MANCHESTER SCHOOL DISTRICT

Southside Middle School

Educational and Facilities Master Plan

smma

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Summary

Included in this report are assets that were collected during the long term facility planning process. Each school's report package contains an At-A-Glance summary report, Facility Evaluation Criteria sheets, and site plan(s). Site plans are included to illustrate the context of the building in relationship to the city, neighborhood, and other adjacent amenities and parcels. The At-A-Glance summary sheets include general information about each school building including school data, such as population and grade structure, etc., site and building data, tax assessor's information, community uses, State of NH Code of Administrative Rules, Operational Data, and Cost model information for repairs and renovations. The Facility Evaluation Criteria sheets are the facility assessment team's findings at each Tier 1 school building including building physical assets, sites, and educational facility effectiveness. On April 24, 2023, the assessment team visited all the Tier 1 school buildings.

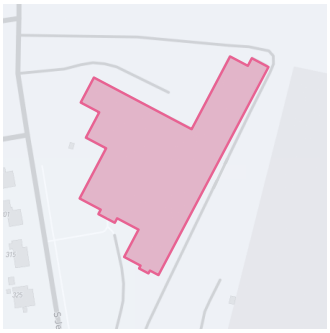
SCHOOL NAME

Southside Middle School

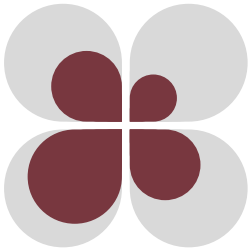
SITE VISIT

August 2023

At-a-Glance



FA: Building FA: Site



EFE: Learning EFE: Spaces

Excellent Deficient

Address
300 South Jewett Street, Manchester, NH 03103

Gross Square Footage (GSF)
116,648 sf

Grades
6th Grade–8th Grade

Site Acreage
47

Hours of Operation
7:25am–2:20pm

Date of Construction
1967

2022–2023 Enrollment
781

Date of Addition Construction
2005

SCHOOL NAME

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Site Plans

SCHOOL NAME

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Facility Evaluation Criteria

Physical Analysis	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Roof Membrane (Architectural)			●		
	"The original roof was replaced in 2004/2005 when the new classroom addition was constructed. Roof edge metal appears to be in good condition. All roofs are beyond their useful lifespan and typical warranty period, so replacement is recommended."				
Existing Photovoltaics					○
	"N/A"				
Space for Solar on Roof					○
	"Space on roof is available, exact locations and SF size can be evaluated."				
Façade		●			
	"Masonry appears to be in good shape. Aluminum vertical fins are damaged in several˜ areas at the base. Paint and finishes are chipping ad worn at exterior doors, columns and˜ canopies in several areas."				
Windows			●		
	"Windows and curtainwall systems in the original building are single paned glazing and are at the end of their useful life expectancy. Windows in the 2004/2005 addition are double paned aluminum window systems. Several exterior doors and windows were replaced in 2004/2005 with double paned aluminum systems."				
Boilers (Mechanical)			●		
	"There is one new Aerco boiler and two older boilers. It looks like the burner/ controls of the boilers has been recently replaced/replacement is in process."				

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REPORT TYPE

Facility Evaluation

Physical Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Boilers (Plumbing)			●		
"Refer to mechanical report for HVAC boilers. Domestic water heating - the domestic water is heated through a gas fired hot water boiler (Laars PW0715IN09KLACXX). The boiler was manufactured in 1999 and is 23 years old which is past the life expectancy of 10-15 years. Replacement is recommended. The system also includes two 156 gallon storage tanks."					
Heating Distribution Systems		●			
"Piping and insulation appeared to be in working condition. Building uses perimeter fin tube radiation in most spaces also in good working condition."					
Building Envelope Thermal Performance		●			
"Original building (1965) only has minimal building insulation at walls and slab. Approximately 3" of insulation was added to the roof when it was replaced in 2004/2005. The 2004/2005 classroom addition includes 2" of insulation at the walls and an air vapor barrier. This does not meet current energy codes. Not˜all building entrances have vestibules."					
Interior Finishes		●			
"Interior finishes have been well maintained. Most of the VCT flooring in the classrooms was replaced in 2004/2005. Also, in 2004/2005 most spaces were painted and new toilet compartments were installed at the ganged toilet rooms. They appear to still be in good shape. Original tile in toilet rooms is worn and˜dated. 2x4 ceiling tiles are prone to warping and bowing. Gym wood flooring is in˜good shape."					
Rooftop HVAC Equipment				●	
"Venmar units on roof are working but reaching the end of useful life. Exhaust fans appear to be working."					
HVAC Controls			●		
"JCI Metasys (District standard). Various types of thermostats throughout the building, some are showing significant ware."					
Technology Infrastructure				●	
"Bandwidth of fiber optic and copper network cabling is inadequate for School Communications. Telecom Rooms are not adequately secured allowing staff to use them for storage."					
Technology Systems				●	
"Telephone and WiFi systems are at the end of useful life. Network switches have been recently replaced. Not all Telecom Rooms are air conditioned, leaving equipment vulnerable to overheating."					

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REPORT TYPE

Facility Evaluation

Physical Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Security Systems		●			
"The City is working with a Security Systems Vendor to deploy 500 CCTV cameras throughout the District's Schools. Adequate bandwidth is a concernfor transmitting video. Notification and Lock Down systems are not present. Indoor cellular signal booster system is desired."					
Kitchen Equipment and Systems (Electrical)		●			
"Kitchen receptacles were observed non-GFCI type and shall be replaced. Kitchen panels are manufactured by FPE, appear "original" to the building, beyond their useful life expectancy."					
Kitchen Equipment and Systems (Plumbing)			●		
"The kitchen equipment is electric. (Gas not present). The hood is protected by a wet chemical suppression system (with an agent tank mounted high adjacent to the hood). The triple pot sink has a floor mounted grease trap installed at the end of the waste piping. Equipment appears in fair working order. Piping is a mix of exposed copper, chrome plated, and PVC. There is exterior pipe discoloration on the metal piping below the sinks. The piping is old and could use replacement. Although PVC is an acceptable material for waste piping per the NH plumbing code, it is not typically installed in commercial kitchens as there are durability and cleanliness concerns. Replacement is recommended. The sink with the garbage disposal is not in operation (sign stating not to use)."					
Natural Gas Distribution System	●				
"The natural gas enters the building and feeds the gas fired boilers, domestic hot water boiler and science class room turrets. The gas valves under the cabinets in the classrooms have been shut off. Visual inspection of the gas lines was limited to areas with exposed piping. Above ceiling piping was not observed. The exposed portions of the piping system appears in good working order."					
Current Fuel Source	●				
"The building has a natural gas service fit with a meter and regulator assembly. The riser is labeled as elevated pressure. The system splits into two pressure regulated lines prior to entering the building in two locations The service is in good working order."					
Generator					○
"N/A"					
Elevator		●			
"The elevator was added in 1980. Due to age of elevator, controls replacement may be required and cab finishes need˜to be updated."					

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REPORT TYPE

Facility Evaluation

Physical Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Ventilation Distribution Systems		●			

"Observable ductwork was in good condition. Ductwork on roof also looks good but is not insulated. Classrooms used ceiling supply low return. Office areas have cooling."

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Electrical Services		●			

"Exterior pad-mounted utility transformer by PSNH is located adjacent to the building outside of the Main Electric room. It's currently installed too close to the building wall/ building windows, and the enclosure is rusted/damaged. It is suggested to review the current installation and transformer's condition with PSNH to verify if the replacement/reinstallation would be advised. The utility transformer's secondary feeder is terminated in the Main Switchboard rated 1,000 Amp 277/480v 3ph 4w. The Main Switchboard is located in the Main Electric room G4 at the Ground floor. The switchboard appears aged, "original" to the building constructed around the year 1965, which would make it beyond its useful life expectancy (usually about +/- 40 years), and therefore it's recommended for replacement. Additionally, the switchboard is manufactured by Federal Pacific (FPE) which were discontinued since around year 1980, and considered unreliable by experts these days. Panels fed downstream from the main switchboard are installed throughout the building, both surface- and recessed-mounted. They consist of the "older" (appear to be installed around the year 1965 "original" construction) and "newer" (added during the building renovation project around the year 2004). The "newer" panels appear in good operational condition. The "older" panels were observed in "aged" poor-to-fair condition. These panels are manufactured by Federal Pacific and are recommended for replacement with associated power feeders from the Main Switchboard."

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Life Safety: Means of Egress (Architectural)		●			

"Stair guardrails in original portions of the building do not meet code required heights.˜ Egress stairs in original portions of the building do not have continuous handrails on˜ the inner side. Quantity and locations of egress stairs and doors appear to be adequate although not all exits are accessible."

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Life Safety: Means of Egress (Electrical)	●				

"Self-contained internally lighted LED exit signs and battery units are provided along egress pathways. Emergency lighting throughout is observed in adequate operational condition."

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Facility Evaluation

Physical Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Life Safety: Fire Protection (sprinklers)	●				
	"The building is currently provided with an automatic sprinkler system and standpipe system. Installation drawings indicate that the system was installed in 2005. A 6-inch fire service enters the far side of the buildings fall out shelter. The service runs the length of the shelter into a 6-inch double check valve assembly that is also within the shelter. The 6-inch line enters the main building and enters the mechanical/fire pump room. The system is supplemented by a 1000 gpm, 70 psi Patterson electric driven fire pump. The fire pump, jockey pump, controllers and related components are all installed within the mechanical room. Standpipes are located within the exit stairs. Fire department valves are provided at each floor. Based on the pressure gauge at the top of the standpipe (reading approximately 165 psi) the fire pump provides more than 100 psi at the most remote standpipe. Since the fire pump can meet the standpipe pressure requirements, the system is considered an automatic standpipe system as opposed to manual. The area below the stage has a fire department valve on both sides (stage side) in accordance with current code requirements. Extended coverage sprinklers are utilized throughout many areas of the school (in particular, classrooms and corridors). The basement unfinished area (fall out shelter) is also protected with automatic sprinklers. The area below the stage is also protected with sprinklers."				
Life Safety: Fire Alarms	●				
	"The Fire Alarm (FA) system was designed and installed around the year 2004 and shows some later upgrades. The FA system is zoned, manufactured by Notifier, consisting of smoke and heat detectors, double action pull stations, speaker/ strobes and strobe only units. All classrooms and similar educational spaces, corridors, teacher areas, etc. are equipped with signaling devices. The Fire Alarm Control Panel (FACP), radio master box and FA graphic map are in the main entrance lobby. The FA equipment was observed in good operational condition."				
Security: Entry Sequence		●			
	"Main entrance has controlled card access. Although office is adjacent to main˜ entrance, there is no visual access to the exterior or into the main vestibule. The door leading into the main office is past the entry vestibule."				
Lighting Quantity / Control	●				
	"Interior lighting was observed in good operational condition. Recent upgrades include the new 2'x'4' and 2'x2' recessed "basket reflector" type LED lights with integral occupancy sensors installed in classrooms and similar educational spaces, corridors, cafeteria, bathrooms, etc. and 2'x'2 LED pendant lights with occupancy sensors in Gym. Overall, adequate lighting illumination levels were observed throughout."				

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REPORT TYPE
Facility Evaluation

Physical Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Toilets and Fixtures			●		

"The fixtures are dated and could use a refresh/replacement in many locations. Drinking fountains have been replaced with bottle filling stations in a few locations, but the old style remains in a few locations as well. The flow rates of the fixtures could not be confirmed, but it is assumed that the fixtures do not meet current low flow sustainability requirements. Replacement fixtures should be low flow type. Many fixtures in the toilet rooms do not appear to meet ADA accessibility requirements."

Plumbing Distribution Systems		●			

"Observations of the plumbing distribution was limited to piping within mechanical rooms, unfinished basement (shelter), and exposed piping in some areas. The domestic water service enters the building and goes through a meter and reduced pressure backflow preventer. The age of the copper piping throughout the building varies. Piping greater than 40 years old (lifespan 40-50 years) should be evaluated (sample destructive testing, water quality testing) to determine the condition and help estimate the longevity left in the piping. Original valves and pipe solder pre-date current lead free regulations and requirements. Exposed sanitary and storm piping within the unfinished basement area (shelter) looks ok. There are signs of exterior pipe corrosion at the elbows/ fittings. The condition of the interior of the piping is not known. The expected lifespan of cast iron piping is 50 years. Therefore, original cast iron piping should be scoped/tested to confirm the expectancy left in the piping."

Accessibility (Architectural)		●			

"Most entrances and exits are not accessible. Handrails to do not meet accessibility codes. Only a couple toilet rooms in the original building were renovated to be made accessible. In two of those cases, toilet stall were made accessible, but door clearances and wheelchair turning radius requirements are not met. Several interior doors do not meet the required door clearances. Classroom sinks in the original building are not accessible. Accessible sinks in the new addition are being blocked by storage boxes and are not˜readily usable. Drinking fountains and wall mounted accessories and equipment encroach more than 4? into˜accessible routes and corridor widths."

Accessibility (Plumbing)	●				

"Some fixtures do not meet ADA requirements. Toilet stalls not large enough, lavatory trap insulation is not present."

Structural Systems: Signs of Deterioration Observed?

	YES	NO
Roof		✕

"Concrete slab and beams at roof. Classroom 111 observed."

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REPORT TYPE
Facility Evaluation

Structural Systems: Signs of Deterioration Observed?

	YES	NO
Floor		✕
"Floor framing not visible. Assumed bar joists and form deck."		
Walls / Columns		✕
"CMU masonry walls throughout the building."		
Foundations		✕
"Foundation is in sound condition."		
Façade		✕
"Exterior masonry walls are in good condition."		
Is Lateral System Identifiable?	✓	
"Concrete and masonry shear walls."		

Community

	YES	NO
Emergency Shelter	✓	
"Main Shelter for South Campus."		
Are there Separate Community / Non-School Spaces on Site?	✓	
The site is shared with Clem Lemire Athletic Complex, which is operated by Parks and Recreation and can be reserved for community use.		

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Site Evaluation Criteria

Physical Analysis	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Parking Capacity		●			
"Parking for faculty only, at rear entrance to building. Visitors may use athletic facility parking with stairs or long sloped bituminous walkway to access building. Some parking at Southside labeled "Jewett St Staff Parking Only.""					
Parking Quality	●				
"Some damaged pavement. Confusing circulation of parking and vehicular access. Needs restriping. Long travel distance from visitor parking to school entrance."					
Ground Cover	●				
"Some landscaping. Natural meadow area down the slope from school. Minimal shading provided by plantings."					
Fields	●				
"Shares access to athletic fields/facilities with Memorial High School. Basketball hoops along fire lane, relatively narrow for play."					
Neighborhood Streets	●				
"Sidewalk and crosswalk connections to neighborhood streets off Jewett St. Multiple driveways/vehicular loops off of Jewett St and drop off points along Jewett St likely cause traffic congestion and disruption to adjacent neighborhood streets."					
Drop-off / Pick-up Routes			●		
"Bus drop off loop at main entrance with sloped bituminous walk up to entrance. Car drop off/pick up along Jewett St or down at athletic facility parking lot. Confusing circulation patterns and signage. Traffic and accessibility concerns associated with current layout."					
Walkways / Curbs / Sidewalks		●			
"Minimal separation of vehicular and pedestrian spaces. Walkways connect directly to driveways with no curbing/barriers/indicators of separation."					

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REPORT TYPE

Site Evaluation

Physical Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
ADA Accessibility			●		
"ADA spaces and accessible entrances from staff parking lot. Steep slope up to main entrance from drop off loop. No accessible entrances along lower level."					
Site Lighting (Civil)	●				
"Some non-LED fixtures on site."					
Site Lighting (Electrical)	●				
"Exterior building-mounted lighting consists of a mix of "older" and new LED type wall packs, in operational condition. The "older" lights are suggested to be replaced with energy-efficient LED lights. Pole-mounted lights appear to be owned by the utility company."					
Fencing	●				
"Fences around mechanical equipment and separating fire lane and basketball hoops from adjacent slope/field."					
Drainage	●				
"No drainage structures along lower level of school. Runoff likely sheet flows across prevent into field below (no curbing). Front plaza and loading area drain to CB in lawn or down to CB in bus lot. Some erosion and sediment washout. No curbs/gutters to direct drainage flowpath."					
Play Areas		●			
"Site shares field access with Memorial school. No dedicated lot for play. Basketball hoops along fire access lane."					
Monuments and Memorials	●				
"None observed at this site."					
Walls / Slopes	●				
"Site slopes from west to east, creating some topographic challenges for accessibility, but no major slopes or retaining walls."					

Physical Analysis

	YES	NO
Are there any Wetlands on Site?	✓	
"Wetlands between Southside and Jewett indicated on record site plans."		

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Site Evaluation

Physical Analysis

	YES	NO
Are there any Easements on Site?	✓	
"Utility poles and overhead wires across field between high school, middle school may have easements for electrical provider. Adjacent church parking lot appears to cross property line, may have easements. No easements shown on GIS."		
Are Play Structures Age-Appropriate?	✓	
"School has access to athletic facilities shared with Memorial High School. Fire lane with basketball hoops relatively narrow for play."		
Is there an Outdoor-Learning Area?	✓	
"Some picnic tables in grassed area. not accessible, no shading, adjacent to busy road with traffic and noise."		
Should there be a Question on Environmental Justice Populations / Vulnerable Populations?		✕
"NH GIS designates site as "Medium" Social Vulnerability Index, based on census analysis."		
Is the Building Expandable on the Current Site?	✓	
"Existing building/site relatively narrow. Possible room to expand into parking areas towards adjacent church parcel between Southside and Jewett. Expansion towards Memorial not impossible, but unlikely due to grading challenges, overhead utilities, and natural resources."		
Is the Site Expandable?	✓	
"Possible expansion if adjacent church parcel between Southside and Jewett is acquired. Opportunities to redevelop bus drop off loop to more efficient design. Expansion towards Memorial not impossible, but unlikely due to grading challenges, overhead utilities, and natural resources."		

Community Analysis

	YES	NO
Historical Commission Status: Inventory of Archaeological Assets (Site Review)		✕
"The site is not listed on the National Register of Historic Places (per the National Park Service website)ÿor the New Hampshire State Register of Historic Places (per the New Hampshire Division of Historical Resources website). The site is also not within the Manchester Historic District or listed as a locally-designated historic site, per Manchester GIS."		

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REPORT TYPE

Site Evaluation

Community Analysis

	YES	NO
Are there School Buses?	✓	
"Designated bus drop off loop. 7 MTA and 10 SPED buses, per bus counts provided by the district."		
Bikeable?		✕
"No designated bike lanes along Jewett St."		
Walkable?	✓	
"Sidewalk connections along S Jewett St. Cross-campus connections to Memorial and S Porter St through athletic complex, via ramps or stairs. ADA accessibility of sloped walkways unknown."		

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REPORT TYPE

Site Evaluation

Traffic Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Bike Facilities	●				
	"Bike rack not fixed to anything."				
Parking **Parking lot**		●			
	"Oddly shaped lot with two driveways very close to each other and no signage or markings for directionality. Broken fence on SE side of lot. Broken pavement in middle of lot. Broken fence between school lot and church lot."				
Pedestrian Connections **Behind school**	●				
	"Crack in path near SE corner of school."				
Pedestrian Connections **Between school and Memorial HS football field**	●				
	"No crosswalks or detectable warning panels at any of the three start/end points. Pedestrian crossings should be evaluated for ADA compliancy. No sidewalks near NE start/end point."				
Sidewalks **S Jewett St**	●				
	"Cross slope at 267 S Jewett St driveway on side opposite school."				
Signalized Intersections					
	No comments.				
Signalized Intersections					
	No comments.				
Standalone Crosswalks					
	No comments.				
Standalone Crosswalks					
	No comments.				

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Site Evaluation

Traffic Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Unsignalized Intersections **S Jewett St at Constant St**	●				
"No crosswalk across Constant St, but curb ramps have detectable warning panels. Pedestrian crossing should be evaluated for ADA compliancy."					
Unsignalized Intersections **S Jewett St at Loading driveway**	●				
"No crosswalk or detectable warning panels across driveway. Pedestrian crossing should be evaluated for ADA compliancy. No STOP sign on driveway approach."					
Unsignalized Intersections **S Jewett St at Maurice St**	●				
"Crosswalk and school crossing signs on north side, but no crosswalk on west side. All curb ramps have detectable warning panels but NW corner only has a panel facing south and not facing east. Pedestrian crossings should be evaluated for ADA compliancy."					
Unsignalized Intersections **S Jewett St at Parking lot north driveway**	●				
"Sidewalk material continues through driveway. No crosswalk or detectable warning panels across driveway. Pedestrian crossing should be evaluated for ADA compliancy. No STOP sign on driveway approach."					
Unsignalized Intersections **S Jewett St at Parking lot south driveway**	●				
"Sidewalk material continues through driveway. No crosswalk or detectable warning panels across driveway. Pedestrian crossing should be evaluated for ADA compliancy. No STOP sign on driveway approach."					
Unsignalized Intersections **S Jewett St at School bus driveway**		●			
"No crosswalk or detectable warning panels across driveway. Pedestrian crossing should be evaluated for ADA compliancy. No STOP sign on driveway approach."					
Unsignalized Intersections **S Jewett St at Seames Dr**	●				
"Crosswalk and school crossing signs on north side, but no crosswalk on west side. No curb ramp on NE corner. NW and SW curb ramps have detectable warning panels, but NW corner only has a panel facing south and not facing east. Curb ramp and detectable warning on SW corner in poor condition. Pavement where pedestrians would cross on west side in poor condition. Pedestrian crossings should be evaluated for ADA compliancy."					

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Site Evaluation

Traffic Analysis

	NONE / MINOR	MODERATE	MAJOR	REPLACE	N/A
Unsignalized Intersections **S Jewett St at Southside Bible Fellowship driveway**	●				

"No crosswalk or detectable warning panels across driveway. Pedestrian crossing should be evaluated for ADA compliancy. No STOP sign on driveway approach."

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Educational Facility Effectiveness: Learning Environments (EFE: LE)

Grade Levels

Building Originally Designed as:	7th Grade–8th Grade
	"Originally designed as a Junior High School."
Which Educational Program are you Assessing?	5th Grade–8th Grade
The Grade Configuration this School is Best Suited to:	Best suited for a non middle school teaming model
	"Needs significant renovations to provide cohesive teaming areas and components."

Educational Building Analysis

	GOOD	FAIR	POOR	DEFICIENT	FAILING
Acoustical	●				
Adjacencies of Learning Environments		●			
	"No team opportunities to congregate and do project based work. One team cannot be completely grouped together."				
Environment (Inviting / Stimulating / Comfortable)				●	
	"Entrance lobby is large but sits directly across a wall and closed doors. Most corridors are long and underserved by daylight, particularly the corridors on the bottom level. No dedicated area for students to gather informally in their team areas."				

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REPORT TYPE

EFE: LE Evaluation

Educational Building Analysis

	GOOD	FAIR	POOR	DEFICIENT	FAILING
Finishes		●			
	"Finishes are institutional and intact but detract from environment and aesthetic of school."				
Furniture			●		
	"Furniture condition is in rough shape."				
Lighting Quality	●				
	"Dimmable LED fixtures."				
Natural Daylighting		●			
	"Classrooms have strip ribbon windows, some classrooms have no windows."				
Outdoor Classrooms					●
	"None observed, although have partnership with SNHU to implement outdoor classroom."				
Technology: Power		●			
Technology: Wireless	●				
Ventilation		●			
	"Admin suite has AC. Rest of school gets stuffy on warm days."				

This Site Includes:

	YES	NO
Accessible	✓	
Play Fields		✕
Playgrounds / Areas		✕
	"Basketball hoops are along east side of building, along bus route, and right outside classrooms (is noisy and disruptive to classrooms)."	

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REPORT TYPE

EFE: LE Evaluation

Building Assessment

	YES	NO	
Can the Building Change Typology Easily?	✓		
	"School was originally designed as a Junior High School."		
Can the Building be Transformed Educationally to Serve 21st Century Needs?		✕	
	"Yes, with significant renovations."		
Can the Building Serve as Swing Space?	✓		
Is the Building between 85%—115% Utilization Rate?		✕	
	"Building is overcrowded."		

Educational Facility Effectiveness: Spaces (EFE)

Space Assessment	QUANTITY	ACTUAL AREA (SF)	MORE INFO
Administration and Guidance (Quantity Varies)	Varies	2750	N/A
Art Classroom (Min Area 900 sf or 36 sf / Student)	3	630, 1050, 1240	N/A
Cafeteria (Min Area 12-15 sf / Student for Max Number of Diners per Lunch Period)	1	5680	LUNCH PERIODS: 4
Classroom: General Education (Min Area 900 sf or 36 sf / Student)	43	770, 850, 900, 1000, 1200	N/A
	"Some used for 5th and 6th grade Science. No sinks for Science."		
FACS	1	1040	N/A
Faculty Lounge	1	550	N/A
Gymnasium (Min Area 6000 sf)	1	7030	STAGE: Yes
Media Center (Min Area 1800 sf or 4 sf / Student x Design Capacity)	1	4210	N/A
Music Classroom (Area 1200 sf)	3	860, 1040, 1165	N/A
Science Classroom / Lab (Area 1200 sf or 60 sf / Student)	5	1000, 1100, 1200, 1300	N/A
Small Group	0	0	N/A
	"Only have informal pull-over spaces, no dedicated small group rooms observed."		

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REPORT TYPE
EFE: Space Evaluation

Space Assessment

	QUANTITY	ACTUAL AREA (SF)	MORE INFO
Special Education: Resource of Small Group **(Area 500 sf)**	1	145	N/A
Special Education: Self Contained **(Area 950 sf)**	5	500, 550, 870, 920, 1000	TOILET ROOM: No
	"Some are small, one windowless."		
Stage **(Area 1000 sf)**	1	1045	N/A
Teacher Planning	1	See Faculty Lounge	N/A
	"Teacher Planning/Dining."		
Technology Lab	1	1180	N/A
Woodshop	1	1385	N/A

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REPORT TYPE

EFE: Space Evaluation

Adequacy of Rooms	GOOD	FAIR	POOR	DEFICIENT	FAILING
Administration and Guidance	●				
	"Administration area was renovated in the last few years."				
Art Classroom		●			
Cafeteria		●			
	"Cafeteria is in decent condition but lacks differentiated seating opportunities. Observed students preferring to eat in classrooms in smaller groups."				
Classroom: General Education		●			
FACS		●			
Faculty Lounge		●			
Gymnasium		●			
Media Center		●			
Medical				●	
Music Classroom		●			
Science			●		
	"Science classrooms do not have mobile lab benches."				
Small Group					●
	"None observed."				
Special Education: Resource of Small Group			●		
	"Very few informal pull over spaces observed in corridors and stairwells."				
Special Education: Self Contained			●		
Stage		●			
Teacher Planning			●		
	"One teacher planning/teacher dining room."				
Technology Lab		●			
Woodshop		●			

SCHOOL NAME

Southside Middle School

SITE VISIT

August 2023

REPORT TYPE

EFE: Space Evaluation

Special Education Assessment	YES	NO	
18+		✕	
Autism Spectrum		✕	
Cognitively Impaired		✕	
Deaf and Hard of Hearing		✕	
Emotional Disturbance	✓		
	"Self-Contained"		
English Learners	✓		
	"Pull-Out"		
Intellectual Disability	✓		
	"Self-Contained"		
Life Skills		✕	
Medically Fragile		✕	
PT/OT/Speech	✓		
Reset Program		✕	
Social Emotional		✕	
Title 1		✕	

Assessment Team Scoring Rubric

Educational and Facilities Assessment Approach

Assessment Criteria

Educational and Facilities Assessment (E+FA) Approach - Led by architects, engineers, and educational planners from SMMA and its consultants, and in partnership with each school principal, the team conducted both a facility assessment (to take inventory of the building layout and condition) and an educational assessment (to determine the adequacy of spaces for the educational programs offered) in each building. The following report outlines the team organization, methodology and approach taken to assess the Manchester Public School portfolio over the Spring and Summer of 2023.

Overall Assessment

Categories and criteria were strategically selected for assessment based on stated objectives, past experience, and nature of the Manchester School District portfolio of buildings. Ultimately, the E+FA team created a customized "Manchester School District methodology" which encompassed approximately 75 areas of criteria, organized either facility or site categories that examined physical components, as well as community components.

Facility Assessment Criteria

Facility Assessment: Building Evaluation

Facilities varying in terms of age, design, construction methods, and materials were reviewed to determine the condition of the district's portfolio. Building assessments were performed to determine existing components and/or systems' conditions at a specific point in time. The resulting information was then used to guide recommendations regarding maintenance, renovation, and/or replacement. The assessment team conducted visual inspections to observe signs of deterioration. No exploratory demolition, removing finishes, or viewing above ceilings was conducted. Areas that were hard to reach, off limits, or obscured by other systems that prohibited view of the some building components were not assessed. Systems and categories that were assessed included:

- Building Envelope
  - Roof Membrane
  - Facade
  - Windows
  - Thermal Performance
- Boilers
- Heating Distribution
- Interior Finishes
- Rooftop HVAC Equipment
- HVAC Controls
- Kitchen Equipment and Systems
- Natural Gas Distribution
- Generator
- Elevator
- Ventilation Distribution Systems
- Electrical Service
- Life Safety:
  - Means of Egress
  - Fire Alarm
  - Fire Protection: Sprinklers
- Security: Entry Sequence
- Lighting Quantity/ Control
- Toilets and Fixtures
- Plumbing Distribution Systems
- ADA/Accessibility
- Structural Systems (consisting of the following components):
  - Roof framing: This is the horizontal framing consisting of decking, slabs, joists, beams, trusses, etc.
  - Floor framing: This is the horizontal framing consisting of decking, slabs, joists, beams, trusses, etc.
  - Walls and columns: These are the vertical elements that hold up the floors and roof structures.
  - Foundations: Foundations occur at the base of the building and transfer the weight of the building onto the underlying soils.
  - Facades: These are the outside walls of the building including many non-structural elements (doors, windows, insulation, vapor barriers, etc.) that are part of the weather enclosure for the building.
- Lateral System: The lateral system in a building is the structural system that keeps the building from falling over when it is subjected to horizontal loads such as wind and earthquake forces.

Building Evaluation: Criteria Rating Hierarchy

The facility assessment building evaluations used a quintile classification hierarchy as defined below:

- None / Minor: System or element functioning reliably; routine maintenance and repair is needed.
- Moderate: System or element functioning minimally. Repair or replacement of some components is needed.
- Major: System or element is barely functioning. Repair or replacement of most components is needed.
- Replace: System or element is non-functioning, not functioning as designed, or is unreliable. Total replacement all components is needed.
- Not Present: System or element is non-existent, non-functioning, not functioning as designed, or is unreliable. Replacement is needed.

Building Evaluation: Physical Analysis Definitions

Roof
Roof Membrane: Apparent condition status noted for the roofing material and flashings. Note any obvious deterioration.

Existing Photovoltaics
Yes / No: Criteria noted. However, presence or absence of photovoltaic did not impact overall building condition.

Space for Solar
Yes / No: Comments, if applicable. Evaluation of whether roof space exists for solar (if there are relatively flat areas for possible future solar panels). Note that the roof structure was not evaluated for structural capacity of future PV panels. Criteria noted; however, presence or absence of photovoltaic panels did not impact overall building condition.

Façade
Description of apparent condition and materials of the exterior walls. Observations of any spalling or disintegration of brick or concrete masonry unit (CMU) walls and the condition of the mortar. Notes if there is any obvious movement or structural cracking, and if there is failure, the percentage of failure. With prefabricated panel system facades, notes the types and apparent conditions of attachment systems, panel material, and whether there is deterioration of the surface or caulking or movement in the panels.

Windows
Description of types and apparent conditions of exterior windows. Considers whether most windows appear to be in good working condition, if windows are transparent or translucent, and if they are single or double-paned.

Boilers (Mechanical)
Review of fuel sources and apparent conditions of boilers.

Boilers (Plumbing)
Observation of heating media (e.g. water or steam) of boilers.

Heating Distribution Systems
Evaluation of type and apparent conditions of piping, type, and apparent corrosion.

Building Envelope Thermal Performance
Review of the existing drawings of envelope elements (exterior walls, roof, foundations and slabs). Notes presence of vestibules at building entrances for temperature control.

Interior Finishes
Evaluation of types and conditions of interior wall, flooring, and ceiling finishes.

Rooftop HVAC Equipment
Review of type and apparent condition of roof top units (RTUs), exhaust fans, and air conditioning equipment, if present.

HVAC Controls
Review of types of thermostats and type and apparent condition of Building Management System (BMS) if present.

Kitchen Equipment and Systems (Architectural)
Evaluation of adequacy and apparent condition of kitchen equipment.

Kitchen Equipment and Systems (Electrical)
Observation of electrical kitchen appliances.

Kitchen Equipment and Systems (Plumbing)
Observation of gas kitchen appliances. Observation of apparent condition of kitchen plumbing fixtures, and whether there are separate sinks for handwashing and dishwashing, per health and plumbing codes. Notes if proper fire suppression system exists where required.

Natural Gas Distribution System
Review of apparent condition of the natural gas system, how it enters the building and is distributed, and of shut-off valves.

Generator
Review of type of generator, type of fuel source, and apparent condition if one is present.

Elevator
Evaluation of apparent condition of elevator if present.

Ventilation Distribution Systems
Review of locations and apparent condition of fans, ductwork, duct grilles, and other ventilation components.

Electrical Services
Apparent condition status noted. Review of available capacity, location and appearance of electrical service and meter age.

Life Safety

- Means of Egress:
  - (Architectural): Evaluation of apparent existence of proper smoke and/or fire doors, and if mechanical hold-open devices appear in good working condition. Notes if egress paths are direct and unencumbered, and whether there are enough exits relative to the facility population.
  - (Electrical): Review of illuminated exit signs and whether they are in the proper locations and appear to be in good condition.
- Fire Protection (Sprinklers): Observation of type and age of system and components. Review of maintenance records and certifications, if available.
- Fire Alarms: Observation of type, age, and appearance of systems. Review of available testing records.

Security

Entry Sequence: Observes if schools have only a camera/buzzer system at their main entrance or whether the main building entrance is adjacent or near the main office. (Adjacency/proximity of main office to main entrance allows for direct observation of the entire person, as well as control of their movements)

Lighting Quality/Control

Observed (not measured) light levels at the working surface, type of light fixtures and whether they provide an even dispersion and control of light for general academic tasks as well as for use of technology. Apparent condition, locations, and lighting uniformity are noted.

Toilets and Fixtures

Review of locations and apparent conditions of fixtures. Notes the maintenance and cleanliness of fixtures and flow of fixtures.

Plumbing Distribution Systems

Review of piping type, apparent corrosion, and equipment, including presence or absence of water heater & back-flow preventer.

ADA / Accessibility

- (Architecture): Observes whether the facility is compliant with the Americans with Disabilities Act (ADA) of 1990 standards. Evaluates adequacy and conditions of ramps, lifts, and elevators and whether every occupiable space in the facility can be accessed by anyone with a disability. Other considerations include compliancy of building elements such as clearances and door hardware.
- (Plumbing): Evaluation of whether toilet facilities and plumbing fixtures are ADA-compliant.

Structural Systems

The assessment team conducted visual inspections to observe signs of deterioration. No exploratory demolition, removing finishes, or viewing above ceilings was conducted. Areas that were hard to reach, off limits, or obscured by other systems that prohibited view of the structure were not assessed. Each of the criteria listed below is considered as it relates to the structural elements of the building.

A “Yes” comment in the assessment indicates that we observed signs of deterioration. A “Not Observed” comment in the assessment indicates that we either did not observe any distress in the structural element or were not able to observe the element due to the aforementioned limitations, and this does preclude an unobserved area from distress.

- Roof structural framing: As the framing is covered by roofing, observations are usually made from below. Water leaks are a common cause of damage to roof framing and part of the visual assessment is to look for signs of water damage. In wood framed structures, visual signs include mold or rotting wood. In structures with metal deck, visual signs include rusting of the deck and in concrete structures it can be cracks with rust stains or spalled concrete, indicated where a section of concrete has broken off (typically caused by water penetrating concrete through small cracks causing the steel reinforcing to rust and expand putting outward pressure on the concrete and causing it to break off).
- Floor structural framing: Common signs of deterioration in floors can be cracks in floors finishes (such as terrazzo), cracks in the bottom of concrete slabs or beams, water damage like that in roofs and longitudinal cracks (or checks) in wood framing. Cracks in floor finishes while cosmetically objectionable is not necessarily an indication of a structural failure. There are several causes for cracks in wood framing members (joists or beams) which does not necessarily mean the member is structurally inadequate.
- Walls/columns: Walls are typically framed with masonry, concrete, or wood or light gage metal studs with varying finishes. Columns typically consist of steel, concrete, or wood posts and can also be masonry piers. Common signs of deterioration in concrete and masonry walls are cracks in the walls. Cracks typically run vertically (bottom to top), although in masonry walls the cracks often follow the mortar joints. Cracks in walls can be caused by many factors: shrinkage in the wall due to changes moisture or temperature, movement of the supporting structure, or stresses in the wall caused by other loads. Concrete columns can have spalled concrete, wood posts can have longitudinal cracks (similar to floor members), and masonry piers can have cracks similar to walls.
- Foundations: Notes the type of foundation. Some types include shallow spread footings (concrete pads) and deep foundations such as caissons and piles that extend deep into the ground. Foundations generally include concrete components and are located below ground – making the system difficult to observe without performing some excavation. Some common signs of deterioration are cracks in foundation walls and areas where there has been vertical movement, indicating some settlement of the structure over time, which can be common. The causes of the cracks are like those described for walls.
- Facades: The structural components of the façade are typically the wall structure (see “Walls” above) but can also include the structural framing for overhangs or other horizontal elements that are part of the walls. Like in roof framing, moisture is a common cause for distress in facades. Common signs of distress are spalled concrete, cracks in concrete or masonry walls, and rusting steel members such as angle lintels over window and door openings in masonry walls. Note that some of these signs of deterioration do not necessarily indicate a structural deficiency and may only require maintenance.
- Identifiable Lateral System: Notes the presence and type of lateral load-resisting system, such as steel braced frames or shear walls consisting of concrete or masonry walls. Often, steel braced frames are imbedded within walls, making them difficult to identify. With masonry walls, it can be difficult to determine if a wall is a shear wall or just a partition wall. It is not possible to determine the structural adequacy of shear walls or braced frames without an in-depth investigation and it should be noted that many masonry walls in older buildings have little or no reinforcing. Common signs of distress in concrete and masonry shear walls are like those described for walls above.

Community Assessment: Building Evaluation

The Community – Building assessment included several categories including historical value, emergency shelter status, and use of community and school within/without the buildings. Historical value reviewed the historic inventory and register status of the building. Because schools are often the largest structure in a neighborhood, the City has designated certain facilities as emergency shelters. Additionally, several schools are directly connected to community centers or utilize adjacent neighborhood facilities for athletics and enrichment. Whether the community utilized the building after hours or on weekends was also considered.

New Hampshire Division of Historical Resources (DHR) Status
Yes/No; Comment, if applicable. Criteria will inform opportunities and constraints for modifying the existing building to meet changing physical demands for a 21st century learning environment.

Inventory of Historic Assets
Yes/No; Comment, if applicable. Notes whether the building is listed on any inventory of historic assets. Criteria will inform opportunities and constraints for modifying the existing building to meet changing physical demands for a 21st century learning environment.

State Register of Historic Places
Yes/No; Comment, if applicable. Notes whether the building is listed on a state Register of Historic Places. Criteria will inform opportunities and constraints for modifying the existing building to meet changing physical demands for a 21st century learning environment.

Locally Designated Historic District
Yes/No; Comment, if applicable. Notes whether the building is within a local historic district. Criteria will inform opportunities and constraints for modifying the existing building to meet changing physical demands for a 21st century learning environment.

Emergency Shelter
Yes/No; Comment, if applicable. Criteria noted and considered as part of the overall community building score. A designation by the city does not certify compliance for all state and federal requirements for the designation.

Community-Use Spaces
Yes/No; Comment, if applicable. These were determined after speaking with school administration during site visits. Community spaces attached to schools were also considered. Criteria noted and considered as part of the overall community building score.

Building Suitability for School Use
Yes/No; Comment, if applicable. Considered any major life-safety concerns for suitability. Criteria will inform opportunities and constraints for modifying the existing building.

Overall Community Building Rating
This is a judgment on the part of the reviewer(s) that considers all aforementioned factors, as well as amenities located in proximity to school sites and access to public transportation.

Facility Assessment: Site Evaluation

The site assessment team performed evaluations at each school facility in the district's portfolio. These evaluations considered the quality, condition, and capacity of the various exterior spaces of the facility. These spaces included: landscaped, educational, recreational, vehicular and pedestrian areas. This field effort was complimented by a study and research of the sites from web-based resources. The resulting information was then used to guide recommendations regarding maintenance, renovation, and/or replacement.

The diverse scope of site elements for schools varies in their relative impact to education and school operations. Priorities include elements that have large impacts to education and/or incur substantial impact to improve or repair.

- ADA Accessibility
- Walkways/Curbs/Sidewalks
- Play Areas
- Drainage
- Parking Quality
- Drop-Off/Pick-Up Routes
- Walls & Slopes
- Site Lighting
- Fencing
- Neighborhood Streets
- Evaluation Criteria

Site Evaluation: Criteria Rating Hierarchy

The site evaluations were judged on a scale as defined below:

- None / Minor: Element is functioning reliably and requires a little repair and routine maintenance.
- Moderate: Element is functioning minimally and requires some repair by a specialist.
- Major: Element is barely functioning and requires substantial repair by a specialist.
- Replace: Element is not functioning correctly and requires total replacement.
- Not Present: Element does not exist or completely failed. This element should be replaced and/or provided. In some instances (parking, walls/slopes and fencing) this element is not required.

Site Evalutation: Physical Analysis Definitions

Parking & Vehicular Circulation
Quality of vehicular area paving and quantity of parking spaces considered. This element may not be required if "Not Present".

Ground Cover
Presence and condition of landscaping, lawn areas, and any other non-hardscape areas. Ground cover evaluated for aesthetic value, shading, and functionality for outdoor gathering

Fields
Presence and apparent condition of athletic or play fields on the property.

Neighborhood Streets
Connectivity to residential areas surrounding the site. Condition of adjacent/ off-site roadways, sidewalks, and accessible elements considered.

Drop-Off/Pick-Up Routes
Segregation of buses, private vehicles, parking, and neighborhood traffic considered. Both on-site and off-site routes considered. This element may not be required if “Not Present”.

On-Site Walkways/Curbs/Sidewalks
Quality of all pedestrian spaces considered.

ADA Accessibility
Availability, location, and condition of accessible routes considered. The accessible routes connect building entrances, handicap parking, public streets, and site facilities. Accessibility is considered “Not Present” if there is no accessible building entrance.

Site Lighting
Condition, location, and quantity of lighting considered.

Fencing
Condition of fencing and gates of various types considered. This element may not be required if “Not Present”.

Drainage
Surface ponding, water quality structures, and condition of visible infrastructure considered.

Play Structures
Evaluation of apparent condition of play structures and if they are appropriate for range of ages of students at a school, if present.

Walls and slopes
Condition of retaining walls and stabilized slopes considered. This element may not be required if “Not Present”.

Wetlands on site
Yes/no; proximity of wetlands or natural resources to the site, which – if present – may add restrictions or regulatory challenges to site renovations or expansion.

Play Areas
Presence, suitability, and physical condition of casual recreation and play for students. Play structures, surfacing, and courts considered. This element may not be required if “Not Present”.

Outdoor Classrooms
Evaluation of apparent condition of outdoor classrooms or learning areas if present.

Environmental Justice Populations
Review of designation of site and adjacent neighborhoods on the Social Vulnerability Index, per state GIS.

Feasibility of Building Expansion on the Current Site
Evaluation of whether building is capable of appropriately expanding on its current site. Expansion can be horizontal, vertical, or infill, depending on the building's configuration. Feasibility of expansion based on size of property, existing coverage, regulatory restrictions, and physical constraints such as topography and proximity to natural resources.

Feasibility of Site Expansion
Evaluation of whether site expansion is possible, based on adjacent properties, and physical constraints, such as roads, proximity to protected lands, and easements.

Community Assessment: Site Evaluation

The Community – Site assessment included the broad categories of transportation access and neighborhood elements. Transportation access considered the condition of the adjacent streets, the ability of students and adults to bicycle and walk to the school, and the accessibility of public transportation. Neighborhood elements considered the school's proximity to community, civic, educational, commercial, and athletic facilities.

New Hampshire Division of Historical Resources (DHR) Status
Inventory of Archeological Assets (Site Review)
Comment, if applicable. Criteria will inform opportunities and constraints for modifying the existing building. In some cases, data may not be available.

School Buses
Review of types and numbers of school buses and bus queuing.

Accessible to Transit
Building is located within 2 blocks (1000 feet) of at least 2 stops on bus lines of regular frequency (at least every 10 minutes, during rush hour and mid-afternoon). Criteria noted and considered as part of the overall community building score.

Bikeable
Facility is considered bikeable if within 2 miles of multiple residential neighborhoods, without riding on busy streets that lack dedicated bike areas. Criteria noted and considered as part of the overall community building score.

- Wide sidewalks and/or low-traffic streets
- Adjacent to or within a residential neighborhood, without crossing busy & wide (4+ lanes) streets
- Not located on a steep street
- Bike racks are present at the school and are safely accessed from site entry points

Walkable
Facility is considered walkable if within 1.4 miles of residential neighborhoods, with consistent sidewalks, and walking route does not require students to cross busy or dangerous streets (per district eligibility criteria).

- Consistent, accessible sidewalks with crosswalks
- Adjacent to or within a residential neighborhood, without crossing wide (4+ lanes) streets

Site suitability for school use?
Yes/No, Comment if applicable. Considers overall site conditions, overall community rating, and size of site.

Overall Building – Community Condition:
This is the professional judgment on the part of the reviewer(s), considering all aforementioned factors and with consideration of nearby neighborhood, community, educational, and athletic facilities. Criteria noted and considered as part of the overall community building score.

Educational Assessment Criteria

Educational Facility Effectiveness Evaluation

Educational Facility Effectiveness of Learning Environments (EFE-LE)

The quality of physical environments has direct impacts on educational outcomes. The EFE analysis considers both inherent building characteristics of physical appearance and condition, and introduced equipment (e.g., furniture and technology). These qualitative factors have a large impact on overall student performance, as they influence students' comfort and ability to concentrate on tasks; teacher and student health and wellness; as well as absenteeism and retention.

Building environments also affect the overall educational effectiveness rating. Fixed elements, such as walls and windows, are components that are not easily remedied and may require extensive or invasive renovation. Other elements, such as furniture or finishes, can be more easily updated, replaced, or supplemented.

Fixed Building Elements include:

- Ventilation
- Natural Daylighting
- Lighting Quality
- Acoustical
- Environment (Inviting/Stimulating/Comfortable)
- Power and Technology Infrastructure
- Access to water for student projects
- Access to toilet facilities

Repairing these fixed elements may require buildings to be unencumbered of students (i.e., vacant) for the duration of the work, depending on the upgrades required.

- Adaptable elements
- Technology: ubiquitous wireless access for teachers and students and classroom technology
- Furniture: light weight, ergonomic and supportive of collaboration
- Finishes
- Adjacencies of Learning Environments
- Access to outdoor learning (classrooms or other)

These considerations often consist of singular systems and can be repaired or replaced independent of other systems. They may change frequently with the evolving landscape of educational pedagogy and should support a building that can adapt flexibly at relatively low costs. These upgrades can be executed internally, by facilities personnel or with arranged contracts.

Educational Facility Effectiveness Evaluation: Criteria Rating Hierarchy

The EFE-LE uses the following classification system:

- Excellent: Elements meet needs for 21st century (Next Generation) teaching and learning
- Good: Elements contribute to teaching and learning
- Fair: Elements somewhat interfere with teaching and learning
- Poor: Elements detract from or interfere with teaching and learning
- Deficient: Non-existent or inoperable systems or elements

Educational Facility Effectiveness Evaluation: Analysis Definitions

Evaluation Criteria

Building Originally Designed As: Over time, a school building may have modified the range of grades served. Knowing their original use quickly provides some insight into space types and building appointments.

Best Grade Configuration for this School Building

A school building may be best suited for a different range of grades or use depending on the types, quantities, and sizes of spaces, as well as the existing site attributes, including:

- Heights of casework, markerboards and other elements the students use
- Configuration and heights of toilet room fixtures

Ventilation

Fresh air is a critical component for health, wellness, and overall student performance. An even distribution of ventilated air is also important. Different ventilation systems (unit ventilators, central air ventilation, no mechanical ventilation) provide varying levels of outdoor air percentages and filtration. Observe whether mechanical ventilation is provided and what the apparent quality of the ventilation system is. Qualitative measurements are not taken, however visual, olfactory, and thermal observations are made.

Natural Daylighting

Considered to be a better quality of light than artificial lighting. Evaluates the general quantity/quality of the natural light and note if most spaces have access to daylight.

Artificial Lighting Quality

Observed (not measured) light level at the working surface. Type of light fixture and whether it provides an even dispersion of light for general academic tasks, and whether the fixture is dimmable, to accommodate use of technology.

Acoustical
The proper balance between voice reinforcement and sound absorption impacts “speech intelligibility.” This includes both sound performance within the space, as well as sound coming from outside the space. Observe whether the space appears to have appropriate acoustical properties for teaching and learning.

Technology (Power):
There are enough electrical outlets to support a future technology-rich classroom/school and they are properly distributed throughout the space.

Technology (Wireless):
There are sufficient access points throughout the school to support a 1:1 technology environment and fiber optic wiring exists within the building The main distribution room (server room) is air-conditioned, to ensure system reliability.

Technology (Interactive):
Classrooms and other teaching spaces have working interactive technology, such as interactive marker boards and document cameras.

Furniture
Different educational-delivery models can be reinforced by furniture type and flexibility. Ideal furniture is light and mobile enough to be easily re-arranged in multiple configurations. Furniture is ergonomic, comfortable, in good condition and promotes student collaboration.

Finishes
Materials and conditions of the walls, floors and ceilings. Both physical and aesthetic conditions are considered.

Environment (Inviting/Stimulating/Comfortable)
Evaluates whether building is aesthetically pleasing and if it is a place where students and teachers feel comfortable and want to spend time in each day.

Adjacencies of Learning Environments
Classrooms and other learning environments have a relationship to each other which promotes collaboration, communication, and other aspects of 21st century teaching and learning. Spaces promote interdisciplinary learning.

Outdoor Classrooms
Students have access to outdoor classrooms or other outdoor learning opportunities to learn in different ways, sometimes involving nature and hands-on activities.

Site Components

Playgrounds/Play Areas
Description of play surface materials (hard or soft). Evaluates condition of on-site play structures and whether structures are age-appropriate to the school's student population.

Accessibility
Evaluates conditions of play areas, including the ground surface/material, and whether areas are accessible to children of various disabilities.

Play Fields
Describes conditions of play fields, if present, and whether fields natural grass or synthetic turf.

Flexibility in Building Typology
Evaluates whether the building can serve alternative grade levels or support a special needs-focused curriculum.

Educational Transformation to Support 21st Century Needs
Evaluates if the building's construction easily allows for renovations that may change room sizes, replace or upgrade mechanical and electrical systems, and accommodate alternative educational-delivery methods (e.g., project-based learning [PBL]). This can often be the largest difference between a modern steel-frame building and interior masonry-bearing wall construction.

Building as Swing Space
Assuming the building is otherwise unoccupied, the ability to use the building for educational purposes for the temporary relocation of a school population during a period of renovation or construction.

Utilization Rate
Description of the utilizations rate and if it is 85% or higher. For high schools, classroom utilization of 85% are considered at capacity. Rates higher than 85% show levels of overcapacity and overcrowding. Middle schools generally work to a utilization of 90% and elementary schools at near 100%.

Educational Facility Spaces Effectiveness Evaluation

The Educational Facility Effectiveness – Spaces (EFE-S) metric compares the sizes of educational spaces to the New Hampshire Code of Administrative Rules, Section Ed. 321 guidelines for 21st century teaching and learning in new capital projects. This quantitative analysis is important for establishing the level of adequacy of the existing spaces for educational delivery. It also indicates whether a facility is deficient/missing dedicated educational spaces normally found in buildings of its grade level and typology.

Primary considerations often affect core curriculum and include:

- Classrooms (Depending on typology, these may include Pre-K and Kindergarten)
- Teacher Planning
- Small Group
- Science
- Art
- Music
- Vocations and Technology
- Media Center
- Cafeteria

Secondary considerations may allow for district flexibility in programming and community resources outside the traditional building environment, and include:

- Gymnasium (This program space is sometimes served by local community spaces)
- Gymnasium Options
- Auditorium
- Stage
- Medical
- Administration & Guidance
- Air Conditioned Technology Network Room
- Other considerations
- Special Education: Self-Contained
- Special Education: Resource or Small Group

Note: If a school has a special education program, its quantity of spaces will vary. Also, some substantially separate programs do not require full-size classrooms to be effective. For this reason, special education was considered differently than typical classroom spaces.

Educational Facility Spaces Effectiveness Evaluation: Criteria Rating Hierarchy

The educational facility effectiveness assessment for spaces used a quintile classification hierarchy as defined below:

- Excellent: Exceeds New Hampshire Code of Administrative Rules, Section Ed. 321 guidelines (+10% or greater)
- Good: School facilities are appropriate to house current enrollment and educational program. NSF meets New Hampshire Code of Administrative Rules, Section Ed. 321 guidelines (-10% to +10%)
- Fair: School facilities appear to be adequately sized for current enrollment and educational program. NSF somewhat less than New Hampshire Code of Administrative Rules, Section Ed. 321 (-10% to -20%)
- Poor: School facilities may not be adequately sized for current enrollment and educational program. Net square footage (NSF) at least 20% less than New Hampshire Code of Administrative Rules, Section Ed. 321 guidelines
- Deficient: Dedicated space does not exist.

Educational Facility Spaces Effectiveness Evaluation: Analysis Definitions

Narratives

The team considered the long-term goals relative to each building's capability of supporting Manchester School District's educational vision for 21st century (next generation) learning and teaching.

Engaged Learning

Engaging with the curriculum, applying it to an authentic context. Making connections between content areas and values/curiosity and interest. Finding connections to the community and making a difference. Public and tangible products. There is selective and intentional engagement, and agency in how one keeps focused and takes breaks.

- The following were criteria used for evaluating the levels of Engaged Learning at each school:
- The building (is/is not) comfortable to learn in.
- The building (has/lacks) appropriate temperature control and ventilation.
- The building (has/lacks) a space that can be used as a flexible learning commons for collaborative learning and presentations.
- The building (makes use/does not make use) of public space for teaching and learning.
- The building (provides/lacks) display space for student work to reinforce student accomplishments.
- The building (provides/lacks) space for teacher collaboration and planning.

Differentiated Learning

Acknowledging different learning styles. Encouraging how to understand one's self (self-knowledge). Flexibility that occurs within instruction, which also promotes flexibility in how students demonstrate learning. The following were criteria used for evaluating the levels of Differentiated Learning at each school:

- Classrooms (are/are not) large enough to support Universal Design for Learning (UDL), including the ability to create learning zones.
- The building (has/lacks) breakout spaces for differentiated/personalized learning and special education.
- The furniture in the building (can be/has difficulty being) flexibly arranged.

Cognitively Demanding Tasks/Programs

- The classroom environment (is/is not) sufficiently flexible to allow for different teaching and learning styles.
- Building (supports/lacks) learning environments that support music.
- Building (supports/lacks) learning environments that support art.
- Building (supports/lacks) learning environments that support physical activity/education.
- The building environment (supports/does not support) STEM adequately.
- The building (provides/lacks) space to experiment, create and collaborate.
- The building (has/lacks) performance/presentation space.
- Based on location and proximity to community resources and public transportation, teachers and students (can/have difficulty) access(ing) the City as a learning tool.

Overall EFE Rating

NH Code of Administrative Rules, Section Ed. 321 areas are based on current enrollment within school. Actual areas were determined by measuring CADD plans provided by Manchester School District. SMMA did not field-measure the buildings but verified general conformity with existing conditions by measuring spot values to determine the rough accuracy of CADD drawings. The design team reviewed the 2018 CMK Long-Range Facilities Plan, which informed some of the educational effectiveness ratings.

The following outlines the rating system used for evaluating the Overall Educational Facility Effectiveness:

- Excellent: Elements meet needs for current AND future teaching and learning.
- Good: Elements contribute to teaching and learning.
- Fair: Elements somewhat interfere with teaching and learning.
- Poor: Elements detract from or interfere with teaching and learning.
- Deficient: Non-existent or inoperable systems or elements.