



PARK RIDGE-NILES
SCHOOL DISTRICT 84

Health Life Safety Survey and Master Facilities Plan

Community Presentation

Board Meeting

June 22, 2015

FGM ARCHITECTS

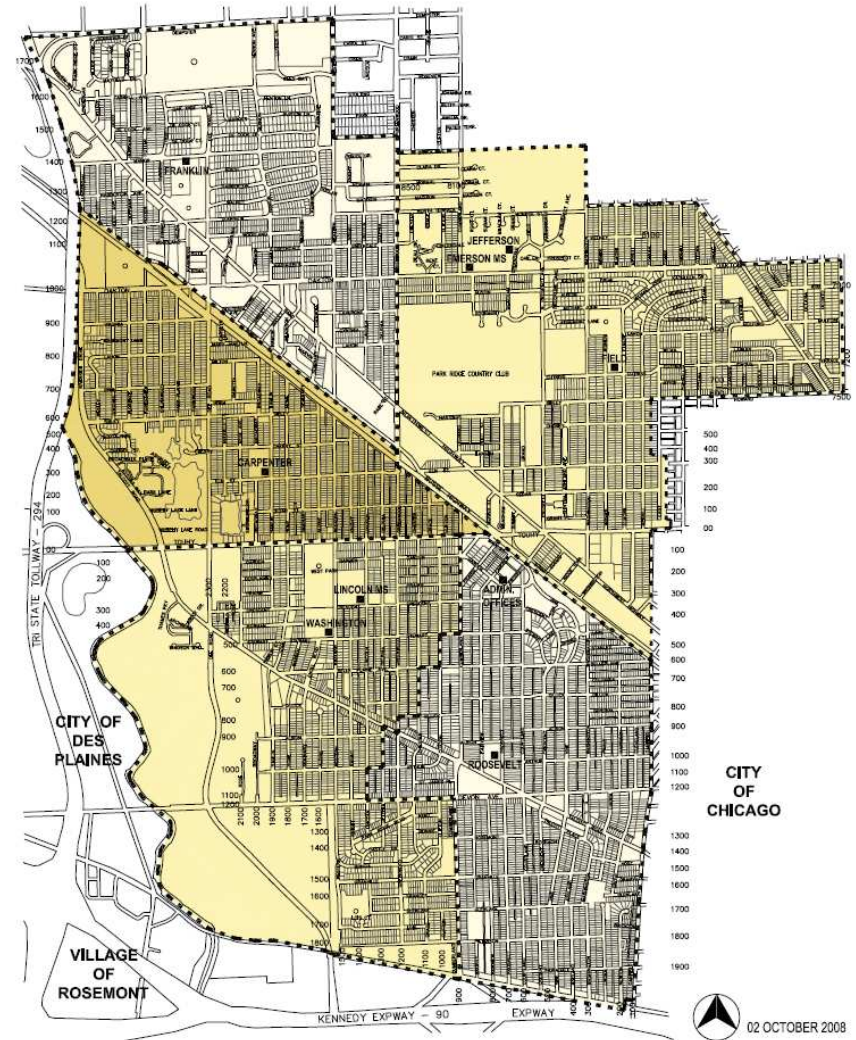
June 22, 2014 Board Presentation

- Overview and Summary of the Health Life Safety Survey and Master Facilities Plan
- Introduction to the Board of the budget categories and project cost information
- Discussion on using report data and information
- Recommendations and next steps



Agenda

- Introduction
- Findings and Budget
- Projects
- Recommendation /
Next Steps



For security reasons the floor plans of the school buildings have been removed from this report.



*“Now this is not the
end. It is not even the
beginning of the end.
But it is, perhaps, the
end of the beginning.”*

Winston Churchill

INTRODUCTION



Master Facilities Plan

- Plan Components
 - Health Life Safety Survey
 - Building Assessment
 - Educational Planning
- Cost Areas
 - Operation Costs
 - Maintenance and Repair Costs
 - Capital Improvements



The Master Facility Plan

- Presents a map that identifies many possible options to reach a desired end
- Provides data to better understand how your facilities are currently being used
- Contains analysis and information to assist the district in making facility decisions balancing educational and financial needs



Master Facilities Plan Focus

- Health Life Safety Survey
- Infrastructure Assessment
 - Systems approach based on useful life
 - Long-term view of major capital costs
 - Overall building condition
- Capacity and Educational Program
 - Core spaces and capacity
 - Flexibility for future improvements and options



Replacement Costs

- The buildings and sites are a valuable investment made by the community and prior boards
- To replace all of the buildings, site improvements and furniture in today's dollars would be \$277 million
- The HVAC replacement work was a significant step in protecting this investment by upgrading aging infrastructure





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FINDINGS AND BUDGET



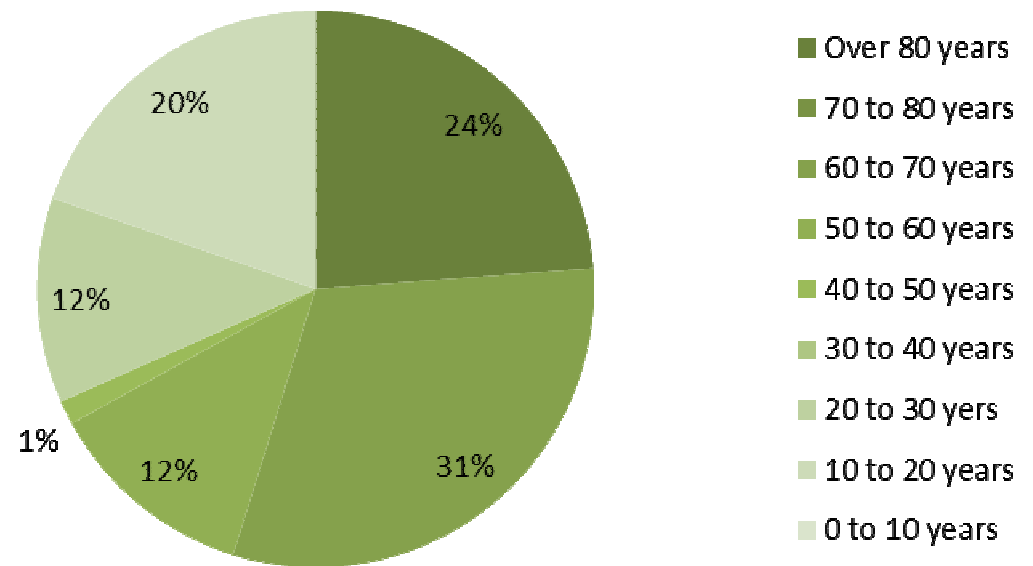
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Infrastructure

- Buildings are structurally sound and safe
- The district will need to continue to replace systems that are past their useful life



Significant Infrastructure Projects

- Student spaces should be moved from the Lower Level of Washington
- Jefferson School is in need of a major renovation
- Based on age and condition Lincoln Middle School should be considered for renovation including:
 - Toilets
 - Locker Rooms
 - Interior Upgrades



Capacity Model / Planning Numbers

- Capacity model is a tool to assess how space is used in each building using identical criteria
- The Planning Number is a benchmark to compare facilities
- Exceeding the Planning Number may not require immediate changes
 - Short-term measures
 - Additional study of enrollment trends



Elementary School Criteria

- Dedicated Art Room of approximately 1,200 square feet including storage and kiln rooms
- Dedicated Music Room of approximately 1,000 square feet
- Primary Art / Music Room for buildings with over 22 sections
- 1 Self-contained Special Education Room per Building



Elementary Gymnasium / Art / Music

Square Foot Comparison								
School	Gymnasium 1	Gymnasium 2	Total Gymnasium Area	Art Room 1	Art Room 2	Music Room 1	Music Room 2	Instrumental Sectionals
Carpenter	3,567	2,380	5,947	1,339		833		306 Lower Level
Field	2,825	3,567	6,392	1,183		Stage	None	Kitchen
Franklin	5,223		5,223	828		838		
Roosevelt	2,703	3,572	6,275	1,086	671	671	Stage	Lobby
Washington	6,332		6,332	1,156		Lower Level	Stage	



Middle School Capacity Model

- Middle Schools run a hybrid program with core classes and exploratory classes
- Many rooms are used for both core classes and exploratory classes
- Capacity model efficiency is based on the scheduling complexity of the program
- Both Middle Schools have a similar number of teaching stations



Capacity Model / Planning Numbers

Elementary Schools

School	Calculated Planning Number		Current Enrollment (April 2015)		Planning Number to Enrollment above or (below)	
	K	Grades 1-5	K	Grades 1-5	K	Grades 1-5
Carpenter	79	438	71	374	8	64
Field	79	553	86	568	(7)	(15)
Franklin	79	438	75	394	4	44
Roosevelt	119	599	104	563	15	36
Washington	79	484	88	527	(9)	(43)

Middle Schools

School	Calculated Planning Number	Current Enrollment (April 2015)	Planning Number to Enrollment above or (below)
Emerson	823	837	(14)
Lincoln	823	718	105



Capacity and Educational Program

- Program needs exceed available space at Field and Washington
 - 10% less area per student than average
 - Field Elementary
 - Lowest square footage of student support space
 - Smallest average classroom size
- Gymnasium space is over-scheduled at Field, Roosevelt and Washington
 - Required space is 120% of available



Capacity and Educational Program

- All elementary schools lack flexibility for changing educational needs
- Special education and student support spaces throughout the district are inconsistent
- Middle Schools
 - District-wide there is sufficient Middle School capacity
 - Emerson Middle School is overcrowded



Budgets

– Construction Costs (Hard Costs)

- Buildings, Sites, GC, OH&P, Contingency, Environmental, FFE and Escalations

– Owner's Cost (Soft Costs)

- Consultants, Legal, Surveys, Soil Borings, Testing, Printing, Utility Costs, Moving and Security

– Other Project Costs (not included)

- Technology Equipment, Land Acquisition, Financing, Staff Salaries, Operational Costs, Owner's Contingencies



Project Budget Categories

- Health Life Safety
- Infrastructure Assessment
- Secured Entrances / Learning Resource Centers / Multipurpose Auditorium Spaces
- Sites
- Capacity Model and Program Spaces
- Other Projects
- Kindergarten / Early Childhood Investigation





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PROJECTS



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Health Life Safety Codes

YEAR	1928-29	1930's	1940's	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14																															
ELEMENTARY SCHOOLS				1950 - George B. Carpenter Elementary School 1954 - Addition 1955 - Addition																1967 - Addition																1994 - Addition																																																															
	1928 - Eugene Field Elementary School			1930 - Addition 1951 - Addition																1963 - Addition 1967 - Addition																																																																															
				1955 - Benjamin Franklin Elementary School 1956 - Addition																																1990 - Addition																																																															
	1928 - Theodore Roosevelt Elementary School			1930 - Addition 1946 - Addition																1960 - Addition																1986 - Addition																1994 - Addition																																															
				1951 - George Washington Elementary School 1953 - Addition																																1989 - Addition 1993 - Addition																																																															
MIDDLE SCHOOLS																																				1998 - Ralph Waldo Emerson Middle School																																																															
	1928 - Abraham Lincoln Middle School			1931 - Addition 1946 - Addition																1956 - Addition																																																																															
OTHER FACILITIES				1936 - Hendee Educational Service Center																																																																																															
				1954 - Thomas Jefferson School 1960 - Addition 1963 - Addition																1967 - Addition																																																																															
BUILDING CODES AND STANDARDS	Health/Life Safety Survey																			1965-67 Initial Inspection																1983-85 Resurvey																1993-95 (or every 10 years) Resurvey																2003-05 (or every 10 years) Resurvey																															
	Illinois School Building Codes			PART 185 Retroactive Code for Existing Buildings																PART 175 Model Code																PART 180 1993 BOCA 1996 BOCA																2003 IBC 2006 IBC 2009 IBC																																															
	NFPA 101 Life Safety Code																			Chapter 7 - Means of Egress 1967 Edition																																																																															
	ISBE Retroactive Codes			Pre-7/1/65 1993 BOCA FP and PM Codes + Part 185																7/1/65 to 7/6/98 1993 BOCA FP and PM Codes + Part 175																7/6/98 to 10/3/05 1996 BOCA FP/PM																10/3/05-Present Most Recent IFC and IPMC																																															
	Sprinkler Requirements																																			Illinois School Sprinkler Law 1991, Repealed 2005																Part 180, Section 180.250 IBC Requirements																																															
	Illinois Plumbing Code																			1969 Initial Adoption																1983 Amendment																1993 Revision																1998 Amendment																2004 Amendment															
	Accessibility Standards																			1973 Rehabilitation Act of 1973, Section 504																1990 ADA																1997 Illinois Accessibility Code																2010 - ADA UPDATE																															
Energy Conservation Code																																																																			2004 - IECC																																



Health Life Safety Projects

- No *Urgent* life safety items were identified
- *Required* and *Recommended* items are included in the life safety budget
- Five years to complete HLS projects
- Leverage dollars required to complete HLS work with other projects



Entrances / LRC/ Auditorium Projects

- Secured Entrances
 - Lockable entry – options for level of access
 - Hardened entry vestibule
 - Visual supervision and management from main office
- Additional security related items included in infrastructure list



Entrances / LRC/ Auditorium Projects

- Learning Resource Centers
 - Increased flexibility
 - Collaborative spaces
 - Fit space to learning experiences
 - Improvements would impact all students
- Multi-purpose Auditorium Spaces
 - Currently limited use by students during day
 - Greater flexibility for multi-purpose uses
 - Improvements would impact all students



Long-Term Site Design Considerations

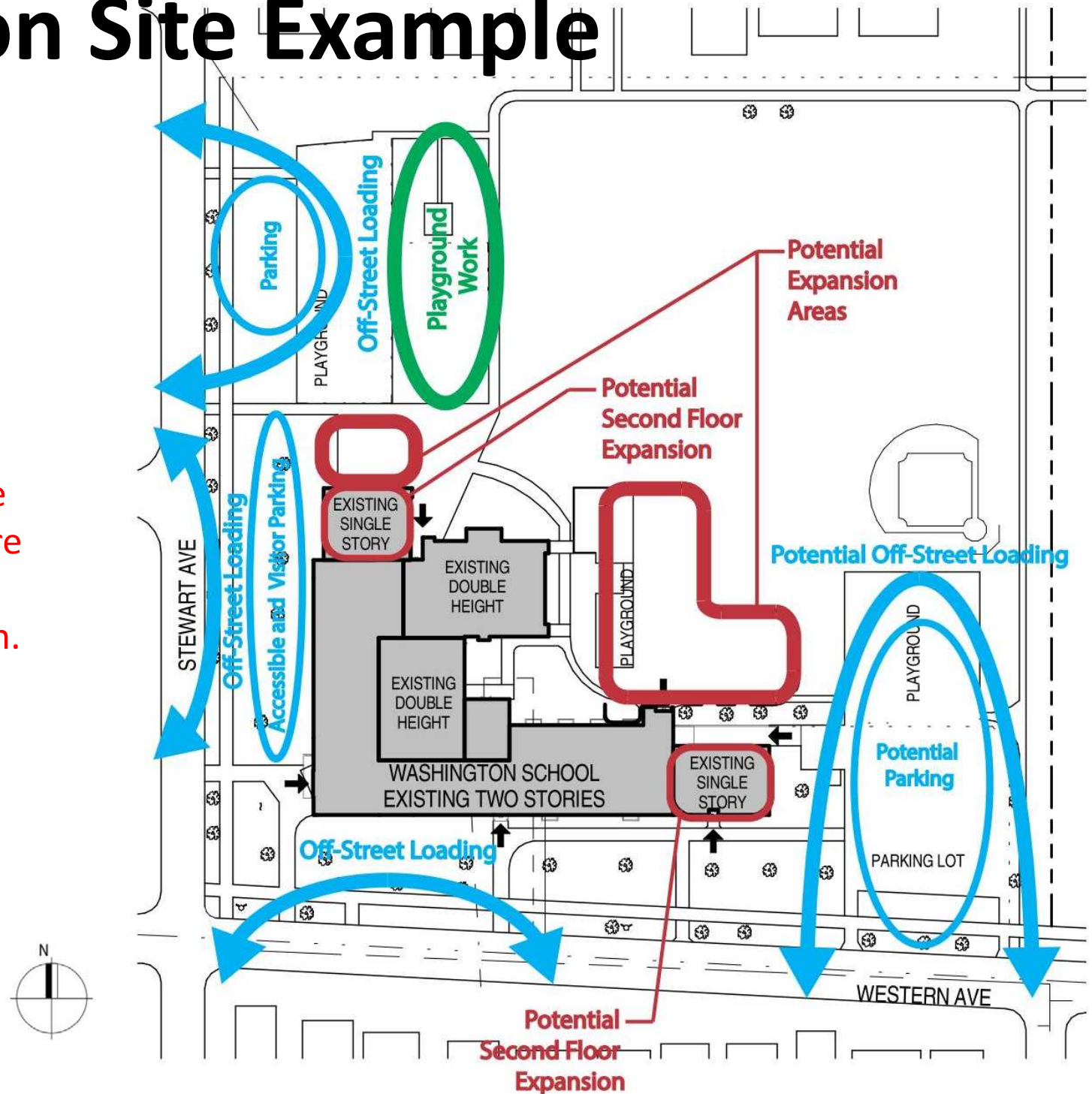
- Off-street bus loading
- Student Drop-off and pick-up
- Visitor and handicapped parking
- Staff Parking
- Playgrounds
- Hard play area
- Drainage and water retention



Washington Site Example

These studies represent possible future changes to address site needs.

Any work done now should not eliminate the possibility of these future scenarios without thoughtful consideration.



Capacity Model and Program Projects

- Four to Eight elementary classrooms
 - Flexibility across district
 - To accommodate dedicated Art and Music Rooms
- Reconfigure space at each school for more efficient use of small group space, offices and storage
- Future consideration of additional Physical Education space
 - Joint use with Park Districts



Capacity Model and Program Projects

- Lincoln Middle School
 - Modern science facilities
 - Relocate some exploratory program spaces from third floor
 - Most cost effective solutions may also increase capacity
- Emerson Middle School Addition budgeted to explore cost of space at that site
 - Two Sixth Grade Science Laboratories
 - Four Classrooms



Carpenter Elementary Projects

- Fire -rated ceiling patching to separate attic
- Corridor separation door replacement for fire rating
- Room / corridor door replacement and modification for fire rating and ADA
- Room-to-room door replacement at fire rated walls
- Attic access panel replacement
- Attic separation wall patching and portal replacement
- Roofing replacement (flat and pitched area)
- Corridor carpet replacement / asbestos removal
- Rekeying building
- PA system
- Electrical panel boards
- Galvanized water piping
- Energy efficiency, occupancy sensors and exterior lighting
- Toilet room exhaust, floor drains, thermostatic mixing valves
- ADA sinks



Field Elementary Projects

- Wood frame and deck construction third floor attic ceiling separation
- Window replacement
- Room / corridor door replacement for fire
- Corridor separation door replacement for fire
- Room to room door replacement for fire
- Rekeying building
- PA system
- Electrical panel board
- Galvanized water piping
- Energy efficiency, occupancy sensors and exterior lighting
- Plumbing fixtures
- Asbestos tile removal / carpet replacement
- Existing office to become classroom
- Room 108 becomes Primary Art/Music
- Reconfigure entry at LRC to capture corridor space
- Reconfigure rooms 134 and adjacent storage into classroom



Franklin Elementary Projects

- Fire-rated door replacement
- Additional fire alarm device installation
- Corridor separation door replacement for fire rating
- Fire alarm device installation
- Roofing replacement (except 1990 addition)
- Rekeying building
- Masonry cleaning
- PA system
- Emergency generator
- Electrical panel boards
- Fire alarm system
- Plumbing fixtures
- Galvanized water piping in walls
- Asbestos floor tile removal (carpet replacement)



Roosevelt Elementary Projects

- Compartmentalize attic space
- Room/Corridor door replacement and modification for fire rating and ADA
- Corridor separation door replacement for fire rating
- Fire alarm device installation
- Fire rated ceiling to separate attic
- Roof replacement
- Asbestos floor tile (first floor classroom completed)
- Rekeying building
- PA system
- Galvanized water piping
- Spalling brick replacement
- Renovate existing office into classroom
- Renovate existing classroom into a second Music Room



Washington Elementary Projects

- Room/ Corridor door replacement and modification for fire rating and ADA
- Corridor separation door replacement for fire rating
- Attic access panel replacement
- New flat roof area and repair at pitched area
- Rekeying building
- Flooring / Asbestos floor tile removal
- PA system
- Electrical panel boards
- Energy efficiency, occupancy sensors and exterior lighting
- Galvanized water piping (30%)



Emerson Middle Projects

- Fire alarm device installation
- Roof, flat areas and repairs at pitched areas
- Rekeying building
- Energy efficiency occupancy sensors and exterior lighting
- Carpet replacement



Lincoln Middle Projects

- Room/Corridor door replacement and modification for fire rating and ADA
- Corridor separation door replacement for fire rating
- Fire stopping
- Non-corridor fire rated door installation
- Attic separation and compartmentalization
- Roofing replacement
- Accessible toilets and toilet distribution
- Window replacement
- Rekeying building
- Plaster repair
- PA system
- Electrical panel board
- Galvanized water piping
- Energy efficiency, occupancy sensors and exterior lighting
- Asbestos floor tile removal



Jefferson School Projects

- Projects at Jefferson School need to be completed after consideration of district-wide issues
 - Use of a portion of the facility by a private day-care provider
 - Use of site for expanded program needs



Jefferson School Projects

- Institutional standards for day care use
- Room/Corridor door replacement and modification for fire rating and ADA
- Corridor separation door replacement for fire rating
- Attic access panel replacement
- Fire stopping at tops of demising walls
- Ceiling repair to close openings to attic
- Replacement of non-rated closet ceilings
- Roofing replacement
- Mechanical system
- Galvanized water piping
- Interior finishes and asbestos removal
- Rekeying building
- PA system
- Emergency generator



Other Projects

- Renovate Hendee Educational Service Center
 - Renovate main level for more efficient work space layout
 - Renovate lower level as a meeting space and training center
 - Accessible and quantity of restrooms
 - Rekeying building
 - Identify area for parking for training attendees
- Maintain Technology Office and MDF at Emerson / Jefferson site
- Utilize Lower Level of Washington for district uses



Kindergarten / EC Investigations

- Three alternatives have been explored to provide the district with the information regarding the facility needs



Kindergarten / EC Investigations

– Alternative 1 - \$11.8 Million

- Full day kindergarten at existing elementary schools
- New or remodeled Kindergarten Rooms at each elementary school

– Alternative 2 - \$35.8 Million

- Centralized full day kindergarten at Emerson / Jefferson site
- Significant site changes not included
- No Renovation for 11 classrooms gained at elementary schools

– Alternative 3 - \$29.0 Million

- Centralized half-day kindergarten at Emerson / Jefferson site
- Significant site changes not included
- No Renovation for 11 classrooms gained at elementary schools



Project Prioritization

Priority One - Violation of the code or a health / safety concern or significant additional costs if item is not addressed

Priority Two - Necessary to comply with a recommended standard or increase operating efficiency or extend the useful life of the building or a system

Priority Three - Improve the quality of materials or systems or reduce the risk of future failures or the enhance performance of a system

The budget summary includes Priority 1, 2 and 3 projects, the breakdown by priority category will be indicated in the final report



Budget Ranges

- Budget ranges have been developed based on the six project categories
 - The high range would represent costs if each project were constructed individually and allowing for some unforeseen conditions.
 - The low range would represent costs if multiple projects were constructed at the same time and with no significant unforeseen conditions
- Some of the listed projects address identified needs in different ways, proceeding with one project would eliminate the need to complete other identified projects



Budget Summary

HLS and Secured Entrance Projects

Category	Low	High
Health Life Safety	\$9.6 Million	\$12.6 Million
Secured Entrances	\$6.1 Million	\$6.8 Million



Budget Summary

Projects (continued)

Category	Low	High
Infrastructure	\$24.6 Million	\$27.6 Million
Sites	\$10.5 Million	\$17.0 Million
Learning Resource Centers	\$5.1 Million	\$5.7 Million
Auditoriums	\$3.7 Million	\$4.9 Million
Capacity Model and Program Spaces	\$24.9 Million	\$30.9 Million
Other Projects	\$2.6 Million	\$3.1 Million





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RECOMMENDATION / NEXT STEPS



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Recommendations

1. Submit 10-year Health Life Safety Report
2. Investigate options for the Secured Entrances / Learning Resource Centers / Multipurpose Auditorium Spaces
3. Prepare options for implementing the facility needs identified in this report

The work of the Design Team (District administrators, architects and other consultants) should continue to review the data, information and findings of the HLS / MFP report and to implement these recommendations



Recommendation One

- Submit 10-year Health Life Safety Report
 - The Report identifies projects to address needs based on the Health Life Safety Code
 - The Board will need to approve submission of this report to the State
 - Start planning to implement HLS items over the next five years in coordination with other work that may be done across the district



Recommendation Two

- Investigate options for the Secured Entrances / Learning Resource Centers / Multipurpose Auditorium Spaces
 - The Design Team should start the design process and prepare preliminary concepts for each facility
 - In the fall of 2015 present a recommendation to the Board
 - Bid some or all of the projects at the beginning of 2016 for summer 2016 construction



Recommendation Three

- Prepare options for implementing priority projects identified in this report
 - Solicit Board comments and questions on report
 - Continue to prioritize needs
 - The Design Team will evaluate educational impact of facility projects
 - The Design Team will prepare implementation recommendation for Board consideration of a five-year plan in fall of 2016

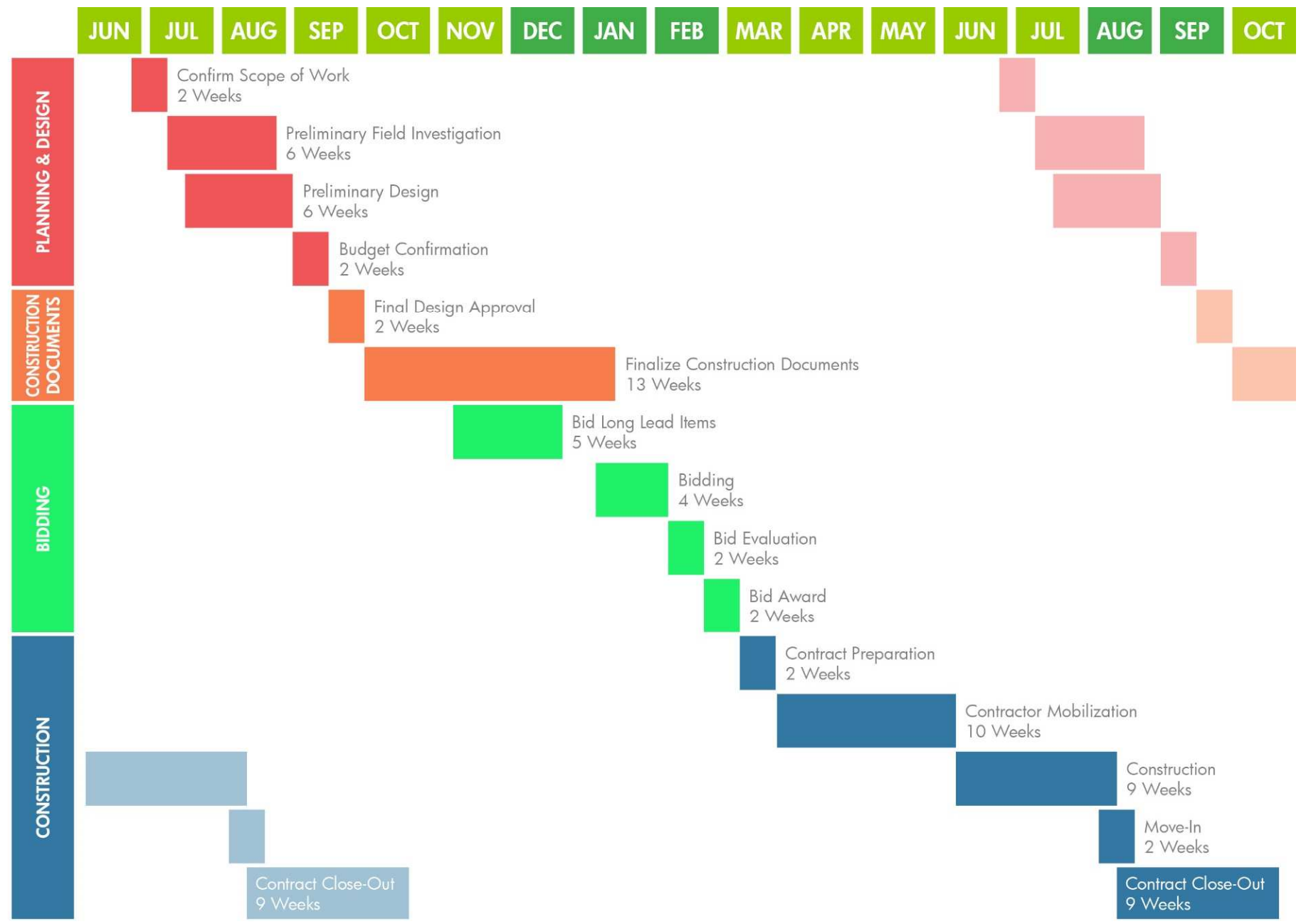


Design Process

- The identified projects are not final solutions, they are concepts to establish general scope and budgets
- When and if the Board authorizes a project to proceed into the design phase the following steps would be taken:
 - Design Committee including administration and building staff explore options
 - Preliminary design and budget verification for Board approval
 - Final design and bidding documents prepared and issued for public bid
 - Board approval of bids for construction



16 Month Design and Construction Schedule



Years 6 to 10 (2021 to 2026)

- Some building systems that are not in need of repair today will need repair or replacement in years 6 to 10.
- Anticipated costs for major systems will be included for years 6 to 10
 - Roofs / Windows / Doors
 - HVAC / Electrical / Plumbing
 - Low Voltage
 - Sites



Years 6 to 10 (2021 to 2026)

- Learning and teaching strategies impacting interior layout and design
 - Technology
 - Collaborative work
 - Inquiry and problem based learning
 - Personalized learning
- Interior system
 - Fit and finishes
 - Casework
 - Furnishings



Operations and Maintenance Costs

- Operation Costs

Reoccurring costs to provide the necessary services to keep the building open and habitable

- Maintenance and Repair Costs

Expected costs to off-set the normal deterioration of building elements based on age, wear and tear, weather and water



Continual Improvement

Master Facilities Plans are designed to build upon one another and have a long term, cumulative impact on your overall portfolio of buildings and infrastructure. This plan and its eventual outcomes will become a foundation for the next Master Facilities plan, which should be completed five years from now and be the next step in a continual improvement process



Continual Improvement

