

Facilities Condition Assessment Program



Facilities Development and Management



DPW - Buildings



Building Inventory Information

Number of Buildings	70
Current Replacement Value	\$332,065,812
Total Area (SF)	1,902,297
Average Age	43



Facilities Management Assets Overview Program

- Comprehensive Facility Analysis

O+M

- Includes:

- Condition Assessment
- Component Inventory

- Capital Budgeting

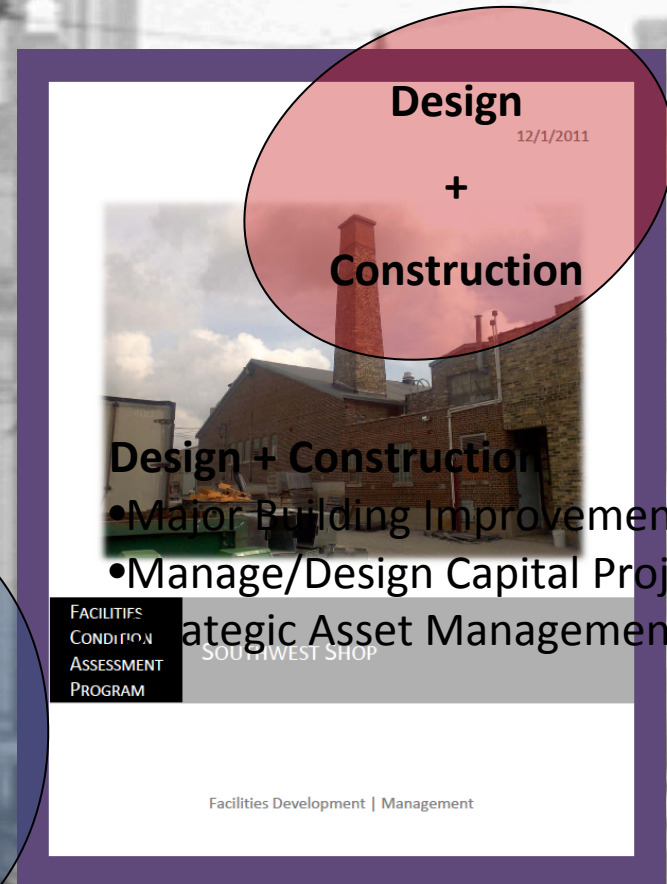
Operations and Maintenance

- Day to Day Facility Oversight
 - Carpentry, HVAC, Electrical, Fiber-optics, Telephone, Custodial, Etc.
- Maintenance
 - 20,000 W.O./year

FCAP

CIC

Oversight



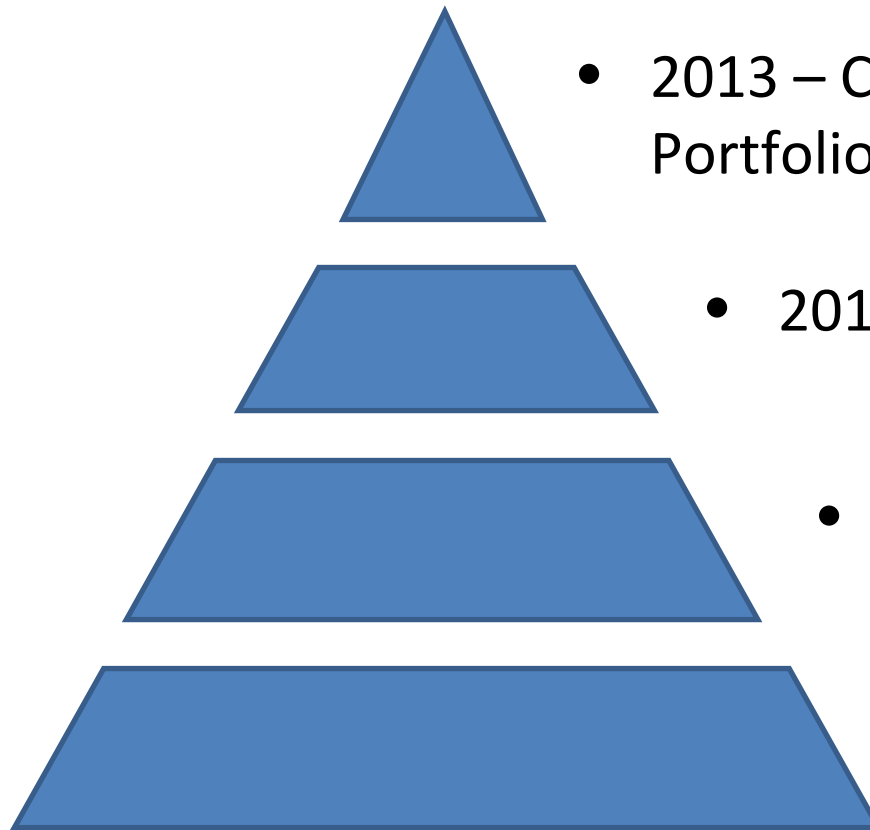
FCAP

Compliance

- Association of Higher Education Facilities Officers (APPA)
 - Facilities audit format
- International Facilities Management Association (IFMA)
 - Cost estimation
- National Research Council
 - Standardized inspection process
 - Utilizes standard industry cost data
- U.S. Department of the Interior
 - Key performance measures (FCI)
- American Public Works Association (APWA)



DPW – FCAP Plan



- 2013 – Combine Portfolio + Maintain

- 2012 – Phase B

- 2011 – Phase A

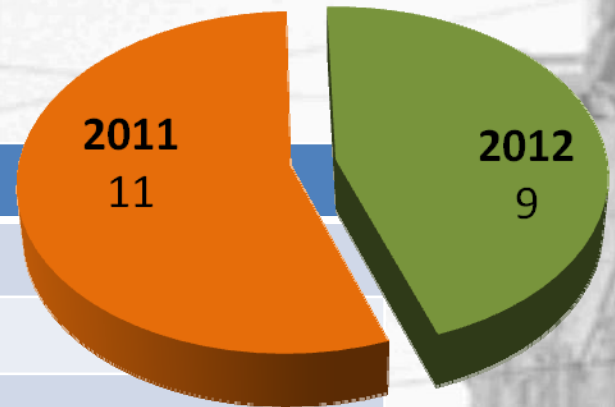
- 2010 - Reform FCAP



DPW Facility Status

- 11 of 20 Complexes Evaluated in 2011

2011 – Phase A	2012 – Phase B
123 Building	809 Building
Central Repair Garage	City Hall
Education Center	DPW HQ
Forestry South HQ	Municipal Nursery
Industrial Road Complex	Municipal Service Building Complex
Lincoln Avenue Garage Complex	North District Field Station
RA Anderson	Sanitation North
Sanitation Central I	Sanitation South
Sanitation Central II	Zeidler Municipal Building
Southwest Shop	
Tow Lot	



Facilities Condition Assessment Program



- **Physical Analysis**
 - Consultant Review
 - Component Inventory
 - Internal Personnel
 - Condition Assessment
 - Photo-Documentation
- **Report Development**
 - Cost Estimation
 - Project Scheduling



FCAP Reporting

Tow Lot

Roofs, EPDM

Tow Lot roof is comprised of three sections. Two sections are EPDM and are described in fair condition by the third party roof inspection/repair company. City of Milwaukee anticipates their replacement by 2019.

Inventory (SF)	Condition Rating	Age (Years)	RUL (Years)	1st Year of Capital Expenditure	
#1, EPDM	5,297	5	13	7	2019
#2, EPDM	4,750	5	13	7	2019



Roof 1



Roof 1 w/ membrane bulges



Roof 2



Roof 2 w/ vegetation growth

RA Anderson Municipal Building

Siding, Concrete

RA Anderson comprises 34,500 square feet of concrete façade. Concrete façade inspections are required every five years per City of Milwaukee façade ordinance. City of Milwaukee last conducted the façade inspection in 2011. The City of Milwaukee plans subsequent façade inspections by 2016 and every five years thereafter.

In 2011 the City of Milwaukee began a capital improvement project to the exterior of the building. The work included multiple projects, which are divided into two categories 1) below third floor, 2) and above third floor. The 2011 projects are summarized below:

2011 RA Anderson Exterior Work		
Project Description	Above Third Floor	Below Third Floor
Full and Partial Concrete Surface Repairs	x	x
Crack Repairs via Rout and Silicone Sealant Installation	x	x
Window Sill Repointing		x
Parapet Wall Rebuilding Above Entrance (3 rd Floor)		x
Concrete Eyebrow Restoration (2-of-8 Complete)	x	
Sealant/Caulk Replacement	x	x
Concrete Sealer (Silane) Application	x	x
Roof Drain Inspection w/ Conductor Drain Pipe Repairs	x	x
Swing Stage Rigging	x	

The 2011 repair work is expected to continue into 2012 and focus on repairs at the eyebrows and water tank level. The following table summarizes the 2012 repairs.

2012 RA Anderson Exterior Work		
Project Description	Above Third Floor	Below Third Floor
Concrete Eyebrow Restoration (6-of-8 Remain)	x	
Water Tank Parapet Wall Structural Repairs	x	
Metal Catwalk Sand Blast/Replace/Paint	x	
Elastomeric Membrane Application (Parapet/Catwalk)	x	
Aluminum Roof Paint Application (Parapet/Catwalk)	x	
Antenna Removal/Banding/Lightning Rod Installation	x	
Permanent Banding at Water Tank for Rigging	x	

At the conclusion of the 2011/2012 repair work, a portion of the exterior façade repairs will be completed. However, a significant portion of tower façade repairs remains. Work yet to be completed includes partial and full depth concrete surface repairs and sealant replacement at 96 locations above the third floor located at the intersections of horizontal and vertical sealant joints. Once this work is complete, subsequent exterior repairs are anticipated to occur every



FCAP Capital Budgeting

Lincoln Avenue Complex

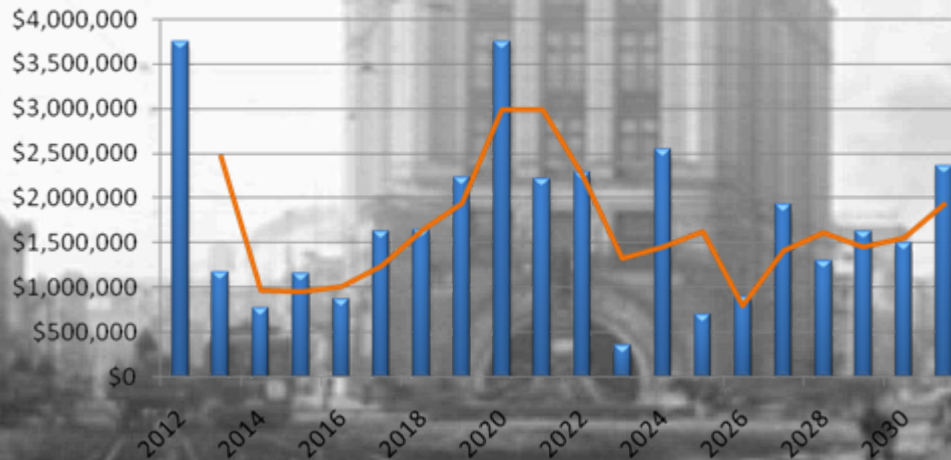
	Quantity	Units	2012 Capital		UL	RUL	20 Year Total		First Capital Expense	CRDM	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
			Unit Cost	Cost			Cost	Cost												
Lincoln Garage																				
Building Envelope																				
Doors, Pedestrian	1	LS	\$20,000	\$20,000	35	10	\$26,000	2022	\$0											
Doors, Garage, Phased	6	EA	\$7,000	\$42,000	15	1	\$716,000	2013	\$0		\$43,000	\$44,000			\$47,000	\$48,000		\$51,000	\$52,000	
Light Fixtures	25	EA	\$400.00	\$10,000	25	9	\$13,000	2021	\$0											\$13,000
Roof, EPDM #1	2,700	SF	\$9.00	\$24,300	20	3	\$26,000	2015	\$0				\$26,000							
Roof, EPDM #2	47,043	SF	\$9.00	\$423,387	20	3	\$459,000	2015	\$0				\$459,000							
Roof, EPDM #3	22,113	SF	\$9.00	\$199,017	20	3	\$216,000	2015	\$0				\$216,000							
Roof, EPDM #4	22,113	SF	\$9.00	\$199,017	20	3	\$216,000	2015	\$0				\$216,000							
Siding, Masonry	1	LS	\$48,000	\$48,000	15	9	\$61,000	2021	\$0											\$61,000
Siding, Metal	7,200	SF	\$14.50	\$104,400	35	9	\$133,000	2021	\$0											\$133,000
Windows, Replacement	1	LS	\$90,000	\$90,000	35	9	\$114,000	2021	\$0											\$114,000
Building Interior Components																				
Facility Modification, CNG Vehicle Service Center	1	LS	\$900,000	\$900,000	N/A	0	\$900,000	2012	\$900,000	\$900,000										
Light Fixtures	257	EA	\$475	\$122,075	35	18	\$197,000	2030	\$0											
Offices, Equipment and Furniture, Replacement	1	LS	\$60,000	\$60,000	20	13	\$85,000	2025	\$0											
Paint Finishes, Structural Steel	1	LS	\$260,000	\$260,000	35	8	\$322,000	2020	\$0											\$322,000
Rest Rooms/Locker Rooms, Renovations	1	LS	\$89,000	\$89,000	25	13	\$126,000	2025	\$0											
Building Control Components																				
Air Filter Units	1	LS	\$186,000	\$186,000	35	0	\$186,000	2012	\$186,000	\$186,000										
Building Automation System, Installation	1	LS	\$225,000	\$225,000	N/A	0	\$225,000	2012	\$225,000	\$225,000										
Building Automation System, Upgrades	1	LS	\$50,000	\$50,000	15	15	\$75,000	2027	\$0											
Electrical, Branch Circuits	1	LS	\$183,000	\$183,000	35	0	\$183,000	2012	\$183,000	\$183,000										
Electrical, Secondary Distribution	1	LS	\$350,000	\$350,000	35	0	\$350,000	2012	\$350,000	\$350,000										
Engineering Analysis, HVAC/Electrical	1	LS	\$75,000	\$75,000	35	0	\$75,000	2012	\$75,000	\$75,000										
Fire Warning System	1	LS	\$108,000	\$108,000	25	19	\$179,000	2031	\$0											
Make-Up Air Units	1	LS	\$250,000	\$250,000	35	0	\$250,000	2012	\$250,000	\$250,000										
Security System, Access Management	1	LS	\$40,000	\$40,000	10	1	\$95,000	2013	\$0		\$41,000									
Security System, Video Surveillance	1	LS	\$45,000	\$45,000	8	2	\$179,000	2014	\$0			\$47,000								
Tube Heaters	1	LS	\$55,000	\$55,000	25	0	\$55,000	2012	\$55,000	\$55,000										
Transfer Station																				
Building Envelope																				
Doors, Garage, Phased	3	EA	\$14,700	\$44,100	15	2	\$344,000	2014	\$0			\$47,000			\$50,000					\$55,000
Gutters and Downspouts	560	LF	\$30.00	\$16,800	25	6	\$20,000	2018	\$0											\$20,000
Roof, Metal #1	23,052	SF	\$16.00	\$368,832	20	6	\$433,000	2018	\$0											\$433,000
Roof, Metal #2	2,332	SF	\$16.00	\$37,312	20	6	\$44,000	2018	\$0											\$44,000
Roof, Metal #3	24	SF	\$75.00	\$1,800	20	6	\$2,000	2018	\$0											\$2,000
Siding, Concrete	1	LS	\$68,000	\$68,000	15	9	\$86,000	2021	\$0											\$86,000
Siding, Metal	10,060	SF	\$14.50	\$145,870	35	9	\$185,000	2021	\$0											\$185,000
Building Interior Components																				
Light Fixtures	44	EA	\$650	\$28,600	35	18	\$46,000	2030	\$0											
Paint Finishes, Structural Steel	1	LS	\$74,000	\$74,000	35	8	\$92,000	2020	\$0											\$92,000
Building Control Components																				
Exhaust Fans	5	EA	\$9,500	\$47,500	35	18	\$77,000	2030	\$0											
Scale House																				
Building Envelope																				
Roof, EPDM w/ Ballast	833	SF	\$12.50	\$10,413	20	13	\$15,000	2025	\$0											
Windows/Doors, Replacement	1	LS	\$24,000	\$24,000	35	18	\$39,000	2030	\$0											
Building Interior Components																				
Interior Renovations	1	LS	\$41,000	\$41,000	20	13	\$58,000	2025	\$0											



DPW Facility Status

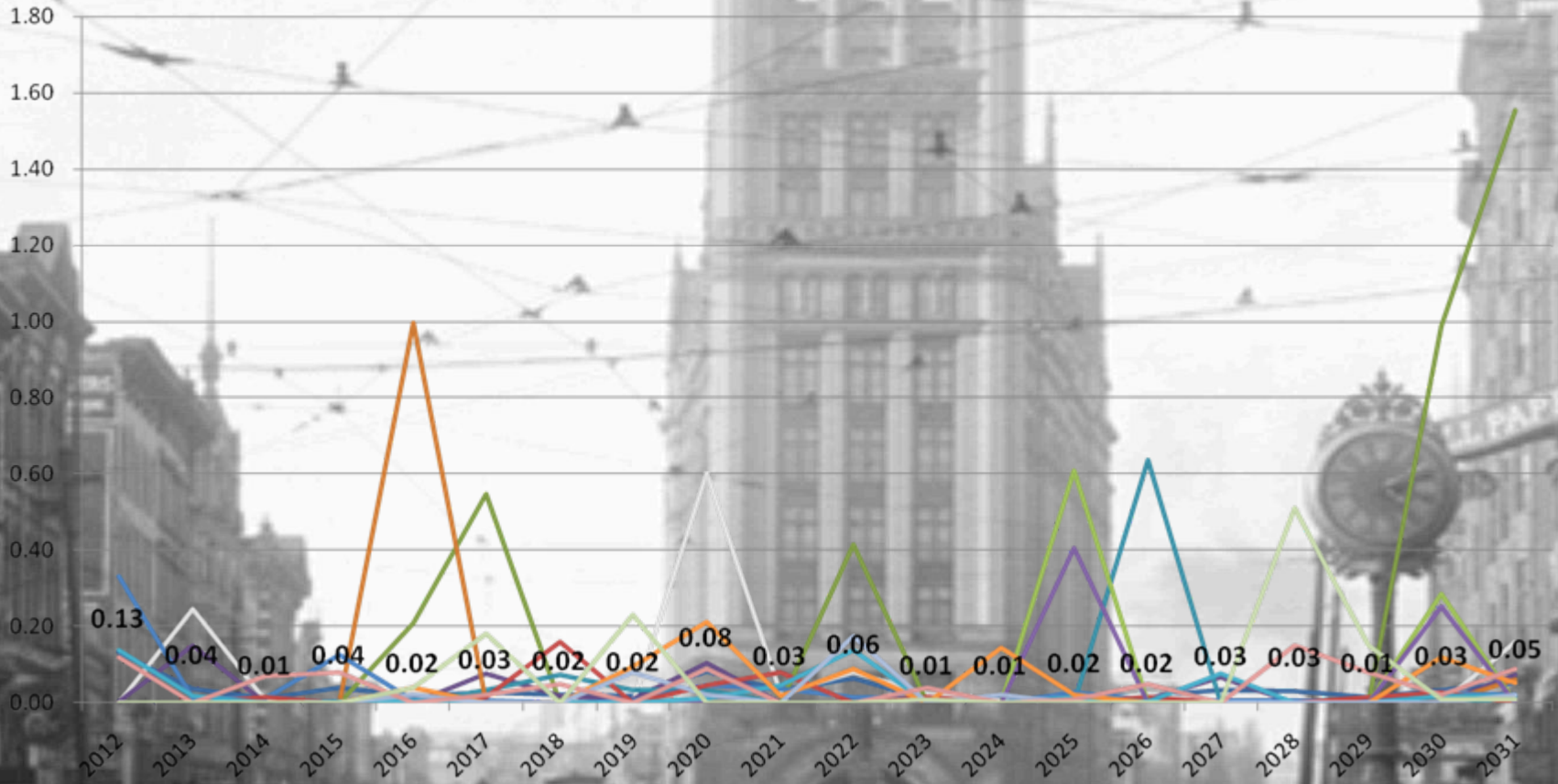
DPW FCAP FCAP Summary	20 Year Total Cost	CRDM	2012	2013	2014	2015	2016	2017
Projected Capital Improvements Per Year								
Building Name								
123 Building	\$3,092,000	\$5,000	\$5,000	\$433,000	\$10,000		\$44,000	\$568,000
Education Center	\$1,577,000			\$52,000			\$80,000	\$210,000
Forestry South HQ	\$2,482,000	\$11,000	\$11,000	\$395,000			\$510,000	\$234,000
Lincoln Garage Complex	\$12,184,000	\$2,232,000	\$2,232,000	\$95,000	\$622,000	\$952,000	\$47,000	\$98,000
RA Anderson	\$5,687,000	\$1,174,000	\$1,174,000	\$149,000		\$27,000	\$76,000	\$9,000
Sanitation Central II	\$2,153,000	\$35,000	\$35,000	\$16,000			\$73,000	\$267,000
Southwest Shop	\$2,531,000	\$231,000	\$231,000	\$6,000	\$134,000	\$168,000		\$41,000
Tow Lot	\$4,930,000	\$64,000	\$64,000	\$25,000			\$40,000	\$194,000
Total 20 Year Cost	\$34,636,000	\$3,752,000	\$3,752,000	\$1,171,000	\$766,000	\$1,147,000	\$870,000	\$1,621,000
		CRV	\$27,470,134	\$28,202,543	\$28,951,648	\$29,723,132	\$30,516,084	\$31,330,600
		FCI	0.13	0.04	0.01	0.04	0.02	0.03

Projected Annual Expenditures Based on 2011 Analysis



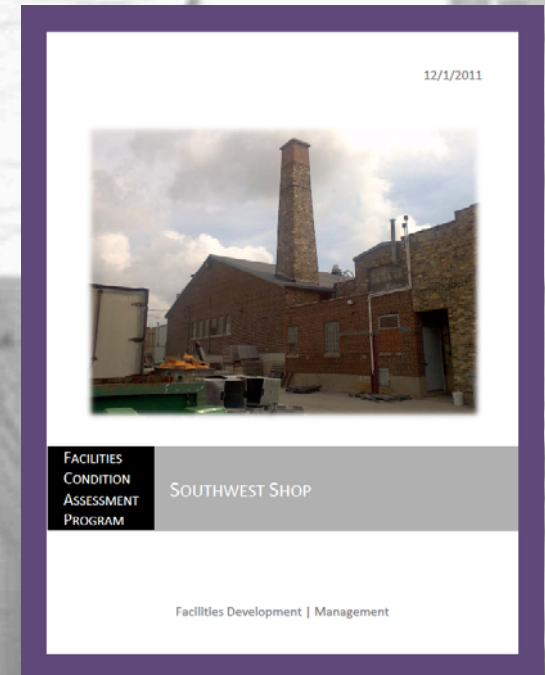
DPW Facility Status

FCI Portfolio Value and Individual Facilities



Conclusion

- FCAP
 - Compliant with National Standards
 - Centralizes Facility Information
 - Documents Condition Assessment
 - Strategizes Capital Budgeting
 - Economies of Scale
 - Living Historic Document
 - Annual Updates



A historical black and white photograph of a city street. A tall, ornate building with a clock tower is the central focus. A complex network of trolley wires crisscrosses the sky. In the foreground, a streetcar is visible on tracks, and a street clock stands on the right. A sign for 'PAPER' is visible on a building to the right. The scene is framed by a blue border.

•Questions