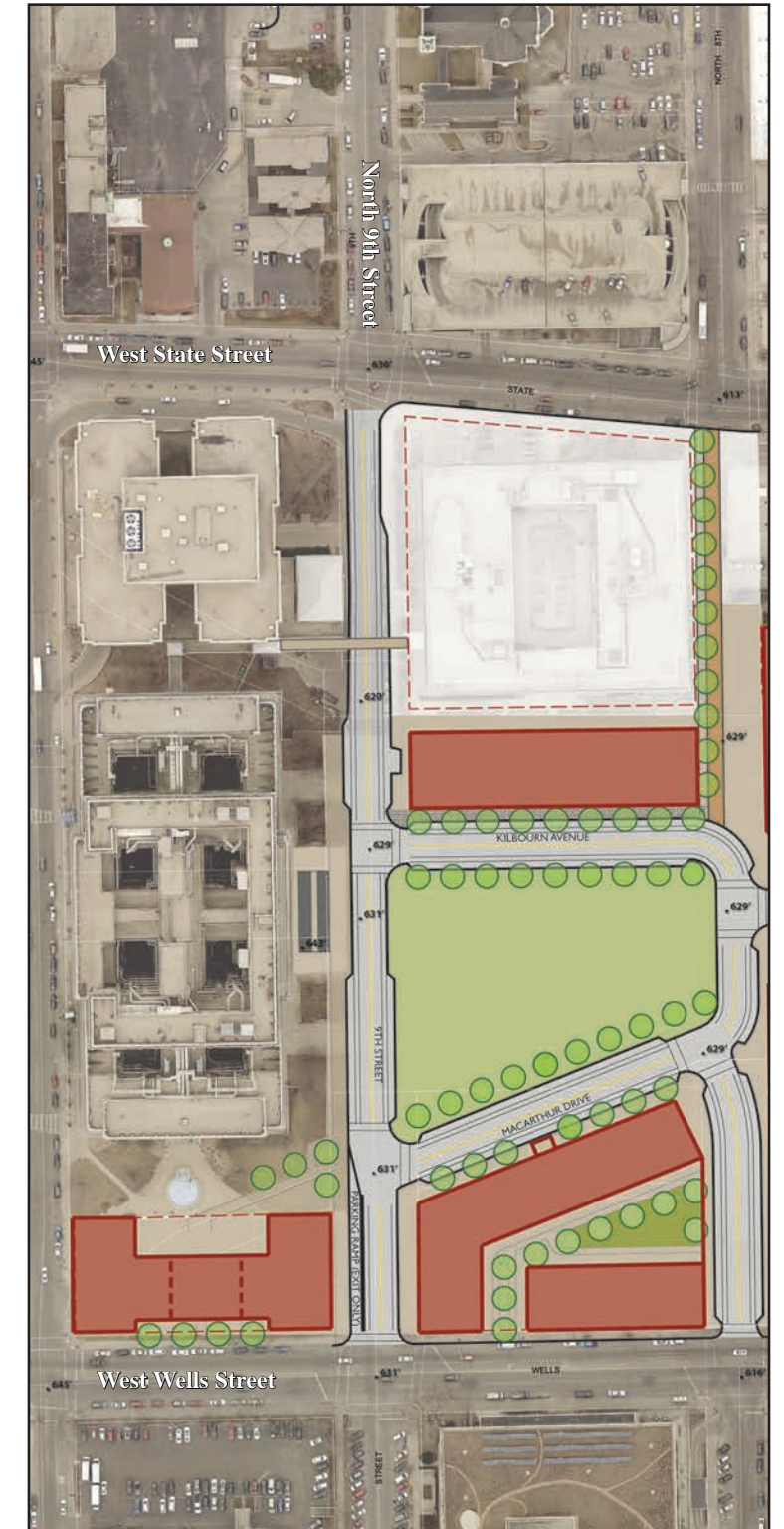
Any design modifications may involve changes to the structural systems for the freeway on/off ramps, pedestrian tunnels, and related mechanical and utility systems. For example, there is an existing pedestrian tunnel that connects the 9th Street level of the garage to the Safety Building.

Additionally, the County intends to maintain an elevated connection between the Criminal Justice Facility and the replacement of the Safety Building, as well as access to the Criminal Justice Facility truck dock from 9th Street. These considerations should guide the redesign of the West Side.



West Side development framework.

Source: GRAEF, 2018.



West Side site design concept.

Source: GRAEF, American Design, 2018.

RECOMMENDATIONS: NORTH SIDE, MATC, LINKS TO BREWERY DISTRICT

The North Side subarea of MacArthur Square provides an especially potent opportunity for development given its proximity to both the Brewery District and MATC.

1. Plan Replacement of the Safety Building

Milwaukee County intends to replace the Safety Building in the near future. As a result, there are several redevelopment options that might be considered for that parcel, including simply rebuilding within the existing footprint. Other options include shifting the footprint in a manner that provides the potential for additional development and public revenue. For example, if this parcel is developed for private sector uses, then it will increase the economic value of otherwise tax-exempt development.

2. Consider Private Sector Development Near the Police Administration Building

The City's Police Administration Building is currently being improved in an incremental fashion, and will not be replaced in the near future. The location of the building along the edge of James Lovell Street, however, leaves a substantial area to the south that can be occupied by a new building footprint. A new building location might be used for private sector tax base. The accompanying diagrams show several changes to be considered. These options assume that some construction over the existing footprint of the parking structure can be achieved. While such construction options would require special structural design to integrate new buildings above the existing parking structure (if retained), it would also add significant revenue potential that would likely exceed, significantly, the structural costs.

3. Improve Links to the Brewery District & MATC

As buildings are improved or new buildings constructed, consideration should be given to how such structures and their uses relate to the north side of State Street, the Brewery District, and MATC.

Perhaps one of the easiest options for improving connectivity is to increase pedestrian movement across 8th Street, onto the Square, and then down Wells Street. A street section designed for a 30' - 35' right-of-way is needed for the section of 8th Street that extends past the Police Administration Building. The sidewalk on the west side of 8th Street should be a continuous path from Wells Street to State Street. The continuation of 8th Street between the Safety Building and the Police Administration Building should be an integral part of the redevelopment of these two facilities.

4. Begin with Cost & Revenue Opinions

Redevelopment of the North Side subarea will require both private and public sector expenditures. To be meaningful, discussions surrounding redevelopment should include general cost options about the most significant expenditures, which may include changes to the County skywalk system that lines and connects the Safety Building to the Criminal Justice Facility and Courthouse.

5. Maintain Security

Almost all of the uses in this subarea have substantial needs for security:

- County Criminal Justice Facility
- Courthouse and Courtrooms
- Police Administration Building
- Circulation for multiple user groups (e.g., general public, judges, prisoners, jurors, staff, police and deputies)

It will be imperative to maintain high quality security and, at the same time, provide public access and visibility appropriate for these civic uses.

6. Consider Relocating the Public Museum to Site 3

If the Public Museum decides to relocate from its existing facilities, Site 3 should be considered for a new location. The museum could be constructed atop the existing parking structure, with its less attractive "back" facing the Police Administration Building. Underground facilities

could extend south to Site 4A, and east to Site 5B. With the museum at Site 3, and a new Criminal Justice Facility at Site 5A, the northern edge of the Square would be complete.

7. Evaluate Construction Challenges

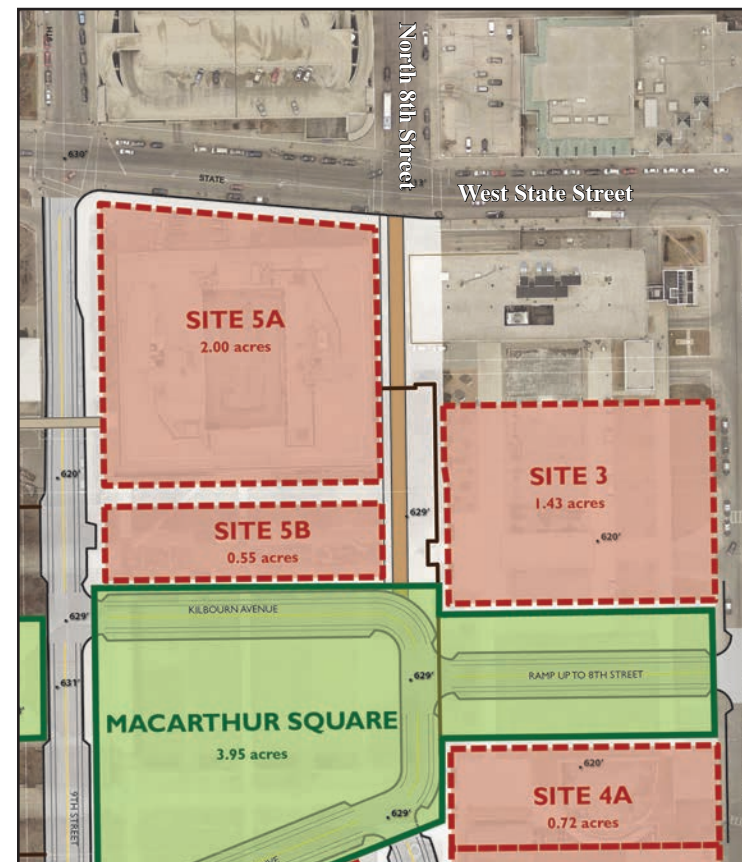
There will be significant challenges regarding construction for the North Side subarea. Depending on the City's decision to retain or reconstruct the parking structure, redevelopment may involve changes to the structural systems for the freeway tunnels, parking garage, pedestrian tunnels, and related mechanical and utility systems. It is assumed that excavation for the new Safety Building may expose the north wall of the north tunnel to build the new foundation. Because the freeway tunnel is a rigid frame, the north wall may require bracing so that the tunnel avoids having differential forces that could cause damage.

The Police Administration Building has an existing basement under the un-vacated portion of 8th Street.

The Department of Public Works has been considering replacing this 'driveway' that the police presently use for vehicle parking. Depending on the timeline of the replacement, it may not be prudent for the City to continue this project since the driveway may be damaged and/or removed during construction of the new Safety Building.

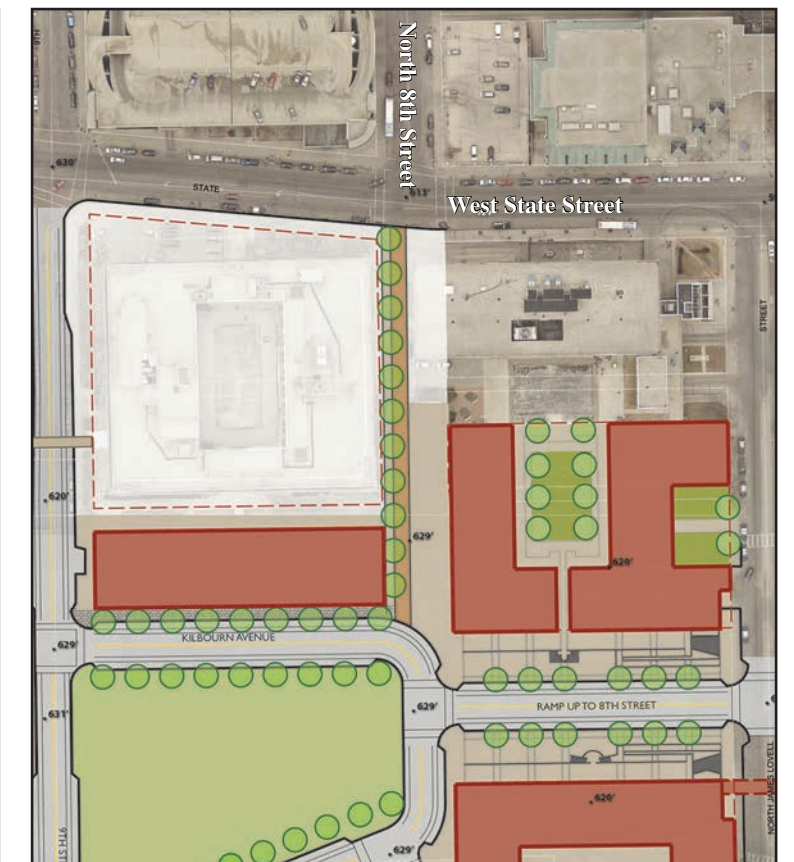
The Police Administration Building basement under 8th Street should be considered during construction operations. Work to waterproof/insulate the top of the basement might need to be coordinated to take place concurrently with the Safety Building construction.

Depending on the final design, it may be necessary to drive new piles. Based on the age and overall condition of the Police Administration Building, north tunnel, and parking garage, the Department of Public Works should consider requiring a crack and damage survey of these City-owned structures prior to demolition and/or pile driving.



North Side development framework.

Source: GRAEF, 2018.



North Side site design concept.

Source: GRAEF, American Design, 2018.

RECOMMENDATIONS: SOUTH SIDE, WELLS STREET, PUBLIC MUSEUM SITE

As plans are evaluated for alternative locations for the Public Museum, the redevelopment of the Wells Street edge of MacArthur Square should be considered as a prime location for new private sector development, which might include residential as well as commercial activity.

1. Create New Development Opportunities

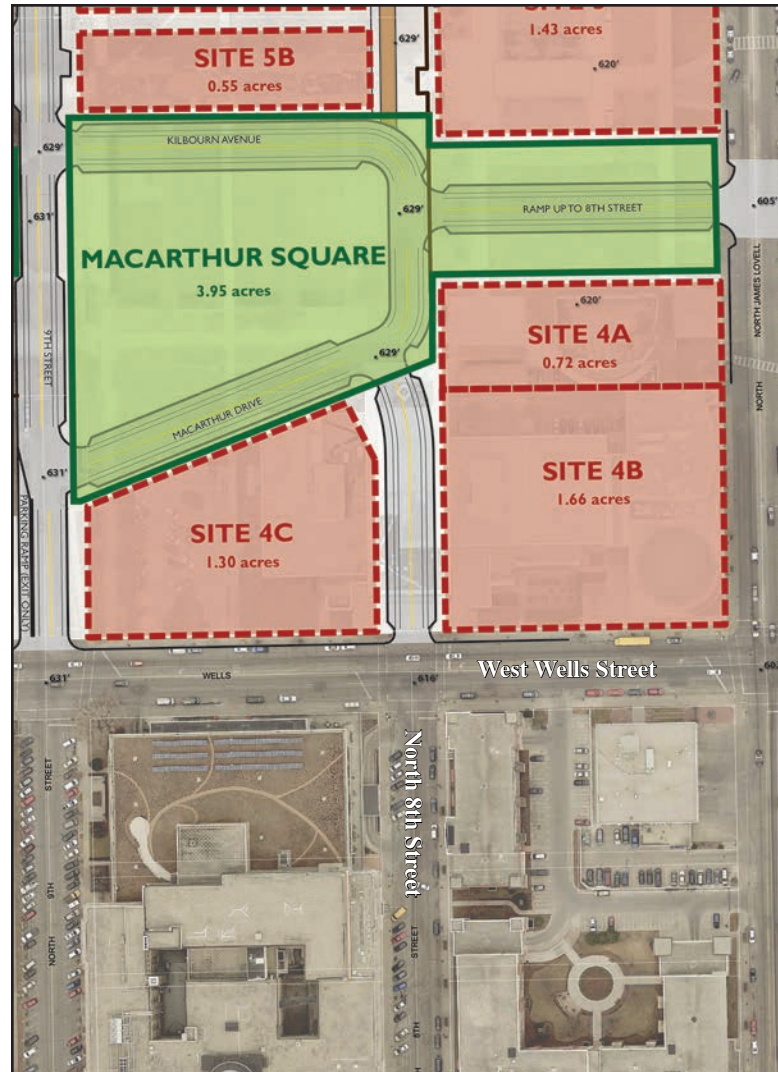
This Plan considers reconfiguration of parcels and the creation of new street and block boundaries to allow full vehicular circulation along James Lovell, 8th, and 9th Streets (as shown in the diagram). These parcels can create an active street edge along Wells Street and the new Central Square. The two new blocks shown in the diagram are sufficiently large enough to accommodate “perimeter buildings” along the street edge, rather than stand-alone objects set back from the street edge.

2. Reconsider the Public Museum

As the Public Museum evaluates its future plans, several options may be considered, including a) the rehabilitation and expansion of the existing buildings for the Public Museum, b) the reuse and adaptation of the buildings (or parts of the buildings) for new purposes, or c) the demolition of the existing buildings. These future plans will determine the potential for modifying this portion of the project area.

3. Reopen 8th Street

Currently, the two-block length of the Public Museum accommodates internal facility needs and programming. However, the creation of this larger “super-block” also diminishes opportunities for activity that would link Wells Street to the potential activities in the Central Square. Depending on the future plans of the Public Museum, some reconfigurations of this block would allow for 8th Street to reconnect to the Central Square and could, if designed effectively, increase the use and value of the interior public space.



South Side development framework.

Source: GRAEF, 2018.



South Side site design concept.

Source: GRAEF, American Design, 2018.

RECOMMENDATIONS: PHASING & NEXT STEPS

1. Phasing principles

Unlike many single purpose institutions or organizations, MacArthur Square users and owners represent almost a dozen different sets of missions, phasing needs, and independent plans. Consequently, phasing capital investments cannot be sequenced with certainty. For example, since the previous plan from 2008 (Volume I) there have been many changes that have occurred that impact the sequence of development options envisaged at the time.

The phasing recommended here is to begin with those subareas that seem most likely to occur within the next few years. This first set of phases would include either or both of two subareas – the East Side or the West Side. The second set of phases would include the major components of the parking structure.

2. First steps: East Side, West side

An obvious key and potentially catalytic phase would start with the two blocks comprising the East Side subarea. The northern block of this subarea is underdeveloped, and the southern block contains the State Office Building, which is likely to be sold or renovated. **The key for this phase is ensuring the construction of new freeway on/off ramps that can accommodate Kilbourn Avenue and the relinking of the streets on top of the Square. Without this change, much of the potential for redoing MacArthur Square is completely lost.** As the freeway ramps are reconstructed, it is essential to link Kilbourn Avenue traffic to James Lovell Street along with options for future extensions. The northern and/or southern blocks could be phased in whatever sequence best accommodates the users and owners.

The West Side, including the reconstruction of 9th Street, is an equally appropriate starting point. Here the key is to reconfigure 9th Street so that it regains its prominence as the major entrance to the Courthouse. While this can be accomplished without major structural changes to the parking structure, the entry and exit lanes to the upper level of the parking structure will need to be reconfigured along with a different exit sequence.

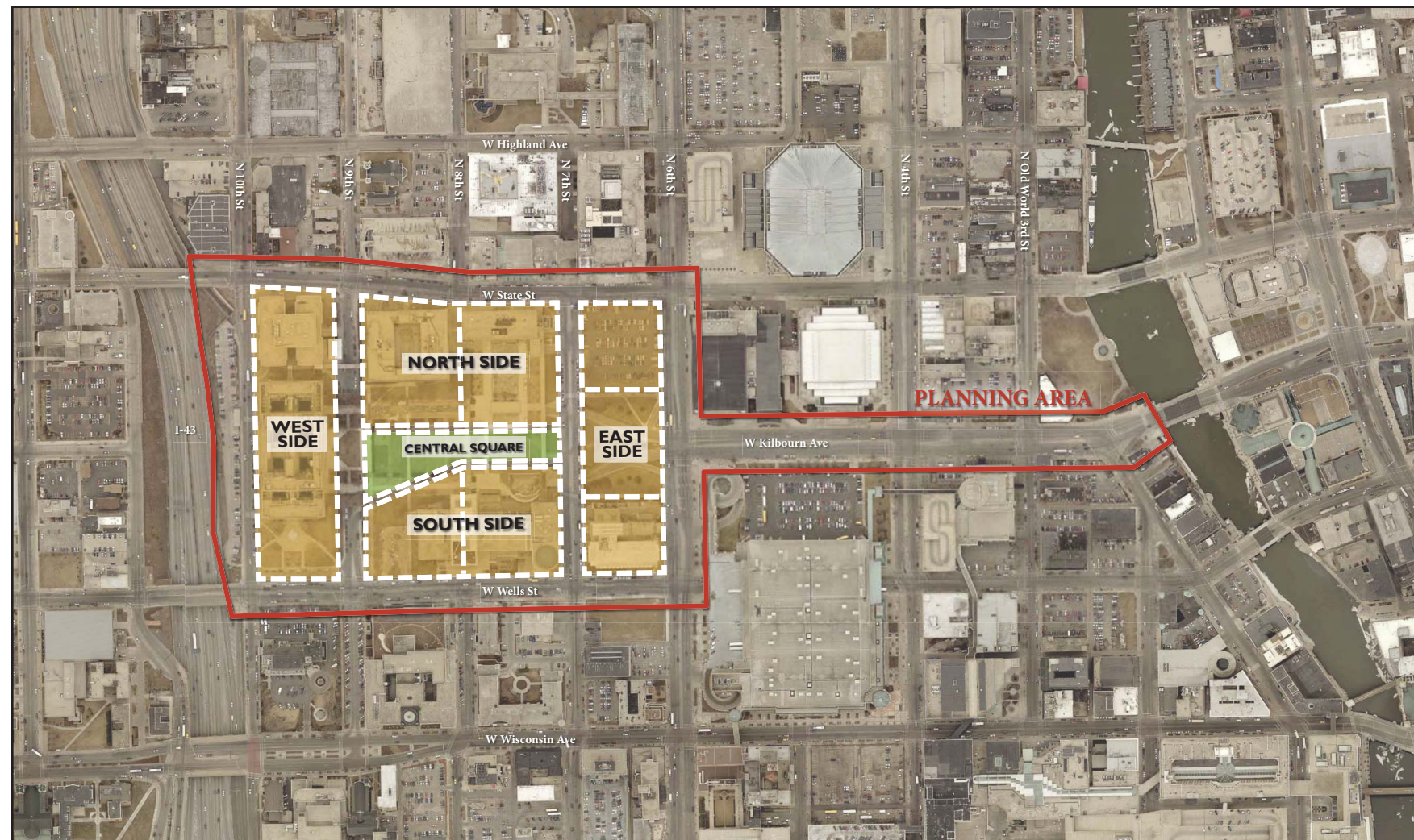
3. Second steps: North Side, South Side, Central Square

The bulk of the current parking structure and the major public open space are situated between James Lovell Street (on the eastern edge) and the future 9th Street (on the western edge). The phasing for this area can occur in several ways, which have been diagrammed previously in this study:

- The North Side can be modified, along with the Safety Building, with relatively minor changes to the parking structure.

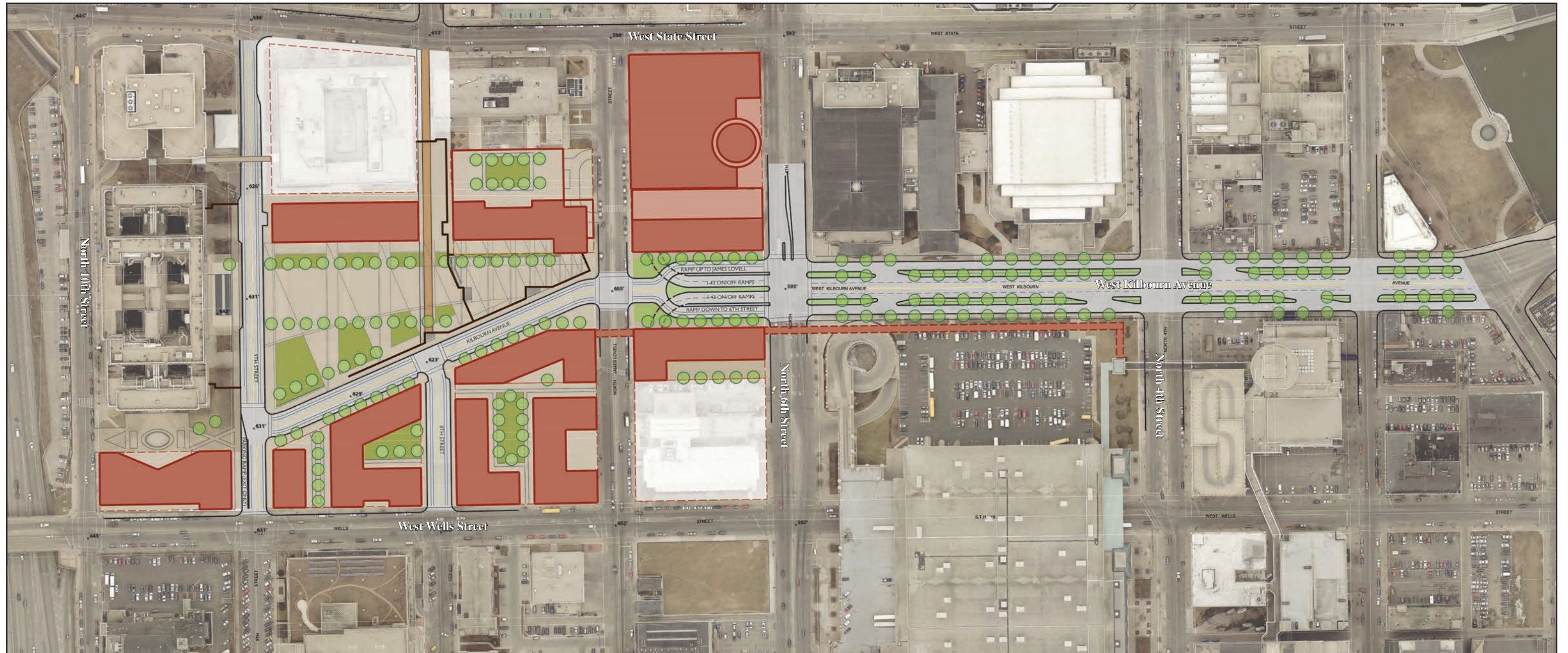
- The South Side could be modified with relatively minor changes to the parking structure.
- Several combinations of these strategies are also possible.

The most critical component of this phase, however, will be the creation of a highly activate public place. Consequently, the design of this public place should be the highest priority as these phases are undertaken.



The Planning Area and subareas within MacArthur Square.

Source: GRAEF, 2018.



Development Framework Plan - Alternative 2: Site design concept.

Source: GRAEF, American Design, 2018.

DEVELOPMENT SITES

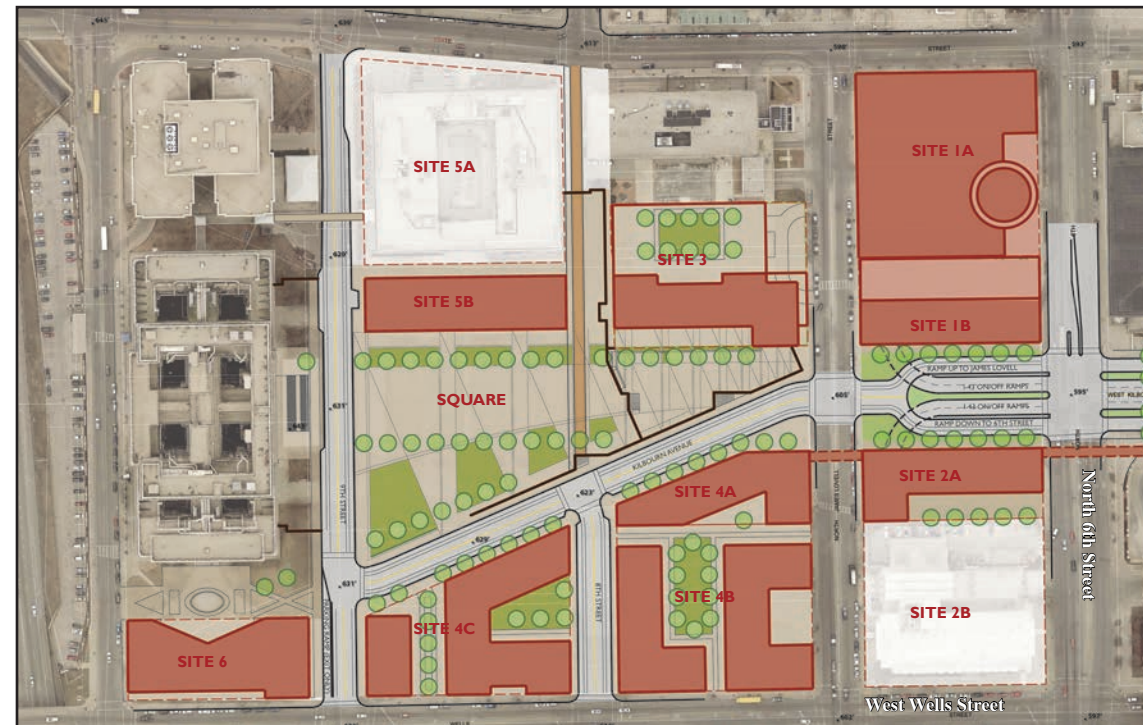
		Development Area (acres)	Conceptual Building Footprint (SF)
Development Framework 1	Site 1(A+B)	2.53	Bldg 1: 32,560 / Bldg 2: 98,821
	Site 2A	0.65	20,385
	Site 2B	1.54	NA
	Site 3	1.43	Bldg 1: 16,782 / Bldg 2: 24,034
	Site 4A	0.72	24,194
	Site 4B	1.66	Bldg 1: 18,006 / Bldg 2: 17,949
	Site 4C	1.3	Bldg 1: 25,288 / Bldg 2: 12,257
	Site 5A	2	NA
	Site 5B	0.55	23,949
	Site 6	0.75	25,007
Square		3.95	NA

Development Framework 2	Site 1A	1.72	69,388
	Site 1B	0.81	17,760
	Site 2A	0.65	20,416
	Site 2B	1.54	NA
	Site 3	1.43	23,494
	Site 4A	0.55	20,846
	Site 4B	1.66	Bldg 1: 18,417 / Bldg 2: 22,811
	Site 4C	1.3	Bldg 1: 7,902 / Bldg 2: 29,585
	Site 5A	2	NA
	Site 5B	0.55	24,140
	Site 6	0.75	26,990
	Square		3.05



Development Framework Plan - Alternative 1: Site design concept.

Source: GRAEF, American Design, 2018.



Development Framework Plan - Alternative 2: Site design concept.

Source: GRAEF, American Design, 2018.

