



GET TO KNOW BDO

FACILITY OPTIMIZATION SOLUTIONS

A proven process to optimize your healthcare real estate footprint through a clear understanding of facility liabilities and costs.

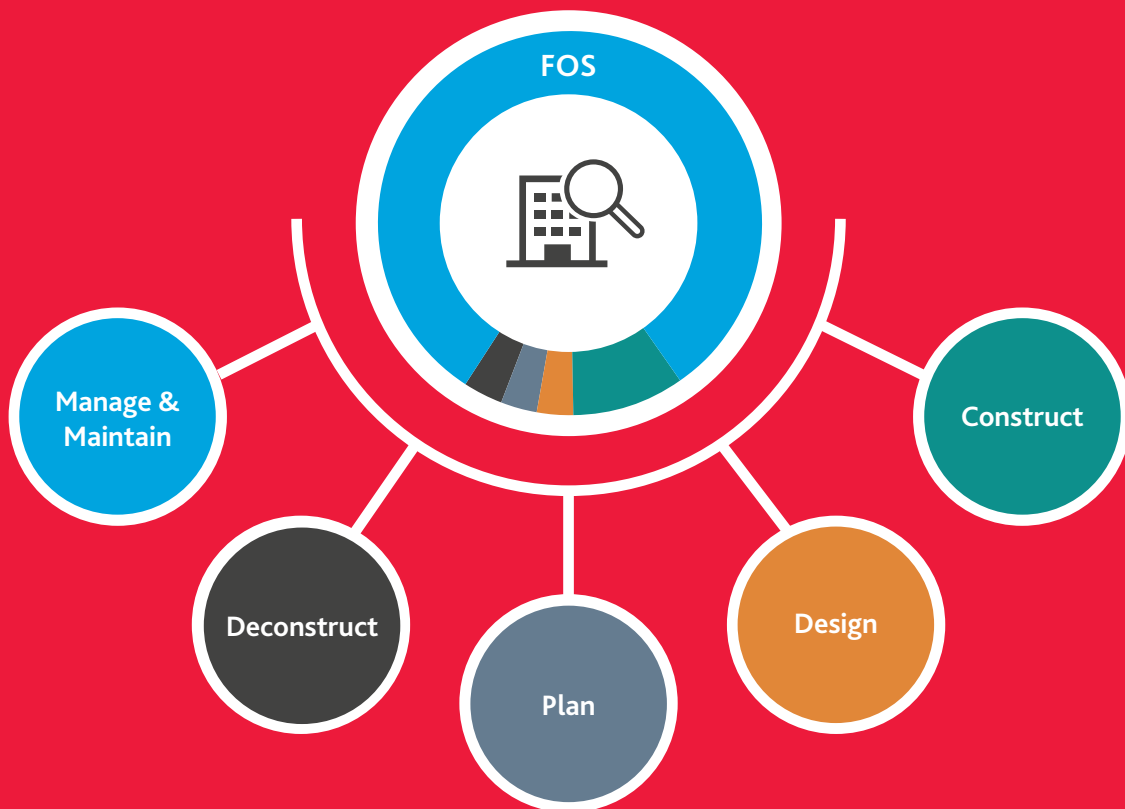
When considering the purchase or sale of an asset portfolio, it is critical to understand more than balance sheets. BDO offers Facility Optimization Solutions (FOS) to help healthcare organizations thoroughly understand physical assets, creating a framework to make informed, defensible decisions based on real-time data.

- ▶ What is the condition of the assets being acquired?
- ▶ What are the financial risks and liabilities associated with each asset?
- ▶ Where are the current asset lifecycles trending?
- ▶ How can the assets be repositioned or repurposed to maximize ROI?

Our consistent, data-driven facility condition assessment process helps guide organizations considering the purchase or sale of physical assets. Empirical system and component condition data with construction cost estimates provides an unbiased framework for confident decision making, accurate lifecycle cost models, and thorough risk analysis. Our deliverables allow clients to understand and prioritize deferred maintenance deficiencies and capital renewal needs.

We deliver data, reports, and visualizations to help clients understand, plan, and present findings at all organizational levels to help quickly and accurately make decisions. Fully understanding an asset portfolio is a minor expense when compared to the overall transaction costs of asset acquisition. Equip yourself with the right tools and information to gain a competitive advantage and increase total return on your investment.

THE LIFECYCLE OF A BUILDING



Our purpose is to develop simple and highly accurate facility management tools to empower building users, managers and owners. Our tools are designed to facilitate data-driven and empirically-based strategic portfolio planning over the life of each unique asset.

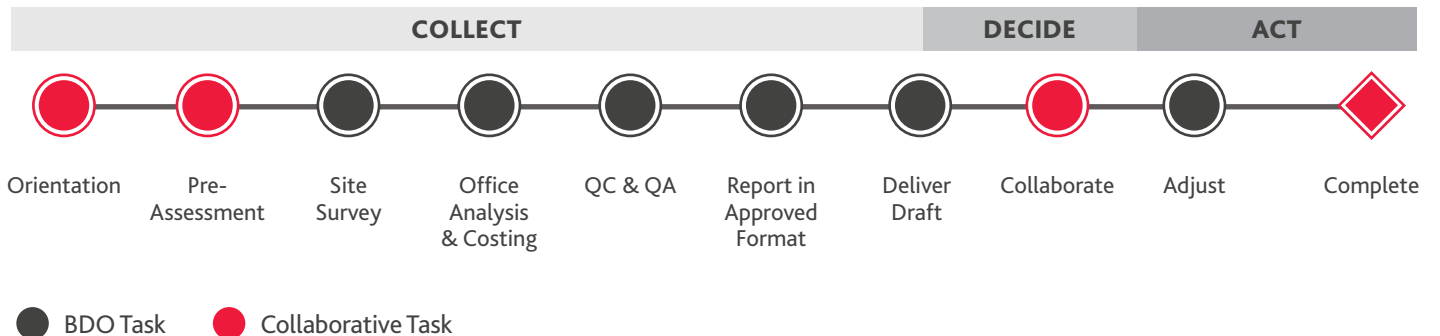


Comprehensive Suite of Services

- ▶ Facility condition assessments
- ▶ Asset lifecycle and total cost of ownership review
- ▶ Long-term capital improvement strategy
- ▶ Operations and maintenance planning
- ▶ Energy audits and conservation measure identification
- ▶ Environmental hazard investigations
- ▶ Constructability and feasibility studies

OUR APPROACH

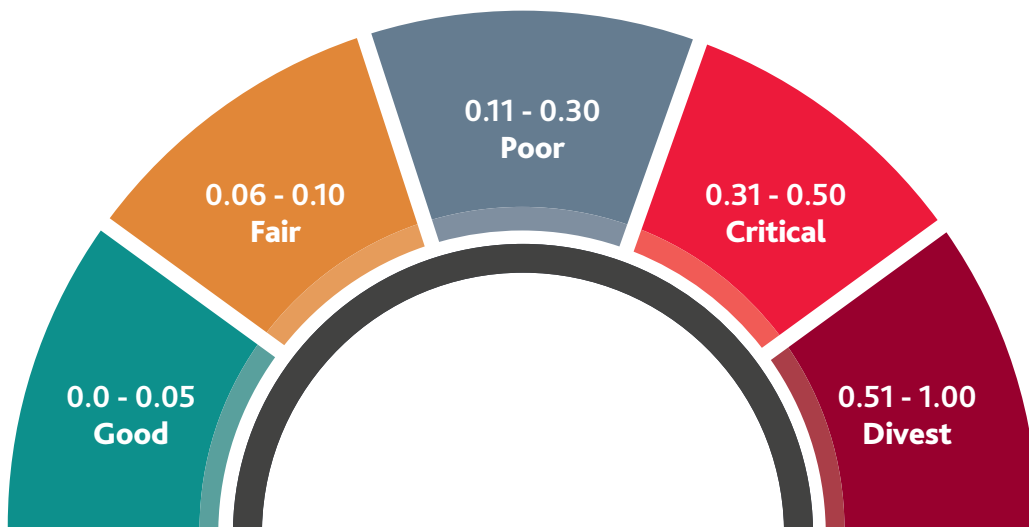
We organize our work into three phases with nine steps. The process is designed to be a collaboration with our client partners ensuring that expectations are met, and that existing information and knowledge is capitalized on.



RESULTS

We use the industry standard facility condition index (FCI) as a measure and benchmark for all assessments. FCI is the ratio of deferred maintenance deficiencies to the "as-is" replacement value of an asset. This score can be used to benchmark both current and future states based on component level prioritization.

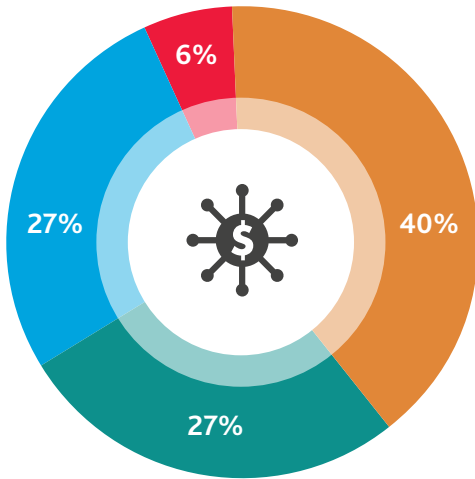
$$\text{FACILITY CONDITION INDEX (FCI)} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$



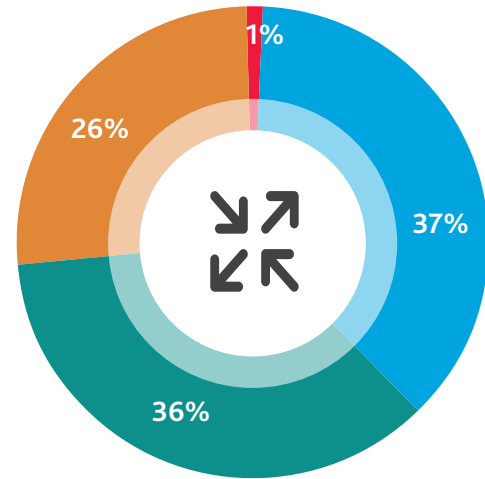
Portfolio Level Information

Facility condition assessment reports have many readers and users. Our reports are designed to convey information from concept to detail, allowing users to quickly understand themes and trends and to dive as deeply into the data as is desired.

Facility Condition based on Number of Assets



Facility Condition based on Building Gross SQF



Here is an example of Asset FCI Results by Building: On average, the facilities were found to be in **Good condition**. Facilities are predicted to decline to **Fair condition** if the following needs are not addressed. Five-year needs are estimates at **\$5 million** in construction costs in ten years, additional deferred maintenance deficiencies (DMD) will arise as an additional \$4.9 million. This is a sub-total of **\$9.9 million**.

Building Name	Year Built	Size	CRV	5 Year Needs	5 Year FCI	10 Year Needs	10 Year FCI
Asset 1	1970	3,618	\$2,103,664	\$343,630	0.16	\$987,152	0.47
Asset 2	2007	55,748	\$11,256,390	\$34,668	0.00	\$34,668	0.00
Asset 3	1922	37,410	\$9,153,213	\$269,585	0.03	\$598,904	0.07
Asset 4	1896	21,344	\$5,239,380	\$1,146,189	0.22	\$1,495,827	0.29
Asset 5	1925	26,752	\$6,113,217	\$116,547	0.02	\$155,831	0.03
Asset 6	1980	83,000	\$16,646,708	\$870,361	0.05	\$927,841	0.06
Asset 7	2014	61,000	\$17,176,899	\$-	0.00	\$-	0.00
Asset 8	1936	15,112	\$3,597,472	\$187,637	0.05	\$661,572	0.18
Asset 9	1970	10,416	\$1,042,998	\$155,112	0.15	\$115,112	0.15
Asset 10	1961	38,264	\$8,042,568	\$261,473	0.03	\$299,688	0.04
Asset 11	1982	21,983	\$6,249,095	\$59,397	0.01	\$727,811	0.12
Asset 12	1963	44,701	\$11,044,523	\$250,820	0.02	\$2,075,959	0.19
Asset 13	1995	50,714	\$12,023,631	\$1,176,814	0.10	\$1,176,814	0.10
Asset 14	1967	12,544	\$3,032,903	\$34,625	0.01	\$410,344	0.14
Asset 15	1946	16,741	\$2,079,507	\$45,325	0.02	\$188,024	0.09
Total:		499,347	\$114,802,168	\$4,952,183	0.04	\$9,855,547	0.09

Note: 5 and 10-year needs are not additive. 10-year needs total includes the 5-year needs. If all or part of the 5-year needs work is completed, the value of completed work should be subtracted from the 10-year needs total.

Recommendations

A TARGETED APPROACH TO STRATEGIC INVESTMENT

As design planners, our job doesn't stop at compiling information. We provide an overall data-driven strategic plan for each campus and can build actionable projects within our assessment and capital planning software platform. Projects and capital improvement scenarios can be tested inside our software to determine if the approach renders the desired effects. Below is an example of a high-level prioritization matrix.

Building Name	Age	FCI Decline	ROD	Primary Concern	Category	RMI	Priority
Asset 1	46	0.31	0.007	Declines to Critical Condition	At Risk	\$643,521	1.00
Asset 2	9	0.00	0.000				
Asset 3	94	0.04	0.000	Declines to Fair Condition			
Asset 4	120	0.07	0.001	Approaching Critical Condition	At Risk	\$349,638	6.00
Asset 5	91	0.01	0.000				
Asset 6	36	0.01	0.000	Declines to Fair Condition			
Asset 7	2	0.00	0.000				
Asset 8	80	0.13	0.002	Declines to Poor Condition	At Risk	\$473,935	5.00
Asset 9	46	0.00	0.000				
Asset 10	55	0.01	0.000				
Asset 11	34	0.11	0.003	Declines to Poor Condition	At Risk	\$668,414	4.00
Asset 12	53	0.17	0.003	Declines to Poor Condition	At Risk	\$1,823,139	2.00
Asset 13	21	0.00	0.000	Near Poor Condition			
Asset 14	49	0.12	0.003	Declines to Poor Condition	At Risk	\$375,719	3.00
Asset 15	70	0.07	0.001	Declines to Poor Condition	At Risk	\$142,699	7.00
Average:	54	0.07	0.001	Over 50% Decline in Condition	47% At Risk	4,479,065	

LEGEND

FCI Decline: Reduction of FCI in 5 Years

ROD: Rate of Decay

RMI: Recommended Minimum Investment



PROACTIVE PLANNING

DMD Correction Roadmap: A simple targeted plan is provided following final collaboration. The timeline summarizes priority, sequence, and construction cost estimates to reduce maintenance backlogs and inform strategic capital renewal.



CREATING A COMPETITIVE ADVANTAGE.

Proactive Capital Planning Tools | Accurate Cost And Liability Metrics | Prioritized Facilities Management Roadmap

Case Study

UNDERSTANDING THE CURRENT STATE AND PLANNING FOR ADAPTATION

- ▶ Facility condition and capacity analysis to understand suitability for further expansion of medical laboratory and support space into unused portions of a former big-box retail distribution center.
- ▶ Assess the existing condition asset lifecycle costs of critical systems and components including building structure, exterior vertical and horizontal enclosure, mechanical and HVAC systems, electrical distribution, and specialty systems including medical gas distribution.
- ▶ Identify critical deferred maintenance deficiencies, potential environmental hazards, and accessibility / life safety risks.
- ▶ Create a prioritized schedule for renewal and replacement of facility systems and components. Develop a short- and long-term capital planning document based on the deficiencies and planned renewals.

Our solution created a 10-year plan for budgeting and scheduling capital renewal and replacement of building systems and components. Based on the costs associated with repair and renewal and the replacement values of each system and component, we developed a facility condition index broken down into system and discipline condition indices for performance benchmarking.

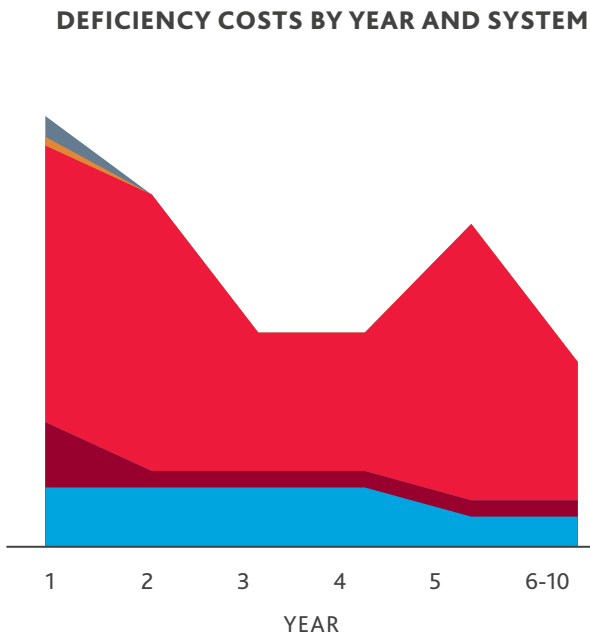
The results gave our client an actionable plan for maintaining and improving current conditions within the facility and an understanding of the associated costs.

We delivered a framework for strategic decision making for optimized operations and maintenance of the existing spaces and identified feasibility and costs for expanding additional functions and programming within the facility.

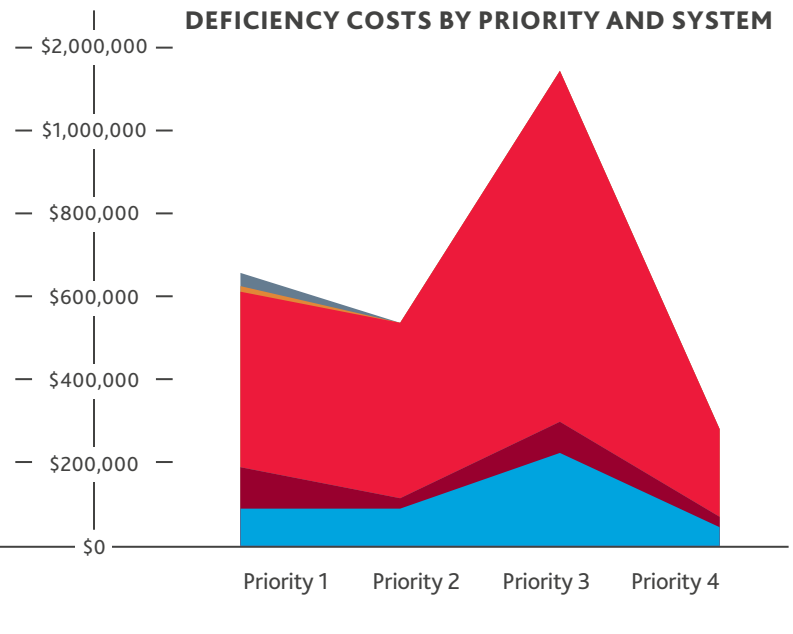


DISCIPLINES	Deferred Maintenance Deficiencies by Year							Currently Critical	Potentially Critical	Necessary, not yet Critical	Recommended
								Priority 1	Priority 2	Priority 3	Priority 4
	1	2	3	4	5	6-10	Total	1	2	3-5	6-10
Architectural	148,720	148,720	148,720	148,720	74,360	74,360	743,600	148,720	148,720	371,800	74,360
Electrical	165,440	41,360	41,360	41,360	41,360	41,360	413,600	165,440	41,360	124,080	41,360
Fire Protection	-	-	-	-	-	-	-	-	-	-	-
Mechanical (HVAC)	698,880	698,880	349,440	349,440	698,880	349,440	3,494,400	698,880	698,880	1,397,760	349,440
Plumbing	22,400	-	-	-	-	-	22,400	22,400	-	-	-
Structural	52,640	-	-	-	-	-	52,640	52,640	-	-	-
Direct Cost Total	1,088,080	888,960	539,520	539,520	814,600	465,160	4,726,640	1,088,080	888,960	1,893,640	465,160

DEFICIENCY COSTS BY YEAR AND SYSTEM



DEFICIENCY COSTS BY PRIORITY AND SYSTEM



● Architectural
 ● Electrical
 ● Fire Protection
 ● Mechanical
 ● Plumbing
 ● Structural

Project Data

- ▶ 580,000 SF former retail distribution, 4M SF multi-campus healthcare portfolio
- ▶ Assess space for critical issues & long-term capital planning
- ▶ Identify opportunity for adaptive re-use
- ▶ Integrate into context of long-term planning for urban campus hospital system



Medical Laboratory



Medical Office



Storage & Logistics

Case Studies

ALLINA HEALTH METRO HOSPITALS

Objective Condition & Functionality Review

Many facilities experiencing physical condition challenges also face limitations in physical design and functionality. Allina Health engaged FOS to perform facility condition assessments and a clinical functionality review of 4.9 million sf of hospital buildings across four campuses. The facility condition assessment was a comprehensive study of architectural, mechanical, electrical, and plumbing components of Allina Health's Mercy Campus, Unity Campus, Abbott Northwestern Campus, and United Campus. The assessments created the ability to prioritize and accurately distribute funding across the diverse portfolio. The clinical functionality review provided an unbiased objective assessment of current physical design and identified areas of opportunity to guide the Allina Health executive team in their strategic initiatives for service delivery across the four-metro campus portfolio.



Project Data



Minneapolis, MN



4.9 Million SF



4 Campuses

CONFIDENTIAL HEALTH SYSTEM

Pre-Acquisition Facility Condition Assessment

Our team provided a comprehensive facilities condition assessment for a client engaging in a hospital campus acquisition. This 675,000-SF campus would add significant care delivery capacity for the health system located in a strategic and competitive east coast geography. While the numbers made sense on paper, it was equally important to fully understand the current condition, liabilities, and long-term total costs of ownership being added to the existing portfolio.

We provided data and documents to prioritize all liabilities requiring correction, including a phase 1 environmental site assessment, and provided specific professional recommendations with cost-estimates for short- and long-term capital planning. Our results created a defensible outlook of necessary capital improvements to create a care delivery environment on brand with the existing portfolio.



Project Data



Capital Region



675,344 SF



9 Buildings

UNIVERSITY OF WISCONSIN

Due Diligence Pre-Sale Assessment

In preparation of a joint operating agreement between University of Wisconsin Health and Meriter Health, we provided a facility condition assessment and clinical operations review of 32 hospital and support spaces totaling nearly 2 million square feet. The facility condition assessment provided a third-party review at the facility component level that included building structural and architectural construction, mechanical/HVAC systems, plumbing systems, electrical

systems, low voltage systems, life safety systems, elevators and grounds surrounding the buildings. The clinical operations review included an inventory and analysis of space allocation by department, facility and off-site buildings, key room counts by department or service, benchmark analysis of clinical square footage, operational/functional deficiencies, work flow adjacencies, & FGI guidelines compliance.



Project Data



Waukesha, WI



1.7 Million SF



32 Buildings

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