#### Chief Mark Rohlfing

Assistant Chief Support Bureau Gerard Washington

Battalion Chief Construction & Maintenance Division Dale Schwark

> Fire Equipment Repair Manager Michael Reid

Fire Technical Service Manager Deborah Wilichowski



COURAGE . INTEGRITY . HONOR

2013



#### 35 Fire Stations + 1 Leased

#### **Repair Facilities**



Primary Repair Building Butler Building Cold Storage Building **\* Facility Overview** 



#### Fire & EMS Training Facilities

Recruit Training Building (w/ Pump Testing Facility)

Fire Training Tower (Inspected in April of 2012)

Fire Education and Historical

Museum

\*Average Age of Structures - 58 years

\*Oldest Structure - Engine 1 - 142 years

\*Newest Structure - Engine 35 - 16 years



\*Age Groupings
0-25 years old - 4 Structures
26-50 years old - 17 Structures
51-75 years old - 9 Structures
76-100 years old - 3 Structures
100+ years old - 8 Structures



\*Basemented Apparatus Floors

- \*12 Total Studied In October/November of 2012
- \*Present Data is Positive No Immediate Safety Issue
- \*E3, E6, and E7 require shoring to meet code
- \*Additional bids requested (DPW)
- \*Move to begin floor by floor assessment to determine repairs

\*Fueling Sites21 Total Fill Sites

18 Diesel

6 Unleaded

2 Dual

Comprehensive monitoring has begun

-Central monitoring (shop)

Next step to use Manager Plus to further monitor

\*Energy Use Reduction Initiatives **Fire Station Energy Audits** Completed at 8 Fire Stations & Shop

Solar Hot Water Heaters

5 Installed Program Slowed due to Change in Grant for Equipment/Installs

Internal Energy Reduction Culture Change Underway NOW!

Engine 18 kickoff of "Cool Choices"

\* Facility Inventory - CIP Integration

Major Capital 20 YEAR Replacement Schedule

Paperless Integration for Facility Tracking - Manager Plus

\* Energy Reduction Team

Active Sustainability Improvements

Intensive Energy Reduction Audits

Development of Scope of Work for Comprehensive Energy Reduction Investments

\* Replacement Study

Collective asset replacement study ongoing



House	2014 Projects
Engine 1	Water heater, Concrete replace/inspection
Engine 2 /Admin.	Paint/inspection (8yrs)
Engine 3	
Engine 4	Water heater
Engine 5	
Engine 6	A/C, Apparatus floor replace/inspection
Engine 7	
Engine 8	Tuck point/inspection, Window replace/inspection, Door replace/Inspection, A/C
Engine 9	Overhead doors, Boiler replace/inspection, Water heater
Engine 10	
Engine 11	
Engine 12	A/C, Boiler replace/inspection
Engine 13	
Engine 14	Tuck point/inspection, Paint/inspection (8yrs)
Engine 16	
Engine 17	Concrete replace/inspection
Engine 18	Water Heater
Engine 21	Paint/inspection (8yrs), Window replace/inspection, Door Replace/inspection, Tuck-point
Engine 22	Electrical upgrade/inspection
Engine 23	Roof replace/inspection, Tuck-point
Engine 24	
Engine 25	
Engine 26	Tuck-point, Apparatus floor replace/inspection, Foundation inspection
Engine 27	Foundation inspection, Concrete replace/inspection
Engine 28	Electrical upgrade/inspection, Foundation inspection
Engine 29	
Engine 30	
Engine 31	Floor Replace/inspection
Engine 32	
Engine 33	
Engine 34	Electrical upgrade/inspection
Engine 35	
Engine 36	Paint/Inspection (8yrs)
Engine 37	
Engine 38	
Engine 39	Concrete replace/inspection
Burn Tower	
Shop	Electrical upgrade/inspection, Water heater
Recruit training	
Ed Museum	

#### \*Comprehensive Asset Plan -2014 Projects

	Engine 1							
Address	784 N Broadway			Replacement Value:	\$2,254,283			Treasure and the
Year Built	1872							
Building Area	14,095 SF			Equipment Housed	Depreciated Value	2012 Repair Costs		
Lot Area				Engine 1	\$292,508.30	\$4,244.70	13	
Roof Area	7,048 SF			Reserve Engine 40		2013 Auction		
Floors	2				\$292,508.30	\$4,244.70		
Foundation	Slab							
Exterior Wall								21 1 5 8 9
	Surface	Brick						21 13024
	Frame	Steel						
Windows	Double hung, alur	ninum, thermo	)	Number of Personnel	Estimated Payroll		Energy Costs	
Floors	Vinyl, wood & Tile	2		4 Daily/12 Total	\$808,259	Engine #1 closed	Electric	\$5,133.59
Electrical	Main Switch 400 Amp 3 Phase			* 1 Capt , 2Lt , 3 HEO,	6 FF, No Factor applied		Natural Gas	\$9,399.43
S & D Voltage	120/208			Station Repairs				\$14,533.02
Heating	Boiler, Steam			\$3,886.51				
Cooling	Window Air syste	m						
Ventalation	Roof/Wall Exhaus	Roof/Wall Exhaust Fans						
Roof	Flat, Wood Deckir	Flat, Wood Decking & Frame, Ballas						
	Year Installed	Quantity	Condition	Model/Make	Serial #	Life Of Component		
Boiler	2002	2	Good	5007N/Burnham	64468945/64468942	20 yrs		
Water Heater		1	Good	BT80/AO Smith	MA97 - 0620068 - 230	10 yrs		
A/C Unit				Window Units		15 yrs		
HVAC System	N/A					20 yrs		
Concrete			Good			20 yrs		
Landscape			N/A			N/A		
Foundation			Good			N/A		
Exterior Wall			Good			10 yr Insp.		
Roof	2010	1	Excellent	EPDM/Membrane	Garland	20 yrs		
Interior Walls/Paint			Fair					
Flooring			Fair					
Generator			N/A			50 yrs		
Windows			Good					
Door(s)			Good					
Overhead Door(s)			Good			10 yr Insp.		

### \*Single Asset Plan

\*Fixed Auxiliary Generators
 22 Placed and Working

 -2 Pending from 2011 funds
 -1 Pending from 2012 funds
 -1 pending from 2013 funds
 Working with DPW to expedite



#### Milwaukee Fire Department Fire Major Capital Purchasing Plan / Projected Costs 2014-2019

Vehicle Type	2014 REQ	2015	2016	2017	2018	2019	6-Year CIP TOTAL		
Multiplier	1.05	1.03	1.03	1.05	1.03	1.03			
ENGINES	529,000	545,000	562,000	591,000	609,000	628,000			
Purchasing Pattern (2-3-3)	3	3	2	3	3	2			
TOTAL	1,587,000	1,635,000	1,124,000	1,773,000	1,827,000	1,256,000	9,202,000		
TRUCKS	768,000	792,000	816,000	857,000	883,000	910,000			
Purchasing Pattern (1-1-2)	1	2	1	1	2	1			
TOTAL	768,000	1,584,000	816,000	857,000	1,766,000	910,000	6,701,000		
MED UNITS	205,000	212,000	219,000	230,000	237,000	245,000			
Purchasing Pattern (2-3-2-3)	3	2	3	2	3	2			
TOTAL	615,000	424,000	657,000	460,000	711,000	490,000	3,357,000		
YEARLY TOTAL	2,970,000	3,643,000	2,597,000	3,090,000	4,304,000	2,656,000	19,260,000		
*Fire Major Capitol									



### \*Present Repair Shop

\*Built in 1929
\*Designed for apparatus
of an earlier era
\*Limited workspace
\*Modern apparatus require
tilting of the cab for
most repairs (3-4 at one time)



# \*Present MFR Benair Shop

#### \*Inefficient

- \* Workspace
- \*Change-over of Reserves
- \* HVAC
  - \* Most expensive facility\* Extreme temperatures



# \*Present MFR Begair Shop



### \*MFR Proposed Repair Shop

\*Built for today's apparatus

- \*Expedite changeover to reserve apparatus
- \*All repair bays allow for tilting of cabs
- \*Architect allowed the most efficient use of space under one roof

\*Green Structure

### \*MFR Proposed Repair Shop

#### \*Requesting Matching Funds for Assistance to Firefighter Grant

#### \* County-wide effort to save on operation costs

Paramedics and EMTs are required to have 30 to 45 hours of "face to face" continuing education and refresher training per year.

#### \* City of Milwaukee Savings

\$65K in overtime costs\$8k in fuel costs485 hours in travel time

#### \* Other Benefits

Faster response in the event of a major emergency during training More time available for firefighting companies to spend on pre-fire plans, smoke detector installation, and other community outreach programs.

### \*Regional Video Conferencing





\*Limited Space \*Inappropriate Locations \*Impractical

#### \*Current Training Set-ups

- \* A cooperative effort was made to apply for the Assistance to Firefigher Grant (AFG) to find a solution for a shared problem
- \* 11 Fire Departments covering 17 communities participated in the grant application process
  - North Shore Fire Department Wauwatosa Fire Department West Allis Fire Department Greenfield Fire Department Greendale Fire Department Hales Corners Fire Department Franklin Fire Department Oak Creek Fire Department South Milwaukee Fire Department Cudahy Fire Department

#### \*Regional Video Conferencing

#### \* Included in the AFG application

61 video conference endpoints; 37 of them for MFD 8 large conference room set ups; 2 of them for MFD Conference bridge to allow hosting of conferences Installation, set up and training for all departments 3 years of prepaid maintenance for all systems

\* Grant request is for \$1,194,600 with a required 20% match Each department pays for their own 20% match MFD share is approximately \$800,000, requiring a 20% match of \$160,000

# \*Regional Video Conferencing

- \*The regional video conferencing grant is the first collaborative effort of its kind, and could be the pre-cursor to other such joint technology initiatives
- \*Failure to participate could jeopardize the project for the whole region

### \*Regional Video Conferencing