



REPORT BRIEF

CRACKS IN THE FOUNDATION:

AN ANALYSIS OF BUILDING REPAIR
AND REPLACEMENT NEEDS AT THE
CITY AND COUNTY OF MILWAUKEE

PUBLIC POLICY FORUM

INTRODUCTION

This report is the third in a five-part series by the Public Policy Forum that is assessing the infrastructure needs of the largest local governments in Greater Milwaukee and their financial capacity to meet their infrastructure challenges going forward. Earlier installments included a September 2016 report on transportation infrastructure owned by Milwaukee County and the City of Milwaukee; and a May 2017 report on water, sewer, and wastewater infrastructure owned by the City and the Milwaukee Metropolitan Sewerage District.

In this report, we explore buildings owned by the City of Milwaukee and Milwaukee County. We cover iconic buildings like Milwaukee City Hall and the Milwaukee County Courthouse; high-profile public safety and social service facilities like the Milwaukee Police Administration building, the County's Criminal Justice Facility, and the County's Mental Health Complex; and lesser-known but significant structures that house the vital equipment that maintains and plows our region's streets and highways.

These buildings are important not only for the public services they house, but also because their proper care and improvement impacts the ability of each government to spend capital dollars on quality-of-life assets like museums and parks, and on the transportation, water, and wastewater assets that are critical to our region's economy and public health. Consequently, we analyze both the condition of City of Milwaukee and Milwaukee County buildings *and* the challenges involved with securing the financial resources to appropriately address repair and replacement needs.

MANAGEMENT OF PUBLIC BUILDINGS AT THE COUNTY AND CITY

Both the County and the vast majority of the City's departments use a Facilities Condition Assessment Program (FCAP) to keep track of building conditions and inform deliberations on capital budget requests. The FCAP involves use of engineers and/or facilities professionals to conduct inspections and identify needed capital projects. Outstanding capital needs for a given building are aggregated and divided by the building's replacement value to develop a Facility Condition Index (FCI), which is meant to convey the current condition of the building to managers and policymakers.

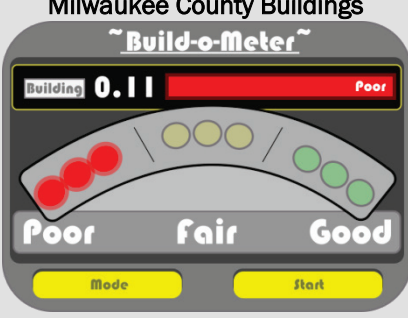
At Milwaukee County, the FCI is used more as a planning tool than as a tool for assessing building condition. Often, the FCI does not include the full range of projects needed to maintain the building's functionality, but only includes those needed to keep the building habitable until such time as replacement can occur.

To supplement the FCI, County engineers also use a Replacement Index (RI), which is a more thorough calculation of upcoming costs due to aging systems, typically within a 10- to 20-year window. Again, the cost of identified projects is divided by the building's replacement value to calculate the RI. If the cost of identified future projects exceeds 50% of the building's replacement value in a 10- to 20-year window (i.e. it receives a score of 0.5 or above), then building replacement should be considered.

BUILDING CONDITIONS - MILWAUKEE COUNTY

Milwaukee County owns hundreds of buildings that are used for different purposes that reflect the County's wide variety of functions. For this report, we focus on all County-owned buildings except those that are related to airports and those used for parks, recreational, and cultural purposes (recreational/cultural facilities will be the subject of the fourth installment in our series).

Snapshot: Building Condition



The image shows a 'Build-o-Meter' for Milwaukee County Buildings. It features a scale from 0 to 1.0 with three main sections: 'Poor' (0.0 to 0.33), 'Fair' (0.33 to 0.66), and 'Good' (0.66 to 1.0). The meter is currently at 0.11, indicated by a red bar and a digital display. Below the meter are 'Mode' and 'Start' buttons.

Although FCI ratings give a positive snapshot of County building condition, RI ratings and deeper analysis of the 10 major buildings assessed by a county-hired consultant suggest otherwise. According to RI ratings, 12 of the County's 19 most significant buildings have identified capital projects that exceed half of the building's replacement value. Looking deeper, we also find that six of the 10 largest buildings are in poor condition, and that several fleet and transportation facilities have substantial deferred capital needs.

County officials provided a list of 103 County-owned buildings that fall into that parameter. Because our objective is to consider those buildings that are most significant to the County's provision of its core services, we narrowed our list of 103 to include only those buildings that have current Facility Condition Index (FCI) and Replacement Index (RI) ratings and that exceed 1,000 square feet. We ended up with a list of 19 buildings.

FCI ratings show that 14 of the 19 buildings are in good condition, one is in fair condition, and four are in poor condition. However, given the limitations of the FCI as a tool for assessing the condition of buildings, we also examined RI ratings. Those ratings convey a different picture, as 12 of the 19 buildings (63%) have RI ratings of 0.5 or above, which indicates they have exceeded the threshold for when building replacement should be considered. Four buildings (21%) have scores between 0.4 and 0.5, which means they are nearing that threshold, while three have scores indicating that replacement does not need to be considered for some time.

The table below identifies the 16 buildings that have RI scores of 0.4 or above and their potential replacement cost. The good news is that the two County buildings with the highest replacement value (the Courthouse and Criminal Justice Facility) have not yet hit the 0.5 RI threshold. The buildings with an RI score of 0.5 and above do have a substantial collective replacement value of about \$227 million, however.



16 County buildings with RI ratings of 0.4 or above

Building	SQFT	RV	RI
Courthouse	703,347	\$249,519,833	0.40
Safety Building	321,832	\$65,896,805	0.58
Vel Phillips Juvenile Justice Center	219,539	\$56,362,688	0.48
HOC Admin Building - Dormitory Building	254,400	\$50,830,095	0.68
CATC	190,170	\$42,382,907	0.81
HOC Boiler House - Dormitory Building	116,707	\$34,848,631	0.64
Sheriff Training Academy	47,000	\$8,017,590	0.60
Medical Examiner	46,500	\$7,734,487	0.53
HOC Franklin Lotter Dormitory Building	26,400	\$6,711,688	0.63
HOC Eli Surges Multi-Purpose Building	26,768	\$6,708,468	0.79
HOC Print and Welding Shop	9,625	\$2,055,048	0.54
HOC Garage	4,534	\$600,179	0.50
HOC Maintenance and Storage Building	4,800	\$569,805	0.57
HOC Truck Storage Building	5,040	\$381,671	0.55
Sheriff's Hangar	4,200	\$295,400	0.43
HOC Salt Storage Building	1,024	\$116,065	0.43

To strengthen our assessment of the condition of County buildings, we utilized a 2013 report that was commissioned by the County to assess its most mission-critical buildings.¹ While the report considered 25 buildings, we focused on its findings related to eight of the largest structures. We assigned a "Good," "Fair," or "Poor" assessment based on our consideration of the report and subsequent capital projects and project requests. As shown in the table below, five of the eight buildings are rated in poor condition.

Ratings for eight mission-critical County buildings

Building	Replacement Value	Rating
Courthouse	\$249,519,832	Fair
Criminal Justice Facility	\$176,749,757	Fair
Mental Health Center (including CATC & Day Hospital)	\$77,087,574	Poor
Safety Building	\$76,762,402	Poor
Marcia P. Coggs Human Services Center	\$46,775,772	Fair
Vel Phillips Juvenile Justice Center	\$42,390,530	Poor
Community Correctional Center	\$21,687,927	Poor
Medical Examiner	\$8,115,709	Poor

The replacement value of the eight buildings comprises 76% of the \$1 billion total replacement value of the 103 buildings on our original list, and 60% of the 4.6 million square feet of space found in the 103 buildings combined. Consequently, understanding the needs and condition of these buildings gives us a good sense of the state of County buildings as a whole.

¹ <https://milwaukeecounty.legistar.com/LegislationDetail.aspx?ID=1288169&GUID=D7ADC62D-ABD0-4589-BC53-F4EB224DCC31>



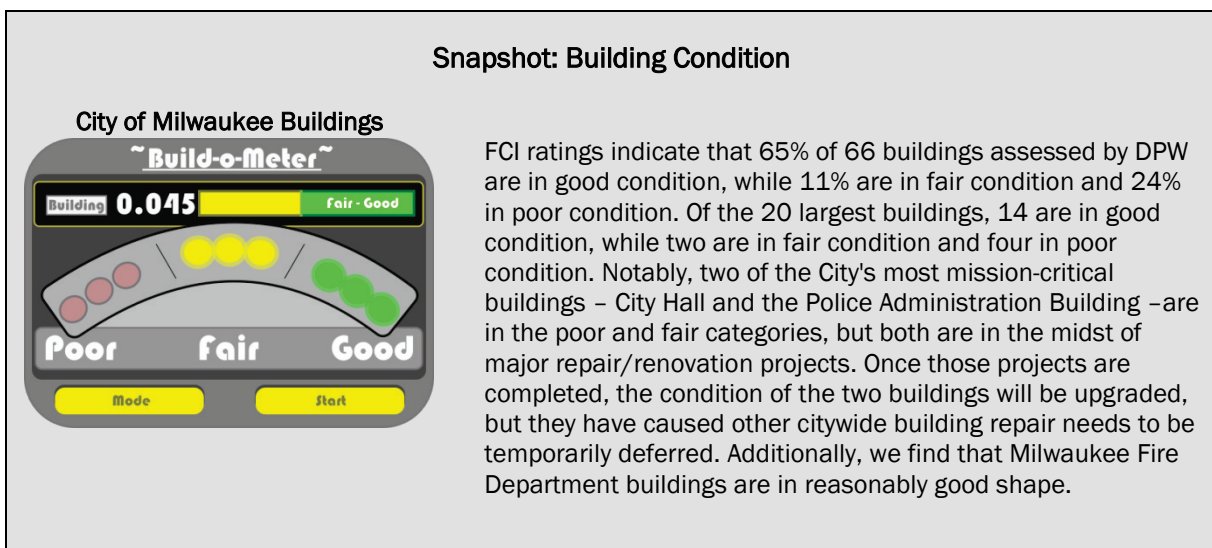
The biggest building concern for the County is the Safety Building. Built in 1929, the building (located in the same complex as the Courthouse and Criminal Justice Facility) serves primarily as office space for justice system personnel, but it does not adequately meet that need.

The County has announced plans to replace the Safety Building by demolishing it and developing a 10-story criminal courthouse that also would house certain functions now located in the Historic Courthouse. Departmental requests for the 2018-2022 capital plan include \$20 million in 2021 and \$200 million in 2022 to accommodate this project, though final project planning has not been completed and a financing plan has not yet been identified. In the meantime, capital projects identified for the existing building over the next five years include a \$2.2 million window replacement project and a \$648,000 bathroom reconstruction.

Overall, the poor and fair condition of several of the County's most mission-critical buildings is a disconcerting situation for County officials and leads us to rate the overall condition of County buildings as "poor." The need to replace the Safety Building, the Mental Health Complex, and the Medical Examiner's headquarters has been known for some time, but there still is no resolution to these needs. In the meantime, the Historic Courthouse and Criminal Justice Facility have significant needs, as do several buildings associated with the House of Correction and several fleet and garage facilities.

BUILDING CONDITIONS - CITY OF MILWAUKEE

Like Milwaukee County, the City of Milwaukee owns a variety of buildings that reflect the diverse set of services for which it is responsible. For this report, we focus on all City-owned buildings except those used by the Milwaukee Water Works and the Sewer Maintenance Fund, which we addressed in our May 2017 report on water and sewer infrastructure; and those used by the Port of Milwaukee and Milwaukee Public Library, as we were unable to obtain current and reliable information from those departments on the current condition of their buildings. That left us with a list of 110 buildings.



The primary assessment tool used by the City's Department of Public Works (DPW) is the FCI. In contrast with the County, FCI ratings at the City take into account all identified repair and replacement projects for which cost estimates have been developed, as opposed only to those needed to keep the building habitable pending replacement. Also, it is worth noting that the City's FCI ratings take into account projects identified in previous years that have been deferred, while the County's typically do not.

DPW provided FCIs for a list of 76 buildings that it assesses, which was filtered to exclude buildings that are smaller than 1,000 square feet. This yielded 66 buildings that we analyzed using both FCIs and replacement values. Consideration of this list of buildings provides an understanding of the largest and most mission-critical buildings used by those departments assessed by DPW. Together, they comprise three million square feet and have a replacement value of \$597.1 million.

FCIs indicate that 43 of the 66 buildings (65%) are in good condition, while seven (11%) are in fair condition and 16 (24%) are in poor condition. The table below shows the 20 largest buildings in terms of square footage, as well as their replacement value and condition based on their FCIs. We see that 14 of the 20 buildings are in good condition, containing over half (54%) of the \$549.7 million in replacement value among the 20 buildings.

Table 5: Condition as determined by FCI ratings for 20 City buildings

Facilities	SqFt	CRV	FCI
MacArthur Square Parking Structure	643,351	\$41,888,660	Good
1000 North Water Parking Structure	337,594	\$34,338,966	Good
Police Administration Building	261,886	\$67,494,059	Fair
2nd and Plankinton Parking Structure	204,404	\$12,710,357	Good
3rd District Police Station/Data Comm	201,370	\$71,092,632	Good
Milwaukee and Michigan Parking Structure	177,630	\$9,949,781	Fair
Central Repair Garage	149,995	\$16,555,495	Good
Municipal Services Building	111,782	\$12,336,912	Poor
City Hall	256,360	\$146,487,820	Poor
Zeidler Municipal Building	316,648	\$65,659,096	Good
Lincoln Garage	85,124	\$7,452,262	Poor
Northwest Garage	71,456	\$7,014,627	Poor
Police Warehouse	48,278	\$4,585,852	Good
Lincoln Garage Transfer Station	31,238	\$2,943,220	Good
6th District Police Station	30,810	\$6,946,318	Good
North West Health Building	30,479	\$6,984,423	Good
Southside Health Building	29,879	\$6,561,388	Good
RA Anderson Municipal Building/Lake Tower	28,820	\$9,417,347	Good
Neighborhood Task Force Building	27,255	\$7,620,312	Good
5th District Police Station	26,389	\$7,694,070	Good



It is important to note that two of the most significant buildings on this list – as defined both by their replacement value and mission-critical nature – are not in good condition:

- The 121-year-old **City Hall** is rated in poor condition per its FCI. The building has undergone extensive work over the past 11 years, beginning with a major renovation project in 2006 that included substantial re-working of its façade, and continuing more recently with an ongoing project to fix its foundation. According to the current five-year capital plan, \$42 million will be needed to complete the project between 2017 and 2020. The building's condition will be upgraded after the foundation work is completed, but this is a stand-alone project that has not addressed City Hall's wide variety of needs.
- The **Police Administration Building**, located at 749 W. State Street, is rated in fair condition per its FCI. The building was constructed in 1970 and underwent a major renovation in 2001. A subsequent remodeling project was initiated in 2013 to address major deficiencies in several of the building's systems. The cost estimate for remaining projects is approximately \$29.4 million between 2017 and 2022. Because the PAB project involves a comprehensive remodeling, that building should be in good condition when the current set of projects is completed.

The good news with regard to the major projects involving these buildings is that they already are underway, and once completed they will leave two of the City's most important and expensive buildings in better condition. However, while City officials have now planned for their incorporation into future capital budgets, the need to finance these major building projects has resulted (and will continue to result) in deferral or delays to other building projects, including the type of proactive building repair work that would have been pursued if resources had been available.

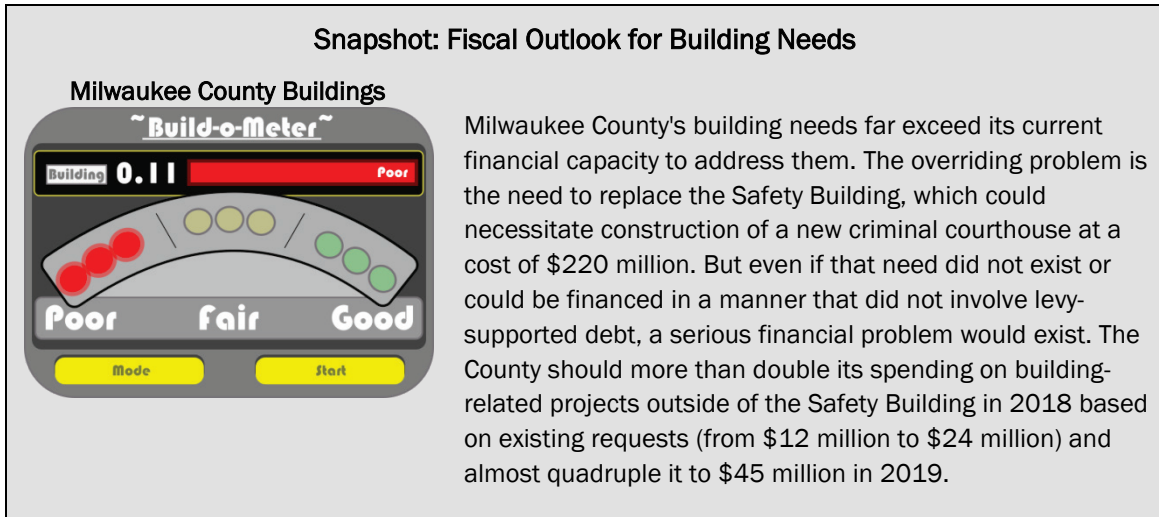
For example, capital appropriations for general building exterior and systems needs have been reduced in recent years as expenditure needs for the City Hall and PAB projects have grown. It is difficult for us to assess the impact of deferred building repair projects, as it is hoped that they are short-term in nature and that the situation will be rectified once the City Hall and PAB projects are completed. Still, this is an issue that merits close monitoring.

The Milwaukee Fire Department (MFD) is one of the departments that has opted not to use DPW for condition assessment of its buildings. Instead, MFD has developed its own form of assessment for its 35 fire houses that involves assigning qualitative condition categories (poor to excellent) to each building's major assets. We averaged the individual ratings for each category to come up with a total "score" for each building and found that that 26 of the 35 engine houses are in good condition or better, while none are in poor condition.

Overall, it is encouraging that two thirds of the City buildings we considered are rated in good condition and that major improvement/repair projects already are proceeding at City Hall and the Police Administration Building. However, the need to make room for those major projects in tight capital budgets may have caused other building repair needs to slip, including mechanical and other needs in the interior of City Hall. Consequently, our overall assessment is that the City buildings addressed in this report are in fair to good condition.

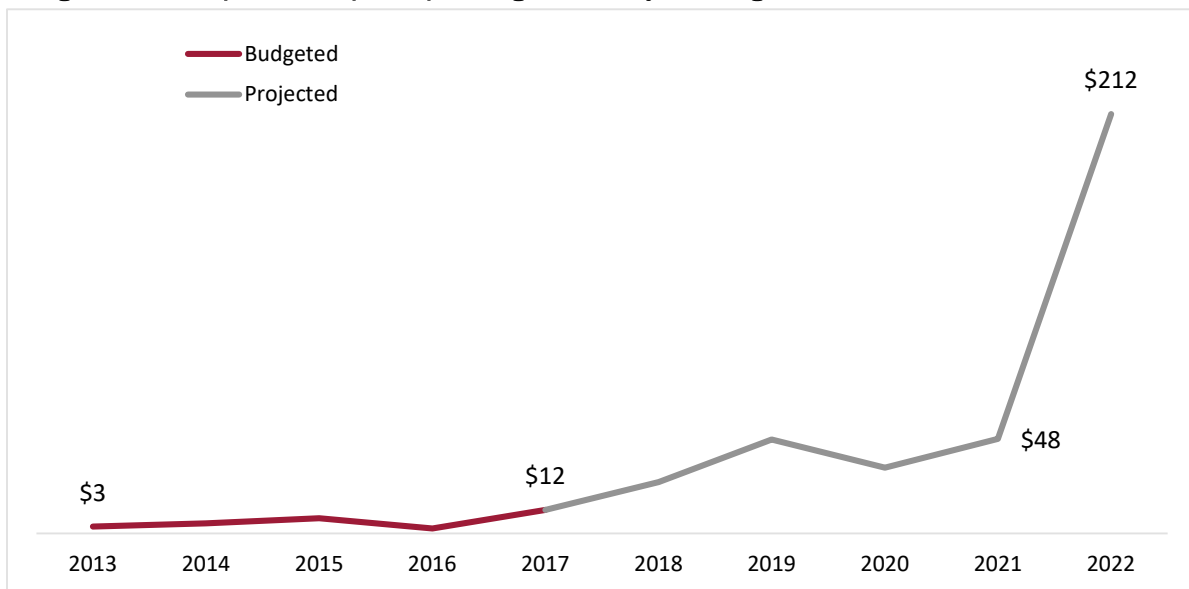


FINANCIAL CAPACITY TO ADDRESS BUILDING NEEDS: MILWAUKEE COUNTY



The chart below tracks County capital spending on the buildings that are the subject of this report for the past five years, and then shows amounts requested for the next five years. From 2013 through 2016, the County only spent an average of \$4.7 million on those buildings per year, with a high of \$7.7 million in 2015 and a low of \$2.6 million in 2016. In 2017, that amount jumped to \$12 million, and over the next five years it would need to rise sharply based on existing capital requests.

Budgeted and requested capital spending for County buildings, 2013-2022



The sizable increase in 2021 and the huge increase in 2022 are linked largely to the Safety Building replacement project. Still, even when we put aside that project, the shape of an ominous problem

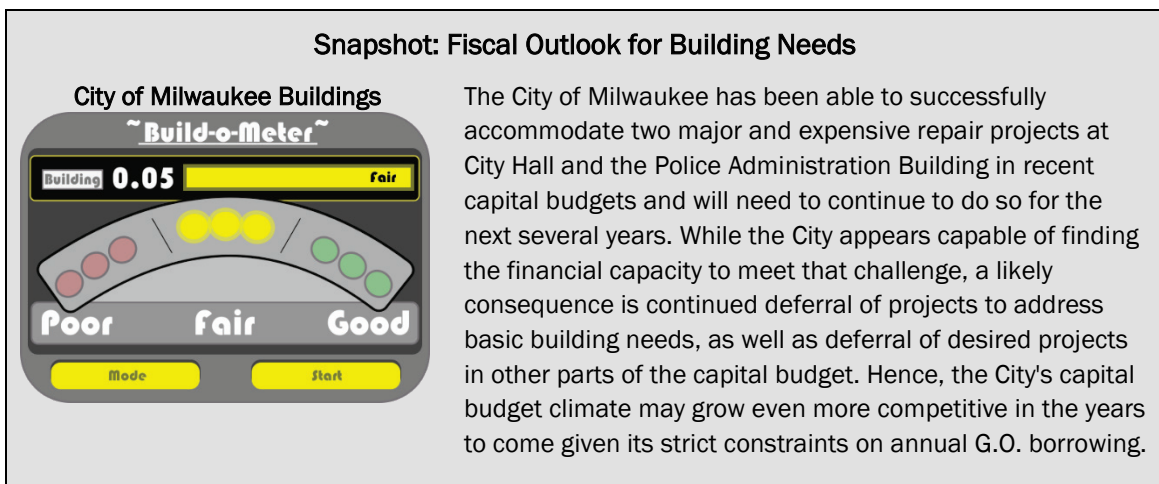


emerges. Excluding the criminal courthouse project, the County's capital spending on buildings would need to more than double to \$26 million in 2018, and then jump to \$45 million in 2019 if all requests were accommodated. While those amounts are projected to fall in 2021 and 2022, it is likely that all necessary projects for those years have yet to be identified. Also, even with the projected decrease in 2021 and 2022, the total amounts in those years still exceed average spending for 2013-17 by a wide margin.

Of course, when it comes to assessing the County's financial capacity to address its building needs (as well as its capital needs in general), the potential construction of a new criminal courthouse to replace the Safety Building is paramount. At this point in time, there appears to be little question as to *whether* the Safety Building must be replaced. Instead, questions surround the timing of the replacement, the nature of a new building, and how it will be financed. For now, the County's five-year capital plan anticipates expenditures of \$2 million in 2019 and \$10 million in 2020 for planning, and \$20 million in 2021 and \$200 million in 2022 for demolition of the Safety Building and construction of the new facility.

While specific financing plans have yet to be determined, there is no question that the County will need to incur a significant cost on its own to replace the Safety Building, and that this looms as the single biggest capital budget challenge facing the County. In fact, with or without the Safety Building project – and despite the County's efforts to liquidate unneeded buildings – it appears that it lacks the capacity to finance the capital needs of its buildings if it wishes to stay within its self-imposed cap on annual borrowing, which would appear to be a necessity given its corresponding need to limit annual debt service payments.

FINANCIAL CAPACITY TO ADDRESS BUILDING NEEDS: CITY OF MILWAUKEE

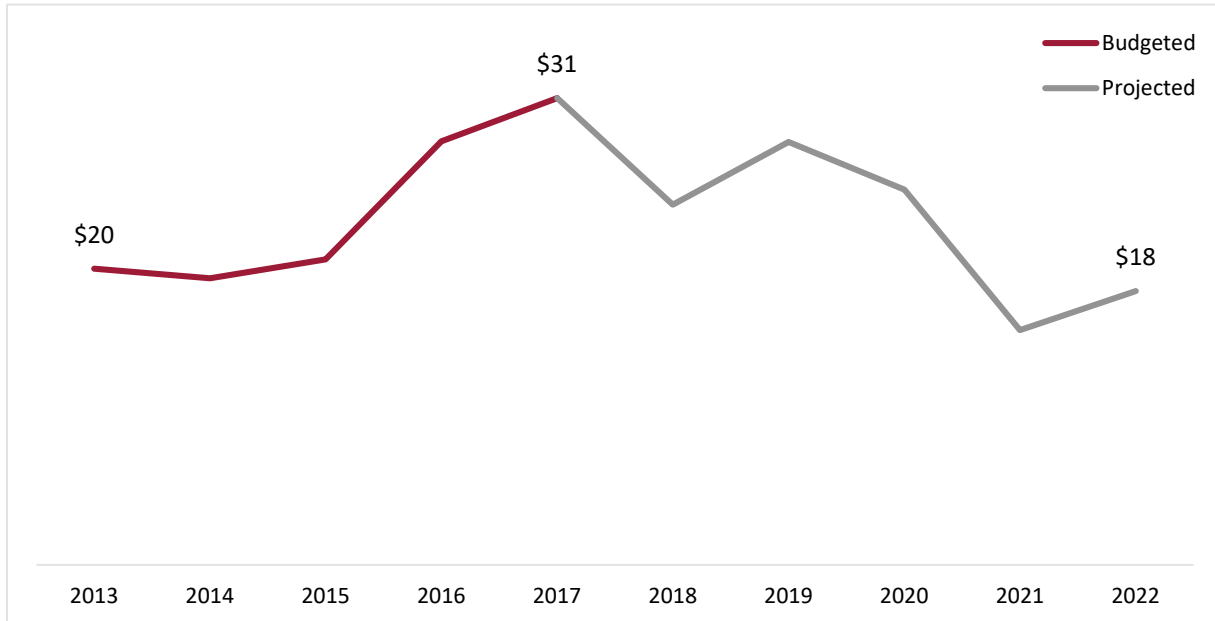


The chart below tracks the City's capital spending on the buildings that are the subject of this report for the past five years, and then shows amounts contained in the City's current five-year plan. We see that in 2016 and 2017, the City's building-related capital expenditures increased sharply, in large



part to accommodate the City Hall foundation project. Expenditures are expected to decrease but remain on the high side (when compared to 2013-15) while the City Hall project continues from 2018-2020, before reverting to slightly below 2013-15 norms in 2021 and 2022.

Chart 10: Budgeted and anticipated capital spending for City buildings, 2013-2022



At first glance, the projected spending scenarios do not appear ominous. The City was able to accommodate \$30.8 million in building-related capital expenditures when those expenditures peaked in 2017, and there soon will be relief as they are anticipated to diminish over the next five years.

However, the City faces substantial needs in other areas, some of which have been (and will continue to be) deferred to make room for the City Hall project in annual capital budgets. In addition, building-related needs may be understated in the later years of the current five-year capital plan, as the need to accommodate spending on the City Hall and Police Administration projects likely crowded out those needs even before impacting other City functions.

Overall, it is encouraging that despite its significant capital finance constraints, the City has been able to find room in recent capital budgets for major repair and renovation projects that will address glaring needs at two of its most mission-critical and visible structures. Yet, in order to do so, the City has been required to spend less than might have been desired on basic building repair needs. Officials hope to ramp up spending on those needs as appropriations for the two major projects wind down, but whether that will be possible depends on the level of competition from other areas of the capital budget, as well as the hope that other major building repair or replacement projects do not materialize in the interim.



CONCLUSION

Our analysis of buildings owned by the City of Milwaukee and Milwaukee County finds that substantial and expensive building-related capital needs exist for both governments. Yet, while there is hope that the City's will be manageable going forward, the County is facing a far more dire set of circumstances that currently appear unmanageable.

Specific key findings include the following:

- **Three of the County's most mission-critical buildings – the Safety Building, Mental Health Complex, and Medical Examiner's Office – should be fully replaced as soon as possible.** The three buildings are similar in that the need for full replacement has been known for some time, and that planning for new buildings is proceeding, but decisions have been delayed because of financial constraints and uncertainty as to whether and how replacement should occur. In the meantime, necessary repair work on the existing buildings has been deferred, thus creating an even more urgent need to act.
- **City buildings are in acceptable condition overall, though only because major renovation projects are underway.** Two buildings that arguably are the City's most visible and mission-critical – City Hall and the Police Administration Building – are in "poor" and "fair" condition respectively, but that picture will improve once existing projects are completed. On the whole – with the exception of the Municipal Services Building and two DPW garages – other major City buildings appear to be in reasonable condition.
- **Milwaukee County lacks the capacity to finance the capital needs of its buildings if it wishes to stay within its self-imposed bonding and cash financing limits.** Even if the need to replace the Safety Building did not exist, we find that the County should more than double its spending on building-related projects in 2018 based on existing requests (from \$12 million to \$24 million) and almost quadruple it to \$45 million in 2019. Doing so likely would cause it to substantially exceed its bonding limits, and/or to focus mainly on financing building needs while deferring its myriad other capital needs in areas ranging from buses to parks to information technology.
- **The City of Milwaukee's capital finance environment is growing more difficult as major building projects are completed.** Unlike the County, which faces a dire long-term outlook, the City already has faced a huge challenge as it has struggled to secure the capital resources to complete the City Hall and PAB projects. A concern is whether the City can appropriately keep on top of its other building needs – and its capital needs in general – while those projects are running their course. For now, the prospects look reasonable, but the emergence of expensive new projects in the next five years and continued deferral of basic repair needs could modify that assessment.

It is important to note that the capital financing challenges facing both governments are inextricably linked to their operating budget woes, which have been documented in previous Forum reports and budget briefs. Simply put, both governments face a pressing need to keep tight control over G.O. debt for operating budget purposes, yet maintaining such controls precludes them from appropriately investing in their capital assets.





PUBLIC POLICY FORUM

IMPARTIAL RESEARCH. INFORMED DEBATE.

633 W Wisconsin Ave
Suite 406
Milwaukee, WI 53203

(414) 276-8240
publicpolicyforum.org
info@publicpolicyforum.org