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STUDY AND SURVEY REPORT

MERCER ISLAND SCHOOL DISTRICT | MERCER ISLAND, WASHINGTON MARCH 2021



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EXECUTIVE SUMMARY

The Mercer Island School District, with a K-12 student population of approximately 4,300, enjoys a widespread reputation for quality and excellence, combining academics, cultural expression, and athletic achievement. Achievement test scores at the elementary, middle, and high school levels are consistently the highest in the state and the District maintains a graduation rate of over 95 percent.

With a vision of inspiring students to be lifelong learners as they create their futures, and a mission to foster learning by engaging students in thinking critically, solving problems creatively, and working collaboratively, the District is committed to addressing the educational needs of each student. However, the Mercer Island School District faces the educational and resource challenges associated with diminishing funding sources and higher expectations with regard to student performance.

The purpose of this Study and Survey is to analyze the physical condition and program configuration of all existing district facilities in relationship to their ability to support the goals of the District.

This report has been prepared by Mahlum Architects on behalf of the Mercer Island School District and under the direction of Superintendent Donna Colosky. Mahlum worked with the District to update the previous 2010 Study and Survey document, including an analysis and update of districtwide building assessments that were conducted in summer 2018.

The team's preparation also included identification of District goals, development of a long-range facility plan, analysis of District facilities and modernization needs, and recommendations for upgrades and or replacement of existing facilities.

Although District needs have been identified and prioritized in the Long-Range Facility Plan, specific project scope, costs, and timelines have not yet been developed. As noted in relevant chapters, this information will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 01: INVENTORY & AREA ANALYSIS

There are currently seven school facilities in the District, including four elementary schools, one middle school, one high school, and an alternative high school. (The alternative high school, Crest Learning Center, is shown and evaluated as a separate facility in this document, but it is considered as part of the high school by OSPI.) District support facilities include the administration building, Mary Wayte Pool, and two maintenance/ transportation buildings. Support facilities are unrecognized by OSPI and therefore were not scored. Information related to these facilities is included for reference only.

The District's educational facilities vary in age, condition, and level of educational adequacy. Facility condition assessments were completed for all seven educational facilities in 2018, and updated in 2020 to reflect current conditions.

Assessments were completed using the State's ICOS form and resulted in the following BCA scores:

Island Park Elementary School

- > Main Building: 75.03
- > Multipurpose Building: 73.78
- > Covered Play: 89.83
- > Site: 72.66

Lakeridge Elementary School

- > Main Building: 79.67
- > Covered Play: 62.37
- > Site: 77.42

Northwood Elementary School

- > Main Building: 98.86
- > Site: 100.00

West Mercer Elementary School

- > Main Building: 85.53
- > Covered Play: 75.48
- > Site: 78.46

Islander Middle School

- > New/Main Building: 96.99
- > 100/200 Building: 73.57
- > 300 Building: 71.44
- > Site: 99.13

Mercer Island High School

- > Main Building: 85.40
- > Site: 87.26

Crest Learning Center

- > Main Building: 83.41
- > Greenhouse 1: 90.00
- > Site: 84.89

Site and floor plans, area calculations, narrative descriptions of condition, and ICOS evaluation forms for each assessed facility are included in Chapter 01.

CHAPTER 02: LONG-RANGE EDUCATIONAL & FACILITIES PLAN

Mercer Island School District's Long-Range Facility Plan was completed in September 2020. The Plan provides a strategic framework for management of the District's facilities over time, such that they continually support the ongoing success of District students, staff, and community.

The Long-Range Plan identifies capital projects based on district need and determines an order of priority. While the preferred plan scenario identifies the order of projects, and broadly outlines their potential scope, the specific timing of each project and how they may be grouped together in phases was not determined as part of the Long-Range Facility Plan. It is anticipated that the District, School Board, and community will reconfirm the Long-Range Facility Plan prior to moving forward with any future capital measure. At that time, further development of project scope and cost will be completed. One or more projects may be planned in the same phase, depending on level of community support and funding parameters.

The Executive Summary of the Long-Range Facility Plan, including a description of identified projects and their prioritization, is included in Chapter 02.

This information will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 03: DEMOGRAPHIC DATA

The current District enrollment is 4,387 students. Over the next ten years, total District enrollment is projected to increase by approximately 133 students, resulting in a total of 4,520 total students by 2029-30. This is an overall increase of approximately three percent districtwide.

The District's current enrollment projection report, as well as the OSPI Cohort Survival Enrollment Projection Report 1049 and Form 1066 Students with Disabilities Enrollment, are included in Chapter 03.

CHAPTER 04: ABILITY TO PROVIDE CAPITAL FUNDS BY LOCAL EFFORT

The assessed valuation of the Mercer Island School District is \$15,258,769,576.00, and the bonded indebtedness is \$76,585,000.00. The district's remaining debt capacity is \$304,884,239.40.

This information will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 05: EXISTENCE OF SCHOOL HOUSING EMERGENCY

The Mercer Island School District does not currently have a school housing emergency due to natural disaster or limits of bonding capacity.

CHAPTER 06: NEED TO IMPROVE RACIAL BALANCE

Mercer Island School District does not currently have racial imbalance in any of their school facilities. An analysis of racial balance, both by individual school and districtwide, is included in Chapter 06.

CHAPTER 07: TYPE & EXTENT OF NEW &/OR ADDITIONS

Mercer Island School District does not have a need for new school facilities or new additions to existing school facilities specifically to add capacity and accommodate existing or projected student enrollment growth. Facility needs related to educational program and facility condition are included in Chapter 08.

This information will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 08: MODERNIZATION NEEDS

The District has a need for modernization and/or additions at existing schools, or facility replacement, in order to meet current educational needs and address facility condition deficiencies. Programmatic needs requiring additional square footage have been identified at all District school facilities, except the recently completed Northwood Elementary School and Islander Middle School New/Main Building.

Modernization and/or replacement projects have been prioritized as follows in the Long-Range Facility Plan:

> Project 1: Islander Middle School Replacement of the remaining older middle school buildings (100/200 Building and 300 Building) to complete the middle school facility. > Project 2: Island Park Elementary School

Replacement of the existing elementary school facility.

> Project 3: Mercer Island High School / Crest Learning Center Various addition and/or improvement projects at the high school and

projects at the high school and replacement and expansion of the Crest Learning Center facility.

> Project 4: West Mercer Elementary School

Replacement of the existing elementary school facility.

> Project 5: Lakeridge Elementary School Replacement of the existing

elementary school facility.

This information will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 09: CAPITAL COST DUE TO DEFERRED MAINTENANCE

The Mercer Island community has supported the Capital / Technology Levy, which has in turn allowed the District to be diligent in the maintenance of their facilities. Upon review of the planned capital projects, none are ascertained as being the result of deferred maintenance.

CHAPTER 10: TIMELINE FOR COMPLETION

Information is not yet available.

This information will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 11: INVENTORY OF NEIGHBORING SCHOOL FACILITIES

The closest neighboring districts, the Bellevue, Renton, and Seattle school districts, do not have any unused or underutilized facilities. Letters from these districts and a School Board resolution are included in Chapter 11.

CHAPTER 12: NEED FOR ADJUSTMENTS OF SCHOOL ATTENDANCE AREAS

Based on the current projected growth, Mercer Island School District does not anticipate the need to make any school attendance area adjustments within the district. [This page intentionally left blank for the purpose of double-sided printing.]

CHAPTER 01 INVENTORY & AREA ANALYSIS

An inventory and area analysis of existing school facilities within the district, a description of the types and kinds of systems and subsystems used in those facilities and their physical condition.

DESCRIPTION

There are currently seven school facilities in the District, including four elementary schools, one middle school, one high school, and an alternative high school. (The alternative high school, Crest Learning Center, is shown and evaluated as a separate facility in this document, but it is considered as part of the high school by OSPI.) District support facilities include the Administration Building, Mary Wayte Pool Building, and two maintenance/ transportation buildings (which were not inventoried or assessed as part of this Study and Survey).

This chapter includes the following information for each of the inventoried facilities:

- Chapter summary, including a narrative summary of all assessed facilities, building area summary and OSPI comparison, and building condition evaluation score summary
- District map diagrams locating all Mercer Island School District facilities
- > Inventory & Area Analysis for each District facility with the following components:
 - Building Summary Information
 - Building Site Plan
 - Building Floor Plan & Area Analysis
 - Building Condition Narrative Report
 - Building Condition Evaluation Forms

SUMMARY

The information included in this chapter has been prepared by Mahlum Architects on behalf of the Mercer Island School District and under the direction of Superintendent Donna Colosky and the Facilities Department staff.

The team's assignment included, as part of the preparation of this Report, an update to the District's 2018 ICOS Evaluation. Site and floor plan diagrams, area analysis, and building condition narratives for each building were completed by BLRB in 2018, and have been updated by Mahlum to reflect current 2020 conditions, including validation of building areas.

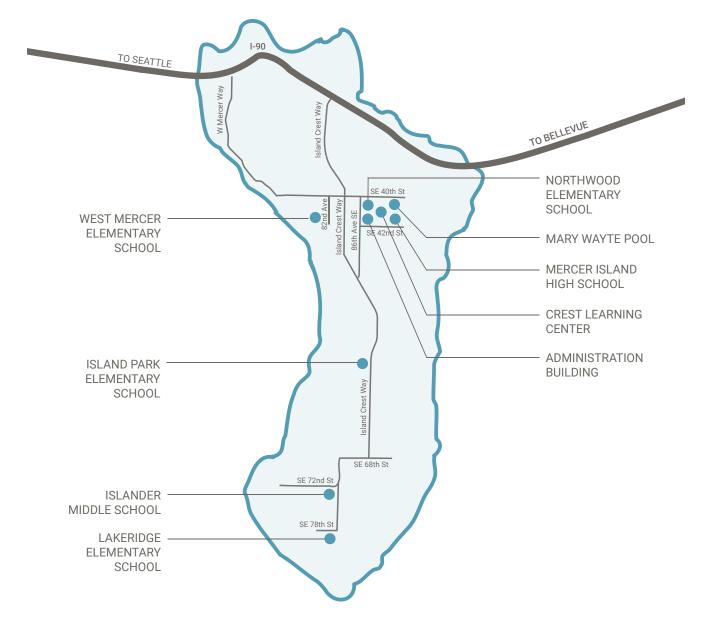
FACILITY EVALUATION PROCESS

Evaluations of the District's existing facilities were conducted using OSPI's Information and Conditions of Schools (ICOS) evaluation method, which establishes a numerical score for each facility. Since 2012, OSPI has changed their approach to evaluating schools. Rather than the hand scoring done through the Building Condition Assessment (BCA), OSPI has turned to ICOS, an online version of evaluating facilities. ICOS is a web-based system where information and condition details, about facilities and sites operated by the District are documented and stored. ICOS meets the increasing demand for accurate school facility information and building condition data that supports statewide programs such as the School Construction Assistance Program (SCAP), District facility management, and school facility information requests or policy decisions. This information is also used to support the performancebased Asset Preservation Program which gauges how well the facilities, buildings, and sites are maintained.

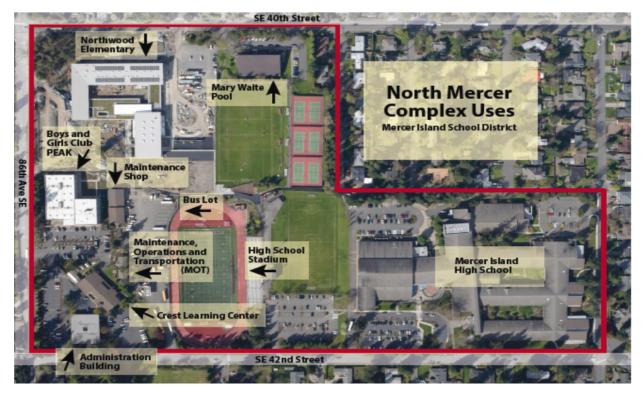
ICOS benefits the Districts by providing functionality for inventory tracking, condition rating, record keeping, and comparative and report analysis. The scoring system of today does not equate to the system of old, the BCEF.

The score reflects building and site facilities in terms of their construction components. The educational adequacy and functionality to meet educational program needs at each facility was also evaluated and is included in the building condition narratives.

MERCER ISLAND SCHOOL DISTRICT FACILITIES



NORTH MERCER CAMPUS



BUILDING AREA SUMMARY

OSPI AREA INVENTORY RECORD		NTORY RECORD
Facility	November 2009	November 2020
Island Park Elementary School	49,399	49,399
Lakeridge Elementary School	51,946	52,269
Northwood Elementary School	N/A	83,128
West Mercer Elementary School	54,221	54, 221
Islander Middle School	119,935	171,526
Mercer Island High School	206,919	231,018
North Mercer Campus	70,717	N/A
Crest Learning Center	10,058	10,058
Totals	563,195	651,619
Additional Area		88,424

Note: Existing building areas were validated from as-built drawings as part of the 2020 Study and Survey process, and the area inventory record was updated to reflect current areas.

FACILITY EVALUATION SUMMARY

BUILDING CONDITION EVALUATION SCORES

	EVALUATION SCO	RE
Facility	2013	2020
ISLAND PARK ELEMENTARY SCHOOL		
Main Building	76.47	75.03
Multipurpose Building		73.78
Covered Play		89.83
Site		72.66
LAKERIDGE ELEMENTARY SCHOOL		
Main Building	82.65	79.67
Covered Play		62.34
Site		77.42
NORTHWOOD ELEMENTARY SCHOOL		
Main Building		98.86
Site		100.00
WEST MERCER ELEMENTARY SCHOOL		
Main Building	88.18	85.53
Covered Play		75.48
Site		78.46
ISLANDER MIDDLE SCHOOL		
New / Main Building		96.99
100 / 200 Building	74.07	73.57
300 Building	71.46	71.44
Site		99.13
MERCER ISLAND HIGH SCHOOL		
Main Building	85.21	85.40
Site		87.26
CREST LEARNING CENTER ¹		
Main Building	85.78	83.41
Greenhouse		90.00
Site		84.89
ADMINISTRATION ²		_
MARY WAYTE POOL BUILDING ²		_

¹ Crest is considered as a part of Mercer Island High School.

² These buildings are support facilities and are included for reference only. Other district support facilities not shown include the Maintenance Building, MOT Building, and the Stadium and associated facilities.

ISLAND PARK ELEMENTARY SCHOOL

Island Park Elementary School was originally constructed in 1956 and was remodeled in 1995. The campus has three buildings that, utilizing the ICOS system, scored as follows: Main Building 75.03, Multipurpose Building 73.78, and Covered Play 89.83. The site score is 72.66.

Structural

The buildings have no serious concerns. However, their seismic design does not meet current standards.

Exterior

The building exteriors are in good to fair condition. Some of the observed issues include minor water intrusion. It was noted that the roof on the Multipurpose Building could use better access for cleanability. The roofs are due for replacement in the near future.

Interior

The building interiors are in good to fair condition. Some of the observed problems include soiled acoustical ceiling panels, but the building is getting a little refresh this summer while the administration area is being reconfigured. The district has added a secure entry vestibule since the last Study and Survey.

Electrical

The building is in good to fair condition. Video surveillance, fire alarm, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wallmounted telecommunications devices are Category 5 cabling and do not support current transmission standards.

Mechanical

The systems are in fair to poor conditions. Student restrooms and corridors are not ventilated adequately. The electrical room is not ventilated for gas storage and there are duct leaks in the attic above the Multipurpose Building. The boilers and heating water pumps are nearing end of life. The control and HVAC systems are functioning but outdated. For the waste system, it was noted that there have been sewer backups in recent years.

Site

The buildings' site is in good to fair condition. The play area is adjacent to Island Crest Way which is not ideal, and the parking lot is cracked and settled. Trees and light poles obstruct sight lines turning out of the parking lot onto Island Crest Way.

There are also two buildings on the site, which is not the preferred configuration for security.

LAKERIDGE ELEMENTARY SCHOOL

Lakeridge Elementary School was originally constructed in 1953 and was remodeled in 1995. The campus has two buildings that, utilizing the ICOS system, scored as follows: Main Building 79.67, and Covered Play 62.34. The site score is 77.42.

Structural

The building has no serious concerns. However, its seismic design does not meet current standards.

Exterior

The building exterior is in good condition. The roof has been known to leak and there are missing and cracked shingles. It is due for replacement soon.

Interior

The building interior is in good to fair condition. All flooring is nearing the end of its servicable life and is in need of replacement within the next five years.

Electrical

The building is in fair to good condition. Video surveillance, fire alarm, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wallmounted telecommunications devices are Category 5 cabling and do not support current transmission standards. The generator was reported by district maintenance as showing signs of age and should be replaced.

Mechanical

The systems are in good to fair condition. The boilers and heating water pumps are nearing end of life and will need to be replaced soon. HVAC duct distribution is in need of cleaning. There is an outdated centralized air distribution system with reheat coils. The control system appears to be relatively newer. Fire service header is in good condition but sprinkler heads in classrooms are not quick response (but met code at the time of construction).

Site

The building and site are moderately noncompliant with handicap accessibility, due to the last time the school was remodeled.

The building site is in good to fair condition. Fencing does not adequately secure the property, the covered play area is too small, the parking lot and hard surface areas are cracked and settled, and there are problems with drainage on the site.

NORTHWOOD ELEMENTARY SCHOOL

Northwood Elementary School was constructed in 2015 and opened in 2016. It scored 98.86, utilizing OSPI's ICOS scoring. The site score is 100.00.

The building is two stories, with administration on the upper level near the parent drop-off. The lower level is daylit and has access to the bus dropoff area. The lower level has two areas -- the classroom area, which can be separated, and a more public area with the gymnasium and cafeteria/commons. Accommodating grades K through 5, it has approximately 22 general classrooms, pull-out shared areas, a library, gymnasium, and lunch room.

Built for 21st Century learning, spaces are flexible and adaptable with lots of transparency. The building has a partial green roof and photovoltaic (PV) panels on the roof, as well as energy dashboard technology that can be used as a teaching tool.

Structural

The structural system is in excellent condition.

Exterior

The building exterior is in excellent condition.

Interior

The building interior is in excellent condition.

Electrical

The electrical systems are new and in excellent condition.

Mechanical

The mechanical systems are new and in excellent condition.

Site

The site is in excellent condition.

WEST MERCER ELEMENTARY SCHOOL

West Mercer Elementary School was originally constructed in 1964 and was remodeled in 1995. The campus consists of two buildings which, utilizing the ICOS system, scored as follows: Main Building 85.53, and Covered Play 75.48. The site score is 78.46.

Structural

The building has no serious concerns. However, its seismic design does not meet current standards and minor rusting was observed at exposed steel framing at the covered play-shed.

Exterior

The building exterior is in good condition. The roof over the south covered walkway is in need of attention. The roof over the covered play-shed has poor drainage.

Interior

The building interior is in good to fair condition. The wooden stage in the Multipurpose Room has a lot of wear and there is damage to wall corners in corridors.

Electrical

The building is in good to fair condition. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices are Category 5 cabling and do not support current transmission standards. Lighting fixtures throughout have some mismatched lamp color temperatures. Classroom AV systems include only VGA cabling and do not have audio enhancement. The generator and tank are severely rusted.

Mechanical

The systems are in good to poor condition. The boilers and pumps are in poor condition and nearing end of life. Replacement will be necessary in the near future. The HVAC systems are in fair condition and the attic has poor ventilation. The domestic water system is in fair to poor condition. No cooling is provided at the MDF room and is subsequently operating very warm. The control system is functioning but outdated.

Site

The building and site are moderately noncompliant with handicap accessibility, and the outdoor platform in the internal courtyard is not accessible.

The building site is in good to fair condition, although there is poor soil drainage on site and uneven settlement in concrete walks that present a tripping hazard and make accessibility difficult.

ISLANDER MIDDLE SCHOOL

Islander Middle School was originally constructed in 1958 and was remodeled in 1994, along with additions to the 100/200 Building. Classroom and multipurpose additions to the 300 Building were completed in 2000. The campus' two older buildings scored as follows, utilizing the ICOS system: 100/200 Building: 73.57 and 300 Building: 71.44.

The New/Main Building, constructed in 2015, received a score of 96.99. Occupied in 2016, it was designed for 21st Century learning, with flexible and adaptable spaces that have significantly more transparency than the older buildings. The building has a small green roof over the entry and photovoltaic (PV) panels on the roof over the Commons, as well as energy dashboard technology that can be used as a teaching tool. The site score is 99.13.

Structural

The New/Main Building has no concerns and is in excellent condition. The seismic

design of the older buildings does not meet current standards.

Exterior

The 100/200 Building and 300 Building exteriors are in fair condition. The 100/200 Building's roof was replaced in 2020. The New/Main Building exterior is in excellent condition.

Interior

The 100/200 Building and 300 Building interiors are in fair to poor condition. Carpet throughout and sheet flooring in the restrooms is at the end of its serviceable life. The New/Main Building interior is in excellent condition.

Electrical

All systems in the new building are in excellent condition and address all required functionality. The older vintage buildings are in fair condition. Video surveillance, access control, fire alarm, and wireless data systems have been upgraded within the older vintage buildings. Power distribution systems within the older buildings are beyond their useful life.

Telecommunications cabling to wallmounted telecommunications devices within the older vintage buildings are Category 5 cabling and do not support current transmission standards.

Mechanical

The systems are in excellent to poor condition. The new building HVAC and domestic water distribution systems are in excellent condition. In the 100/200 Building, the HVAC and domestic water systems are in poor condition. Access to maintenance in the attic is difficult. The control system is functioning but outdated. In the 300 Building, the boilers and water heaters were replaced in 2011 and still appear to be in excellent condition. The HVAC and domestic water distribution systems are in fair to poor condition.

Site

The buildings and campus are now in compliance with handicap accessibility.

In general, the building site is in excellent condition. The southeast parking lot was redone as part of the 2015 campus improvements. Landscaping is in excellent condition.

The bus loop along the north property edge was not modified by 2015 work and is cracked, has settlement, and needs to be addressed with the next significant work. Old portable pads to the north and east of the 100/200 Building remain gravel.

There are three separate buildings on the site, requiring the student body to move outdoors between buildings during class periods. This approach is not preferred from a security standpoint. In addition, there is no fencing to secure the outdoor student areas or buildings. The track and field, used by PE classes, are not inside secure fencing and are open to community use during school hours as currently configured.

MERCER ISLAND HIGH SCHOOL

Mercer Island High School was originally constructed in 1955 and was remodeled in 1997. Additions were constructed in 2012 for Music and in 2014 as extensions of the 100, 200, and 300 Halls. The building scored 85.40 overall, utilizing OSPI's ICOS scoring. The site score is 87.26.

Structural

The building has no serious concerns. However, its seismic design does not meet current standards, there is minor rust at exposed steel canopies at entries.

Exterior

The building exterior is in good condition. The roof was replaced over the 2018 summer break.

Interior

The building interior is in good to fair condition. Walls are in good condition. Floor wear was observed in some areas, and some acoustical ceiling tiles have been damaged by water but with a new roof, this is more than likely taken care of.

Security of the main entry was improved in 2019 and administration offices were also renovated at this time.

Electrical

The building is in good condition. Existing lighting fixtures have been recently retrofitted with LED T8 type lamps. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wall-mounted telecommunications devices in the older areas of the building are Category 5 cabling and do not support current transmission standards. In the newer additions, Category 6 cabling has been installed.

Mechanical

The systems are in good to fair condition. The central HVAC systems are in good to fair condition, some systems are nearing end of life. The boilers and pumps were replaced in 2011 and in good condition, the chiller is showing signs of weathering but is in good operation. The domestic water system is in good condition and there is a mix of newer and older controls throughout the site.

Site

The building and site are moderately noncompliant with handicap accessibility. The bus pullout along 92nd Avenue SE does not have easy accessibility into the building.

The building site is in good to fair condition. Concrete at the bus pullout along 92nd Avenue SE is in like-new condition, at the pullout along 42nd Street SE, the concrete is in fair condition. Several of the campus' asphalt walks are cracked and settled and can be a challenge to accessibility.

CREST LEARNING CENTER

Crest Learning Center, considered a part of Mercer Island High School, was originally constructed in the 1960s and remodeled and added onto in 1997. In addition to the main building, there is a greenhouse connected by a covered area and a second small prefab greenhouse. The Main Building has a score of 83.41, the main greenhouses has a score of 90.00, and the site score is 84.89. The small greenhouse is not a permanent structure and therefore is not scored.

Structural

The building has no serious concerns. However, its seismic design does not meet current standards.

Exterior

The building exterior is in good condition. Roofing is nearing the end of its life and is due for replacement.

Interior

The building interior is in fair condition. Floors are in good condition. Carpet is from 1997.

Electrical

The building is in fair to good condition. The exterior utility transformer is weathered/ rusting. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wallmounted telecommunications devices are Category 5 cabling and do not support current transmission standards.

Mechanical

The building is in fair condition. The electrical/ telecommunications room has poor ventilation, the exhaust is poor in the student restrooms, and no exhaust has been provided for the teacher workroom. The domestic water system is in good condition and there is a new water heater. The HVAC systems are dated, 80% efficient gas furnaces, but are functioning and in good condition.

Site

The building and site are moderately noncompliant with handicap accessibility. The designated handicap parking stall is not accessible.

The site is in good to fair condition.

ADMINISTRATION BUILDING

The Administration Building was originally constructed in 1966 and had some tenant improvements in 1987. It has not been scored under the ICOS system due to the fact it does not house students. However, it has been entered to ICOS for district tracking purposes.

Structural

The building has no serious concerns. However, its seismic design does not meet current standards.

Exterior

The building exterior is in good to fair condition. Walls, windows, and trim are in good condition.

Interior

The building interior is in good to fair condition. Walls and floor are worn and a few acoustical ceiling tiles are water damaged. During 2019 and 2020 the reception area and administration office received a renovation.

Electrical

The building is in fair to poor condition. The main electrical panel is in poor condition and is at end of usable life, making replacement parts not readily available. Video surveillance, access control, and wireless data systems have been recently upgraded. Telecommunications cabling to wallmounted telecommunications devices are Category 5 cabling and do not support current transmission standards.

Mechanical

The building is in fair to poor condition. The second floor and warehouse are not sprinklered. The heating water system is poor condition. There is a fairly new chiller that is in excellent condition, but the HVAC systems are in need of replacement.

Site

The building and site are severely noncompliant with handicap accessibility. Accessible parking requires patrons to cross vehicular traffic, entry paths are not fully compliant, there is no elevator or accessible path around the building, the employee kitchen is not accessible, the upper floor restrooms are not accessible, and many of the door handles do not have levers.

The building site is in good condition.

The building is not compliant in regard to current standards for fire separation and egress. There is no fire separation between the warehouse and adjoining spaces, the rated one-hour corridor does not appear to meet current standards, the upper floor only has one direct access to the outside, egress out of the bottom floor corridor (small secondary corridor adjacent to the stairs) does not have panic hardware, and secondary egress out of the board room terminates into a planter.

MARY WAYTE POOL BUILDING

The Pool was originally constructed in 1973 by King County Parks through a property lease with the District. The District took ownership of the building from King County in 2011. The building has always been a pool, designed by Kirk, Wallace, McKinley Architects. It is a wood-framed construction single-story building with a mezzanine for spectator viewing purposes.

The building does not have an ICOS score due to the fact that it is not a facility that is utilized for instruction through the Mercer Island School District. However, it has been entered into ICOS for district tracking purposes.

Exterior

The building's roof was replaced in 2019.

Electrical

The building is in fair to poor condition. Building switchgear and panels were replaced in 2019 and most of the lighting was updated in 2020. Wiring and conduit has been replaced in some areas, but remains in poor condition. Branch wiring devices throughout appear damaged and show signs of corrosion. Lighting fixtures in some areas show corrosion and some are missing lenses. There is not a facility-wide telecommunications system, all data access is based on a residentialstyle service with router and distribution within the administration area only. There is no fire alarm system in the building.

Mechanical

Boilers, air handlers, and ERV were replaced in 2020 and are in good condition. Plumbing fixtures were calibrated for water conservation but are for the most part, original fixtures. There is no fire protection system. The pool supply and drainage system was recently relined and appears to be functioning well.

Site

The site is in fair condition and has remained relatively unchanged since its construction.

INVENTORY, AREA ANALYSIS & BUILDING CONDITION REPORTS

This section includes the following updated information for each Mercer Island School District facility:

- Building Summary, including basic site and building information and an aerial view of the site
- > Building Site Plan
- Building Floor Plan and Area Analysis Summary
- > Building Condition Narrative Report, including system description and condition evaluation of systems and subsystems
- > OSPI Building Condition Rating Summary (ICOS Detailed Assessment by Building Forms are included at the end of Chapter 1 for reference)

Site and floor plan diagrams, area analysis, and building condition narratives for each building were completed by BLRB in 2018, and have been updated by Mahlum to reflect current 2020 conditions, including validation of building areas.

ISLAND PARK ELEMENTARY SCHOOL

SITE INFORMATION

County:	KING
Site Area:	9.37 ACRES
Zoning:	R-9.6
Tax Parcel:	1924059040
Jurisdiction:	CITY OF MERCER ISLAND
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT

BUILDING INFORMATION

BOILDING INFORMATION		
Original Construction:	1956	
Addition:	1995	
Modernization:	1995	
Area (Permanent):	49,399 GSF	
Portables:	2 BUILDINGS (4 Classrooms)	
Grades:	K-5	
Capacity (Permanent):	420	
Enrollment (2019-20):	410	

5437 Island Crest Way Mercer Island, WA 98040 206.236.3410

TEACHING SPACES

General Classrooms:	22
Special Education Classrooms:	2
Occupational Therapy:	1
Technology/Computer Room:	1
Art Room:	0
Music Room:	1
Gymnasium:	1
Library:	1
Total Teaching Spaces:	29



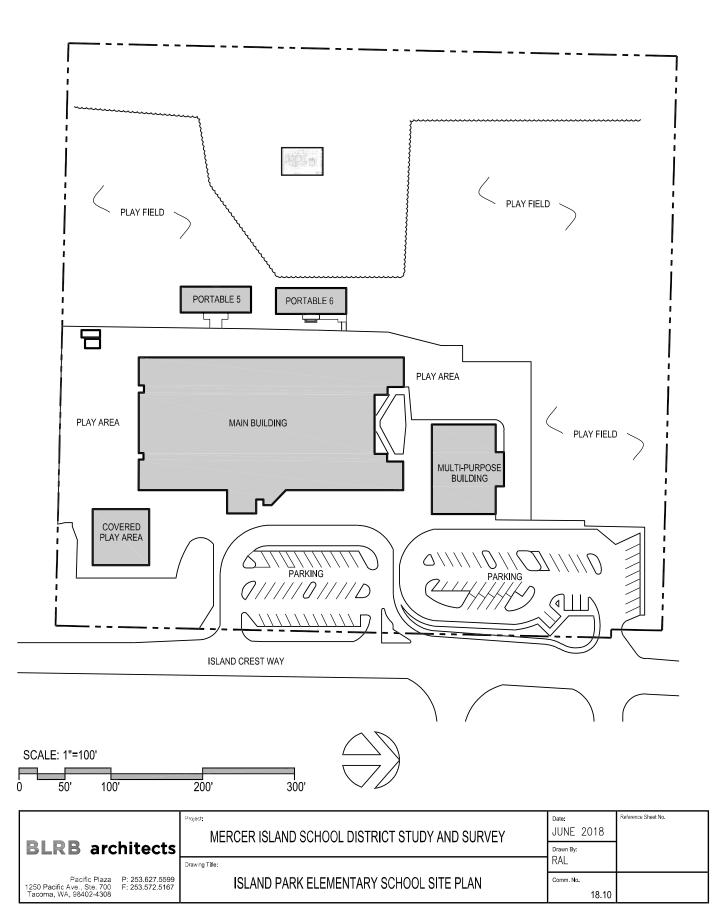
Building Condition Evaluation ICOS Score

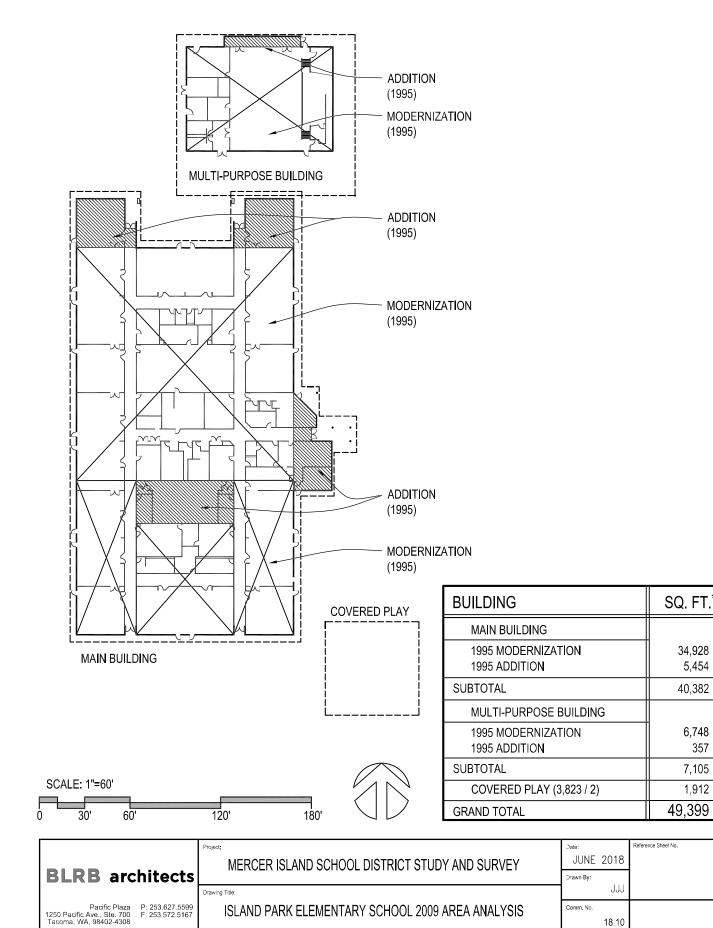
Main Building: 75.03

Multipurpose Building: 73.78

Covered Play: 89.83

Site: 72.66





* Building areas are within 1% of recorded area, per as-built drawing takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021)

34,928

5,454

40,382

6,748

7,105

1,912

357

CONSTRUCTION HISTORY

Island Park Elementary School was originally built in 1956 and was added onto in 1966. In 1995, it was added onto and renovated. At this time, the internal courtyard was in-filled to create space for the new Music Room. The administration and main entrance to the Main Building was moved from the northern elevation, adjacent to the Multipurpose Building to the eastern elevation. The former location for administration was repurposed into two classrooms which were modified into administration at the new entry. Two additional classrooms were added between the Main Building and the Multipurpose Building. Reorganization was done to relocate classrooms, special education, and teacher planning rooms within the existing footprint.

The Multipurpose Building was expanded to the north to allow for additional storage. The restrooms in this building were reconfigured to make them accessible and a storage room flanking the stage was modified into a ramp to make it accessible and to create a dressing room. The storage room to the north of the stage was re-purposed into an office.

The modernization included removal and replacement of all existing windows, addition of a sloped trussed framed system over the existing roofs and replacement of interior and exterior finishes. Most of the existing exterior walls of the Main Building were removed and new walls were constructed on the existing footings. The existing concrete slabs were reused as well. Interior walls between classrooms were removed and replaced with operable partitions. New casework along with marker boards and tackboards were installed. All of the doors and frames were replaced. New toilets, fixtures, and lighting were installed. Flooring throughout the facilities was replaced. In the summer of 2018, the administration front office received tenant improvements.

BUILDING CONDITION EVALUATION 1.0 Exterior Building

Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

Island Park Elementary School's Main Building has been constructed in several phases. There appears to be two original phases, most likely constructed in the 1960s, with concrete spread footing foundations, concrete slab on grade floor construction, reinforced CMU walls, steel roof joist and columns and metal roof decking for two-thirds of the roof (assumed to be part of the original construction) and wood roof decking for the other third (assumed to be an addition).

In 1995, the Main Building was modernized with a new overbuilt wood roof, replacement of the exterior walls with wood stud walls and brick veneer, and a minor entry addition. The overbuild roof structure consists of open web wood roof trusses, wood roof sheathing and glulam roof beams supported by exiting steel columns.

The lateral resisting system for the Main Building consists of the existing wood and metal decking roof diaphragm, plywood roof diaphragm at the overbuilt roof, interior reinforced masonry shear walls, and interior and exterior plywood shear walls. There are also isolated areas with redundant steel cross bracing.

The gymnasium structure has similar construction, with exterior masonry walls, steel columns and roof beams, and wood roof decking. In 1995, plywood sheathing was added over the existing wood roof decking.

The lateral resisting system of the building consists of the plywood roof diaphragm and exterior reinforced masonry shear walls. There is also redundant steel rod cross bracing.

CONDITION EVALUATION

No significant signs of structural distress, differential settlement, or deterioration were observed.

There have been some significant changes in the building code since Island Park Elementary School was seismically upgraded and added onto in 1995. The current IBC requires a 1.25 importance factor for school design plus anchorage requirements for masonry walls have significantly increased. It is assumed that the existing structure is not in full compliance with the current code.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

The exterior wall for the Main Building consists of wood stud walls with plywood sheathing, block veneer wainscot and steel columns that support the roof structure above.

At the gymnasium, the exterior walls consists of reinforced CMU walls with steel columns supported roof structure.

CONDITION EVALUATION

No significant signs of structural distress, differential settlement, or deterioration were observed.

With the code changes in the anchorage requirements for masonry walls, it is assumed that the existing anchorage is not in complete compliance with current code.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

Main Building:

The original low slope roof was covered by a sloped overbuild in 1995. The most recently constructed roof is comprised of asphalt composition shingles with roof felt underlayment over ³/₄" plywood sheathing. The roof positively slopes to metal gutters and PVC downspouts at the perimeter. The roof is interrupted by dormers which house mechanical louvers and storefronts. Ridge venting provides air circulation to the attic space. This roof has no fall restraint system.

Multipurpose Building:

The roof is a built-up roof over a nailer board, rigid insulation, and plywood sheathing. This assembly is supported by 6x12 purlins and steel beams. The roof positively slopes to the perimeter, which has metal gutters and PVC downspouts. Louver dormers are constructed of asphalt composition shingles. This roof has no fall restraint system.

CONDITION EVALUATION

Main Building:

There appears to be a structural deformity that "bumps up" adjacent to the northwest window dormer above the library.

Multipurpose Building:

Access to this roof is provided through an attic space that is extremely difficult to navigate because of ductwork and structure. The hatch leading to the roof is spring loaded and takes a lot of force to close. The low slope roof has a lot of patches, suggesting that water intrusion is a major problem.

Covered Play:

Metal roofing system hidden by parapet.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

Main Building:

The windows are aluminum and were replaced in the 1995 addition and modernization. The classroom windows have operable upper hopper casements. These casements are covered with insect screens. Flashing at the sill sits atop a masonry cap and has a hemmed edge. The perimeter of the window is caulked and sealed and there is no head flashing. The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are solid fill grouted. Doors leading into classrooms and corridors have half lites, while the main entry doors have full lites. There are some hollow metal windows above the main entry door and in the cupola above the main entry. All exterior windows are insulated.

Multipurpose Building:

The windows, doors, and frames were replaced in 1995 as well. The windows are aluminum and the doors are hollow metal doors set within hollow metal frames.

CONDITION EVALUATION

Main Building:

The windows are in good condition and are sealed properly. Many of the door thresholds exceed ½" and do not rest properly on the exterior concrete walkways or asphalt as a result of settlement. Some of the door sweeps are missing screws or are damaged.

Multipurpose Building:

The windows and doors are in good repair.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

Main Building:

A piece of 2x10 cedar trim provides backing for metal gutters and a 2x8 piece of cedar trim provides an end cap for double 2x6 outriggers. The soffit is a painted 2x6 painted tongue and groove decking that slopes with the roof. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster. Soffits over entries are plaster and have recessed light fixtures. A hemmed piece of flashing protects the masonry cavity wainscot.

Multipurpose Building:

This building is trimmed with metal flashing over a 2x8 fascia board over a 2x10. A 2x8 wood trim provides the termination for the plaster wall. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster.

CONDITION EVALUATION

Main Building:

The exterior trim system is generally in good repair. Some gutters have standing water. All exterior light lenses are UV stained.

Multipurpose Building:

The exterior trim system is generally in good repair. All exterior light lenses are UV stained.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

Main Building:

All original flooring was removed and replaced in the 1995 addition and modernization. Classrooms have carpet with VCT along the cabinetry walls. Corridors and offices are carpeted as well. Restrooms have a sheet vinyl floor with a coved base. Rubber base was installed in 1995 over carpeted areas and VCT. The carpet is getting to the end of it useful life. The main office is currently being remodeled. Also, a new security vestibule has been installed in recent years.

Multipurpose Building:

The multipurpose room has VCT flooring that is striped for basketball. The kitchen has sheet vinyl flooring with a coved base. The wooden stage was built before the 1995 addition and modernization. Various kitchen equipment was replaced in 2019.

CONDITION EVALUATION

Main Building:

Hard-surface floors are in good condition. Carpeting is original from the 1990s and needs to be replaced.

Multipurpose Building:

The floors are generally in good repair.

2.2 WALLS

SYSTEM DESCRIPTION

Main Building:

Walls are generally type "x" gypsum wallboard over wood studs. Painted concrete masonry units provide a finish surface throughout the facility. Restrooms typically have plastic laminate wainscoting over existing CMU walls and gypsum wallboard. The main entry corridor and library have acoustical wall panels in the high volume spaces above. Vinyl wall covering is provided on one wall in the classrooms and in the corridors.

Multipurpose Building:

Walls in the Multipurpose room are comprised of concrete masonry units, painted MDO plywood that is capped with a 1x3 piece of wood trim, and type "x" gypsum wallboard above. They are covered by wall mats below. The Kitchen has painted CMU and FRP over gypsum wallboard. The wet walls do not have FRP but do have a large stainless steel backsplash integral to the stainless steel equipment. The Custodian Room does not have FRP on the wall adjacent to the mop sink. Acoustical wall panels are provided in the high volume space of the Multipurpose Room. Restrooms typically have plastic laminate wainscoting over existing CMU walls and gypsum wallboard.

CONDITION EVALUATION

Main Building:

The walls are in good repair, but the coverings are in fair condition.

Multipurpose Building:

CMU walls in the Kitchen and Multipurpose room should be repainted. There is water damage to the wall adjacent to the mop sink. The wall mats are in poor condition around the wall outlets. The outlet cover plates are damaged as well. Acoustical wall panels in the Multipurpose Room are soiled.

2.3 CEILINGS

SYSTEM DESCRIPTION

Main Building:

Ceilings consist of 2'x4' acoustical ceiling panels in the corridors and classrooms. The main entry corridor is a high volume space that has acoustical ceiling tiles that slope with the roofline. The library is also a high volume space with a ceiling that slopes in four directions. It is finished with acoustical ceiling tiles. Restrooms, storage rooms, electrical room, and a portion of the music room has a gypsum board ceiling.

Multipurpose Building:

The Multipurpose Room is a high volume space with exposed painted beams and purlins. Acoustical ceiling tiles are attached to the underside of the wood deck roof. The dressing room has acoustical ceiling panels. All other spaces have a gypsum board ceiling.

CONDITION EVALUATION

Main Building:

Water damage was observed in several locations. Areas that were observed include above the door connecting the library with the east corridor, adjacent to structural steel in that location, in the staff lounge, and in the main entry corridor. It is unclear if this damage is caused by mechanical equipment above or from water intrusion from the roof.

Multipurpose Building:

There are missing acoustical ceiling tiles in the Multipurpose Room.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

Main Building:

Classrooms are typically equipped with upper and lower cabinetry, sink, a tall cabinet, projection screen, white board, wall-mounted television, and an operable partition wall.

The library has bookshelves along the wall and in islands that were resurfaced with plastic laminate during the 1995 addition and modernization.

The staff lounge is equipped with a stove, fume hood, refrigerator, dishwasher, and upper and lower cabinetry.

Multipurpose Building:

The Multipurpose Room is equipped with two operable basketball backboards, six stationary practice backboards, and movable storage under the main stage. These backboards were repainted during the 1995 addition and modernization. The scoreboard was relocated during construction. The Kitchen consists of a double door reach-in refrigerator, double door reach-in freezer, milk cooler, double stack convention oven, three-well steam table, three-compartment sink, single-compartment dishwasher, and an exhaust hood. Much of the cabinetry was reused during the 1995 addition and modernization.

CONDITION EVALUATION

Main Building:

The equipment appears to be in good repair.

Multipurpose Building:

The equipment appears to be generally in fair repair. The movable storage located under the stage is difficult to operate.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

Main Building:

Power Distribution

Utility Service: Island Park Elementary School's Main Classroom Building is fed from the Gym Building via a 600A breaker. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.

Switchboard: The sub-distribution board is a "Square-D" brand "I-Line" type panelboard rated for 600A at 480Y/277V.

Generator: Emergency circuits for data and telecommunications are fed from the emergency distribution system in the Gym Building.

Panelboards: Existing panelboards are "Square-D" brand "NEHB", "I-Line", and "NQOD" type boards, most with spaces and spares for future capacity. "Leviton" 42120-DY3 transient voltage surge suppressors are installed on 120V panels.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock.

Interior fixtures are locally switched by occupants and corridors are keyswitched at entries. Interior light fixtures are 2'X4' lay-in lensed with LED retrofit T-8 lamps. Occupancy sensors control classroom lighting in conjunction with local switching. Low Voltage

Low Voltage

Telecommunications: The Main Distribution Frame (MDF) is located in Area B off Corridor 118. Network distribution for voice and data is hierarchical star topology. Data cabling is a mixture of Cat 5 and Cat 6 CommScope and terminates on Ortronics patch panels; voice cabling is a mix of Cat 2/3 and terminates on 110 wall mount blocks. Workstations are terminated on Ortronics Series II jacks. Classrooms have minimum connectivity. Demarcation enters MDF from above (attic space) the actual entrance into the building is unknown. (1) Cat 5 4-pair and (1) Cat 3 25-pair copper backbone cable connects to the gym building IDF. There is an optical fiber cabinet but no optical fiber is present. Wirelesses Access Points are in various classrooms.

CATV Distribution: CATV distribution cabling is homerunned back to MDF with an extension to the gym building. The signal is extended to a 2' x 2' x 80" headend cabinet. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR's are located in the Library work room. The CATV taps are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wall-mounted TV outlet and a wallmounted TV set.

Intercom/Clock: The intercom system was upgraded in 2018. The gym building is connected to the main building, 66 blocks are wall-mounted in the electrical room. Combination intercom/clock speaker devices with call switches are located in instructional spaces. Flushmounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wallmounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.

Sound Systems: Sound systems are present in the following spaces:

- > Gym/Commons (shared spaces)
- > Band/Choir Room (single room)

The Gym/Commons sound system was upgraded in 2020.

Security: An Ademco Vista 50 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security Cameras have recently been added to the school. Access card readers and security keypads are installed at selected entrances and a security vestibule at the main entrance has been added. System is monitored by Guardian.

Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wallmounted 110 terminal blocks.

Multipurpose Building:

Power Distribution

Utility Service: Island Park Elementary School's Gym Building is fed underground from an exterior pad-mounted 300kVA utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.

Switchboard: The main switchboard is a "Square-D" brand "QED" type switchboard rated for 800A at 480Y/277V. The main switchboard has an 800A main breaker and (7) available spaces.

Generator: The existing generator is an 80kW "Katolight" brand 480Y/277V generator with a "Zenith" brand automatic transfer switch. Panelboards: Existing panelboards are "Square-D" brand "NQOD" and "NEHB" type boards. Most panels have available for future capacity. "Leviton" brand "42120-DY3" transient voltage surge suppressors have been installed throughout the facility.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and corridors are key-switched at entries. Interior fixtures are T-8 type LED retrofit lamps including LED retrofit lamps in the in the gym. New lenses have been installed in the covered play area.

Low Voltage

IDF is located in the gym building Electrical Room 212. Patch panels and 110 blocks are wall-mounted; there is no equipment rack at this location.

All low voltage systems are typical of the classroom building.

CONDITION EVALUATION

Main Building:

The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The interior and exterior lighting is in good condition and appears to provide adequate lighting levels.

The existing intercom system is in good operating condition.

The existing security system provides adequate intrusion detection and access control functions. There is no existing video surveillance system.

The existing CATV system functions adequately for the distribution of local cable TV and school programming.

The existing Category 5 telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. It is possible the cable is capable of supporting current standards if the cabling was re-terminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a Category 5e or category 6 cabling plant. The current data backbone (Cat 5) is insufficient for future applications and should be replaced with laser optimized 50/125 multi-mode optical fiber cable to support current 10 gigabit per second Ethernet transmission standards for optical fiber cabling. A fiberoptic connection has been brought to the main MDF.

The existing sound systems appear to be operating adequately. The existing demark cable may be in a code violation if length of exposed cable exceeds 50' within building.

Multipurpose Building:

The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The main electrical room has a fireproof cabinet, however, gasoline and gas powered equipment is stored outside in the shed.

The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixture lenses are yellowing and should be replaced.

See Classroom Building Condition Evaluation for low voltage evaluation.

3.2 PLUMBING

SYSTEM DESCRIPTION

Main Building:

All restrooms are equipped with metered faucets. Trap wrap is not installed in any ADA height sinks in the building.

All water closets are equipped with 1.6 GPF flush valves. Urinals in boys' restrooms are equipped with 1.0 GPF hands-free flush valves. Student restrooms are equipped with hose bibbs. Each classroom is equipped with a sink and bubbler. Drinking fountains and bottle fillers are located in the corridors.

Multipurpose Building:

Girls' and boys' restrooms are not equipped with ADA-height sinks or trap wrap at sinks. Sinks have metered faucets in good condition. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 1.0 GPF hands free flush valves.

The hot water heater is located in the boiler room and was replaced in 2017-18.

CONDITION EVALUATION

Main Building:

Staff and student restrooms are in good condition. Water closet and urinal flush valves are in good condition.

Multipurpose Building:

Plumbing systems are in fair condition.

3.3 HOT WATER/FORCED AIR HEATING

SYSTEM DESCRIPTION

Main Building:

Forced air heating is provided by a hydronic heating water system. Temperature control is provided in classrooms by push-button thermostats. Hot water coils, air handling units, and return fans were installed in 1995, and are in good condition. Heating water is provided by Lochinvar boilers that were also installed in 1995. The boilers are nearing end of life.

Restrooms seem to have adequate exhaust. Minimal ventilation is provided to hallways. In the library, air is diffused from high on the wall, and returned at the floor.

In mechanical attics, dampers rattle in the ductwork in several areas. There are several areas with significant air leakage around a connection to a hot water coil. Heating water piping and ductwork for incoming outside air appeared to be well insulated.

There are no floor drains in mechanical attics. The heating water to coils is controlled by Griswold control valves.

Computer Room Cooling One Carrier heat pump provides cooling to the computer room. The unit was installed in 1995.

Multipurpose Building:

Forced air heating in the multipurpose building is provided by a hydronic heating water system. La Salle air handling units in the mechanical attic provide mixed air to heating coils for each zone. There is a separate return air fan. All equipment appears to have been installed in 1995. Ducts leak in several areas in the mechanical attic.

Heating water is supplied by two Patterson Kelly boilers. Both heating water pumps are controlled by VFD.

Student restrooms in the multipurpose building are not sufficiently ventilated.

CONDITION EVALUATION

Main Building:

The systems are in fair to poor condition. System is inefficient, with aging equjipment.

Multipurpose Building:

The systems are in fair condition. Equipment is inefficient and aging.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

Main Building:

Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

Multipurpose Building:

Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

4.2 FIRE CONTROL CAPABILITY

Main Building:

Fire protection sprinklers are provided in the covered play area, but they are not shielded.

Multipurpose Building:

Fire protection sprinkler heads in the multipurpose room are unshielded.

4.3 FIRE ALARM

SYSTEM DESCRIPTION

Main Building:

The fire alarm system has been recently replaced and new RF subscriber dialer installed. There appears to be an adequate number of notification and detection devices.

Multipurpose Building:

There is a new fire alarm panel located in the main building. There appears to be an adequate number of notification and detection devices in this facility. The gum is monitored from the adjacent main building. There are tamper, flow, and low air switches installed in the building and beam detectors installed in the gym.

CONDITION EVALUATION

Classroom Building:

System is in good working condition and appears to meet current code coverage.

Multipurpose Building:

System is in good working condition and appears to meet current code coverage.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Main Building:

Emergency lighting for egress consists of LED fixtures supplied from the emergency generator, located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

Multipurpose Building:

Emergency lighting for egress consists of LED fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

CONDITION EVALUATION

Main Building:

System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

Multipurpose Building:

System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 FIRE RESISTANCE

Main Building:

The Classroom Building has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. A two-hour area separation wall was built at the southeast corner between Classrooms 17 and 18 and adjacent to the Multipurpose Building. This wall is a 10" CMU wall with wood stud furring and GWB. The building is sprinklered.

Multipurpose Building:

The Multipurpose Building has one floor of occupied space and is comprised mostly of CMU walls. This building is sprinklered.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

Main Building:

The 1995 improvements to this building resulted in better handicapped accessibility. Improved or newly constructed restrooms include the appropriate clearances, access widths, heights of accessories, accessible fixtures, and grab bars. Waste pipes are not insulated.

Throughout the building interior door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances. Drinking fountains throughout the facility are at 2'-10", but do not have the appropriate high/low configuration. Sinks and countertops in the classrooms are 2'-10" above finish floor.

Three handicapped parking stalls are provided in the front parking area adjacent to the main entry. However, the path of access crosses the pick-up/ drop-off lane of traffic. At this location, a painted crosswalk has been provided to highlight this path. A curb cut has been provided to give direct access from the driveway to the main entry of the building.

The height of many exterior door thresholds exceeds the ½ inch prescribed by current code. This occurs at the new concrete walk constructed in 1995 and at the asphalt paving that was kept in place during construction.

Multipurpose Building:

Restrooms include the appropriate clearances, access widths, and grab bars. Sinks are not at an accessible height. Waste pipes are not insulated here or at the hand sink in the Kitchen.

There is one accessible drinking fountain in the Multipurpose room that does not have the appropriate high-low configuration.

CONDITION EVALUATION

Main Building:

Proper drinking fountains with a high-low sink should be considered. All exposed pipes under sinks should be insulated. Bottle fillers have been installed.

Uneven settlement in exterior sidewalks and asphalt walks has resulted in slab differentials at exterior door thresholds. Site work should be considered to fix this problem. This condition also presents a tripping hazard.

Multipurpose Building:

Sinks should be at an accessible height and waste piping should be properly insulated.

SITE CONDITION EVALUATION

The site is surrounded by residential properties along its northern and western perimeters. The site slopes down to the west at the play fields. There are three play fields, one located to the northwest of the property and one at the southwest. They are separated from each other by a fenced ravine. The third play field is located north of the Multipurpose Building.

The northwest play field has a sandlot at its southeast corner. Access to this play field is provided by an asphalt ramp with handrails. During wet winter months, this field is occasionally fenced to limit access. The southwest field is currently fenced off and has no access.

The building is located toward the east of the property. Parent drop-off occurs in a loop around staff parking to the east of the main entry, off of Island Crest Way. The bus loop is located in the northeast parking lot, off of Island Crest Way. Some of the parking stalls are designated compact. Flaggers help facilitate traffic from Island Crest Way during the morning and afternoon. Parking is inadequate even though the stall count exceeds what is prescribed by the Mercer Island Municipal Code for an elementary school.

Play equipment areas are located on the southeast corner of the property, adjacent to Island Crest Way. It is screened by a fence and bushes. The covered play area is also located here.

Two portables are located to the west of the Main Building. Exterior storage shed and emergency supply storage are in good shape.

Physical Condition

PARKING AND DRIVEWAY AREAS

The asphalt paving in the north and south parking lots is in good to fair condition. The surface contains some cracking and previous patches.

HARD SURFACE PLAY AREAS

The hard surface play areas are generally in fair condition. Game lines could stand to be repainted. There is minimal cracking to the surface.

DRAINAGE

The north softball field has poor drainage along its southern perimeter, where an underground spring keeps the field constantly wet.

Drainage along the southern fence facing the wooded area is poor.

PLAY FIELDS

The south play field is in fair to poor condition. Dirt was relocated from South Mercer Play fields to help level this area. Additional work has been done, but the usefulness of this field is still limited by levelness and lack of irrigation.

The north softball field is in fair to poor condition. It is unlevel with bumps and depressions. There are brown spots located around the perimeter and the sandlot has vegetation growing through it. The path leading down to this field is retained by jersey barriers.

FENCING

Chain link fencing surrounding the north softball field is severely damaged. In some locations the top rail has become detached, causing the chain link to sag. The chain link has holes and deformations in many locations. Some of the top rails are beginning to rust.

Metal posts on the chain link fence fronting the portables are no longer perpendicular to the ground in some locations.

Fencing along the southern property line provides security between the school and the heavily wooded area. This fence should be taller than three feet.

PLAY EQUIPMENT

Codes related to play equipment have changed in the last several years. Because of this, the equipment should be inspected by a certified inspector on an annual basis. The play area is bordered by asphalt. There is no curb to contain the treated wood chips. One area includes a plastic border that appears to be performing well. The equipment areas are underlain with treated wood chips (fibar) and appear to be at sufficient depth.

Timber toys have been replaced with metal play equipment, so all play equipment is metal. This play area has some small climbing walls, built in benches and tables.

There is a large covered play area located to the southeast of the Main Building. It is constructed of a structural steel rigid frame, steel purlins, exposed metal deck, and metal panel fascia, surrounded by concrete masonry units walls. There is a small storage shed connected to this structure. This shed has asphalt shingles on its low-slope roof which are in poor condition.

Other Observations

Taking a left onto Island Crest Way from the main parking lot is hazardous. Site lines are obscured by trees and light poles. Leaving this parking lot is problematic during peak times. Traffic backs up south for approximately three quarters of a mile.

The main play area is located adjacent to Island Crest Way. It is shielded from the street by fencing and bushes. Relocation of the play equipment and covered play area should be considered. Security barriers between the play area and the street should at least be considered if relocation proves not viable.

EDUCATIONAL ADEQUACY ASSESSMENT

The following summary includes programmatic needs and issues identified at Island Park Elementary School by the school principal, the MISD facilities department, and the 2010 Study and Survey report.

Site

The campus is not secure. This is primarily due to multiple disconnected buildings on the campus.

Portable classrooms are disconnected from other buildings, creating security issues for access. They have no covered entry, causing water intrusion at the doors, and they do not provide adequate storage or pull-out space.

Parking is challenging. Vehicular circulation creates traffic congestion in the neighborhood during pick up/ drop off times and during events. This also creates egress difficulties for staff, and causes parking overflow in the neighborhood. The circulation issue is further exacerbated by poor pedestrian connections in neighborhood.

Outdoor play fields have drainage issues which limit their usability during the rainy season.

Hard surface play areas are currently too close to southern classrooms. Play area between multipurpose building and classroom building gets congested.

Covered play area is not large enough to meet program need.

Building/Program

TEACHING AREAS

Multipurpose room is used both as a cafeteria and gymnasium, causing scheduling issues and resulting in a reduction of instructional time for PE and available time for lunch. This space also has poor acoustics.

Special education program does not have adequate space. There is a need for a new special education classroom and OT/PT therapy room. Speech and resource rooms are located too close to the music room. Most importantly, having a centralized special education area would provide a better opportunity to connect with other students. Classrooms are too small, and do not have sufficient storage. There is deficiency of flex / project spaces distributed throughout the school, as well as a need for more tackable wall surfaces. Acoustics between classrooms are poor.

There is a need for small group learning / pull-out areas to support general education distributed throughout the school

SUPPORT AREAS

Expansion of administration area to accommodate an adequate health room, nurse's office, staff workroom, staff lounge, records storage, conference room, and PTA room.

Permanent facilities for the before/after care program are desired.

There is a need for small group learning/ pull-out areas distributed throughout the school to support general education.

Dedicated art/science classroom is needed.

Library needs additional storage and more natural light.

Multiple sensory rooms or "safe spaces" would be very useful. These would ideally be distributed throughout the school and easily accessible.

There is a need for student restrooms in or adjacent to kindergarten classrooms.

Additional staff restrooms are needed.

Safety/Security

A secure entry vestibule was added to the building in 2018 allowing controlled access into the school.

The school is located just off Island Crest Way, the main north / south arterial for the Island. The site area for parking and bus loading is constrained by the playground to the south, the school and play field to the west, and Island Crest Way to the east. The consequence of having access to a school from a main arterial will always be challenging, but this situation is made worse by the limited area available to accommodate buses, student pickup and drop-off, parent parking, and staff parking. There are traffic backups on Island Crest Way and a general sense of chaos for both morning drop-off and afternoon pickup. The congestion further increases safety concerns for pedestrians.

The school's proximity to this busy street and the challenges presented to fencing decrease the time it takes for a student to leave a supervised area and be either in the parking area or on the street.

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY		
ISLAND PARK FI	MERCER ISLAND EMENTARY SCHOOL - 01_MAIN BUILDING	SCHOOL DISTRICT (17400)
Profile Name:	Classroom Building - Slabs On Grade	Currently BCA Certified: Yes
Inventory Statu		Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Ratin		Last District Review: 11/25/2020
condition natio	B. 75.0376	
		Condition Rating Component Priorit
Sub-Assembly	Component	EGFPUN/A Score LMI
Foundations		
A1010	Standard Foundation	
Slabs on Grade		
A4010	Standard Slabs on Grade	
Water and Gas N	Vitigation	
A6010	Building Subdrainage	
Superstructure		
B1020	Roof Construction	
Exterior Vertical	Enclosures	
B2010	Exterior Walls	
B2020	Exterior Windows	
B2050	Exterior Doors and Grilles	
B2070	Exterior Louvers and Vents	
Exterior Horizon	tal Enclosures	
B3010	Roofing	
B3020	Roof Appurtenances	
B3060	Horizontal Openings	
B3080	Overhead Exterior Enclosures	
Interior Construe	ction	
C1010	Interior Partitions	
C1020	Interior Windows	
C1030	Interior Doors	
C1070	Suspended Ceiling Construction	
Interior Finishes		
C2010	Wall Finishes	
C2030	Flooring	
C2050	Ceiling Finishes	
Plumbing	-	
D2010	Domestic Water Distribution	
D2020	Sanitary Drainage	
D2030	Building Support Plumbing Systems	
HVAC	5 <u>6</u>	
D3010	Facility Fuel Systems	
D3020	Heating Systems	
D3020	Facility HVAC Distribution Systems	
	Ventilation	
D3060	Ventilation	

01-20 School District | 03 Geographic and Character Island School District | 03 Geographed: Mar 14, 2021

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

F	ire Protection				
	D4010	Fire Suppression		90 %	
	D4030	Fire Protection Specialties		90 %	
E	lectrical				
	D5010	Facility Power Generation		62 %	
	D5020	Electrical Services and Distribution		90 %	
	D5030	General Purpose Electrical Power		90 %	
	D5040	Lighting		90 %	
C	Communications				
	D6010	Data Communications		90 %	
	D6020	Voice Communications		90 %	
	D6030	Audio-Video Communications		62 %	
	D6060	Distributed Communications and Monitoring		90 %	
E	lectronic Safety	and Security			
	D7010	Access Control and Intrusion Detection	$\boxdot \Box \Box \Box \Box$	100 %	
	D7030	Electronic Surveillance	$\boxdot \Box \Box \Box \Box$	100 %	
	D7050	Detection and Alarm	$\boxdot \Box \Box \Box \Box$	100 %	
I	ntegrated Autom	nation			
	D8010	Integrated Automation Facility Controls		62 %	
F	urnishings				
	E2010	Fixed Furnishings		90 %	
	E2050	Movable Furnishings		62 %	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)				
ISLAND PARK EL	IVIERCER ISLANI EMENTARY SCHOOL - 02_MULTI-PURPOSE BUILDING	SCHOOL DISTRICT (17400)		
Profile Name:	Gymnasium	Currently BCA Certified: Yes		
Inventory Statu	•	Last BCA Certify: 3/14/20)21	
Reviewed By:	Consultant	Last District Review: 11/25/		
Condition Ratir	ng: 73.78 %	Last District Review: 11/25/	11/25/2020	
		Condition Rating Component F	-	
Sub-Assembly	Component	E G F P U N/A Score L	мн	
Foundations				
A1010	Standard Foundation			
Slabs on Grade				
A4010	Standard Slabs on Grade			
Water and Gas I	-			
A6010	Building Subdrainage			
Superstructure				
B1020 Exterior Vertica	Roof Construction			
B2010	Enclosures Exterior Walls			
B2010 B2020	Exterior Windows			
B2020 B2050	Exterior Doors and Grilles			
B2030	Exterior Louvers and Vents			
Exterior Horizon				
B3010	Roofing			
B3020	Roof Appurtenances			
B3060	Horizontal Openings			
B3080	Overhead Exterior Enclosures			
Interior Constru				
C1010	Interior Partitions			
C1030	Interior Doors			
C1030	Interior Grilles and Gates			
Interior Finishes				
C2010	Wall Finishes			
C2020	Interior Fabrications			
C2030	Flooring			
C2050	Ceiling Finishes			
Plumbing	-			
D2010	Domestic Water Distribution			
D2020	Sanitary Drainage			
D2030	Building Support Plumbing Systems			
HVAC				
D3010	Facility Fuel Systems			
D3020	Heating Systems			
D3050	Facility HVAC Distribution Systems			
D3060	Ventilation			

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	ON
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

	MERCER ISEAR		
Fire Protection			
D4010	Fire Suppression	90 %	
D4030	Fire Protection Specialties	90 %	
Electrical			
D5010	Facility Power Generation	90 %	
D5020	Electrical Services and Distribution	62 %	
D5030	General Purpose Electrical Power	62 %	
D5040	Lighting	62 %	
Communications			
D6010	Data Communications	90 %	
D6020	Voice Communications	90 %	
D6030	Audio-Video Communications	90 %	
D6060	Distributed Communications and Monitoring	90 %	
Electronic Safety	and Security		
D7010	Access Control and Intrusion Detection	62 %	
D7030	Electronic Surveillance	62 %	
D7050	Detection and Alarm	90 %	
Integrated Auton	nation		
D8010	Integrated Automation Facility Controls	62 %	
Equipment			
E1030	Commercial Equipment	90 %	
E1040	Institutional Equipment	90 %	
E1070	Entertainment and Recreational Equipment	90 %	
Furnishings			
E2010	Fixed Furnishings	90 %	
E2050	Movable Furnishings	90 %	

	2020-2021 BUILDIN	JPERINTENDENT OF PUBLIC INSTRUCTION G CONDITION RATING SUMMARY D SCHOOL DISTRICT (17400)
ISLAND PARK ELEI	MENTARY SCHOOL - 03_COVERED PLAY	
Profile Name:	Covered Play	Currently BCA Certified: Yes
Inventory Status:	Recognized	Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Rating	89.83 %	Last District Review: 11/25/2020
		Condition Rating Component Priori
Sub-Assembly	Component	EGFPUN/A Score LM
Foundations		
A1010	Standard Foundation	
Slabs on Grade		
A4010	Standard Slabs on Grade	
Superstructure		
B1020	Roof Construction	
Exterior Vertical E	nclosures	
B2010	Exterior Walls	
Exterior Horizonta	l Enclosures	
B3010	Roofing	
B3020	Roof Appurtenances	
B3080	Overhead Exterior Enclosures	
Interior Finishes		
C2050	Ceiling Finishes	
Electrical		
D5040	Lighting	
Electronic Safety a	and Security	
D7030	Electronic Surveillance	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
SITE CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

ISLAND PARK EL	EMENTARY SCHOOL		
Profile Name:	Elementary School - Rural	Last Review:	3/14/2021
Inventory Statu	s: Recognized		
Condition Ratin	g: 72.66 %		
		Condition Rating	Component Prior
Sub-Assembly	Component	EGFPUN/A	Score L M
Site Improveme	nt		
G2010	Roadways		90 %
G2020	Parking Lots		90 %
G2030	Pedestrian Plazas and Walkways		62 %
G2050	Athletic, Recreational and Playfields Areas		62 %
G2060	Site Development		62 %
G2080	Landscaping		62 %
Liquid and Gas S	ite Utilities		
G3010	Water Utilities		90 %
G3020	Sanitary Sewerage Utilities		62 %
G3030	Storm Drainage Utilities		62 %
Electrical Site Im	provements		
G4010	Site Electric Distribution Systems		90 %
G4050	Site Lighting		62 %
Site Communica	tions		
G5010	Site Communications Systems		90 %

LAKERIDGE ELEMENTARY SCHOOL

SITE INFORMATION

County:	KING
Site Area:	9.48 ACRES
Zoning:	R-9.6
Tax Parcel:	2524049015
Jurisdiction:	CITY OF MERC ISLAND
Police Jurisdiction:	MERCER ISLAN POLICE DEPARTMENT
Fire Jurisdiction:	MERCER ISLAN FIRE DEPARTMENT

BUILDING INFORMATION

	Original Construction:	1953
	Addition:	1995
	Modernization:	1995
	Area (Permanent):	52,269 GSF
RCER	Portables:	2 BUILDINGS (4 Classrooms)
AND	Grades:	K-5
NT	Capacity (Permanent):	456
AND	Enrollment (2019-20):	450
лт		

8215 Southeast 78th Mercer Island, WA 98040 206.236.3415

TEACHING SPACES

General Classrooms:		
Special Education Classrooms:	2	
Occupational Therapy:	1	
Technology/Computer Room:	1	
Art Room:	0	
Music Room:	1	
Gymnasium:	1	
Library:	1	
Total Teaching Spaces:		

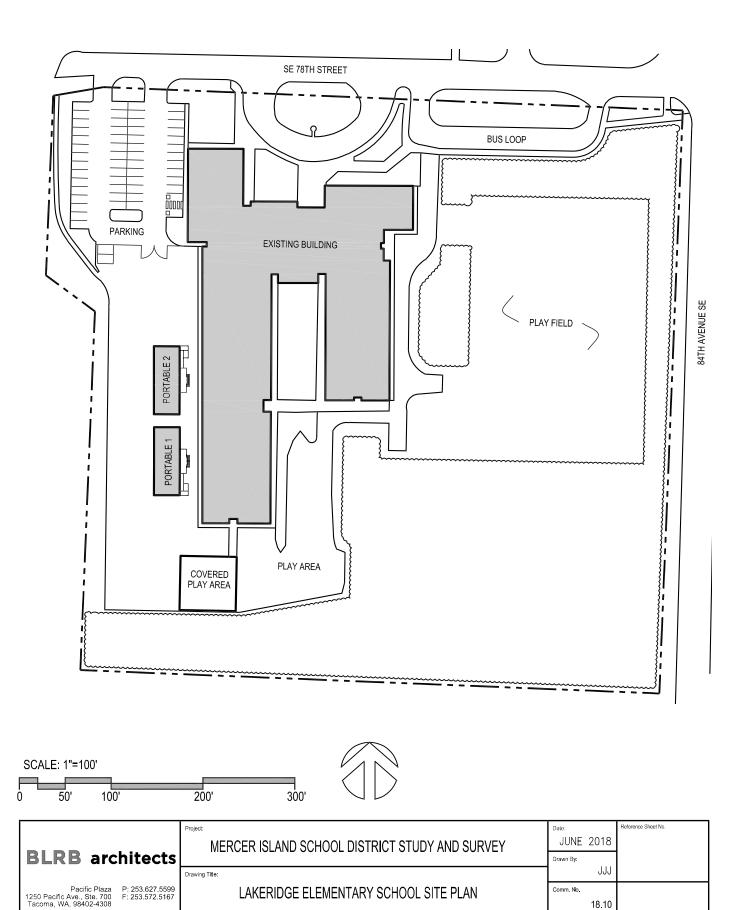


Building Condition Evaluation ICOS Score

Main Building: 79.67

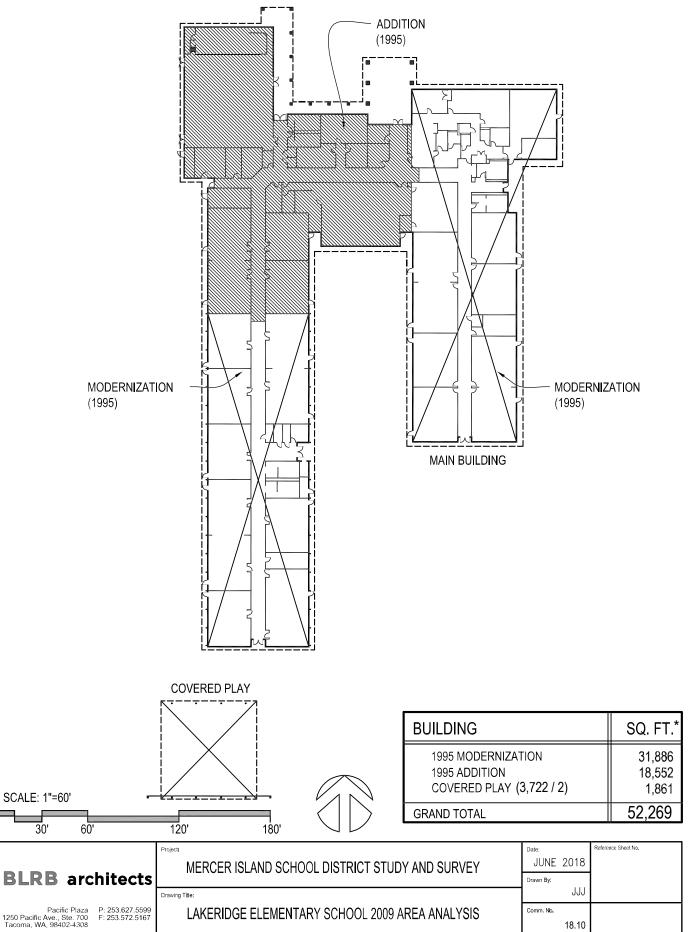
Covered Play: 62.34

Site: 77.42



18.10

CHAPTER 01 | INVENTORY & AREA ANALYSIS LAKERIDGE ELEMENTARY SCHOOL



* Building areas have been updated per as-built drawing area takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021)

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CONSTRUCTION HISTORY

Lakeridge Elementary School was originally constructed in 1953. Until 1995, the campus was comprised of two classroom buildings, a Multipurpose Building, a mechanical building, and a covered play shed. All of these buildings were connected via a covered walkway.

In 1995, the existing Multipurpose Building and the mechanical building were demolished and the classroom buildings were modernized. These classroom buildings were connected and added onto by new construction consisting of a new Multipurpose Room with a kitchen, office and storage. A library and office, three additional classrooms, a Resource Room, Chapter 1 Room, Speech Room, Itinerant Room, O.T./P.T., PTA Room, Teacher Planning, and additional storage and restrooms were also part of the addition. The addition is a slab on grade with wood framing and roof truss joists and asphalt shingles. Aluminum windows were installed.

The modernization included removal and replacement of all existing windows, addition of a sloped trussed framed system over the existing roofs and replacement of interior and exterior finishes. New casework along with markerboards and tackboards were installed. All of the doors and frames were replaced. Some of the classrooms had new wood-framed walls with GWB installed. A secured entry vestibule has been added recently.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

Lakeridge Elementary School consists of two original classroom wings,

constructed in 1953, and a newer addition, constructed in 1995, that connects the two wings together.

The original construction of the classroom wings consists of concrete spread footing foundations, concrete slab on grade floor construction, steel beams and columns, partially reinforced CMU non-bearing shear walls, steel roof joists and metal decking at the west wing and wood decking at the east wing.

In 1995, the building was modernized with a new overbuilt wood roof consisting of open web wood roof joist and plywood decking supported by the existing steel columns. The exterior walls were infilled with wood stud framing with plywood sheathing. The interior and exterior masonry walls were backed with wood stud walls.

The addition to the building consisted of concrete spread footing foundations, concrete slab-on-grade floor construction, wood stud bearing and exterior walls with plywood sheathing and open web wood roof joist with plywood sheathing.

The play shed was seismically upgraded with the addition of masonry shear walls at the open end of the structure.

The lateral resisting system for the building consists of the original wood and metal decking roof diaphragms, plywood roof diaphragm, plywood shear walls, and to some extent the existing masonry shear walls.

CONDITION EVALUATION

We did not observe significant signs of structural distress, differential settlement or deterioration.

There have been some significant changes in the building code since Lakeridge Elementary School was seismically upgraded and added onto in 1995. The current IBC requires a 1.25 importance factor for school design plus the design force for out of plane anchorage for masonry walls has doubled. It is assumed that the existing structure is not in full compliance with the current code.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

The majority of the exterior walls at the Lakeridge Elementary are wood stud walls with plywood sheathing. At the end of the original wings the walls are partially reinforced masonry that were backed with wood stud walls in 1995.

CONDITION EVALUATION

We did not observe signs of significant structural distress, differential settlement or deterioration.

The partially reinforced masonry walls are of some concern. The stresses on the walls were limited and they have been backed to reduce the potential for earthquake damage. The out of plane design forces for masonry walls have doubled since the building was upgraded in 1995. There is the potential for some overstress in the backing or masonry walls with respect to current code..

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

The original low slope roof was covered by a sloped overbuild in 1995. The most recently constructed roof is comprised of asphalt composition shingles with roof felt underlayment over ¾" plywood sheathing. The roof positively slopes to metal gutters and PVC downspouts at the perimeter. The roof is interrupted by dormers which house mechanical louvers. Ridge venting provides air circulation to the attic space. This roof has no fall restraint system.

CONDITION EVALUATION

There are shingles missing in small areas throughout the roof with some of these shingles along ridge vents. There are some exposed nails along the ridge vents. The louver overbuilds have a 12:12 pitch causing the ridge shingles to crack. There is significant moss buildup on the roof, particularly in shaded areas. Some of the gutters are not sloped properly to drain. Trees along line the eastern and southeastern side of the roof are higher than the roof requiring maintenance to keep the downspouts in that location from backing up.

The boiler flue above the Utility Room has excessive condensation causing discoloration of the shingles below it. The base flanges of some stack vents are damaged and do not have sufficient contact with the roofing.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows are aluminum and were replaced in the 1995 addition and modernization. The classroom windows are operable and have insect screens. The perimeter of the window is caulked and sealed and there is no head flashing. The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are solid fill grouted. Doors leading into classrooms and corridors have half lites while the main entry doors have full lites. There are some hollow metal windows above the main entry door. All exterior windows are insulated.

CONDITION EVALUATION

Doors and frames are generally in good repair, but should be cleaned and repainted. The threshold at the door leading out of the northwest corner of the Multipurpose room does not have proper contact with the concrete walkway and exceeds the allowed height prescribed by current accessibility codes. This also occurs at the exterior door leading out of Staff 164.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

The roof fascia is comprised of prefinished corrugated metal panel over plywood sheathing. The soffit is painted plywood with surface mounted light fixtures. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster. Soffits over entries and the gymnasium are painted plywood and have recessed light fixtures. The main entry has exposed structural beams which have a stain finish.

CONDITION EVALUATION

The structural beams in front of the main entry should be re-finished. Stucco walls along the main entry soffit should be painted. The cedar trim below the prefinished metal fascia and along the roof edges needs new paint. The cedar trim surrounding the mechanical louver dormers requires new paint. The stucco face of these louver overbuilds is dirty and should be cleaned and painted. Louver overbuilds on the south side of the gymnasium have head flashing that is turned up and do not drain properly.

The plywood soffits around the perimeter of the building have a low level finish. They are in need of paint. Nail heads and seams are visible. There is a sprinkler line that runs underneath the covered walkway east of the Multipurpose room that is rusted.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

All original flooring was removed and replaced in the 1995 addition and modernization. Classrooms, corridors, and offices are carpeted. Restrooms have a sheet vinyl floor with a coved base. Rubber base was installed in 1995 over carpeted areas and VCT. The multipurpose room and stage have VCT floors. Carpet is nearing the end of it useful life.

CONDITION EVALUATION

The floors are generally in good repair. The exception would be in the boy and girl's toilet rooms where the sheet vinyl is shrinking, causing the seams in the floor and coved base to enlarge and collect dirt. The rubber treads and risers leading up to the stage in the Multipurpose room are losing bond with the substrate. The rubber base on the ramp leading up to the stage is also in poor condition.

2.2 WALLS

SYSTEM DESCRIPTION

Walls are generally type "x" gypsum wallboard over wood studs. Restrooms typically have plastic laminate wainscoting over gypsum wallboard. The multipurpose room and library have acoustical wall panels in the high volume spaces above. Vinyl wall covering is provided in the corridors.

CONDITION EVALUATION

The gymnasium wall mat is cracked and damaged, particularly around the wall outlets. Walls in the kitchen are damaged from heavy use and minimal wall protection. These walls do not have a waterproof finish on the wet walls. The walls leading up to the stage in the Multipurpose room are damaged as a result of high traffic volume and minimal wall protection. The handrails in this location do not have sufficient backing and are being pulled away from the wall.

2.3 CEILINGS

SYSTEM DESCRIPTION

Ceilings consist of 2'x4' acoustical ceiling panels in the corridors and classrooms. The main entry corridor, library, and multipurpose room are high volume spaces that have acoustical ceiling tiles sloping with the roof line. Restrooms, storage rooms, electrical rooms, and custodial rooms have a gypsum board ceiling.

CONDITION EVALUATION

The ceilings are generally in good repair.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

Classrooms are typically equipped with upper and lower cabinetry, sink, a tall cabinets, coat racks, whiteboard, wallmounted television, and an operable partition wall.

The staff lounge is equipped with a stove, microwave, refrigerator, dishwasher, and upper and lower cabinetry. The Multipurpose room has 8 basketball hoops and stage lighting. The Kitchen consists of a double door reach in refrigerator, double door reach in freezer, milk cooler, double stack convention oven, three-well steam table, three-compartment sink, singlecompartment dishwasher, and an exhaust hood.

CONDITION EVALUATION

Various equipment was replaced in 2019. Overall, the equipment appears to be in excellent to good condition.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

Power Distribution Utility Service: Lakeridge Elementary School is fed underground from an exterior pad-mounted utility transformer. Distribution is 480Y/277V with stepdown transformers to supply 208Y/120V loads.

Switchboard: The main switchboard is a "Square-D" brand "QED" type switchboard rated for 800A. The main switchboard has an 800A main circuit breaker, has (1) 200A spare, and (6) spaces.

Generator: The existing generator is a 40kW "Katolight" brand generator with a "Zenith" brand ATS.

Panelboards: Existing panelboards are "Square-D" brand "I-Line", "NEHB", and "NQOD" type boards, most have spares/ spaces available for future capacity.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Interior light fixtures are Interior light fixtures are 2'X4' lay-in lensed with LED retrofit T-8 lamps.

Low Voltage

Telecommunications: The Main Distribution Frame (MDF) is located in Area 3 off Corridor 140. Network distribution for voice and data is hierarchical star topology. Data cabling is Cat 5 and Cat 6 and terminates on Ortronics patch panels; voice cabling is a mix of Cat 2/3 and terminates on 110 wall mount blocks. Workstations are terminated on Ortronics Series I and Series II jacks. Classrooms have minimum connectivity. (2)4"C with a 100-pair copper demarc enters and terminates within the MDF. (1) 12 Strand 62.5/125 multimode optical fiber cable and (1) Cat 3 25-pair copper backbone cable routes to Area 1 IDF. Wirelesses Access Points are in various classrooms.

IDF is located in Area 1 inside the east entrance in Corridor 110. Patch panels and data equipment are rack-mounted and voice 110 blocks are wall-mounted.

CATV Distribution: CATV distribution cabling is homerunned back to MDF with an extension to Area 1 IDF. The signal is extended to a 2' x 2' x 80" headend cabinet. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR's are located in the Library work room. The CATV taps are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wallmounted TV outlet and a wall-mounted TV set.

Intercom/Clock: A Rauland Borg TC4130 intercom system is housed in the MDF. The 66-block terminations and crossconnects are mounted on the plywood backboard and clock power supplies and transformers are mounted in a 19" x 60" equipment rack. Combination intercom/ clock speaker devices with call switches are located in instructional spaces. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wallmounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.

Sound Systems

Sound systems are present in the following spaces:

> Gym/Commons (shared spaces)

Security: An Ademco Vista 50 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security cameras are present in the school. Access card readers and security keypads are installed at selected entrances and there is a security vestibule at the main entrance. The system is monitored by Guardian.

Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wallmounted 110 terminal blocks.

CONDITION EVALUATION

The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

Interior lighting is in good condition and appears to provide adequate lighting levels. Most lighting fixtures have been retrofitted and are using LED bulbs.

The existing intercom system is in good operating condition.

The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system appears to have marginal coverage of parking and surrounding areas. The DVR has additional ports for expansion.

The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.

The existing Category 5

telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. It is possible the cable is capable of supporting current standards if the cabling was re-terminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a Category 5e or category 6 cabling plant. Likewise the existing 62.5/125 multi-mode optical fiber cabling would need to be replaced with laser optimized 50/125 optical fiber cables to support current 10 Gigabit per second Ethernet transmission standards for optical fiber cabling.

The existing sound systems appear to be operating adequately.

3.2 PLUMBING

SYSTEM DESCRIPTION

Student restrooms are equipped with tempered, metered faucets at all sinks. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 0.6 GPF hands-free flush valves. Faucets in adult restrooms are not self-metering.

Sinks with bubblers are provided in each classroom, but aerators are missing on all faucets. Drinking fountains in hallways are not hi-lo type, and are not recessed.

Hot water is supplied from a newer instantaneous water heater located in the boiler room. The instantaneous water heater feeds into an existing hot water storage tank. There are no floor drains in the mechanical attic.

CONDITION EVALUATION

Plumbing systems are in fair condition. Slow draining, inadequate system cleanouts, inefficient water usage.

3.3. HOT WATER/FORCED AIR HEATING

SYSTEM DESCRIPTION

Heating for the building is provided by a hydronic system that supplies heating water to hot water coils for each zone.

Air handling units and return fans in the mechanical attic were installed in 1995. Ductwork in the mechanical attic is not insulated in some areas, and there are some areas with air leakage. There are very few controls in the attic and some units utilize old style fuses. Several portions of the ductwork show dirt/dust buildup on the inside.

Heating water is supplied by two Patterson Kelly boilers located in the boiler room. The boilers are nearing the end of their useful life. Also in the boiler room are two hydronic pumps. The pumps are not controlled by VFD.

Thermostats in the building are pushbutton type. No exhaust has been provided in the teacher workroom for the copier. Exhaust in the student restrooms is insufficient. The gas meter is equipped with a seismic gas valve. The fan in classroom 27 is very loud.

A Carrier heat pump provides heating and cooling to the computer room. The unit was installed in 1995.

CONDITION EVALUATION

The systems are in fair condition. Equipment is inefficient and aging.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

4.2 FIRE CONTROL CAPABILITY

Fire protection sprinkler heads in the multipurpose room are not shielded. Sprinkler heads in classrooms are not quick response.

4.3 FIRE ALARM SYSTEM

SYSTEM DESCRIPTION

The fire alarm system has been recently replaced with a new Siemens control panel and RF subscriber dialer installed. There appears to be an adequate number of notification and detection devices.

CONDITION EVALUATION

System is in good working condition and appears to meet current code coverage.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Emergency lighting for egress consists of fluorescent fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

CONDITION EVALUATION

System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 FIRE RESISTANCE

This facility has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. A two-hour area separation wall was built to separate the Multipurpose Room from the rest of the facility. This wall is wood-framed with two layers of GWB on both sides. The building is sprinklered.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

The 1995 improvements to this school building resulted in better handicapped accessibility. Improved or newly constructed restrooms include the appropriate clearances, access widths, heights of accessories, accessible fixtures, and grab bars.

Throughout the building interior door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances. Drinking fountains throughout the facility are at 2'-10", but do not have the appropriate high/low configuration. Sinks and countertops in the classrooms are 2'-10" above finish floor. Ramps in corridors have handrails to assist people with disabilities.

2 Handicapped parking stalls are provided to the west of the Multipurpose room. A curb cut has been provided to give direct access from the driveway to the main entry of the building.

The height of some of the exterior door thresholds exceeds the ½ inch prescribed by current code. There is a significant slope running east-west in the asphalt play area to the south of the building. This slope exceeds 1:12 and the accessible path from the upper and lower asphalt areas is provided through the building.

CONDITION EVALUATION

Accessible parking should be located as close to the main entry as possible.

Proper drinking fountains with a high-low sink should be considered. All exposed pipes under sinks should be insulated.

Uneven settlement in exterior sidewalks and asphalt walks has resulted in significant slab differentials at exterior door thresholds.

Play areas should be made accessible to all students.

SITE CONDITION EVALUATION

The site is surrounded by residential properties with vehicular access from SE. 78th Street. The site slopes down from north to south and from west to east. There is also a large, steep hill between the east side of the building and adjacent residences. There is a fairly significant slope within the courtyard area making it difficult for anyone with disabilities to transverse the southern play surface area. The site has a large wooded at the southeast portion of the property. It is screened from adjacent properties by large trees along the south, east, and northeast perimeter. It is obscured from the western residences by a small hill, shrubbery, and fencing.

The building is located toward the western portion of the property. Staff parking, parent drop-off, and buses all access the site from SE. 78th Street. Staff parking is located on the northwestern part of the property. This parking has 54 parking stalls in this lot including 2 handicapped stalls. Fire access is provided via a loop around the building and along the hard surface play area. Parent drop-off is provided in a loop in front of the building.

Parking on the Lakeridge site is inadequate for events, even though the stall count exceeds what is prescribed by the Mercer Island Municipal Code for an elementary school. Overflow parking is provided across the street in the South Mercer Play fields, which is managed by the City. This parking lot has 79 total stalls with four handicapped stalls. This parking lot is used as staging for parents picking up their kids after school. A flagger helps facilitate this process. There is a shoulder on SE 78th Street which is also utilized for temporary parallel parking. The bus loop is located to the northeast of the building.

Pedestrian access to the site is provided along SE 78th Street, by a trail to the southwest of the property and through trails in the southeastern wooded area.

Play equipment is located to the southeast of the building, in the wooded area. There is grass play field that is located to the east of the building. A covered play area sits in a depression to the south of the building.

Physical Condition

PARKING AND DRIVEWAY AREAS

The asphalt paving in the northwest parking lot has been sealed.

The asphalt paving in the parent dropoff area and in the bus loop is in good condition. The paving signs and curbs in the bus loop should be repainted.

HARD SURFACE PLAY AREAS

The asphalt paving in the hard surface play areas is in fair condition. The surface contains cracks and previous patches. There is vegetation growing through the cracks in several locations.

The asphalt paving area has many asphalt patches adjacent to exterior classroom doors where the entry mats that were added in the 1995 renovation and addition were taken out and filled.

CONCRETE WALKS

The concrete walk leading from the building to the covered play area to the south is cracked.

DRAINAGE

There is inadequate drainage directly west of the main entry. This causes the landscaping there to get soggy.

The southeast portion of the staff parking lot tends to pond during rainfall. This area does not slope correctly to the adjacent catchment basin.

Drainage between the play field and the play area is poor. Water in this vicinity flows to the southeast.

A trench drain was added outside of the exterior entry to Kindergarten 184, in order to mitigate the flow of water from the adjacent hillside that is between the two wings.

PLAY FIELDS

The play field was returfed in 2009 using a joint grant between the City and the District.

FENCING

Security fencing at Lakeridge Elementary is particularly problematic and of great concern to the District. The perimeter fencing is sporadic and does not sufficiently secure the property. Screening between the staff parking and the hard surface play area is provided by a fire gate, chain link fencing, dumpster enclosures, and bollards. Screening behind all other portables is provided by a hillside, shrubbery, and a private wooden fence built by the residences. There is an opening in the screening on the southwest corner of the school which leads to a private street.

The chain link fencing on the south side of the property and to the east of the hard surface play area is in poor condition. The wooded play area has no security fencing between it and the adjacent trails and heavily forested area. The eastern play field is currently fenced around the perimeter but it is difficult to determine its condition since the field is currently being upgraded and is not accessible.

There are two gates leading into the dumpster enclosure, on of which the fencing is not obscured.

The 4' high chain link fencing along the western edge of the staff parking is in poor condition.

There is gas meter with a fenced enclosure to the west of Classroom 104 which is not obscured.

There is a chain link fence that serves as a guard along the high walk in the inner courtyard which is in poor condition. There are fence posts adjacent to this fence suggesting that there was another fence here at one time that was replaced. These posts are cast in a concrete footing that is above the finish grade.

PLAY EQUIPMENT

Play equipment is inspected annually, necessary repairs are made, and wood chips are added as needed.

The borders around the equipment are wood and extruded concrete curbs. The wooden borders appear to be in good condition, but the extruded curb is damaged and missing in some places. The equipment areas are underlain with treated wood chips (fibar) and generally appear to be at sufficient depth.

The play area has one drinking fountain.

There are benches spread throughout the wooded play area.

There is a covered benched area within the play area. It is built of tube steel posts, tube steel joists, heavy wood beams, wood joists, wood sheathing, and metal fascia. It has a standing seam metal roof. The structure has metal gutters but no downspouts. The metal gutter is damaged. The tube steel joists are rusting. The structure is bordered by wood which appears to be in good shape. The canopy covers benches and table tops which have tiled mosaics depicting lions on two tabletops and chess boards on the other two. The benches are wooden and are in good repair.

A covered play area sits on the southwest side of the property and is too small for the needs of this school. It sits in a depressed portion of the asphalt play area. It is constructed of concrete masonry walls, steel trusses, steel beams, and wood decking. The trusses are rusting and need to be painted along with the wood decking. There are three basketball hoops under this covered area. One of the basketball hoops is in poor condition and has no net.

LANDSCAPING

Landscaping in the staff parking lot islands is in fair to poor condition.

The landscaping on the west side of the site, behind, and between the portables is overgrown. The landscaping between the two wings, on the western slope is in poor condition. Exposed asphalt edges and fence post bases above suggest that the finish grade was higher at one time.

There is no landscaping in the fire hydrant island to the east of Kiln Room 185.

Landscaping in the courtyard to the south of the library consists of grass, shrubs, and trees and is in fair condition. This area has been converted to school/ community gardens and supports the local food bank. The landscaping in the island of the bus turnaround and in the island where parents drop-off their students is in good condition. The landscaping along the front perimeter of the building is in good condition.

Other Observations

Because of its proximity to the ground, kids have been known to scale the roof above the library. This presents a hazard and potential liability. As a result the roofing along the gutter and the gutter itself have been damaged in this location.

Additional storage is provided for on site by temporary sheds and large metal containers.

EDUCATIONAL ADEQUACY ASSESSMENT

The following summary includes programmatic needs and issues identified at Lakeridge Elementary School by the school principal, the MISD facilities department, and the 2010 Study and Survey report.

Site

Students in modular classrooms cut through other classrooms to enter the building, use the restrooms, or go to the office.

Building/Program

TEACHING AREAS

There are no small group learning / pullout areas to support general education. Classrooms, hallways, and the library are used for these functions.

Multipurpose room is used both as a cafeteria and gymnasium. This shared use results in limited lunch set up time, impact on PE programming, and food service carts having to be stored outside during PE. This space also has poor acoustics.

Library is currently being utilized for hosting guest speakers, which disrupts the library functions. It is also desirable to have smaller reference area, more computers/ technology.

Classrooms are too small, and do not have sufficient storage or adequate adjacent pull-out space.

Art and science need a dedicated classroom and more adequate storage.

Music room location is too far from the stage and should be adjacent.

SUPPORT AREAS

Administration area is undersized and needs additional space for staff workroom, conference room, and records storage.

Restrooms are in need of reconfiguration, they are currently inconveniently located (especially in relationship to kindergarten classrooms). In general, there is a need for more restrooms.

Safety/Security

No deficiencies noted. A secure entry vestibule was added to the building in 2018 allowing controlled access into the school.

	2020-2021 BUILDING	PERINTENDENT OF PUBLIC INSTRUCTION G CONDITION RATING SUMMARY D SCHOOL DISTRICT (17400)
LAKERIDGE ELEM	IMERCER ISLAND	
Profile Name:	Classroom Building - Slabs On Grade	Currently BCA Certified: Yes
Inventory Status		Last BCA Certify: 3/14/2021
, Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Rating	g: 79.67 %	Last District Review: 11/25/2020
		Condition Rating Component Priority
Sub-Assembly	Component	EGFPUN/A Score LMH
Foundations		
A1010	Standard Foundation	
Slabs on Grade		
A4010	Standard Slabs on Grade	
Water and Gas N		
A6010	Building Subdrainage	
Superstructure		
B1020	Roof Construction	
Exterior Vertical		
B2010	Exterior Walls	
B2020	Exterior Windows	
B2050	Exterior Doors and Grilles	
B2070	Exterior Louvers and Vents	
Exterior Horizont	al Enclosures	
B3010	Roofing	
B3020	Roof Appurtenances	
B3060	Horizontal Openings	
B3080	Overhead Exterior Enclosures	
Interior Construc	tion	
C1010	Interior Partitions	
C1020	Interior Windows	
C1030	Interior Doors	
C1070	Suspended Ceiling Construction	
Interior Finishes		
C2010	Wall Finishes	
C2020	Interior Fabrications	
C2030	Flooring	
C2050	Ceiling Finishes	
Plumbing		
D2010	Domestic Water Distribution	
D2020	Sanitary Drainage	
D2030	Building Support Plumbing Systems	
HVAC		
D3020	Heating Systems	
D3050	Facility HVAC Distribution Systems	
D3060	Ventilation	

S	TATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
	2020-2021 BUILDING CONDITION RATING SUMMARY	
	MERCER ISLAND SCHOOL DISTRICT (17400)	

Fire Protection			
D4010	Fire Suppression	90 %	
D4030	Fire Protection Specialties	90 %	
Electrical			
D5010	Facility Power Generation	62 %	
D5020	Electrical Services and Distribution	90 %	
D5030	General Purpose Electrical Power	90 %	
D5040	Lighting	90 %	
Communications			
D6010	Data Communications	90 %	
D6020	Voice Communications	90 %	
D6030	Audio-Video Communications	62 %	
D6060	Distributed Communications and Monitoring	90 %	
Electronic Safety	and Security		
D7010	Access Control and Intrusion Detection	90 %	
D7030	Electronic Surveillance	62 %	
D7050	Detection and Alarm	100 %	
Integrated Autom	nation		
D8010	Integrated Automation Facility Controls	90 %	
Furnishings			
E2010	Fixed Furnishings	90 %	
E2050	Movable Furnishings	90 %	

	2020-2021 BUILDING C	RINTENDENT OF PUBLIC INSTRUCTION ONDITION RATING SUMMARY CHOOL DISTRICT (17400)
LAKERIDGE ELEM	ENTARY SCHOOL - 02_COVERED PLAY	. ,
Profile Name:	Covered Play	Currently BCA Certified: Yes
Inventory Status	Recognized	Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Rating	: 62.34 %	Last District Review: 11/25/2020
		Condition Rating Component Priorit
Sub-Assembly	Component	EGFPUN/A Score LM
Foundations		
A1010	Standard Foundation	
Slabs on Grade		
A4010	Standard Slabs on Grade	
Superstructure		
B1020	Roof Construction	
Exterior Vertical E	inclosures	
B2010	Exterior Walls	
Exterior Horizonta	al Enclosures	
B3010	Roofing	
B3080	Overhead Exterior Enclosures	
Interior Finishes		
C2010	Wall Finishes	
C2050	Ceiling Finishes	
Electrical		
D5040	Lighting	
Equipment		
E1070	Entertainment and Recreational Equipment	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
SITE CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

	WILKELK ISLAND S		
LAKERIDGE ELEM	IENTARY SCHOOL		
Profile Name:	Elementary School - Rural	Last Review:	3/14/2021
Inventory Status	Recognized		
Condition Rating	g: 77.42 %		
		Condition Rating	Component Priority
Sub-Assembly	Component	EGFPUN/A	Score L M H
Site Improvemen	ıt		
G2010	Roadways		90 %
G2020	Parking Lots		62 % 🗆 🗆 🗆
G2030	Pedestrian Plazas and Walkways		90 % 🗆 🗆 🗆
G2050	Athletic, Recreational and Playfields Areas		62 % 🗆 🗆 🗆
G2060	Site Development		90 %
G2080	Landscaping		62 %
Liquid and Gas Si	te Utilities		
G3010	Water Utilities		62 % 🗆 🗆 🗆
G3020	Sanitary Sewerage Utilities		90 % 🗆 🗆 🗆
G3030	Storm Drainage Utilities		90 % 🗆 🗆 🗆
Electrical Site Im	provements		
G4010	Site Electric Distribution Systems		90 % 🗆 🗆 🗆
G4050	Site Lighting		90 % 🗆 🗆 🗆
Site Communicat	ions		
G5010	Site Communications Systems		90 % 🗆 🗆 🗆

NORTHWOOD ELEMENTARY SCHOOL

SITE INFORMATION

36th Ave SE

County:	KING
Site Area:	8.4 ACRES
Zoning:	R-9.6
Tax Parcel:	1824059006
Jurisdiction:	CITY OF MERCER ISLAND
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT

BUILDING INFORMATION

Original Construction:2015/2016Addition:N/AModernization:N/AArea (Permanent):83,128 GSFPortables:0Grades:K-5Capacity (Permanent):466Enrollment (2019-20):408

4030 86th Avenue SE Mercer Island, WA 98040 206.275.5800

SUMMARY OF TEACHING SPACES

Total Teaching Spaces:	31
Library:	1
Gymnasium:	1
Music Room:	1
Art Room:	1
Technology/Computer Room:	1
Occupational Therapy:	1
Special Education Classrooms:	4
General Use Classrooms:	21

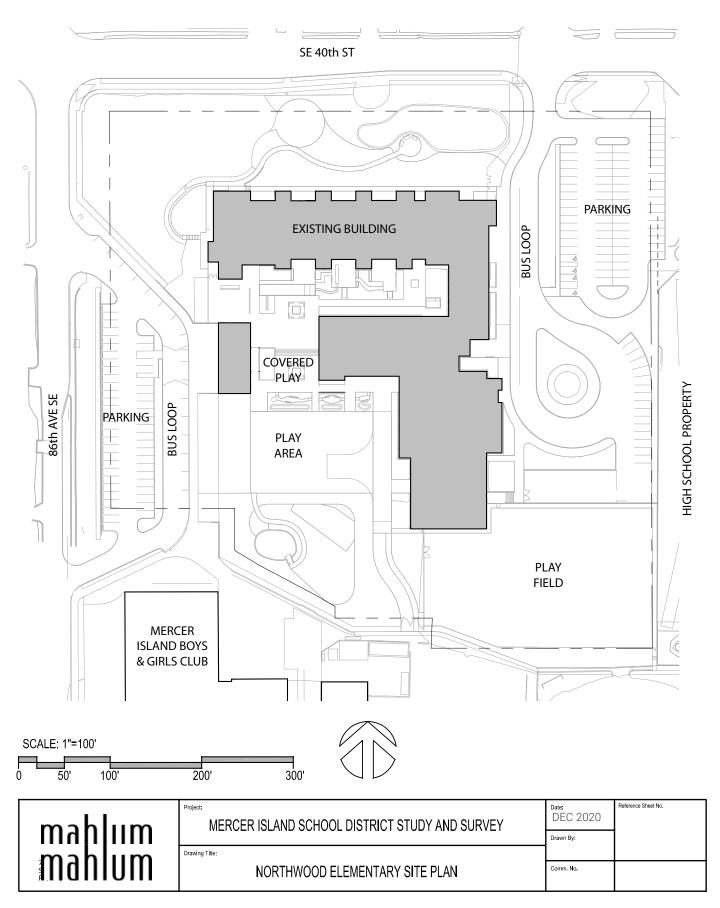


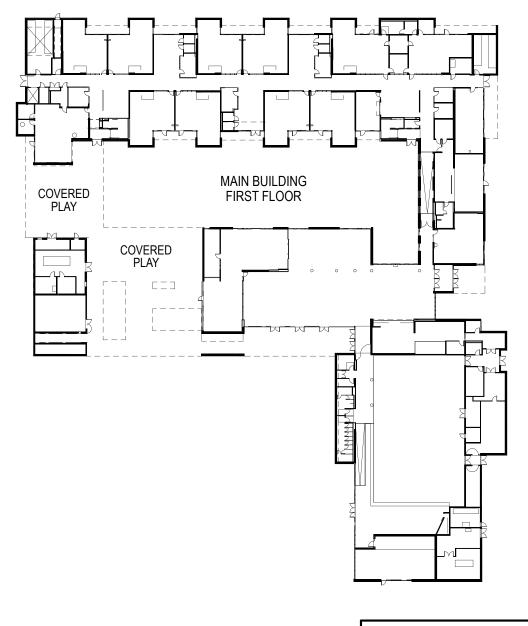
Building Condition Evaluation ICOS Score

Main Building: 98.86

Site: 100.00

(



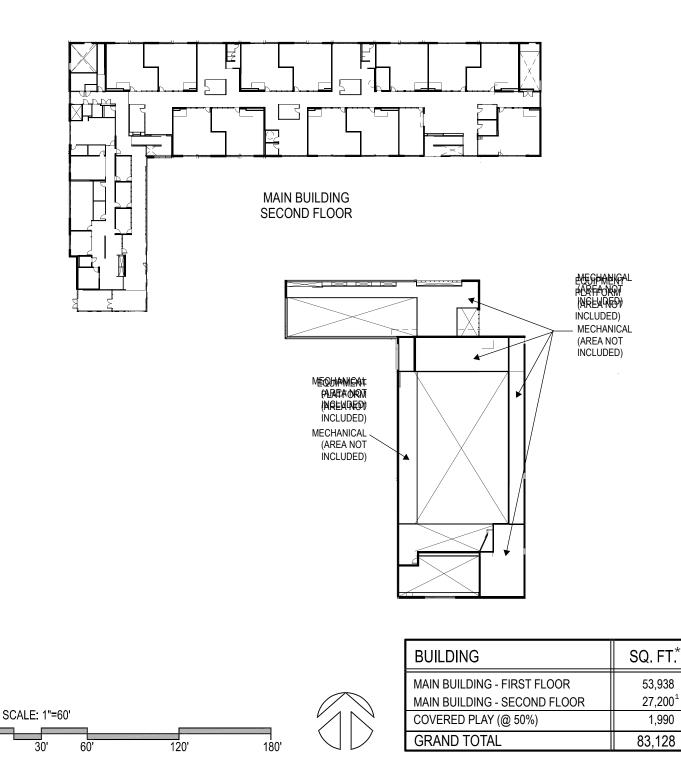


		BUILDING	SQ. FT.*
SCALE: 1"=60'		MAIN BUILDING - FIRST FLOOR MAIN BUILDING - SECOND FLOOR COVERED PLAY (@ 50%)	53,938 27,200 ¹ 1,990
0 30' 60' 120' 180'	$\langle \rangle$	GRAND TOTAL	83,128

mahlum	Project: MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: DEC 2020 Drawn By:	Reference Sheet No.
71 Columbia, Floor 4 Seattle, WA 98 104 P: 2061 443:411	NORTHWOOD ELEMENTARY CHOOL - FIRST FLOOR PLAN	LP ^{- 2} 型色と	whereance Sheet No.
* Building areas updated per as built d ¹ Includes stair area (counted on both	rawing area takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021) floors). NOR	'- Drawn By.	·

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CHAPTER 01 | INVENTORY & AREA ANALYSIS NORTHWOOD ELEMENTARY SCHOOL



mahlum	Project MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	Date: DEC 2020 Drawn By:	Reference Sheet No.
71 Columbia, Floor 4 Seattle, WA 98104 P: (206) 441-4151		LP Comperer Deserve By:	eference Sheet No.

* Building areas updated per as-built drawing area takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021) ¹ Includes stair area (counted on both floors).

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CONSTRUCTION HISTORY

Northwood Elementary School was constructed in 2015 and opened in 2016. A two-story elementary school with the administration on the upper level near the parent drop-off. The lower level is daylit and has access to the bus dropoff area. It is Type 2 B construction with one two-hour wall on the lower level that separates the gym public area from the remainder of the classrooms on the lower level. Built for grades K through 5, it has approximately 21 general classrooms, pull-out shared areas, a library, gymnasium and lunch room.

Built for 21st century learning, spaces are flexible and adaptable with lots of transparency. The building has a partial green roof and photovoltaic (PV) panels on the roof that generate a significant amount of the school's power consumption and provide a teaching tool.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION Foundations are slab on grade.

CONDITION EVALUATION

Foundations are in excellent condition.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

The majority of the exterior walls of the building are steel stud construction with masonry veneer. There are a variety of other exterior materials; fiber siding and panel systems, and metal panel siding as well.

CONDITION EVALUATION

The exterior systems are in excellent condition.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

The low slope roofs area are a mixture of green roofing system along with single ply membrane system over rigid insulation. The second story portion of the roof is standing seam metal roof with skylights and photovoltaics mounted on them. The standing seam portion of the roof utilizes internal gutter system of single ply.

CONDITION EVALUATION

The roof is in excellent condition.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows are storefront with operable casement windows. The doors are typically storefront except when accessing mechanical and storage spaces.

CONDITION EVALUATION

The door and windows are in excellent condition.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

The roof has an approximate 3 foot overhang and parapet system. Internal gutters behind the parapets which penetrate the soffit into PVC pipe. All downspouts have an overflow as well. Parapets are capped with metal fascia.

CONDITION EVALUATION

Exterior trim appears to be in excellent condition.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

The flooring system is primarily rubber tile throughout, including in the restrooms with rubber base. There is carpet tile in the classrooms. There are walk-off mats at the entry points and a felt flooring laid over the rubber at drinking fountains for slip resistance. The floor of the Commons is polished concrete and there is exposed concrete at stairways connecting floors.

CONDITION EVALUATION

The floors are in excellent condition.

2.2 WALLS

SYSTEM DESCRIPTION

Corridor walls are type "x" gypsum wallboard over metal studs, just painted, no wainscot. Student restrooms have a porcelain tile wainscot.

CONDITION EVALUATION

Walls are in excellent condition.

2.3 CEILINGS

SYSTEM DESCRIPTION

Most all ceiling systems are either painted GWB or a form of SAC suspended systems. Pull-out spaces have a perforated GWB ceiling.

CONDITION EVALUATION

Ceilings are in excellent condition.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

Classrooms have fixed cabinets on one wall. Classrooms on the Level One have movable full-height whiteboards with storage behind on the opposite wall. Other walls throughout the classrooms or pull-out spaces have "wall talker" painted surfaces or cubby storage, depending on the grade level. Countertops in classrooms with sinks are plastic laminate. There is built-in and freestanding storage in the hallways, also faced with plastic laminate.

Classrooms have lots of glazing, both to the exterior and the interior. All glazing has roller shades. Interior and exterior shades are manual, except for motorized shades in the commons and gymnasium skylights.

CONDITION EVALUATION

The fixed equipment is in excellent condition.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

Power Distribution Utility Service: The building is fed underground from a pad-mounted, exterior utility transformer. Distribution is 480Y/277V

Switchboard: The main switchboard is a "Siemens" brand rated for 1200A at 280Y/277V. The main switchboard has a GFCI-protected main breaker.

Generator: The existing generator is a 80kW "Caterpillar" brand diesel fuel 480Y/277V generator with an output bus which feeds (2) ATS's interior to the building.

Panelboards: Siemens type 'P1' panelboards with approximately 25% spares or spaces for future capacity.

Lighting

The existing lighting control system is a "Wattstopper" brand control panel. Interior fixtures are LED and controlled via occupancy sensors, locally switched by occupants and controlled by photocell and time of day input in common areas. Exterior fixtures are LED type and controlled by time of day and photocell control via the lighting control relay panels.

Low Voltage

Intercom/Clock: An IP intercom clock system by 'Syn-Apps' was installed in 2016.

Telecommunications: The Main Distribution Frame (MDF) for the facility is located on the ground level. Telco service is terminated on a demarcation point mounted on the plywood backboard. T1 circuits provide voice and data connections to service providers and other schools in the District. There are grounding busbars. An independent air-conditioning unit provides cooling to the space and other IDF rooms. Four-plex and special electrical receptacles provide power to the equipment racks and wall-mounted equipment. Telecom rooms are on generator backup power

The optical fiber, and UTP voice backbone cables enter the building through underground conduits.

Riser-rated category 6 horizontal cabling is installed from racks in MDF to telecommunication outlets in offices. The horizontal cabling is installed above the accessible ceilings using open cabling methods and is terminated on surface mounted telecommunication outlets.

Security: A Bosch Security panel, model number D9412GV4-C is located in the MDF. The system is monitored by Guardian security.

Security/Access Control: The school is equipped with card key access control, intrusion detection and video surveillance systems.

CONDITION EVALUATION

All systems in the building are effectively new and in excellent working condition.

3.2 PLUMBING

SYSTEM DESCRIPTION

All water closets are equipped with 1.28 GPF flush valves and urinals in boys' restrooms are equipped with 0.125 GPF hands-free flush valves. Student restrooms are equipped with hose bibbs.

Each classroom is equipped with a sink and bubbler. Dual-height drinking fountains and bottle fillers are provided in hallways.

Hot water is provided by HTP condensing style water heaters located in the boiler room.

CONDITION EVALUATION

All plumbing systems in the building are effectively new and in excellent working condition. Staff and student restrooms are in excellent condition.

3.3 FORCED AIR HEATING

SYSTEM DESCRIPTION

A change-over style hydronic piping loop is supplied by (2) Fulton boilers and (1) 20-ton Multistack air-source heat pump. The air-source heat pump is currently sized to provide cooling only for the administration, but future space is allocated in the service yard for additional modules to be added in the future.

Hydronic piping is routed to a number of mechanical rooms where Haakon air handlers serve the spaces. The classrooms are fed by a VAV system thru displacement ventilation along with radiant floor heating. The gymnasium, commons, administration, and other general areas are fed by overhead HVAC systems.

Cook exhaust fans provide exhaust in the restrooms and other code required exhaust areas and Mitsubishi mini-split systems provide cooling at the MDF and elevator machine rooms.

CONDITION EVALUATION

The heating system in the building is effectively new and in excellent working condition.

4.0 Safety/Building Code

Building met all codes at the time it was constructed.

5.0 Provisions for the Handicapped

Building meets all current Washington State ADA building codes.

SITE CONDITION EVALUATION

Physical Condition

PARKING AND DRIVEWAY AREAS

Parking and roads are in excellent condition.

CONCRETE WALKWAYS

Sidewalks and other concrete surfaces are in excellent condition.

HARD SURFACE PLAY AREAS

Hard play areas are in excellent condition.

DRAINAGE

There are no apparent drainage issues related to the site.

PLAY FIELDS

Fields are in excellent condition. No deficiencies noted.

FENCING

Fencing is in excellent condition. No deficiencies noted.

LANDSCAPING

Landscaping is in excellent condition.

EDUCATIONAL ADEQUACY ASSESSMENT

As a recently built school, Northwood Elementary School is built for studentcentered excellence. The following summary includes programmatic needs and issues, based on recent postoccupancy feedback from the school principal.

Building/Program

SUPPORT AREAS

Restroom without direct access from the health room is not optimal.

Gymnasium restroom location presents a challenge, both from the standpoint of disruption of PE classes and supervised access from the playground.

Acoustics are a challenge in the gymnasium, dining/commons/entry, stairwells, and the main corridor, due to the number of hard surfaces.

Safety/Security

No deficiencies noted.

Sub-AssemblyComponentEGFPUN/AFoundationsII <tdi< th=""><th>3/14/ 11/25</th><th>/2021 5/2020 Priority L M H C</th></tdi<>	3/14/ 11/25	/2021 5/2020 Priority L M H C
Profile Name: Elementary School - Multi-Story Current'y BCA Certify Inventory Status: Recognized Last BCA Certify Reviewed By: Consultant Last District Reviewed: Condition Rating: 98.86 % Last District Reviewed: Sub-Assembly Component E G F P U N/A Foundations	3/14, 11/25 11/25 mponent Score 100 % 100 % 100 %	5/2020 5/2020 Priority L M H C C C C C C C
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B3060 Horizontal Openings	100 %	
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B3080 Overhead Exterior Enclosures 🛛 🖓 🖓 🖓 🖓	100 %	
	100 %	
Interior Construction		
C1010 Interior Partitions \square \square \square \square \square	100 %	
C1020 Interior Windows	100 %	
C1030 Interior Doors 🗹 🗆 🗆 🗆	100 %	
C1040 Interior Grilles and Gates 🗹 🗆 🗆 🗆	100 %	
C1060 Raised Floor Construction 🗹 🗆 🗆 🗆	100 %	
C1070 Suspended Ceiling Construction 🗹 🗆 🗆 🗆	100 %	
Interior Finishes		
C2010 Wall Finishes	90 %	
C2020 Interior Fabrications 🗹 🗆 🗆 🗆	100 %	
C2030 Flooring	90 %	
C2040 Stair Finishes	90 %	
C2050 Ceiling Finishes 🗹 🗆 🗆 🗆	100 %	
Conveying		
	100 %	

		2020-2021 BUILDING CO	NTENDENT OF PUBLIC INSTRUCTION NDITION RATING SUMMARY HOOL DISTRICT (17400)	
Plumbing				
D	2010	Domestic Water Distribution		
D	2020	Sanitary Drainage		
D	2030	Building Support Plumbing Systems		
HVAC				
D	3010	Facility Fuel Systems		
D	3020	Heating Systems		
D	3030	Cooling Systems		
D	3050	Facility HVAC Distribution Systems		
D	3060	Ventilation		
Fire Protec	tion			
D	4010	Fire Suppression		
D	4030	Fire Protection Specialties		
Electrical				
D.	5010	Facility Power Generation		
D.	5020	Electrical Services and Distribution		
D.	5030	General Purpose Electrical Power		
D	5040	Lighting		
Communic	ations			
D	6010	Data Communications		
D	6020	Voice Communications		
D	6030	Audio-Video Communications		
D	6060	Distributed Communications and Monitoring		
Electronic	Safety a	and Security		
D	7010	Access Control and Intrusion Detection		
D	7030	Electronic Surveillance		
D	7050	Detection and Alarm		
Integrated	Autom	ation		
D	8010	Integrated Automation Facility Controls		
Equipment	t			
E	1030	Commercial Equipment		
E	1040	Institutional Equipment		
E	1070	Entertainment and Recreational Equipment		
E	1090	Other Equipment		
Furnishing	S			
E	2010	Fixed Furnishings		
F	2050	Movable Furnishings		П

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION SITE CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)

NORTHWOOD E	LEMENTARY			
Profile Name:	Elementary School - Urban	Last Review:	3/14/2021	
Inventory Statu	s: Recognized			
Condition Ratin	g: 100.00 %			
		Condition Rating	Component Priority	
Sub-Assembly	Component	EGFPUN/A	Score L M H	
Site Improveme	nt			
G2010	Roadways		100 %	
G2020	Parking Lots		100 %	
G2030	Pedestrian Plazas and Walkways		100 %	
G2050	Athletic, Recreational and Playfields Areas		100 %	
G2060	Site Development		100 %	
G2080	Landscaping		100 %	
Liquid and Gas S	ite Utilities			
G3010	Water Utilities		100 %	
G3020	Sanitary Sewerage Utilities		100 %	
G3030	Storm Drainage Utilities		100 %	
Electrical Site Im	provements			
G4010	Site Electric Distribution Systems		100 %	
G4050	Site Lighting		100 %	
Site Communica	tions			
G5010	Site Communications Systems		100 %	

WEST MERCER ELEMENTARY SCHOOL

SITE INFORMATION

County:	KING
Site Area:	8.86 ACRES
Zoning:	R-9.6
Tax Parcel:	9365700100
Jurisdiction:	CITY OF MERCER ISLAND
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT

BUILDING INFORMATION

Original Construction:	1964				
Addition:	1995				
Modernization:	1995				
Area (Permanent):	54,221 GSF				
Portables:	2 BUILDINGS (4 Classrooms)				
Grades:	K-5				
Capacity (Permanent):	456				
Enrollment (2019-20):	471				

4141 81st Avenue SE Mercer Island, WA 98040 206.236.3430

TEACHING SPACES

General Classrooms:	24
Special Education Classrooms:	3
Occupational Therapy:	1
Technology/Computer Room:	1
Art Room:	0
Music Room:	1
Gymnasium:	1
Library:	1
Total Teaching Spaces:	32

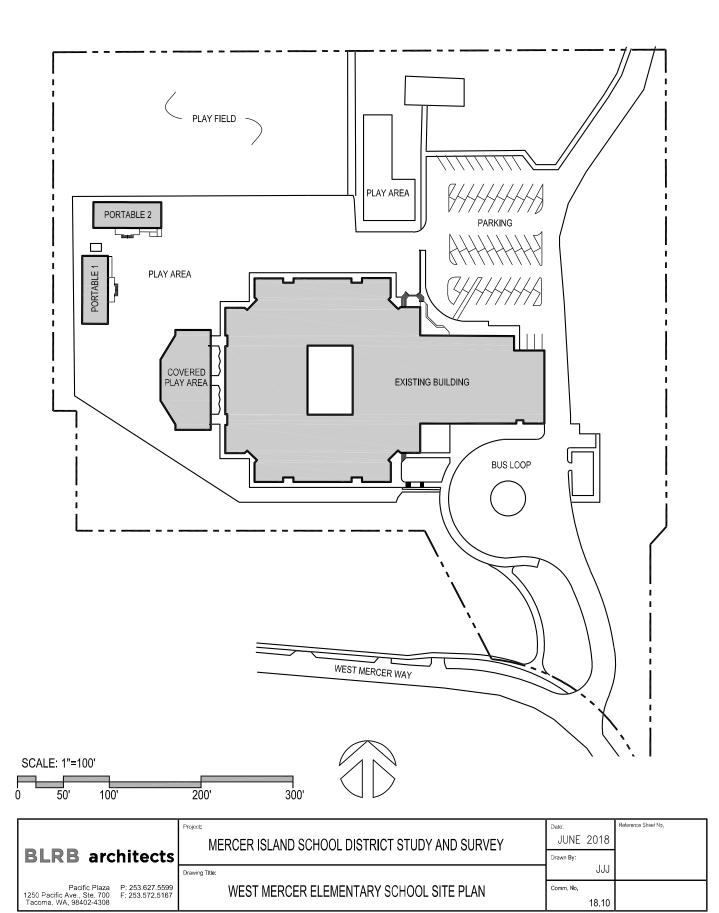


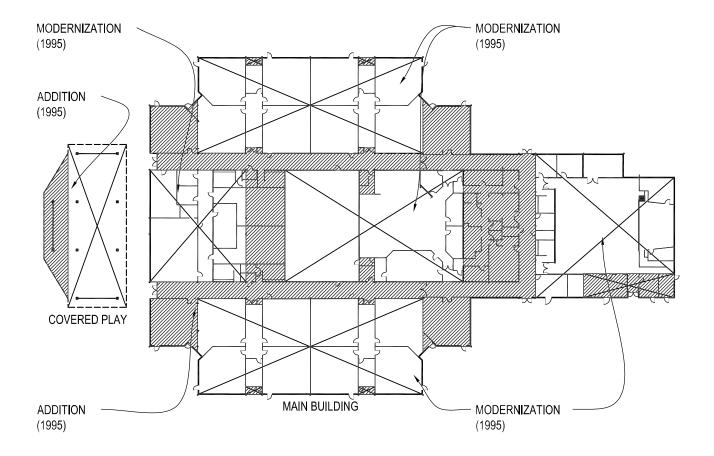
Building Condition Evaluation ICOS Score

Main Building: 85.53

Covered Play: 75.48

Site: 78.46





		BUILDING	SQ FT.*
		1995 MODERNIZATION 1995 ADDITION	35,586 16,843
SCALE: 1"=60'		COVERED PLAY (2,560 / 2) 1995 COVERED PLAY ADDITION (1,024 / 2)	1,280 512
0 30' 60' 120' 180'	$\Box \Box$	GRAND TOTAL	54,221
Project:		Date: R	ference Sheet No.

	Project:	Date:	Reference Sheet No.
	MERCER ISLAND SCHOOL DISTRICT STUDY AND SURVEY	JUNE 2018	
BLRB architects			
	Drawing Title:	JJJ	
Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167	WEST MERCER ELEMENTARY SCHOOL 2009 AREA ANALYSIS	Comm. No.	
Tacoma, WA, 98402-4308		18.10	
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* Building Brilding areas are within 15% of a great of a second as will drawing taken to be a second and a withow of the 15% of a great of the taken of taken

CONSTRUCTION HISTORY

West Mercer Elementary School was originally constructed in 1963. Until its renovation and addition, the West Mercer campus was comprised of 5 separate buildings and 1 covered play area. In 1995, the exterior space between the buildings was infilled, creating one uniform building with an attached covered play area.

Much of the exterior walls and structure remained intact. A roof overbuild was constructed over all of the connected buildings. All doors and windows were removed and replaced. Flooring throughout the facilities was removed under a separate contract and replaced. Toilet rooms were removed and relocated. Extensive mechanical and electrical systems were replaced. Site work including concrete walks and landscaping was done to accommodate the renovated building.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

West Mercer consists of the original building, constructed in 963, and an addition and major modernization in 1995. The original structure consists of concrete spread footing foundations, concrete slab on grade floor construction, steel and concrete columns, partially reinforced CMU walls, steel beams and joist girders, and steel roof joist with wood roof decking.

In 1995 a wood overbuilt roof was provided consisting of steel columns, glulam beams, open web wood roof trusses and plywood sheathing. Areas of addition were constructed with wood stud walls with plywood sheathing. Additional plywood and reinforced shear walls were added along with backing some of the masonry walls. Masonry shear walls were also added at the covered play area.

The lateral resisting system for the building consist of the original wood roof diaphragm, plywood sheathing at the overbuilt roof, original partially reinforced masonry walls and plywood shear walls.

CONDITION EVALUATION

We observed no significant signs of structural distress, differential settlement or deterioration.

There was some minor rusting observed at the exposed steel framing at the covered play area.

There have been some significant changes in the building code since West Mercer Elementary School was seismically upgraded and added onto in 1995. The current IBC requires a 1.25 importance factor for school design plus anchorage requirements for masonry walls have significantly increased. It is assumed that the existing structure is not in full compliance with the current code.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION Exterior walls consist of masonry and wood stud walls with plywood sheathing.

CONDITION EVALUATION

We observed no significant signs of structural distress, differential settlement or deterioration.

There have been significant changes to the out of plane earthquake design forces for masonry walls since the building was rehabilitated in 1995. Most of the walls are relatively short, however some of the taller walls, like the gymnasium and covered play, likely do not meet current code requirements.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

The roof is a comprised of composition shingles and it positively slopes to the

outer perimeter of the building and toward the inner courtyard. Metal gutters and PVC downspouts provide drainage for the roof. Flat roofs with a single-ply membrane provide cover for walkways at the north and south entries. These roofs have internal drains. The drain at the north entry has an emergency overflow scupper approximately six feet south of the roof drain. The south entry walkway has three drains and no emergency overflows. The entire south gable over the multipurpose room drains onto the south covered walkway. There is an existing masonry chimney stack at the southwest corner of the multipurpose roof. Large trees overhang the southernmost perimeter and northeast perimeter of the building. There is no venting at the ridge of this roof. The roof has no fall restraint system in place.

CONDITION EVALUATION

The existing chimney stack is not adequately reinforced and should be pinned and repointed. The roof requires regular maintenance to keep downspouts in proper working order.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows are aluminum and most of them were replaced in the 1995 addition and renovation. Most of the windows are operable. These casements do not have insect screens. The perimeter of the window is caulked and sealed and there is no exposed head flashing. Window head conditions typically terminate at the soffit. The sill is flashed with an aluminum extruded aluminum sill that was provided by the window manufacturer. All exterior windows are insulated.

The exterior door assemblies are hollow metal doors set within hollow metal frames. These doors and frames were all replaced in the 1995 addition and renovation. The hollow metal frames are solid fill grouted. Doors leading into classrooms are flush with overhead transoms in filled with a solid metal panel. The main entry doors, corridor doors, and door leading into the multipurpose room have full lites. These frames have side and overhead transoms that are in filled with safety glazing. The head conditions at frame transoms typically terminate at the soffit.

CONDITION EVALUATION

The windows are generally in good condition and are sealed properly. The sealant in the windows above the multipurpose room is beginning to crack. The extruded aluminum sill flashing at the south window of classroom 312 has been damaged and should be replaced.

Exposed steel angles supporting masonry above windows and doors are rusting and there are no weeps in the masonry at those headers. The exterior door leading out of classroom 318 is bent and does not adequately cover the exterior concrete walk. Its threshold exceeds the height prescribed by current accessibility codes.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

An insulated stucco soffit and deep stucco fascia match the depth of the original marblecrete fascia, providing overhangs around the building. The transition between soffit and fascia is provided by a stainless steel screed. Original stucco soffits were cut and patched to allow for new lighting, mechanical, and structure. Stucco soffits are vented above new windows and new stucco walls and contain concealed sprinkler heads with cover plates. Light fixtures are also recessed into this soffit. Behind the external gutters is an exposed piece of 1x6 cedar fascia trim that stands proud of the stucco/marblecrete fascia. An extruded aluminum flashing trim matching the profile of adjacent window sill flashing provides a transition where there is a stucco infill above existing 6" SCR brick walls. Painted metal rake flashing and counter-flashing is provided at the transition between roof and stucco walls above the roofline. Downspouts consist of polyvinyl chloride (PVC) piping.

CONDITION EVALUATION

Many of the cover plates on the concealed sprinkler heads are missing or loose and need to be replaced. The cedar fascia behind the external gutters should be repainted. Soffits should be continuously vented to provide more even air circulation across the entire enclosed area. The counter-flashing above the multipurpose room on the north slope is not adequately fastened and continuously falls off. Some of the recessed light fixtures are loose and have cracked lenses.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

All original flooring except for in the storage and mechanical rooms flanking the multipurpose room was removed and replaced in the 1995 addition and renovation. These rooms have an exposed concrete slab. The floor was prepped and leveled for new finishes. The wood stage in the multipurpose room was part of the original construction. VCT is typically provided at the entries, vestibules, book, and supply rooms. The multipurpose room has VCT flooring that is striped for basketball. Classrooms have carpet with VCT along the cabinetry walls. Corridors and offices are carpeted as well. Restrooms and the kitchen have a sheet vinyl floor with a coved base. Rubber base was installed in 1995 over carpeted areas and VCT. Various carpet and flooring was replaced in 2018/19.

CONDITION EVALUATION

Newly replaced areas of flooring and carpet are in excellent to good condition. Overall, the floor finishes are in good condition. The wooden stage at the raised platform in the multipurpose room has a lot of scratches resulting from many years of use. Rubber base, particularly around outside wall corners and in the multipurpose room is in need of replacement.

2.2 WALLS

SYSTEM DESCRIPTION

Typically, the interior partitions in classrooms, administrative office areas. and most other spaces consist of painted gypsum wallboard over staggered wood framing and acoustical insulation. Corridors walls are constructed of plaster veneer over "type x" gypsum wallboard. The gymnasium walls consist of exposed concrete masonry units at the ground floor level and plaster veneer over "type x" gypsum wallboard above. Wall mats provide protection around the perimeter of the gymnasium. Exposed concrete masonry units are in the Kitchen as well with fiberglass reinforced wall panels (FRP) being used on the wet walls for an impact-resistant, easy-to-clean wall finish. Plastic laminate is used in the restrooms. Each classroom has 2 walls of vinyl wall covering. There is vinyl wall covering in the library, administration office areas, and work spaces as well. There is some exposed brick at the main entry.

CONDITION EVALUATION

The wall finishes are generally in good repair. The corridor walls have some damage at corners where there are no corner guards. The CMU in the multipurpose room facing the stage should be cleaned and repainted.

2.3 CEILINGS

SYSTEM DESCRIPTION

The corridor ceilings are 12"x12" acoustical ceiling tiles over gypsum wallboard. There are gypsum wallboard soffits and beams in the corridors as well. The classrooms and offices have 2'x4' acoustical ceiling panels for ceiling finishes. There are gypsum wallboard ceilings in the restrooms, storage areas, and Kitchen. The Library has 2'x4' acoustical ceiling panels over the reception desk and over some of the bookcases. There are beams running through the space that are encased in gypsum wallboard. Above these beams, the ceiling follows the pitch of the roof and is furred out with gypsum wallboard and 12"x12" acoustical ceiling tile. The OT/PT room and the Music classroom

consist of 12"x12" acoustical ceiling tiles above painted structural steel beams. Trusses and structural steel decking were left exposed in the Multipurpose room. 12"x12" acoustical ceiling tile provides the surface above the platform area.

CONDITION EVALUATION

The ceilings are generally in good repair. Some tiles appear to be water damaged around the building, suggesting water intrusion in the attic above.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

Classrooms are typically equipped with 16-foot and 4-foot whiteboards, wallmounted televisions, folding partition walls, and plastic laminate finished storage casework.

The gymnasium includes six backboards – one at each end, and two on each side.

Kitchen equipment includes a dishwasher and sinks, two-door reach in freezer, two-door reach in refrigerator, serving counter with hot food wells, a thermal shelf, a worktable with sink, a two-deck convection oven, and exhaust hood, and a hand sink. In 2019, various kitchen equipment was replaced.

Coiling roll-up doors provide counter access from the Kitchen to the gymnasium area for serving and dishwashing.

CONDITION EVALUATION

The classroom equipment is in good repair, although at 2'-10" above finish floor, the sinks and accessories are difficult to reach for small children. The heights of mirrors in all restrooms are appropriate for children.

The gymnasium equipment appears to be in good condition.

All of the fixed equipment in the Kitchen appears to be in good repair.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION Power Distribution

Utility Service: West Mercer Elementary School is fed underground from an exterior pad-mounted 300kVA utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.

Switchboard: The main switchboard is a "Square-D" brand "QED" type switchboard rated for 800A at 480Y/277V. The main switchboard has an 800A main breaker and (7) available spaces. The main switchboard is equipped with a 'Square-D" brand "power logic" circuit monitor.

Generator: The existing generator is a 100kW "Kohler" brand 480Y/277V generator and "Kohler" brand automatic transfer switch.

Panelboards: Existing panelboards are "Square-D" brand "I-Line", "NEHB", and "NQOD" type boards, most have spares/ spaces available for future capacity.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Interior light fixtures are 2'X4' lay-in lensed with LED retrofit T-8 lamps with LED type high bay LED gym retrofit lamps in the gym.

Low Voltage

Telecommunications: The Main Distribution Frame (MDF) is located in Section 100 behind the Computer Lab Room 165 and supports the entire school. Network distribution for voice and data is single star topology. Data cabling is Cat 6 and terminates on Ortronics patch panels; voice cabling is a mix of Cat 2/3 and terminates on 110 wall mount blocks. Workstations are terminated on Ortronics Series I and Series II jacks. Classrooms have minimum connectivity. There are (2)4"C and a 100 pair copper demarc cable that enters and terminates within the MDF. Wirelesses Access Points are in various classrooms and staff workrooms.

CATV Distribution: CATV distribution cabling is via taps and splitters. The signal is extended to a 2' x 2' x 80" headend cabinet. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR's are located in the Library work room. The CATV taps and splitters are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wallmounted TV outlet and a wall-mounted TV set.

Intercom/Clock: A Rauland Borg TC4130 intercom system is housed in the MDF. The 66-block terminations and crossconnects are mounted on the plywood backboard and clock power supplies and transformers are mounted in a 19" x 60" equipment rack. Combination intercom/ clock speaker devices with call switches are located in instructional spaces. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wallmounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.

Sound Systems: Sound systems are present in the following spaces:

- > Gym/Commons (shared spaces)
- > Band/Choir Room (single room)

Security: An Ademco Vista 50 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security Cameras have recently been added to the school. Access card readers and security keypads are installed at selected entrances and a security vestibule at the main entrance has been added. System is monitored by Guardian.

Telephone System: A Nortel PBX telephone system is in the MDF. The PBX station ports are terminated on wallmounted 110 terminal blocks.

CONDITION EVALUATION

The main switchboard and branch panels appear to be in good condition. They appear to be current models and The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The generator enclosure and fuel tank are severely rusted. This appears to be caused by rain water over unprotected batteries within the generator housing.

Pendant light fixtures in the computer lab have been mounted directly to the ceiling and the louvers are damaged. The remainder of the interior lighting is in good condition and appears to provide adequate lighting levels.

The existing intercom system is in good operating condition.

The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system appears to have good coverage of parking and surrounding areas. The DVR has additional ports for expansion.

The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.

The existing sound systems appear to be operating adequately.

3.2 PLUMBING

SYSTEM DESCRIPTION

Student restrooms are equipped with metered faucets at all sinks, and trap wrap at one sink in girls' restrooms. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 1.0 GPF hands-free flush valves. Each restroom also has a hose bibb.

In classrooms, sinks and bubblers are in good condition. Drinking fountains in hallways are not hi-lo type, and are not recessed.

Hot water is supplied from two water heaters that have been replaced in the last five years. The water heaters are located in the boiler room.

In the mechanical attic, piping is in good condition and is well labeled. There are no floor drains in the mechanical attic.

CONDITION EVALUATION

Plumbing systems are generally in good condition.

3.3. HOT WATER/FORCED AIR HEATING

SYSTEM DESCRIPTION

Heating for the building is provided by a hydronic system that supplies heating water to hot water coils for each zone. Air handling units and return fans in the mechanical attic were installed in 1995. Ductwork in the mechanical attic is insulated and well braced.

Heating water is supplied by two Patterson Kelly boilers located in the boiler room. Also in the boiler room are two hydronic pumps. Both the boilers and pumps are showing signs of wear and are nearing the end of their useful life. Each pump is controlled by a VFD.

Thermostats in the building are pushbutton type. Ventilation in the kiln room is sufficient. Exhaust has been provided in the teacher workroom for the copier and laminator.

A Carrier heat pump provides heating and cooling to the computer room. The unit was installed in 1995.

CONDITION EVALUATION

Systems are generally in good to fair condition. Equipment is inefficient and aging.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

Illuminated LED exit signs supplied from the emergency generator are located above the exit doors.

4.2 FIRE CONTROL CAPABILITY

Fire protection sprinkler heads in the multipurpose room are not shielded.

4.3 FIRE ALARM SYSTEM

SYSTEM DESCRIPTION

The existing fire alarm panel is a "Siemens" brand panel with RF Subscriber unit dialer unit. The fire alarm panel is connected to an emergency system electrical panel and there appears to be an adequate number of notification and detection devices, including beam detectors in the gymnasium. Tamper, flow, and low air switches are also monitored by the fire alarm system. The annunciation appears to meet current code.

CONDITION EVALUATION

The system is in good working condition and appears to meet current code coverage.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Emergency lighting for egress consists of fluorescent fixtures with emergency battery packs. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

CONDITION EVALUATION

System is in good working condition and appears to meet current code coverage. There appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 FIRE RESISTANCE

This facility has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. The corridor walls are one-hour and are mostly constructed of wood framing with GWB on both sides and plaster veneer on the corridor side. A two-hour area separation wall separates the Multipurpose Room from the rest of the facility. These walls consist of CMU and CMU with wood furring and GWB. The building is sprinklered.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

(2) Handicapped parking stalls are provided in the front parking area adjacent to the main entry. However, the path of access crosses the pick-up/ drop-off lane of traffic. At this location, a painted crosswalk has been provided to highlight this path. This crosswalk is a continuation of the designated access aisle which is less than the 5'-0" prescribed by current accessibility standards. A curb cut has been provided to give direct access from the driveway to the main entry of the building. A van handicap stall is provided at the northeast corner of the multipurpose room. This stall has no clear designated access aisle or crosswalk to an accessible entry. The supposed access aisle impedes into the adjacent fire lane and gate.

The 1995 improvements to this school building resulted in better handicapped accessibility. Improved or newly constructed restrooms include the appropriate clearances, access widths, heights of accessories, accessible fixtures, protection from hot waste pipes, and grab bars.

Circulation east-west in Hall Ramp Corridor 102 and 125 is provided via 1:12 ramps. The handrails for these ramps terminate at the main entry doors and fire doors, and wraps around existing concrete columns. It has an awkward termination in these instances and does not appear to have adequate extensions as prescribed by current accessibility standards.

Throughout the building door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances. Drinking fountains throughout the facility are at 2'-10", but do not have the appropriate high/low configuration. Although the sinks and countertops in the classrooms are 2'-10" above finish floor, the hot water waste pipes are not insulated.

Some areas of the concrete sidewalks around the exterior perimeter of the buildings have settled unevenly, resulting in tripping hazards and slab differentials greater than ½-inch. Handrails throughout the building and site range between 36-38 inches. Although within acceptable heights, these handrails may be too high for small children with disabilities.

There is a raised platform area in the internal courtyard which has no stairs or ramp leading to the top.

CONDITION EVALUATION

Proper drinking fountains with a high-low sink should be considered. All exposed pipes under sinks should be insulated.

Uneven settlement in exterior sidewalks has resulted in slab differentials. Any differential greater than ½-inch needs to be repaired/replaced.

SITE CONDITION EVALUATION

The site is surrounded by residential properties with several access points from a variety of directions. The site slopes dramatically from north to south at the main drive into the site. There is also a large, steep hill between the east side of the building and adjacent residences. There are some significant grade elevation differences running east-west at the building that result in differing floor elevations and the use of concrete stairs for building access pathways around the perimeter of the building making access difficult for anyone with disabilities.

The building is located at the center of the property. There is a drive that extends from 40th Avenue to the front of the building providing access for staff parking and parent drop-off. Buses access the site from West Mercer Way and drop-offs from here access the building from the south entry. Additional temporary parking is provided on the east side of this bus loop. This parking is not paved and wood chips over dirt provide its surface. There are 65 parking stalls in the north lot including two handicapped stalls, one handicapped van parking and space for approximately 12 parking spots in the bus loop. Parking is inadequate for events, even though the stall count exceeds what is prescribed by the Mercer Island Municipal Code for an elementary school.

Play equipment areas are located in front of the building, immediately northeast of the hard surface play area and portables. The remainder of the site is grassed play fields which are north of the building. Field equipment includes a chain-link backstop in one location. There is a covered play area to the east of the building and it is connected to the school by two covered walkways.

The site has a significant amount of impervious area, and may exceed the allowed impervious area of 55% prescribed by the Mercer Island Municipal Code. The site has challenges with draining because of its proximity to the north and east hill, poor maintenance of catchment basins, and the site's impervious area.

Physical Condition

PARKING AND DRIVEWAY AREAS

The asphalt paving in both of the front parking areas is in fair condition. The front parking lot has some cracking and should be resurfaced and repainted. An extruded curb lines the eastern edge of the property along the fire lane, but has been damaged by vehicle tires and is broken in several locations.

Entry into the north parking lot is problematic with traffic backing up onto 40th Avenue when parents are dropping off their children.

There are three parking stalls located at the northeast corner of the building which have no wheelstops or bollards to prevent a potential collision into the building.

Parking at this site is insufficient for the needs of the staff and parents.

HARD SURFACE PLAY AREAS

The asphalt paving in the play area north, west, and south of the building is in fair condition. The surface contains multiple cracks and previous patches.

Between the building and the covered play area are existing planters that were filled in with asphalt. These planters are flanked by two emergency exits whose pathways flush out with the top of the old planter boxes creating a potential falling hazard during an evacuation. Between these two planters is a stairway used during the original construction and abandoned in the 1995 addition and renovation. There is a large lip where the asphalt meets the concrete landing presenting a tripping hazard for anyone walking on top of the planters.

There are gaps at the borders between the asphalt and concrete walks causing weeds to grow within these gaps.

DRAINAGE

The catchment basin located east of classroom 202 has been known to back up as a result of the overhead trees and from water runoff from the adjacent rockery retaining wall and stairs.

The west side of the bus loop accumulates standing water as a result of inadequate sloping to catchment basins.

During heavy rainfalls, water runs down the hill north of the main entry and play

field. From there, it runs west along the fence line and south into the field, causing a swampy condition. This is further amplified by an underground spring in the north hill. The water also seeps into the adjacent big toy area.

There is an underground retention tank on the west side of the northwest play field.

Maple trees have been known to backup the catchment basin south of classroom 318.

Runoff from the east hill and underground springs cause a steady stream along the dumpsters and east side of the building during heavy rainfalls.

Standing water tends to accumulate east of classroom 303. This is at the base of a hill and two stairways. The catchment basin in the adjacent hill seems to have little impact on this problem since the water seems to bypass it during heavy rainfalls.

PLAY FIELDS

Supervision from the school to the northwest field is adequate.

FENCING

The perimeter fence along the north, west, and south side of the property varies in height and is broken and damaged in many places. The school is visually screened from adjacent property by large trees behind the perimeter fencing.

PLAY EQUIPMENT

Codes related to play equipment have changed in the last several years. The equipment should be inspected by a certified inspector on an annual basis. The borders around the equipment are concrete and appear to be in good condition. One area includes a plastic border that appears to be performing well. The equipment areas are underlain with treated wood chips (fibar) and appear to be at sufficient depth.

There are two stairways leading up to the play equipment which have no handrails.

There are basketball hoops, tetherball poles, designated areas for foursquare and hopscotch located throughout the hard surface play area. The basketball hoops are in poor condition, with nets that are failing and clear backboards accumulating mold and mildew.

There is a large covered play area located to the west of the main building. It is constructed of brick, CMU, concrete columns, exposed steel trusses, and exposed wood decking. Its fascia matches the main building and its roof is connected to the main building by two flat roofs. The main roof of this structure has four internal drains. The roof is flat and a new single-ply membrane was applied to it in 1995. The roof structure was also expanded to the west in 1995 providing more cover. This roof has significant debris buildup and ponds along the eastern drains. The covered play area houses 3 basketball hoops which are in poor condition. The exposed steel trusses are rusting and the covered play area is in need of new paint.

LANDSCAPING

The landscaping and pond in the internal courtyard of the main building has been completely redone and is in good condition.

Other Observations

Sidewalks around the perimeter of the building and throughout the site are cracked in many locations.

Additional storage is provided for on site by temporary sheds and large metal containers.

EDUCATIONAL ADEQUACY ASSESSMENT

The following summary includes programmatic needs and issues identified at West Mercer Elementary School by the school principal, the MISD facilities department, and the 2010 Study and Survey report.

Site

Students using modular classrooms must leave the portable to use restroom or other school facilities.

This site works well from a traffic perspective. Event parking is a challenge but there is good queuing on the road to the north.

Parking does not accommodate school needs. Some staff members park on Homestead Park's lot where lighting is inadequate, an access to school is not safe for pedestrians. Bus loop parking is not paved, and gets muddy during the rainy season.

Play fields have drainage issues that limit their usability during the rainy season.

Playground / play area is remote from the cafeteria.

Covered play area is undersized.

A restroom that is easy to access from play areas is desired.

Building/Program

TEACHING AREAS

Multipurpose room is used both as a cafeteria and gymnasium. Shared function of multipurpose room results in a number of PE classes being doubledup and impacts available time for lunch. The space also needs to be bigger, and have more natural light.

Special education programs are disjointed, and should have better placement within facility. The spaces also have poor acoustics. There is a need for an additional special education classroom.

Classrooms are too small, and do not have sufficient storage or adequate adjacent pull-out space.

Art and computer science currently share a space and both need a dedicated classroom. There are no small group learning / pullout areas to support general education. A "pod" configuration is desired.

Library needs additional storage and more natural light.

SUPPORT AREAS

Administration is undersized and lacks visual connection. Additional needs include an adequate health room/ nurse's office, student waiting area, additional administrative and student service offices, conference room, records storage, an enlarged staff workroom and lounge, and a PTA room.

There is congestion in the main corridor during pick-up and drop-off.

Safety/Security

No deficiencies noted.

A secure entry vestibule was added to the building in 2018, allowing controlled access into the school.

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)					
WEST MERCER E	INTERCER ISLANI				
Profile Name:	– Classroom Building - Slabs On Grade	Currently BCA Certified: Yes			
Inventory Statu	s: Recognized	Last BCA Certify: 3/14/2021			
Reviewed By:	Consultant	Last District Review: 11/25/2020			
Condition Ratin	g: 85.53 %	Last District Review: 11/25/2020			
		Condition Dating Component Dright			
Sub-Assembly	Component	Condition Rating Component Priority E G F P U N/A Score L M H			
Foundations					
A1010	Standard Foundation				
Slabs on Grade					
A4010	Standard Slabs on Grade				
Water and Gas I					
A6010	Building Subdrainage				
Superstructure	Sanang Sabaranage				
B1020	Roof Construction				
Exterior Vertical					
B2010	Exterior Walls				
B2020	Exterior Windows				
B2050	Exterior Doors and Grilles				
B2070	Exterior Louvers and Vents				
Exterior Horizon					
B3010	Roofing				
B3020	Roof Appurtenances				
B3060	Horizontal Openings				
B3080	Overhead Exterior Enclosures				
Interior Constru	ction				
C1010	Interior Partitions				
C1020	Interior Windows				
C1030	Interior Doors				
C1070	Suspended Ceiling Construction				
Interior Finishes					
C2010	Wall Finishes				
C2020	Interior Fabrications				
C2030	Flooring				
C2050	Ceiling Finishes				
Plumbing					
D2010	Domestic Water Distribution				
D2020	Sanitary Drainage				
D2030	Building Support Plumbing Systems				
HVAC					
D3010	Facility Fuel Systems				
D3010	Heating Systems				
D3020	Facility HVAC Distribution Systems				
D3050	Ventilation				
03060	ventiidliUii				

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

Fire Protection						
D4010	Fire Suppression		90 %			
D4030	Fire Protection Specialties		90 %			
Electrical						
D5010	Facility Power Generation		62 %			
D5020	Electrical Services and Distribution		90 %			
D5030	General Purpose Electrical Power		90 %			
D5040	Lighting		90 %			
Communications						
D6010	Data Communications		90 %			
D6020	Voice Communications		90 %			
D6030	Audio-Video Communications		62 %			
D6060	Distributed Communications and Monitoring		90 %			
Electronic Safety	and Security					
D7010	Access Control and Intrusion Detection		100 %			
D7030	Electronic Surveillance		100 %			
D7050	Detection and Alarm		100 %			
Integrated Autom	nation					
D8010	Integrated Automation Facility Controls		62 %			
Furnishings						
E2010	Fixed Furnishings		90 %			
E2050	Movable Furnishings		90 %			

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)						
WEST MERCER EL	EMENTARY SCHOOL - 02_COVERED PLAY					
Profile Name:	Covered Play	Currently BCA Certified: Yes				
Inventory Status:	Recognized	Last BCA Certify: 3/14/2021				
Reviewed By:	Consultant	Last District Review: 11/25/2020				
Condition Rating	: 75.48 %	Last District Review: 11/25/2020				
		Condition Rating Component Priorit				
Sub-Assembly	Component	EGFPUN/A Score LM				
Foundations						
A1010	Standard Foundation					
Slabs on Grade						
A4010	Standard Slabs on Grade					
Superstructure						
B1020	Roof Construction					
Exterior Vertical E	nclosures					
B2010	Exterior Walls					
Exterior Horizonta	al Enclosures					
B3010	Roofing					
Interior Finishes						
C2050	Ceiling Finishes					
Electrical						
D5040	Lighting					
Electronic Safety a	and Security					
D7030	Electronic Surveillance					
Equipment						
E1070	Entertainment and Recreational Equipment					

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
SITE CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

MILKELK ISLAND SCHOOL DISTRICT (17400)				
WEST MERCER EL	EMENTARY SCHOOL			
Profile Name:	Elementary School - Rural	Last Review:	3/14/2021	
Inventory Status	: Recognized			
Condition Rating	;: 78.46 %			
		Condition Rating	Component Priority	
Sub-Assembly	Component	EGFPUN/A	Score L M H	
Site Improvemen	t			
G2010	Roadways		90 %	
G2020	Parking Lots		62 %	
G2030	Pedestrian Plazas and Walkways		90 % 🗆 🗆 🗆	
G2050	Athletic, Recreational and Playfields Areas		62 % 🗆 🗆 🗆	
G2060	Site Development		90 %	
G2080	Landscaping		62 %	
Liquid and Gas Sit	te Utilities			
G3010	Water U tilities		90 % 🗆 🗆 🗆	
G3020	Sanitary Sewerage Utilities		90 % 🗆 🗆 🗆	
G3030	Storm Drainage Utilities		90 % 🗆 🗆 🗆	
Electrical Site Imp	provements			
G4010	Site Electric Distribution Systems		90 % 🗆 🗆 🗆	
G4050	Site Lighting		62 % 🗆 🗆 🗆	
Site Communicati	ions			
G5010	Site Communications Systems		90 % 🗆 🗆 🗆	

ISLANDER MIDDLE SCHOOL

8225 Southeast 72nd Street Mercer Island, WA 98040 206.236.3413

SITE INFORMATION

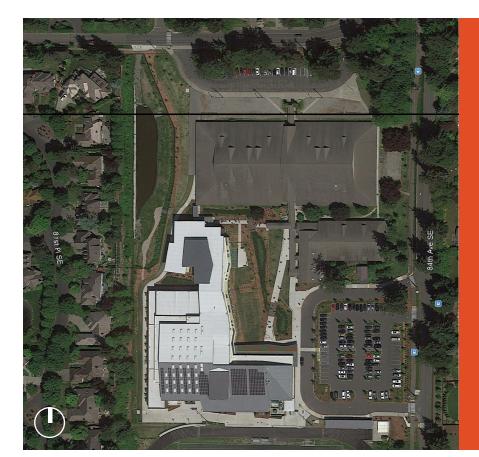
County:	KING
Site Area:	27.36 ACRES
Zoning:	R-9.6
Tax Parcel:	2524049144
Jurisdiction:	CITY OF MERCER ISLAND
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT

BUILDING INFORMATION

Original Construction:	1958
Addition:	1994/2000/2015
Modernization:	1994/2000
Area (Permanent):	171,526 GSF
Portables:	0
Grades:	6-8
Capacity (Permanent):	1,314
Enrollment (2019-20):	1,139

TEACHING SPACES

General Classrooms:	48
Special Education Classrooms:	3
Occupational Therapy:	0
Technology/Computer Room:	3
Art Room:	2
Music Room:	4
Gymnasium:	3
Library:	1
Total Teaching Spaces:	



Building Condition Evaluation ICOS Score

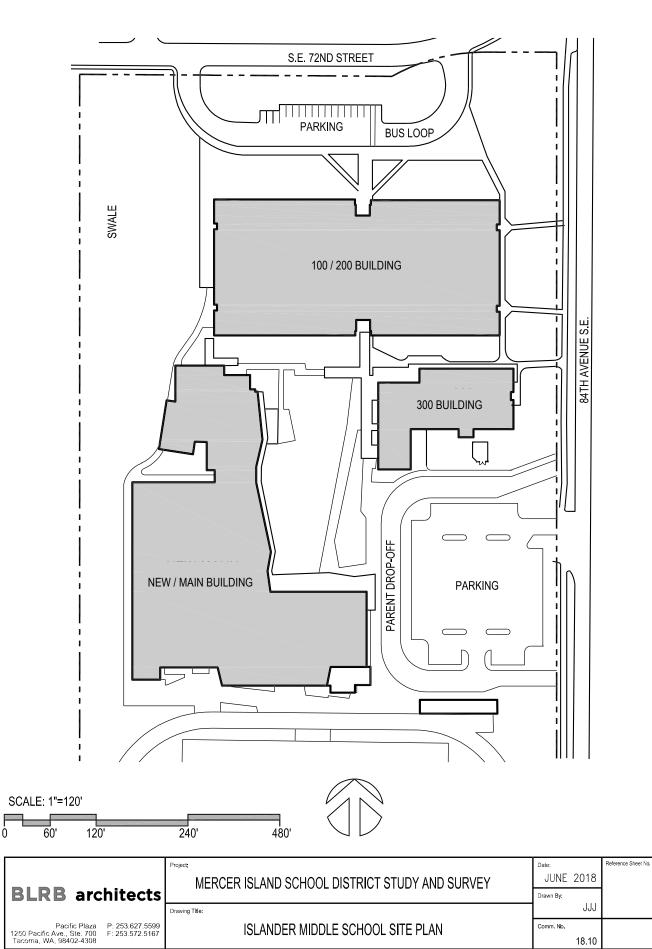
New / Main Building: 96.99

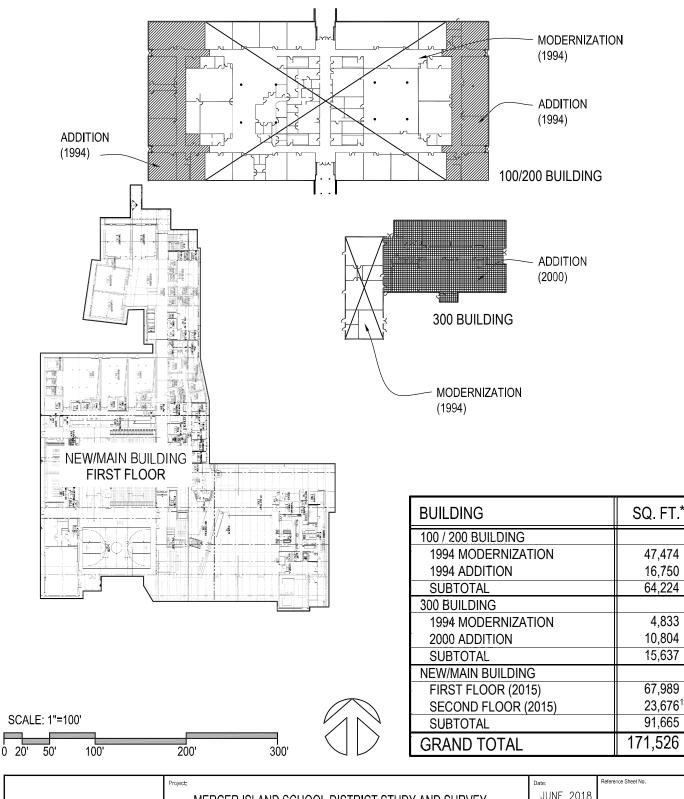
100 / 200 Building: 73.57

300 Building: 71.44

Site: 99.13

CHAPTER 01 | INVENTORY & AREA ANALYSIS ISLANDER MIDDLE SCHOOL

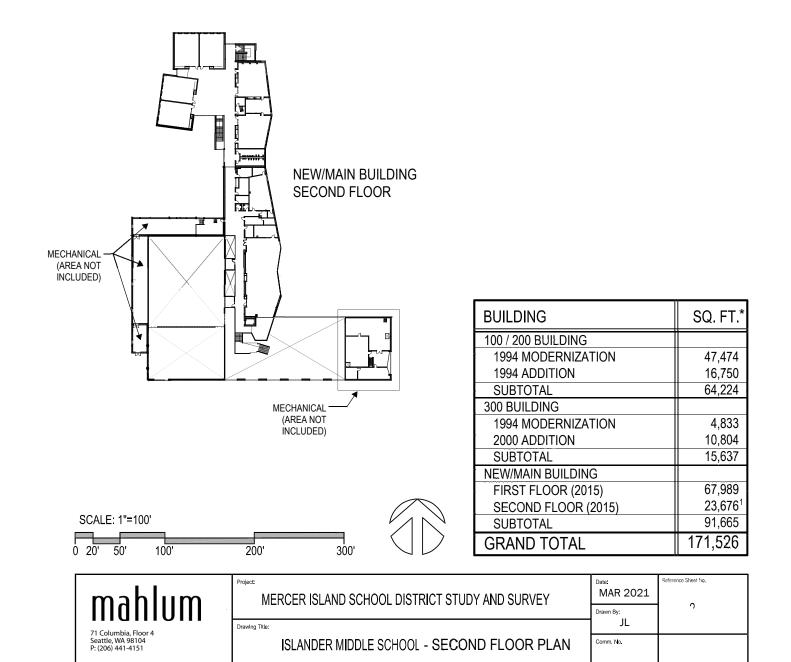




		JUNE 2018	
BLRB architects	Drawing Title:	Drawn By: JJJ	
Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	ISLANDER MIDDLE SCHOOL - FIRST FLOOR PLAN	Comm. No. 18.10	

* Building areas have been updated per as-built drawing area takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021) ¹ Includes stair area (counted on both floors).

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* Building areas have been updated per as-built drawing area takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021) ¹ Includes stair area (counted on both floors).

CONSTRUCTION HISTORY

Islander Middle School (IMS) was originally constructed in 1958. It is currently a campus of three buildings connected by covered walkways. A compressive renovation and addition was completed in 1994. It has since had a portion of those buildings removed and replaced with new construction. Currently there is the original, and renovated in 1994, 100 / 200 Building. The 300 Building, that was part of the original campus and renovated in 1994, was then added onto in 2000. And there is a new building that replaced existing structures and was constructed in 2015/16.

The 1994 construction was wood-framed walls with CMU veneer to match the existing CMU walls. The modernization of the buildings included roof overbuilds over the original low-slope roofs. All roof systems, new and at the overbuilds, were comprised of open-web trusses supported by glulam beams. Rigid insulation was installed over the plywood sheathing and asphalt roof shingles over the insulation.

Existing spaces received new floor covering and suspended ceiling along with all wall surfaces being painted. Doors and door frames were upgraded to comply with fire codes at that time. All existing windows were replaced with more energy efficient windows.

Site work included some upgrading and addition to the existing fore loop system and an additional meter service to improve domestic water. An onsite, above grade detention system was constructed for storm water control along with some replacement of existing sanitary line and on new side saver connection. Some sidewalk work was done to conform to codes of that time and to accommodate new construction. Minor landscape and irrigation restoration was done in these disturbed areas and where portables were removed. Some asphalt patching and painting was done at the existing parking lots.

The existing buildings and new construction received a new heating system, replacing the existing unit ventilators in each classroom and office. Some plumbing piping was replaced throughout the facilities. New toilets were installed at this time.

Power was upgraded to 277/480 V 3 Phase System. Many of the light fixtures were replaced. New data, TV, and a fire alarm system were installed. The entire campus was sprinkled. Asbestos was predominately removed under a separate contract.

The project delivery method was Fast Track with the roof overbuilds constructed while students were still in school during the spring of 1994. The renovated school was opened during the fall of 1994.

In 2000, an addition was constructed to expand the Multipurpose room seating area and add table storage space. Hollow metal door and window frames were salvaged and reused as part of this addition. Another addition was constructed at the 300 Building to provide five classrooms, two science rooms, student restrooms, storage, and a conference room. Asphalt, concrete walks, and landscaping was modified to accommodate this.

In 2015, Building 400/500/600/700 was demolished and a new building was erected and is now the front door to the campus. It consists of new secure main entrance to the administration offices as well as a new gymnasium, auxiliary gym and commons. New music facilities were constructed for a total of 22 new teaching stations.

The building is steel constructed with brick veneer to approximately seven feet in height. A horizontal metal panel above the brick, then at the second floor transitions to a vertical metal siding.

The roof is partial metal roof and singleply membrane roof. Window systems are aluminum storefront.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

Islander Middle School consists of three buildings: the 100 / 200 Building, the 300 Building, and the New / Main Building. The 100 / 200 Building was originally constructed in 1958. The New / Main Building was completed in 2016.

The New / Main Building consists of concrete spread footing foundations, concrete slab on grade, reinforced CMU bearing walls with structural steel framing at both the roof and second floor. The second floor is concrete filled metal decking and the roof is light gage metal decking spanning between the steel framing.

The lateral force resisting system consists of metal deck roof diaphragms, concrete filled metal deck floor diaphragms and reinforced CMU shear walls.

The 100 / 200 Building and the 300 Building consist of concrete spread footing foundations, concrete slab-ongrade construction, steel columns, infill partially-reinforced CMU walls, steel roof joist and beams, and tectum roof sheathing. In 1994, a wood overbuilt roof was added, consisting of open-web wood roof trusses, plywood sheathing, wood and glulam roof beams supported by the existing steel columns of the original construction.

The addition to the east has wood stud bearing walls, steel columns, and openweb wood roof trusses with plywood sheathing.

The lateral resisting system for the 100 / 200 Building consists of plywood and tectum horizontal diaphragms and plywood and partially reinforced CMU shear walls.

The west end of the 300 Building is original masonry construction that was seismically upgraded in 1994 and a new wood-framed over-built roof. The 2000 addition to the east consists of concrete spread footing foundations, slab on grade floor construction, wood stud interior and exterior bearing walls, wood roof trusses and plywood sheathing.

The lateral resisting system for the 300 Building consists of plywood roof diaphragm, plywood shear walls and masonry shear walls of the original construction.

CONDITION EVALUATION

We did not observe significant signs of structural distress, differential settlement or deterioration.

There have been some significant changes in the building code since Islander Middle School was seismically upgraded and added onto in 1994. The current IBC requires a 1.25 importance factor for school design plus the design force for out of plane anchorage for masonry walls has doubled. It is assumed that the older portions of the structure (100/200 and 300 Buildings) are not in full compliance with the current code.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

At the older north and east buildings, the exterior walls consist of the original CMU walls or new wood stud walls with masonry veneer. The New / Main Building consists of metal stud frame walls or reinforced CMU walls. The new walls have a combination of exterior finishes with masonry veneer in several locations.

CONDITION EVALUATION

We did not observe significant signs of structural distress, differential settlement or deterioration.

The lateral resisting system in the older buildings does rely on partially unreinforced masonry shear walls. The stresses are limited; however they are more susceptible to earthquake damage than properly reinforced masonry walls.

The current design forces for out of plane design and anchorage of masonry walls has doubled since the 1994 seismic upgrades and additions. It is assumed that in some locations in the older structures, most likely at the taller walls, the anchorage or capacity of adjacent supporting steel columns do not meet current code.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

100 / 200 Building:

The original low slope roof was covered by a sloped overbuild in 1994. The low sloped roof and structure over the main entry spine was demolished in 1994 and a new sloped roof was built overhead, creating a high volume space along this corridor. The most recent roof replacement occurred in 2019 and it is therefore in good condition. The most recently constructed roof is comprised of asphalt composition shingles. The roof positively slopes at 3:12 pitch to metal gutters at the perimeter. The roof is interrupted by dormers which provide light into the Student Court and Library. Lower dormers house mechanical louvers. These dormer overbuilds are at a 12:12 pitch and are constructed of asphalt composition shingles.

300 Building:

The roof over the 300 Building is similar. Ridges above the 2000 addition are vented.

New / Main Building:

The roof over the new building is a mixture of metal roof with rigid insulation and built-up single ply membrane for a majority of the roof. The metal roof has a mounted photovoltaic (PV) system.

CONDITION EVALUATION

100 / 200 Building:

New roof was installed in the summer of 2020 and is in excellent condition.

300 Building:

Since most of this roof was recently constructed, it is generally in good repair. Missing shingles were observed at the ridge vent on the east side of the roof.

New / Main Building:

New roofing systems as of 2015. The roof is in excellent condition.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

100 / 200 Building:

The windows are aluminum and were replaced in the 1994 addition and modernization. Bent metal flashing at the sill sits atop a masonry cap and is sealed. The perimeter of the window is caulked and sealed and there is no head flashing. Weeps are provided at the base of the vertical mullions. The classroom windows have operable upper casements and operable blinds.

The exterior door assemblies are hollow metal doors set within hollow metal frames which are solid fill grouted.

300 Building:

Doors and windows in the 300 Building are similar.

New / Main Building:

The window and door systems for the new building are all storefront systems in excellent condition.

CONDITION EVALUATION

100 / 200 Building:

The sealant is cracked on some windows along the west elevation. One window adjacent to the main entry has compromised perimeter seals at the glazing.

Defective hardware should be replaced.

300 Building:

Doors and windows are in good repair.

New / Main Building:

New windows and doors are aluminum storefront and in excellent condition.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

100 / 200 Building:

A piece of 2x10 cedar trim provides backing for metal gutters and a 2x8 piece of cedar trim provides an end cap for double 2x6 outriggers. The soffit is a painted 2x6 painted tongue-andgroove decking that slopes with the roof. Downspouts consist of polyvinyl chloride (PVC) piping. Dormer overbuilds are faced with plaster sill and a painted fascia board along the eaves. The covered walkways have a painted plywood ceiling.

300 Building:

The exterior trim on the 300 Building is similar.

New / Main Building:

Various types of trim are incorporated into the buidling's exterior. All appear to be in excellent condition.

CONDITION EVALUATION

100 / 200 Building:

The wood fascia was repaired with the 2020 roofing project.

300 Building:

The exterior trim is generally in fair repair. Paint fascia trim.

New / Main Building:

The exterior trim is in excellent condition.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

100 / 200 Building:

All flooring is from the 1994 addition and modernization. Classrooms and corridors are carpeted throughout the building. Restrooms have a sheet vinyl floor with a coved base. Art rooms have VCT flooring. Rubber base was installed in 1994 over carpeted areas and VCT.

300 Building:

Floors are similar to the 100 / 200 Building.

New / Main Building:

The New / Main Building is primarily honed concrete floors. Based on what appears to be construction timelines, there is a fair amount of cosmetic cracking. Tiled carpet is used in classrooms, breakout spaces and the library.

CONDITION EVALUATION

100 / 200 Building:

The rubber base in high traffic areas such as the corridors is damaged in many places and requires replacement. The sheet vinyl flooring in the restrooms is shrinking, causing its joints to get larger and collect dirt. The coves are cracking in some locations. The sheet vinyl coved base is losing its bond in some instances.

300 Building:

Floors are in good repair.

New / Main Building:

The carpet is in excellent condition. The polished concrete has cosmetic cracking and spidering along with construction footprints in the second floor slab.

2.2 WALLS

SYSTEM DESCRIPTION

100 / 200 Building:

Corridor walls are typically constructed of painted concrete masonry units. Gypsum walls in the corridors are type "x" and have a ¼" MDF wainscoting that terminates at a wooden chair rail. Restrooms that were part of the addition in 1994 have a plastic laminate wainscoting over type "x" gypsum wallboard. Original restrooms have painted CMU and ceramic tile wainscoting. Classrooms are typically constructed of gypsum wallboard. Some walls have vinyl wall covering. The library and Student Court have acoustical wall panels in the high volume spaces.

300 Building:

Corridor walls in the 300 Building are similar to the 100 / 200 Building.

New / Main Building:

There are a variety of systems used in the new building, ground faces CMU walls around gym facilities, GWB and phenolic wall panels in the hallways.

CONDITION EVALUATION

100 / 200 Building:

The gypsum wallboard is damaged at the base in the Student Court area.

300 Building:

The walls are in good repair.

New / Main Building:

Interior wall systems are in excellent condition other than cosmetic streaking of the CMU sealant in the main corridor.

2.3 CEILINGS

SYSTEM DESCRIPTION

100 / 200 Building:

The main entry corridor is a high volume space that has a gypsum board ceiling that slopes with the roofline. The library and Student Court are also high volume spaces with a ceiling that slopes with the roof and is finished with acoustical ceiling tiles.

Ceilings consist of 2'x4' acoustical ceiling panels in the corridors and classrooms. Restrooms, storage rooms, janitor rooms, and the utility room have a gypsum board ceiling.

300 Building:

Ceilings in the 300 Building are similar to those in the Classroom Building.

New / Main Building:

New ceiling systems are a mixture of perforated wood panels (mostly in the public spaces), 2x2 sac (classrooms), and painted exposed metal decking (gymnasiums).

CONDITION EVALUATION

100 / 200 Building:

Ceilings in the 100 / 200 Building are generally in poor condition.

300 Building:

Ceilings in the 300 Building are in good repair.

New / Main Building:

All various ceiling types are in excellent condition.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

100 / 200 Building:

Classrooms are generally equipped with four 8-foot long whiteboards with integral tack boards, built-in lower and upper cabinetry, tall cabinet storage, three pull-down projection screens and a wallmounted television.

The art rooms are equipped with a wallmounted television, a projection screen, and lower caabinets with stainless steel sinks along the perimeter of the room. This cabinetry is original to the building and was relaminated in the 1994 modernization. All of the countertops are 3'-0" above finish floor and there is no accessible sink or workspace. Electrical outlets are located above the sinks in some cases.

Countertops in the Faculty Room appear to be of a residential grade and were probably replaced after the renovation. Operable walls in the Teaching Room and in Conference Rooms 136, 138, and 139 were removed to make the rooms function better.

Most of the double-tier lockers in the corridors were existing during the 1994 modernization and addition and were refinished to match new lockers. These lockers are approximately 25 years old. Some of these lockers are missing hardware, hooks, and have damaged bottom plates.

300 Building:

Rooms are generally equipped with whiteboards, upper and lower cabinetry, projection screens and mounted audio/ visual equipment.

New / Main Building:

Rooms are generally equipped with whiteboards, upper and lower cabinetry, projection screens and mounted audio/ visual equipment.

CONDITION EVALUATION

100 / 200 Building:

The cabinetry in the art rooms is in poor working condition. Drawers are difficult to open and some of them are missing stops. Some doors are hung out of plumb and are missing magnetic closers. The cabinetry should be replaced and provisions for an accessible workspace and sink should be accounted for.

Phenolic toilet partitions in the restrooms have been vandalized extensively with sharp objects and should be replaced.

Lockers that were existing during the 1994 modernization have reached the end of their intended life, are in poor working condition, and should be replaced.

300 Building:

Equipment is in generally good condition.

New / Main Building:

Fixed equipment is in excellent condition.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

100 / 200 Building:

Power Distribution Utility Service: Islander Middle School's 100 / 200 Building is fed from the boiler/ electrical building via an 800A breaker. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.

Switchboard: The sub-distribution board is a "GE" brand "Spectra Series" type switchboard rated for 800A at 480Y/277V. The sub-distribution board has a "Hi-Break" 800A main circuit breaker.

Generator: There is a "Generac" brand ATS installed in this building which feeds Panel "CM," a 60A 208Y/120V emergency panel.

Panelboards: Existing panelboards are "GE" brand "A-Series" type boards. 480Y/277V panels have available spare/ spaces while 208Y/120V panels are generally at capacity with no space available. 208Y/120V panels are protected with "Tycor" brand "TPY" series TVSS units.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Interior fixtures are mostly linear fluorescent, except for HID and compact fluorescent fixtures in the corridors.

Low Voltage

Telecommunications: The Main Distribution Frame (MDF) is located in Area E off the Main Corridor 127. Network distribution for voice and data is hierarchical star topology. Data cabling is Cat 5 General/CommScope and terminates on Infotap patch panels; voice cabling is Cat 5 General/ CommScope and terminates on wall mount BIX blocks. Workstations are terminated on Leviton jacks. Classrooms have staff and student connectivity. Demarcation to school is located in Area C Electrical Room 306 with (2)2"C and a 50-pair copper. Demarc is extended into MC room with a Cat 3 25-pair copper backbone cable. (1) 12 strand 62.5/125 multimode optical fiber cable and (1) Cat 3 25-pair copper backbone cable connects to Area B IDF-AB. Wirelesses Access Points are in various classrooms.

CATV Distribution: CATV distribution cabling is via taps and splitters with an extension to Area B. The signal is extended to a 2' x 2' x 80" headend cabinet located in the AV Workroom A221 across the corridor from the MDF. The manufacture is Blonder Tongue with sub-channel origination. DVD/VCR's are located with the headend equipment. The CATV taps and splitters are mounted on the plywood backboard. The CATV signals are distributed to TV outlets in the school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. Each classroom is equipped with a wallmounted TV outlet and a wall-mounted TV set.

Intercom/Clock: A Telecor II intercom system is located in Area E Admin 134. The 66-block terminations and cross-connects are mounted on the plywood backboard in the MDF. Area B is connected to the 100 / 200 Building, 66 blocks are wall-mounted in the IDF room. Combination intercom/clock speaker devices with call switches are located in instructional spaces. Flush-mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wall-mounted analog clocks are located in the corridors and common areas. There are exterior speakers to provide paging coverage to the outside areas.

Sound Systems: Sound systems are present in the following spaces:

- > Gym 601
- > Gym 602
- > Multipurpose 501
- > Band Room 401
- > Music Room 402
- > Choral Room 403

Security: A Radionics D9112 security panel and associated power supplies are located in the MDF. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Security cameras are located on the exterior and interior of the building with a DVR in the MDF. Interior cameras cover cafeteria/ multipurpose room. Access card readers and security keypads are installed at selected entrances. System is monitored by Guardian.

Telephone System: A Nortel PBX telephone system is in the MDF. The PBX

station ports are terminated on wallmounted BIX blocks.

300 Building:

Power Distribution

Utility Service: Islander Middle School's main switchboard in the Boiler/Electrical Room is fed underground from an exterior utility transformer. Distribution is 480Y/277V with step-down transformers to supply 208Y/120V loads.

Switchboard: The main switchboard is a "GE" brand "AV-Line" type switchboard rated for 1600A at 480Y/277V. The main switchboard has a 1600A main circuit breaker and also has fusible switches to feed the 100 / 200 Building and gym. There are also fusible disconnect switches to feed temporary power to the site for portable trailer.

Panelboards: Existing panelboards are "GE" brand "A-Series" type boards. 480Y/277V panels have available spare/ spaces while 208Y/120V panels are generally at capacity with no space available. 208Y/120V panels are protected with "Tycor" brand "TPY" series TVSS units.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants. Exterior fixtures utilize metal halide lamps and interior fixtures are T-8 fluorescent.

New / Main Building:

Power Distribution

Utility Service: new addition has a main switchboard in the Boiler/Electrical Room is fed underground from an exterior utility transformer. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.

Generator: There is a 230kW generator which was installed in 2015. The generator has (2) ATS's which supply power to the emergency life safety loads in the building and the emergency standby loads which includes telecom rooms and food service equipment. Panelboards: Existing panelboards are "GE" brand "A-Series" type boards. 480Y/277V panels have available spare/ spaces while 208Y/120V panels are generally at capacity with no space available. 208Y/120V panels are protected with "Tycor" brand "TPY" series TVSS units.

Switchboard: The main switchboard rated for 2500A at 480Y/277V. The main switchboard has a 2500A main circuit breaker and also breakers for subdistribution.

Panelboards: 480Y/277V and 208Y/120V panels have available spare/spaces and are protected with Innovative Technologies 'SPD' devices.

Lighting

Interior and exterior lighting are LED type. Interior fixtures operate based on time of day and occupancy sensor function through a lighting control system. Exterior fixtures operate based off of DDC integration, photocell and time of day scheduled control.

CONDITION EVALUATION

100 / 200 Building:

The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The room housing the main switchboard is not well ventilated. The main distribution panel clearance does not meet code due to table with security camera monitoring equipment being placed in front of switchboard.

Panels "CL" and "CK" are located behind couch in custodial office which is a code violation.

The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixture lenses are yellowing and should be replaced.

The existing intercom system is in good operating condition.

The existing security system provides adequate intrusion detection and access control functions. The existing video surveillance system appears to have marginal coverage of parking and surrounding areas. Half the cameras are located in the cafeteria/multipurpose area. The DVR has additional ports for expansion.

The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.

The existing Category 5 telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. It is possible the cable is capable of supporting current standards if the cabling was reterminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a Category 5e or category 6 cabling plant. Likewise the existing 62.5/125 multimode optical fiber cabling would need to be replaced with laser optimized 50/125 optical fiber cables to support current 10 Gigabit per second Ethernet transmission standards for optical fiber cabling.

The existing sound systems appear to be operating adequately.

300 Building:

The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixtures have broken lenses which need to be replaced.

New / Main Building:

All systems are new and in excellent working order.

3.2 PLUMBING

SYSTEM DESCRIPTION

100 / 200 Building:

In student restrooms, faucets are low flow and metered. Water closets are equipped with 1.28 GPF flush valves. Urinals are equipped with 0.125 GPF hands-free flush valves.

Drinking fountains in hallways are hi-lo type with bottle fillers. Sinks are provided in some classrooms, and plaster traps are provided for art classrooms sinks.

Sinks in science classrooms are acid resistant and they drain, via acid resistant piping to an acid neutralization tank. Gas and air turrets are provided at all stations. Each science classroom and prep room has emergency eyewash/ showers fed by tempered water. The air compressor for the science classrooms is located in the mechanical mezzanine along with an electric water heater which supplies hot water for the non-potable water piping in the science labs.

Hot water is provided by three new Conquest condensing-style water heaters located in the boiler room.

300 Building:

In student restrooms, faucets are metered, but some sinks are not equipped with trap wrap. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 1.0 GPF handsfree flush valves.

Sinks in science labs are not acid resistant, and they are not equipped with acid neutralization tanks. Gas turrets are provided at all stations. Some emergency eyewash showers have been disabled. Sinks are not provided in math classrooms.

In the mechanical attic, piping is in good condition, but some is hung from the ductwork.

New / Main Building:

Systems were designed and installed per code requirements.

CONDITION EVALUATION

100 / 200 Building:

The plumbing and domestic water distribution system is in fair to poor condition.

300 Building:

The plumbing and domestic water distribution system is in fair to poor condition.

New / Main Building:

All plumbing systems in the building are effectively new and in excellent working condition. Staff and student restrooms are in excellent condition.

3.3. FORCED AIR HEATING

SYSTEM DESCRIPTION

100 / 200 Building:

Heating and cooling for the 100 / 200 Building is provided by Haakon air handlers, which distribute to VAV boxes with reheat coils for multi-zone systems and single-zone Haakon air handlers for single zones. New Alerton controls are located throughout the building.

Change-over hydronic piping is fed by (2) Aerco boilers and (3) 30-ton Airstack air-source heat pumps. The boilers and pumps are located in a mezzanine adjacent to the gymnasium, near the custodial area.

Radiant heating is provided in the various classrooms and common areas in the classroom wing.

MDF, IDF, and elevator machine rooms are cooled by Mitsubishi mini-split systems.

300 Building:

Thermostats in the building are pushbutton type. Heating for the science building is provided by a hydronic heating water system with hot water coils for each zone. Air handling units and return fans in the mechanical attic were installed in 2002. There is very little seismic bracing for ductwork in the mechanical attic. Heating water is supplied by newer condensing-style hydronic boilers in the boiler room. Also in the boiler room, there are two hydronic system pumps controlled by one VFD on a lead / lag scheme. An air handling unit is also installed in the boiler room.

There is no seismic valve on the gas meter.

New / Main Building:

A change-over style hydronic piping loop is supplied by (2) Fulton boilers and (1) 20-ton Multistack air-source heat pump. System is in excellent condition.

CONDITION EVALUATION

100 / 200 Building:

The HVAC system is in fair to poor condition. Access to maintenance in the attic is difficult. The control system is functioning but outdated.

300 Building:

The HVAC system is in fair to poor condition.

New / Main Building:

The new building HVAC system is in excellent condition.

Exhaust/ventilation in student restrooms is very deficient. Exhaust for the science storage room is also insufficient.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

100 / 200 Building:

Illuminated fluorescent exit signs with battery back-up are located above the exit doors.

300 Building:

Illuminated fluorescent exit signs with battery back-up are located above the exit doors.

New / Main Building:

Illuminated LED exit signs on generator power back-up are located above the exit doors.

4.3 FIRE ALARM SYSTEM

SYSTEM DESCRIPTION

100 / 200 Building:

The 2015 building addition included a new fire alarm control panel with RF subscriber dialer. In 2015 and 2016, the existing buildings have undergone fire alarm system replacement and have been connected to the panel in the building addition. Fire sprinkler riser is located in building with monitored tamper switches, flow switches, and low air pressure switches.

300 Building:

New fire alarm devices installed in 2015/2016 and tied into building addition control panel.

New / Main Building:

System is a voice annunciated addressable system with battery backup as well as generator power backup. System has RF subscriber dialer.

CONDITION EVALUATION

100 / 200 Building:

System is in good working condition and appears to meet current code coverage.

300 Building:

System is in good working condition and appears to meet current code coverage.

New / Main Building:

System is new and in excellent working condition.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

100 / 200 Building:

Emergency lighting for egress consists of fluorescent fixtures supplied from emergency battery packs. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

300 Building:

Emergency lighting for egress consists of fluorescent fixtures with emergency battery packs.

New / Main Building:

Emergency lighting for egress consists of LED fixtures supplied from emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

CONDITION EVALUATION

100 / 200 Building:

System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code-required egress time.

300 Building:

System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.

New / Main Building:

Lighting is new and in excellent working condition.

4.5 FIRE RESISTANCE

100 / 200 Building:

The 100 / 200 Building has one story of occupied space. Construction of interior walls is predominately comprised of wood studs with GWB on both sides. There are no fire separation walls in this building but it is sprinklered.

300 Building:

The 300 Building has one story of occupied space. Construction of interior walls is predominately comprised of wood studs with GWB on both sides and plaster on the corridor side. Corridor walls are one hour. The building is fully sprinklered.

New / Main Building:

The building was designed and constructed to meet applicable code requirements.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

Most of the accessible stalls are located in the southeast parking lot. Accessibility from the southeast parking to the building is provided by four accessible stalls. These stalls have access aisles, but do not have a clearly designated pathway leading to the sidewalk. The path of access crosses the pick-up/ drop-off lane of traffic. Access onto the curb is provided by an asphalt ramp that extends into the drop-off lane. The north parking lot has one accessible stall. There is a designated pathway extending from the access aisle to the sidewalk in front of the main entry. Access onto this sidewalk is provided by a curb cut, but it also crosses the drive and bus loop.

Drinking fountains in the corridors are 2'-10" above finish floor, but do not have the appropriate high-low configuration. The sink and countertops in the Faculty Room are not accessible.

The stairway between Hall 148 and Student Services 150 is not code compliant. The rise to run is 5 and 17. A handrail is provided by toilet room grab bar that varies in height from 2'-4" to 2'-10" above finish floor.

Locker rooms and showers are not accessible in the older buildings. There are no accessible lockers, benches, or shower stalls. The shower area has a 6" curb that impedes a person with disabilities. The sinks in the restroom do not have waste pipe insulation. The coach's office does not have an accessible toilet, shower, sink, or required clearances. The door leading into the Boy's Locker Room from the vestibule does not have the appropriate maneuvering clearance at the push side. Doors leading outside from both locker rooms do not have the appropriate maneuvering clearance at the push side. The entries into Men's Restroom

142 or Toilet 133 do not have sufficient maneuvering clearances either. According to the plans, there are many more doors that do not have maneuvering clearances.

A handrail has been removed from one side of the ramp in Corridor 121. Some handrails are loose in their connection to the wall as a result of inadequate backing and/or anchoring to the wall and abuse from high traffic.

The Boy's Restroom 224 does not have the necessary clear floor space around urinals to make them ADA compliant. Sinks require the user to twist the controls for water and the waste pipe has no insulation. Sinks in the Science Classrooms are 34 inches above finish floor and have accessible controls; however they all require a parallel approach.

There are many doors throughout the facility that are difficult to operate due to improperly installed doors and frames and/or malfunctioning hardware.

CONDITION EVALUATION

All stairs should be have the appropriate rise and run and handrails as prescribed by current code standards.

Showers and locker rooms should have equal access for disabled students. This requires accessible showers with the appropriate clearances, a bench, accessible controls, and grab bars. All showers in the New / Main Building are in compliance.

5% of the lockers require accessible controls and should be at a height prescribed by current codes. Benches are required to be of an approved height, depth, length, and need to have back support. Accessible sinks should have waste pipe insulation so that someone in a wheelchair does not burn their leg on the pipe. The instructor may be disabled and therefore should have an accessible restroom and shower. Doors out of the locker rooms must have a 12" clearance from the jamb to adjacent perpendicular wall on the push side. Ramps serving as a main path of egress are required to have a handrail on both sides. All missing handrails should be replaced. Loose handrails should be anchored appropriately to a solid backing surface.

All urinals, toilets, and sinks should be a minimum distance apart of 30 inches. Accessible sinks should be no more than 34 inches high, have waste pipe insulation, and have controls that do not require tight grasping, pinching, or twisting of the wrist. In classrooms that have sinks, at least one should have clear floor space and clearances that allow for a forward approach.

Doors should be easy to operate and have a maximum door opening force of five pounds. Hardware, doors, and frames should be refurbished or replaced as needed to achieve this. A further analysis of each door should be considered to determine which doors require attention.

SITE CONDITION EVALUATION

The site is surrounded by residential properties with several access points from a variety of directions. The site slopes down slightly from east to west. To the south of the building are the South Mercer Play fields and the track. These play fields are part of the property and are owned by the District. The City maintains the turf play field and all grass fields south of the school. The District maintains the track and detention pond on the northwest corner of the property.

The building is located to the north of the property. The campus is composed of three separate buildings connected by covered walkways.

The site has a parking lot north of the building and one to the southeast of the building. The north parking lot is accessed from SE 72nd Street and serves as a bus loop and visitor parking. It is not large enough to accommodate all of the buses, causing many of them to double park during pick-up and dropoff. This parking lot has one designated accessible parking stall. This loop is also designated as a fire lane and double parked buses should not impede access to this site in case of an emergency.

The southeast parking lot functions well.

The South Mercer Play Fields have four play fields.

Physical Condition

PARKING AND DRIVEWAY AREAS

The north parking lot is in fair condition and has minimal cracking and settlement. It should be restriped. The asphalt in the southeast parking lot is in new condition.

The parking lot at the South Mercer Play Field is in good condition.

PLAY FIELDS

There is a track and field to the south of the buildings. The synthetic turf was replaced in 2020 and the track was replaced/improved in 2019.

FENCING

The west side of the property has permiter fencing. Fire lane gates are provided at both the north and south side of the school. No other fencing exists around the three school buildings or the track and field used by students.

The internal courtyard has chain link fencing to keep foot traffic off of the landscaped area. A more permanent fence should be considered for this application.

Chain link fencing lines the drive into the southeast parking lot.

LANDSCAPING

Landscaping around the New / Main Building is extensive and in excellent condition. Landscape areas to the north of the 100 / 200 Building, and to the east of 100 / 200 and 300 Buildings are in poor condition.

EDUCATIONAL ADEQUACY ASSESSMENT

The following summary includes programmatic needs and issues identified at Islander Middle School by the school principal, the MISD facilities department, and the 2010 Study and Survey report.

Site

Multiple detached buildings on the site create a lack of connection between both students and programs.

Building/Program

TEACHING AREAS

Reorganize / expand existing classroom wings in the remaining older buildings into effective, small, personalized learning communities.

300 Building science classrooms do not support current STEM programs and need more storage.

A new school broadcast studio and editing room is needed.

Common areas in the 100 / 200 Building are difficult to supervise.

Sound transfer between classrooms in the 100 / 200 Building can be disruptive.

During hot days (from May through June), the classroom areas get so hot that it can interfere with teaching and learning (100 / 200 Building only).

Classrooms in the 100 / 200 Building do not have sufficient storage, and need more flexibility and efficiency.

SUPPORT AREAS

Corridor and public spaces in the 100/ 200 Building need to accommodate small break-out spaces.

Areas designated for student art and project work is desired.

Safety/Security

The full student population of Islander Middle School must move between buildings during each passing period. Currently, the majority of the seventh grade classes are held in the new building while the sixth and eighth grade classes are in the 100 / 200 Building and 300 Building.

The cafeteria, library, music room, and administration functions are all housed in the New / Main Building. This requires nearly two-thirds of the 1,150 students to move between the three buildings during each passing period, which creates security challenges.

The IMS campus is unsecured on three sides. There is a bus loop to the north, street frontage and the main parking and parent drive to the east, and the districtowned, but City managed, South Mercer Play Fields to the south. The play fields include a synthetic field and track used extensively for PE classes, lunch activity, and school sports, as well as significant use by the neighborhood.

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY		
ISLANDER MIDD	MERCER ISLAND LE SCHOOL - 01_100/200 BUILDING	SCHOOL DISTRICT (17400)
Profile Name:	Classroom Building - Slabs On Grade	Currently BCA Certified: Yes
Inventory Statu	Ū.	Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Ratin		Last District Review: 11/25/2020
		Condition Rating Component Priority
Sub-Assembly	Component	EGFPUN/A Score LMH
Foundations		
A1010	Standard Foundation	
Slabs on Grade		
A4010	Standard Slabs on Grade	
Water and Gas N	Aitigation	
A6010	Building Subdrainage	
Superstructure		
B1020	Roof Construction	
Exterior Vertical	Enclosures	
B2010	Exterior Walls	
B2020	Exterior Windows	
B2050	Exterior Doors and Grilles	
B2070	Exterior Louvers and Vents	
Exterior Horizon	tal Enclosures	
B3010	Roofing	
B3020	Roof Appurtenances	
B3060	Horizontal Openings	
B3080	Overhead Exterior Enclosures	
Interior Construc	tion	
C1010	Interior Partitions	
C1020	Interior Windows	
C1030	Interior Doors	
C1070	Suspended Ceiling Construction	
Interior Finishes		
C2010	Wall Finishes	
C2020	Interior Fabrications	
C2030	Flooring	
C2050	Ceiling Finishes	
Plumbing		
D2010	Domestic Water Distribution	
D2020	Sanitary Drainage	
D2030	Building Support Plumbing Systems	
HVAC		
D3020	Heating Systems	
D3050	Facility HVAC Distribution Systems	
D3060	Ventilation	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

Fi	re Protection			
	D4010	Fire Suppression	90 %	
	D4030	Fire Protection Specialties	90 %	
El	ectrical			
	D5010	Facility Power Generation	62 %	
	D5020	Electrical Services and Distribution	62 %	
	D5030	General Purpose Electrical Power	62 %	
	D5040	Lighting	90 %	
C	ommunications			
	D6010	Data Communications	90 %	
	D6020	Voice Communications	90 %	
	D6030	Audio-Video Communications	62 %	
	D6060	Distributed Communications and Monitoring	90 %	
El	ectronic Safety	and Security		
	D7010	Access Control and Intrusion Detection	90 %	
	D7030	Electronic Surveillance	100 %	
	D7050	Detection and Alarm	100 %	
In	tegrated Auton	nation		
	D8010	Integrated Automation Facility Controls	62 %	
Fu	urnishings			
	E2010	Fixed Furnishings	90 %	
	E2050	Movable Furnishings	90 %	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION
2020-2021 BUILDING CONDITION RATING SUMMARY
MERCER ISLAND SCHOOL DISTRICT (17400)

Inventory Status:	Classroom Building - Slabs On Grade Recognized	Currently BCA Ce Last BCA Certify:		/2021
Reviewed By:	Consultant	Last District Revie		5/2020
Condition Rating:	71.44 %	Last District Revie		5/2020
		Condition Rating	Component	Priority
Sub-Assembly C	Component	EGFPUN/A	Score	LMH
Foundations				
A1010	Standard Foundation		90 %	
Slabs on Grade				
A4010	Standard Slabs on Grade		90 %	
Water and Gas Mi	tigation			
A6010	Building Subdrainage		90 %	
Superstructure				
B1020	Roof Construction		90 %	
Exterior Vertical E	nclosures			
B2010	Exterior Walls		62 %	
B2020	Exterior Windows		90 %	
B2050	Exterior Doors and Grilles		90 %	
B2070	Exterior Louvers and Vents		90 %	
Exterior Horizonta	l Enclosures			
B3010	Roofing		62 %	
B3020	Roof Appurtenances		90 %	
B3060	Horizontal Openings		90 %	
B3080	Overhead Exterior Enclosures		90 %	
Interior Constructi	on			
C1010	Interior Partitions		90 %	
C1020	Interior Windows		62 %	
C1030	Interior Doors		90 %	
C1070	Suspended Ceiling Construction		62 %	
Interior Finishes				
C2010	Wall Finishes		62 %	
C2020	Interior Fabrications		62 %	
C2030	Flooring		62 %	
C2050	Ceiling Finishes		62 %	
Plumbing				
D2010	Domestic Water Distribution		62 %	
D2020	Sanitary Drainage		62 %	
D2030	Building Support Plumbing Systems		62 %	
HVAC				
D3020	Heating Systems		62 %	
D3050	Facility HVAC Distribution Systems		62 %	
D3060	Ventilation		62 %	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

F	ire Protection			
	D4010	Fire Suppression	90 %	
	D4030	Fire Protection Specialties	90 %	
E	lectrical			
	D5010	Facility Power Generation	90 %	
	D5020	Electrical Services and Distribution	62 %	
	D5030	General Purpose Electrical Power	62 %	
	D5040	Lighting	62 %	
C	Communications			
	D6010	Data Communications	90 %	
	D6020	Voice Communications	90 %	
	D6030	Audio-Video Communications	90 %	
	D6060	Distributed Communications and Monitoring	90 %	
E	lectronic Safety	and Security		
	D7010	Access Control and Intrusion Detection	90 %	
	D7030	Electronic Surveillance	90 %	
	D7050	Detection and Alarm	100 %	
l	ntegrated Autom	nation		
	D8010	Integrated Automation Facility Controls	62 %	
F	urnishings			
	E2010	Fixed Furnishings	90 %	
	E2050	Movable Furnishings	90 %	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)		
ISLANDER MIDDL	E SCHOOL - 05_NEW/MAIN BUILDING	
Profile Name:	Middle/Junior High School - Multi-Story	Currently BCA Certified: Yes
Inventory Status	Recognized	Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Rating	g: 96.99 %	Last District Review: 11/25/2020
		Condition Rating Component Priority
Sub-Assembly	Component	Condition Rating Component Priority E G F P U N/A Score L M H
Foundations	component	
A1010	Standard Foundation	
	Standard Foundation	
Slabs on Grade	Standard Slahr on Grado	
A4010 A4040	Standard Slabs on Grade Pits and Bases	
Water and Gas N		
A6010	Building Subdrainage	
Superstructure	Floor Construction	
B1010	Floor Construction	
B1020	Roof Construction	
B1080 Exterior Vertical	Stairs	
B2010	Exterior Walls	
B2020	Exterior Windows	
B2050	Exterior Doors and Grilles	
B2070	Exterior Louvers and Vents	
Exterior Horizont		
B3010	Roofing	
B3020	Roof Appurtenances	
B3060	Horizontal Openings	
B3080	Overhead Exterior Enclosures	
Interior Construc		
C1010	Interior Partitions	
C1020	Interior Windows	
C1030	Interior Doors	
C1040	Interior Grilles and Gates	
C1070	Suspended Ceiling Construction	
Interior Finishes		
C2010	Wall Finishes	
C2020	Interior Fabrications	
C2030	Flooring	
C2040	Stair Finishes	
C2050	Ceiling Finishes	
Conveying		
D1010	Vertical Conveying Systems	

		2020-2021 BUILDING CO	NTENDENT OF PUBLIC INSTRUCTION NDITION RATING SUMMARY IOOL DISTRICT(17400)
Plumbing	S		
	D2010	Domestic Water Distribution	
	D2020	Sanitary Drainage	
	D2030	Building Support Plumbing Systems	
	D2050	General Service Compressed-Air	
HVAC			
	D3010	Facility Fuel Systems	
	D3020	Heating Systems	
	D3030	Cooling Systems	
	D3050	Facility HVAC Distribution Systems	
	D3060	Ventilation	
Fire Prote	ection		
	D4010	Fire Suppression	
	D4030	Fire Protection Specialties	
Electrical			
	D5010	Facility Power Generation	
	D5020	Electrical Services and Distribution	
	D5030	General Purpose Electrical Power	
	D5040	Lighting	
Commun	ications		
	D6010	Data Communications	
	D6020	Voice Communications	
	D6030	Audio-Video Communications	
	D6060	Distributed Communications and Monitoring	
Electronio	c Safety	and Security	
	D7010	Access Control and Intrusion Detection	
	D7030	Electronic Surveillance	
	D7050	Detection and Alarm	
Integrate			
	D8010	Integrated Automation Facility Controls	
Equipme			
	E1030	Commercial Equipment	
	E1040	Institutional Equipment	
	E1070	Entertainment and Recreational Equipment	
	E1090	Other Equipment	
Furnishin	-		
	E2010	Fixed Furnishings	
	E2050	Movable Furnishings	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION SITE CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)

ISLANDER MIDD	LE SCHOOL		
Profile Name:	Middle/Junior High School - Rural	Last Review:	3/14/2021
Inventory Statu	s: Recognized		
Condition Ratin	g: 99.13 %		
		Condition Rating	Component Priority
Sub-Assembly	Component	EGFPUN/A	Score LMF
Site Improveme	nt		
G2010	Roadways		100 % 🗆 🗆 🗆
G2020	Parking Lots		100 % 🗆 🗆 🗆
G2030	Pedestrian Plazas and Walkways		100 % 🗆 🗆 🗆
G2050	Athletic, Recreational and Playfields Areas		90 % 🗹 🗆 🗆
G2060	Site Development		100 %
G2080	Landscaping		100 % 🗆 🗆 🗆
Liquid and Gas S	ite Utilities		
G3010	WaterUtilities		100 % 🗆 🗆 🗆
G3020	Sanitary Sewerage Utilities		100 % 🗆 🗆 🗆
G3030	Storm Drainage Utilities		100 % 🗆 🗆 🗆
Electrical Site Im	provements		
G4010	Site Electric Distribution Systems		100 % 🗆 🗆 🗆
G4050	Site Lighting		100 % 🗆 🗆 🗆
Site Communica	tions		
G5010	Site Communications Systems		100 % 🗆 🗆 🗆

MERCER ISLAND HIGH SCHOOL

9100 SE 42nd Street Mercer Island, WA 98040 206.236.3345

SITE INFORMATION

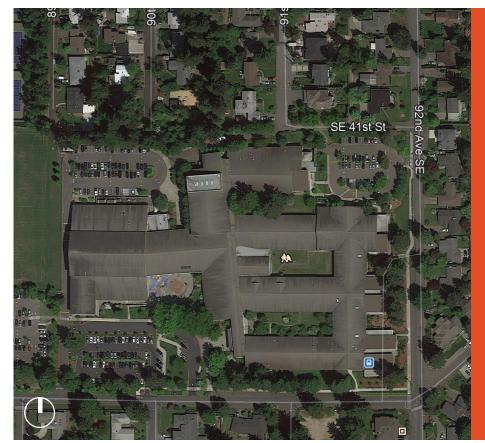
County:	KING
Site Area:	30.90 ACRES
Zoning:	R-9.6
Tax Parcel:	1824059005
Jurisdiction:	CITY OF MERCER ISLAND
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT

BUILDING INFORMATION

Original Constructio	n:	1955
Addition: 1997/2	201	2/2014
Modernization:		1997
Area (Permanent):		231,018 GSF
Portables:		0
Grades:		9-12
Capacity (Permanen	it):	1,505*
Enrollment (2019-20)):	1,510
(*Note: This capacity the additional 126 se Learning Center, whi accommodate high s	eat: ch	s at Crest is also used to

TEACHING SPACES

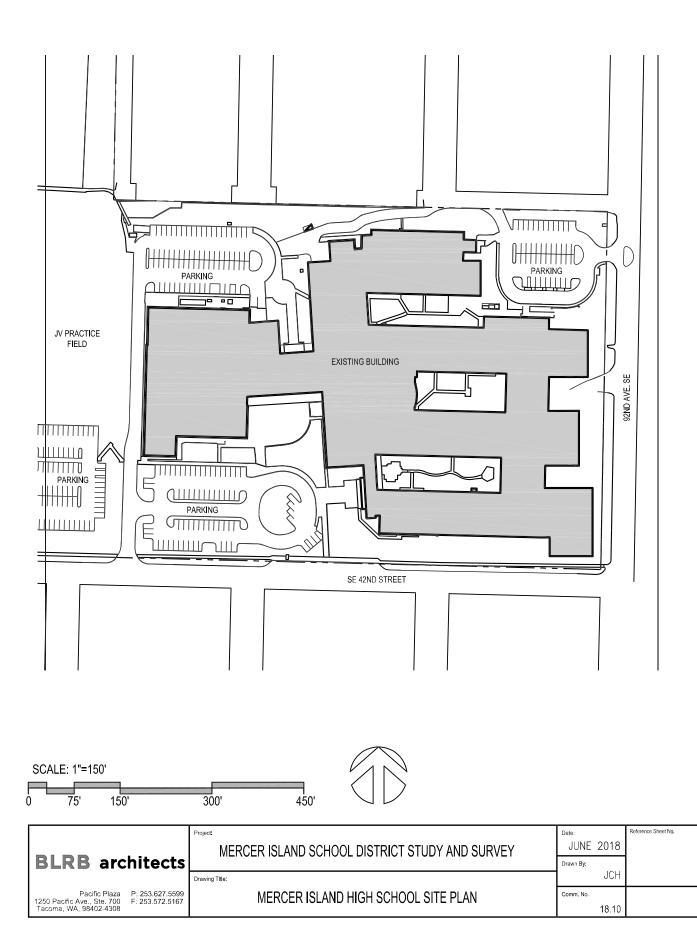
General Classrooms:	48
Special Education Classrooms:	3
Occupational Therapy:	0
Technology/Computer Room:	3
Art Room:	2
Music Room:	4
Gymnasium:	3
Library:	1
Total Teaching Spaces:	64

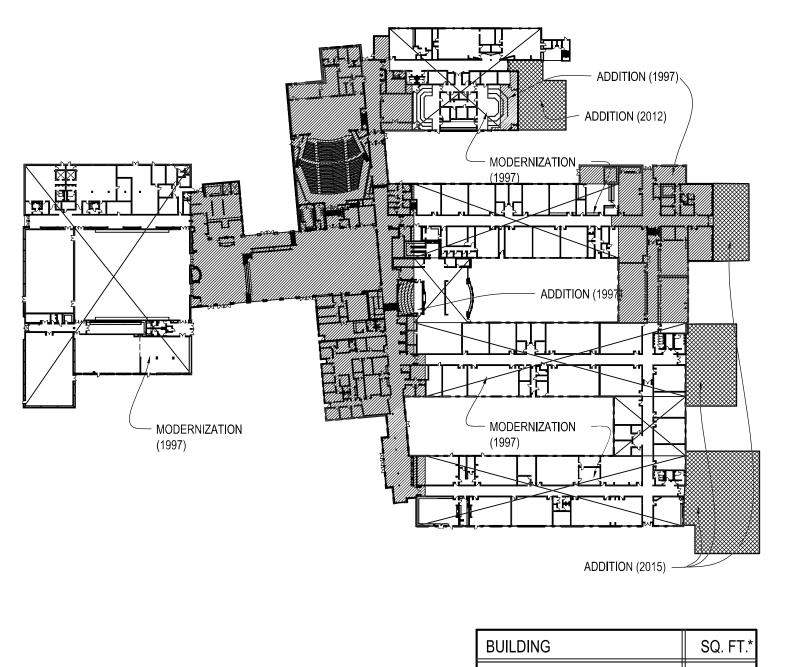


Building Condition Evaluation ICOS Score

Main Building: 85.40

Site: 87.26





SCALE: 1"=100'	1997 MODERNIZATION 1997 ADDITION 2012 ADDITION 2015 ADDITION	132,859 79,656 3,248 15,255
0 20' 50' 100'	200' 300' GRAND TOTAL	231,018
	Project: Date: JUNE 2018	ference Sheet No.
BLRB architects	Drawing Title: JJJJ	
Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308 F: 253.572.5167	MERCER ISLAND HIGH SCHOOL 2009 AREA ANALYSIS	

* Building areas have been updated per as-built drawing area takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021)

CONSTRUCTION HISTORY

Mercer Island High School was originally constructed in 1954 with a major modernization and addition in 1997. A large Multipurpose Building was constructed in 1957. This structure later housed cafetorium and student center until it was demolished in 1997. A large expansion occurred in 1961 with a new classroom, auditorium, art and shop space. More classrooms were added in 1967 along with an auditorium and expansion to the gymnasium. Smaller additions and renovations occurred in 1978 and 1986.

The high school campus was united under one roof in 1997. The cafetorium and boiler room building were demolished in order to provide space for a Multipurpose Room and kitchen that connects the Gymnasium with the rest of the school. The entire school was covered with a sloped roof overbuild. A central spine that houses the main circulation, locker bays, and administration was added at the west side of the classroom wings. The entire facility was upgraded with new fixtures, electrical, and mechanical systems and was fully sprinkled.

Main entry security was improved in 2019. This project also included improvements and renovation of the administration offices.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

Mercer Island High School was originally constructed in 1967 with a major modernization and addition in 1997. The original structure at the classroom wings consists of concrete spread footing foundations, concrete slab on grade, in isolated locations a crawl space on the ground level with steel beams and concrete slabs, steel columns, beams and roof trusses with wood roof decking. At the gymnasium the walls are partially reinforced CMU.

In 1997 the original roof structure was overbuilt with a new sloped roof. In most cases this consists of plywood "I" joist with plywood sheathing supported by glulam beams and ultimately the existing structure. At the gymnasium, open web wood trusses were provided.

The 1997 additions structure consists of concrete spread footing foundations, reinforced masonry walls, steel columns, joist and metal roof decking.

Seismic upgrade to the existing structure was provided in 1997 with the addition of the plywood roof diaphragm at the new overbuilt roof and the addition of plywood shear walls.

The lateral resisting system for the building consists of plywood and metal deck roof diaphragms, masonry and plywood shear walls.

In 2014, additions were made to the east ends of the three primary classroom wings. These additions were single story with small interior mechanical platforms, and were constructed with shallow concrete foundations. Two of the areas have structural steel floors with concrete filled metal deck over crawl spaces, while the third area is conventional slab on grade construction. The elevated platforms and the roofs are constructed from conventional wood framing; utilizing plywood l-joists and plywood decking supported by wood stud bearing walls and interior glulam beams.

CONDITION EVALUATION

There were no significant signs of structural distress, differential settlement or deterioration. Some minor deterioration and differential settlement were observed as noted below.

There is a crack and some differential settlement in the concrete slab at the intersection of the 300 and 400 wing.

This is more a cosmetic issue rather than a structural concern.

The exposed steel at the commons and main entrance has been recently painted and is in good condition.

There have been some significant changes in the building code since Mercer Island High School was seismically upgraded and added onto in 1997. The current IBC requires a 1.25 importance factor for school design plus the design force for out of plane anchorage for masonry walls has doubled. It is assumed that the existing structure is not in full compliance with the current code. The 2014 additions were designed per current Code to be self-supporting and independent of the existing structure.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

The majority of the exterior walls of the original building are wood construction with masonry veneer. At the gymnasium and 1997 addition the walls are constructed of CMU.

CONDITION EVALUATION

With the exception of the deterioration of masonry walls at the kiln room we did not observe any significant signs of structural distress, differential settlement or deterioration.

At the kiln room we observed spalling or minor deterioration of the exterior masonry. This condition should be monitored and has not affected the structural integrity of the wall.

The current design forces of out of plane anchorage of masonry walls has doubled since the 1997 seismic upgrades and additions. It is assumed that in some locations, most likely where the walls are parallel to the roof framing the anchorage does not meet current code.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

The original low slope roofs were covered by a sloped overbuild in 1997.

The most recently constructed roof is comprised of asphalt composition shingles with an ice and water shield underlayment over 1/2" plywood, rigid insulation, and building felt. The roof positively slopes typically at a 3:12 pitch to metal gutters at the perimeter. The roof is interrupted by dormers which provide house mechanical louvers. These dormer overbuilds are at a 6:12 pitch and are constructed of asphalt composition shingles. The roof has ridge venting. The roof has no fall restraint system. Low slope applications are comprised of built-up roofing over 34" cover board over rigid insulation. The roof and much of the plywood underlayment were replaced in 2018. It is comprised of a peel and stick membrane covered with architectural style shingle.

CONDITION EVALUATION

The roof is generally in excellent condition.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows are typically vinyl and were replaced in the 1997 modernization and addition. These windows are framed by a 2"x2" piece of wood trim with a ¾" chamfer. Operable windows have insect screens. The entry corridor spine has aluminum storefront and clerestory windows. The Commons also has storefront. All exterior windows are insulated.

The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are filled with Structo-Lite.

CONDITION EVALUATION

The exterior windows and doors are generally in good repair. The exterior door to the auxiliary gymnasium has an exposed wood header. The building paper in this location is deteriorated. The center header masonry unit over the doors at the Wrestling Room and Weight Room is missing, leaving the steel angle exposed.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

Roof eaves and rakes are typically comprised of a continuous 2x10 capped with a 2x2 piece of wood trim and a 2x12 fascia board. A piece of 2x2 wood trims out the connection between painted plywood soffits and brick veneer walls. Air circulation in these soffits is provided by a 2" continuous vent strip. Plaster soffits with recessed light fixtures are a typical condition above exterior doors to corridors. A metal panel soffit provides the finish for overhangs at the Commons. Aluminum gutters, scuppers, and downspouts provide drainage for the roof. Metal flashing provides the transition between concrete masonry units and exterior stucco above.

CONDITION EVALUATION

Exterior trim is generally in good condition.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

All original flooring was removed and replaced in the 1997 addition and modernization. Corridors and the Commons have VCT flooring. The administrative offices and general classrooms have carpet. The locker rooms have concrete floors and the staff restrooms have a sheet vinyl floor with a coved base. The showers and student restrooms have a porcelain tile floor. The Ceramics classroom has a sealed concrete floor.

CONDITION EVALUATION

The VCT entries at the Commons is faded. VCT flooring at the 400 wing is cracked where the building has settled. VCT behind rubber stair nosings is cracked. Some of the rubber base at outside corners in corridors is beginning to crack. The VCT floor in Gymnastics is beginning to show signs of wear.

2.2 WALLS

SYSTEM DESCRIPTION

Walls are generally type "x" gypsum wallboard over wood studs. Corridor walls are typically covered with FRP. Student restrooms have a porcelain tile wainscot and staff restrooms have an FRP wainscot. The Commons walls are concrete masonry units. Showers have full height porcelain tile walls. The Gymnasium walls are MDO with Tectum above.

CONDITION EVALUATION

The MDO panels in the Gymnasiums are in poor condition. They have sustained impact damage where volleyball poles are stored. Some of the panels are beginning to detach from the wall. They should be replaced as needed and painted. Damage is mostly along the west wall. The MDO panels in the Weight Room have similar damage. There is missing tile in the Boy's Shower that should be replaced.

2.3 CEILINGS

SYSTEM DESCRIPTION

Classrooms and offices typically have 2'x4' acoustical ceiling panels and most of the corridors have 2'x2' acoustical ceiling panels. The main entry spine, Commons, and Gymnasiums are high volume spaces with exposed structure. 12"x12" acoustical ceiling tile can be seen above the reception area, waiting area, and in the main entry corridor. The tectum ceiling in the Gymnasiums was repainted in 1997.

CONDITION EVALUATION

Ceilings are generally in good condition. Missing acoustical ceiling tiles in Band and Choral rooms were intentionally removed to improve volume and acoustics.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

Classrooms are typically equipped with upper and lower cabinetry, sink, a tall cabinet, projection screen, whiteboard, and wall-mounted television. Several classrooms include an operable partition. New lockers were provided for students in the 1997 renovation and addition.

The library has bookshelves along the wall and in islands that were resurfaced with plastic laminate during the 1997 addition and modernization.

The staff lounge is equipped with a stove, fume hood, refrigerator, dishwasher, and upper and lower cabinetry.

The kitchen is equipped with three double convection stoves, a dishwasher, a large grill, steamer oven/kettle, serving coolers, Hobart mixer, a Walk-in Cooler and Walk-in Freezer, commercial espresso machine, and slicer.

The Gymnasium has bleachers, basketball hoops, and a gym divider curtain.

CONDITION EVALUATION

Most equipment is in fair to good shape. Equipment that should be replaced or requires attention includes the gas kiln, dishwasher, bleachers, and the gym divider curtain.

Fixed elements in the auxiliary gym are in need of replacement, i.e. scoreboard, ceiling material, and tectum wall panels.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION Power Distribution

Utility Service: The High School is has two separate electrical services and is fed underground by two exterior pad-mounted utility transformers. Distribution is 480Y/277V with step down transformers to supply 208Y/120V loads.

Switchboard: There are two main switchboards at this facility, both independent from one another and serving opposite ends of the school. Main switchboard #1 is a "Square-D" brand "QED" type switchboard rated for 2500A at 480Y/277V with a 2500A main circuit breaker. Main switchboard #2 is a "Square-D" brand "QED" type switchboard rated for 1600A at 480Y/277V with a 1600A main circuit breaker.

Generator: There are two generators at this facility, both independent from one another and serving opposite ends of the school. Both generators are "Cummins" brand 50kW gensets each with (1) ATS for standby loads. Both ATS's are rated for 125A each. Egress lighting, receptacles, communications equipment, security panels, and the fire alarm are connected to the generator.

Panelboards: A majority of the existing panelboards are "Square-D" brand "NQOD" type boards with minimal spares or spaces for future capacity.

Lighting

The existing lighting control panel is a "Douglas" brand control panel. The district has invested time over the past few years and worked to upgrade the control system programming to properly control interior and exterior lighting zones. Interior fixtures are controlled via occupancy sensors and also locally switched by occupants. Exterior fixtures have been upgrades in recent years to LED retrofit and new LED fixture. Interior linear fluorescent T8 lamps have recently been upgraded to LED type T8 type lamps. Interior compact type fluorescent lamps have not been upgraded to respective LED retrofit type.

Low Voltage

Intercom/Clock: A Rauland Borg Telecenter System 21 intercom system was installed in 1998 and is housed in the telecommunications room on the main level of Area 300. The 66-block terminations and cross-connects and clock power supplies and transformers are mounted to a plywood backboard. Combination intercom/clock speaker devices are located in instructional spaces and offices. Flush mounted ceiling speakers provide coverage in corridors and other large spaces. Intercom signaling is transported over shielded 22 AWG cables. Wall-mounted double-faced digital clocks are located in the corridors. There are exterior speakers to provide paging coverage to the outside areas.

Telephone System: A Nortel PBX telephone system is in the MDF located in the mezzanine above Area 300. The PBX station ports are terminated on wallmounted 110 terminal blocks.

Telecommunications: A 100-pair unshielded twister-pair (UTP) voice backbone cable is installed from the Administrative Building. The cable is terminated on a Building Entrance Protection block. There are (2) Primary Rate Interface ISDN circuits to the Administrative Building. A ducted cooling system is provides environmental control of temperature and humidity levels in the MDF. Fiber is installed from the MDF to the Administrative Building. The MDF contains four 19"x7' equipment racks for mounting:

- > Category 6 modular patch panels
- > Wire management panels
- > Cisco Ethernet 4503 switch
- > Dell PowerConnect and PowerEdge Servers
- > Rack-mounted optical fiber cabinet
- > HP Procurve 4000 series and 3Com 3300 10/100 Ethernet switches
- > Apple Library server

The telecommunications distribution system is a hierarchical star topology consisting of the MDF and six IDF's. The IDF's are connected to the MDF with 12-strand 62.5/125 multimode optical fiber and 50-pair UTP backbone cables. The optical fiber cabling is terminated on ST-style connectors. The Ethernet network backbone is operating at 1 GB/ sec using SX gbic modules.

The equipment in the MDF appears to be grounded with grounding conductors installed to a grounding system. However the integrity of the grounding system could not be confirmed and there is not a telecommunications grounding busbar visible in the MDF.

The MDF power receptacles are connected to the emergency generator but power to the receptacles in the IDF's is not on emergency backup.

A typical IDF contains one to two 19"x7' equipment racks equipped with category 6 48-port modular patch panels, wire management, rack mounted fiber cabinet, power distribution strip, and 10/100 ethernet switches with 1GB/ sec GBIC uplink to MDF. A plywood backboard is installed for wall-mounted equipment. There is a wall phone in each IDF and conduit sleeves for cabling pathway to the attic. A 50-pair UTP cable is installed from the 110 wiring block mounted on the plywood backboard to a 48-port voice cross-connect patch panel mounted on the 19" equipment rack. Ladder tray is installed above the racks to manage the cabling and service loops.

AMP category 6 horizontal cables are installed from each IDF and the MDF to telecommunications outlets located in classrooms and offices. The horizontal cable is terminated per the T568B standard on rack mount patch panels and face plates. Horizontal cables are typically installed above accessible ceilings and in the attic space using open cabling methods.

IDF's do not have cooling. There is a gravity vent located in the ceiling above the racks.

No grounding facility was visible in the IDF's.

A typical classroom has the following telecommunication outlets:

- > (2) 3-port outlets on the corridor wall
- > (1) 3-port outlet on the exterior wall
- > (1) 4-port outlet in the corner on the exterior wall for the teacher's desk
- > (1) 3-port outlet on an interior wall

Each telecommunication outlet consists of:

- > A flush mounted 6-port AMP faceplate
- > 8-postion 8-conductor modular connectors for terminating the horizontal cable
- > Color-coded icons
- > Label

Security: A Radionics D9112 security panel and associated power supplies are located in the telecommunications room on the main level of Area 300. There are magnetic door contacts on exterior doors and motion detectors for intrusion detection. Recent upgrades have been made to the Security camera system. Cameras are located in interior spaces and mounted to the exterior of the building. Access card readers and security keypads are installed at selected entrances.

CATV Distribution: CATV service is terminated on the backboard in the telecommunications room on the main level of Area 300. The signal is extended to a 2' x 2' x 80" headend cabinet. The cabinet contains:

- > Blonder Tongue sub-channel processor
- > Rauland MR 200 media controller
- > Three (3) VCR's
- > Satellite receiver
- > (6) Pico PFAM 550 AV modulators
- > (2) RMDA broadband distribution amplifiers
- > Notch filter

The CATV taps and splitters are mounted to the plywood backboard. The CATV signals are distributed to TV outlets in the high school using RG6 coax cabling. The CATV distribution system supports the distribution of Cable TV channels as well as locally originated programming which is inserted on school channels. The system is capable of supporting bandwidth of 550Mhz. Each classroom is equipped with a wall-mounted TV outlet and a wall-mounted TV set. Sound Systems: Sound systems are present in the following spaces:

- > Commons
- > Gym
- > Band Room
- > Choir Room
- > Auditorium

Stadium. In additional to the stadium public address system there is a separate wireless system for providing two-way intercom coverage between the press box and the headsets used on the field.

Each classroom is equipped with a ceiling-mounted projector.

CONDITION EVALUATION

The transformer supplying power to the main switchboard #2 is rusting.

The main switchboards and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The generators and Automatic transfer switches appear to be new and replacement parts should be readily available. Only one transfer switch is provided per generator which does not comply with current code requirements to separate emergency (Life safety) from standby loads.

In the attic spaces, some transformers have been installed on the floor, flush with the old roof. In some cases, these installations do not meet code because there is not adequate working clearance in front of the devices.

The interior lighting is in good condition particularly with the recent LED retrofitting of the T8 lamps. Exterior light fixtures are in good condition from recent LED retrofit lamps replacements.

The existing intercom system is in good operating condition

The existing security system provides adequate intrusion detection and access

control functions. The existing video surveillance system could be expanded with additional cameras and digital video recorders to increase the coverage area and amount of recorded material.

The existing CATV system functions adequately for the distribution of local cable TV channel and school programming.

The existing category 6

telecommunications cabling is in good condition and supports the current 1 Gigabit per second Ethernet transmission standards. Given the lengths of the existing 62.5/125 multimode optical fiber cabling, it will not support current 10 Gigabit per second Ethernet and would need to be replaced with laser optimized 50/125 multimode cabling if 10 Gigabit per second Ethernet is required on the backbone.

The existing sound systems appear to be operating adequately.

3.2 PLUMBING

SYSTEM DESCRIPTION

All restrooms are equipped with metered faucets with hot and cold controls at sinks. Zurn Aquaflush 6000 flush valves are provided on water closets. Plumbing trap wrap is installed in staff restrooms, and some ADA height sinks in student restrooms.

Hi-lo type ADA accessible drinking fountains are provided in the commons and locker room area, but not in classroom wings. A gang shower is provided in locker rooms, with one curtained shower stall. Domestic hot water is heated by Sellers commercial water heaters in the boiler room, as well as smaller water heaters throughout the building in custodial rooms and mechanical attics.

There are no floor drains in mechanical attics. In mechanical attics where cooling coils are present, condensate is routed in PVC piping to a mop sink in an attic.

CONDITION EVALUATION

The domestic water system is in good condition. Staff and student restrooms are in generally good condition. Drains in ceramics are problematic, this is likely do to age and waste material clogging.

3.3. HOT WATER HEATING/CENTRAL AIR CONDITIONING-HEATING COMBINATION

SYSTEM DESCRIPTION

Heating at Mercer Island High School is provided by a hydronic heating water system. Heating water from (4) Aerco condensing style boilers, installed in 2013, pumped to Trane air handling units and heating coils. Supplementary heat is provided by several Heatex heat recovery units. Cooling to specific areas with the potential for high heat loads is provided by (2) Trane chillers and air handling units equipped with cooling coils. Temperature control is provided in classrooms by push-button thermostats.

Duct hot water coils, air handling units, chillers and heat recovery units were installed in 1997, and are in good condition.

In mechanical attics, ductwork is not insulated after heating coils. Water piping and ductwork for incoming outside air appeared to be well insulated.

The heating water to coils is controlled by Griswold control valves. New classroom wings 100, 200 and 300 are fed by Nailor Thermal air handlers with heating water coils.

CONDITION EVALUATION

The central HVAC systems are in good to fair condition, however some systems are both inefficient and well into their expected life.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

Exit signs are typically fluorescent and "bug eye" egress fixtures are installed where associated metal halide uplighting has been utilized. It should also be noted that there are no emergency lighting fixtures on the exterior of the building to aid with egress lighting.

4.2 FIRE CONTROL CAPABILITY

The building is fully sprinklered.

4.3 FIRE ALARM SYSTEM

SYSTEM DESCRIPTION

The existing fire alarm panel is a notifier series panel. This system is fully addressable and there appears to be an adequate number of notification and detection devices installed throughout the facility. There are sprinkler flow and tamper installed.

The annunciation appears to meet current code.

CONDITION EVALUATION

System is in good working condition and appears to meet current code coverage.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Emergency lighting for egress consists of LED fixtures supplied from the emergency generator. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

CONDITION EVALUATION

System appears to be in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes.

4.5 FIRE RESISTANCE

Mercer Island High School has one story of occupied space. Interior walls consist mostly of wood studs and GWB on both sides and CMU. The building is sprinklered. A 2 hour area separation wall is utilized between classroom wings, and at the library. The Main Corridor is separated with a two-hour wall from the Commons and Auditorium. There is another two-hour wall that provides separation between the Commons and the Gymnasium. The entire facility is fully sprinklered.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

Overall, accessibility in the building is good. Throughout the building door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances.

Restrooms include the appropriate clearances, access widths, accessible fixtures, and protection from hot waste pipes. Grab bars are present, including the required vertical grab bar in the accessible toilet stall that has become a recent requirement.

The building has adequate accessible parking. Wheelchair access from the bus loop is provided via ramp at the northeast corner of the building. Most of the accessibility issues pertain to the overall campus as a result of walkways that are too steep and lack of handrails.

CONDITION EVALUATION

Restrooms and most spaces are generally compliant. Access in some of the level changes at the corridors is provided by a chair lift. There is no easy access from the bus loop. Access into the building from this location is provided by stairs and no ramp.

SITE CONDITION EVALUATION

This building is part of the overall high school campus site plan. It is sited in the southeast corner of the property. It is bordered by 92nd Avenue SE to the east, SE 42nd Street to the south, a JV practice field and parking to the west, and residences and parking to the north. The facility has a bus loop that runs parallel with 92nd Avenue SE. It is serviced by four parking lots that accommodate visitors, staff, and students. The overall campus has a total of three practice fields and six tennis courts. It also contains the Bus Lot, Maintenance Building, District Administration Building, Crest Learning Center, the MOT Building, and a Stadium with a rubberized track and synthetic field. The North Mercer Campus is located in the property to the north of the Campus. The PEAK Boys and Girls Club facility was constructed in 2011 and Northwood Elementary School was added to campus in 2015/2016.

Physical Condition

PARKING AND DRIVEWAY AREAS

The asphalt in the High School parking lots is in good condition.

Trees were planted in sawcut openings in the asphalt of the northeast and southwest parking lots. The asphalt around these sawcuts is beginning to crack.

CONCRETE WALKWAYS

The sidewalk south of the Music wing was replaced with pervious pavers in 2012, at the same time as the Music addition.

HARD SURFACE PLAY AREAS

The tennis courts are in good condition.

DRAINAGE

There are currently no site drainage issues.

PLAY FIELDS

There is poor drainage at some areas around the perimeter of the practice fields to the west of the gymnasium.

FENCING

Fencing has been replaced and is in good condition.

LANDSCAPING

Landscaping tends to grow quickly in the main parking lot islands. It can get overgrown and requires maintenance. This is especially problematic at the entry to this parking lot where it can reduce sight lines. Generally, the landscaping between fields is in fair condition.

EDUCATIONAL ADEQUACY ASSESSMENT

The following summary includes programmatic needs and issues identified at Mercer Island High School by the school principal, the MISD facilities department, and the 2010 Study and Survey report.

Site

Stadium seating and restrooms need to be renovated.

Building/Program

TEACHING AREAS

Older science classrooms/labs should be larger to accommodate instruction.

Additional science department storage is needed.

Music program continues to grow. Additional space is desired.

A separate black box theater (200 seats) is desired, to enhance the drama program and allow the theater to be used by more programs.

Theater technology / equipment (i.e. lighting, sound, projection, curtain, etc.) and acoustics could be improved.

Reconfigure the library into flexible learning spaces that will encourage better use by students and small groups.

Improvements and connectivity could be made in College and Career Readiness programs (i.e. broadcast programs).

SUPPORT AREAS

Counseling area and health room should be reconfigured to provide better access and confidentiality.

Safety/Security

No deficiencies noted.

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY			
MERCER ISLAND H	MERCER ISLANI IIGH SCHOOL - 01_MAIN BUILDING	SCHOOL DISTRICT (17400)	
Profile Name:	– High School - Single Story	Currently BCA Certified: Yes	
Inventory Status:	Recognized	Last BCA Certify: 3/14/2021	
Reviewed By:	Consultant	Last District Review: 11/25/2020	
Condition Rating	85.40 %	Last District Review: 11/25/2020	
		Condition Rating Component Priority	
Sub-Assembly (Component	EGFPUN/A Score LMF	
Foundations			
A1010	Standard Foundation		
Slabs on Grade			
A4010	Standard Slabs on Grade		
Water and Gas Mi	tigation		
A6010	Building Subdrainage		
Superstructure			
B1020	Roof Construction		
Exterior Vertical E	nclosures		
B2010	Exterior Walls		
B2020	Exterior Windows		
B2050	Exterior Doors and Grilles		
B2070	Exterior Louvers and Vents		
Exterior Horizonta	Il Enclosures		
B3010	Roofing		
B3020	Roof Appurtenances		
B3060	Horizontal Openings		
B3080	Overhead Exterior Enclosures		
Interior Construct	ion		
C1010	Interior Partitions		
C1020	Interior Windows		
C1030	Interior Doors		
C1040	Interior Grilles and Gates		
C1070	Suspended Ceiling Construction		
Interior Finishes			
C2010	Wall Finishes		
C2020	Interior Fabrications		
C2030	Flooring		
C2050	Ceiling Finishes		
Plumbing			
D2010	Domestic Water Distribution		
D2020	Sanitary Drainage		
D2030	Building Support Plumbing Systems		
D2050	General Service Compressed-Air		

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)			
HVAC			
D3	3010	Facility Fuel Systems	
D3	3020	Heating Systems	
D3	3030	Cooling Systems	
D3	3050	Facility HVAC Distribution Systems	
D3	3060	Ventilation	
Fire Protect	tion		
D4	4010	Fire Suppression	
D4	4030	Fire Protection Specialties	
Electrical			
D5	5010	Facility Power Generation	
D5	5020	Electrical Services and Distribution	
D5	5030	General Purpose Electrical Power	
D5	5040	Lighting	
Communica	ations		
D6	5010	Data Communications	
D6	5020	Voice Communications	
D6	5030	Audio-Video Communications	
D6	5060	Distributed Communications and Monitoring	
Electronic S	Safety a	nd Security	
D7	7010	Access Control and Intrusion Detection	
D7	7030	Electronic Surveillance	
D7	7050	Detection and Alarm	
Integrated /	Autom	ation	
D8	3010	Integrated Automation Facility Controls	
Equipment			
E1	1010	Vehicle and Pedestrian Equipment	
E1	1030	Commercial Equipment	
E1	1040	Institutional Equipment	
E1	1070	Entertainment and Recreational Equipment	
E1	1090	Other Equipment	
Furnishings	5		
E2	2010	Fixed Furnishings	
F2	2050	Movable Furnishings	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION SITE CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)

MERCER ISLAND	HIGH SCHOOL			
Profile Name:	High School - Urban	Last Review:	3/14/2021	
Inventory Statu	s: Recognized			
Condition Ratin	g: 87.26 %			
		Condition Rating	Component Priori	
Sub-Assembly	Component	EGFPUN/A	Score L M	
Site Improvemer	nt			
G2010	Roadways		90 %	
G2020	Parking Lots		62 %	
G2030	Pedestrian Plazas and Walkways		90 %	
G2050	Athletic, Recreational and Playfields Areas		90 %	
G2060	Site Development		90 %	
G2080	Landscaping		62 %	
Liquid and Gas S	ite Utilities			
G3010	Water Utilities		90 %	
G3020	Sanitary Sewerage Utilities		90 %	
G3030	Storm Drainage Utilities		90 %	
Electrical Site Im	provements			
G4010	Site Electric Distribution Systems		90 %	
G4050	Site Lighting		90 %	
Site Communicat	tions			
G5010	Site Communications Systems		90 %	

CREST LEARNING CENTER

SITE INFORMATION

County:	KING	C
Site Area:	30.90 ACRES (Part of MIHS site)	4
Zoning:	R-9.6	N A
Tax Parcel:	1824059005	F
Jurisdiction:	CITY OF MERCER ISLAND	(
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT	(E
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT	N C S

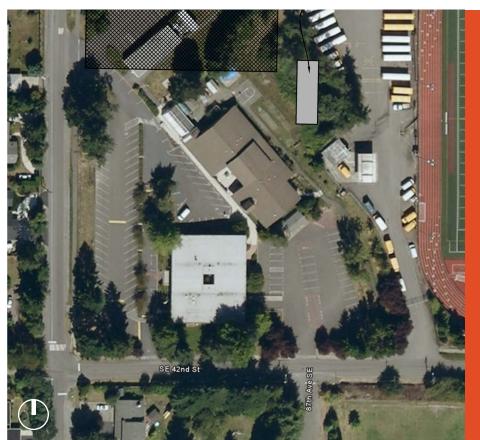
BUILDING INFORMATION

Original Construction:	1960 (est.)
Addition:	1997
Modernization:	1997
Area (Permanent):	10,058 GSF
Portables:	0
Grades:	9-12
Capacity (Permanent):	126
Enrollment (2019-20):	ENROLLED IN MIHS
Note: This facility is cor of Mercer Island High S shared enrollment.	

4150 86th Avenue SE Mercer Island, WA 98040 206.236.3390

TEACHING SPACES

General Classrooms:	4
Special Education Classrooms:	0
Occupational Therapy:	0
Technology/Computer Room:	1
Art Room:	1
Music Room:	0
Gymnasium:	0
Library:	0
Horticulture:	1
Total Teaching Spaces:	7

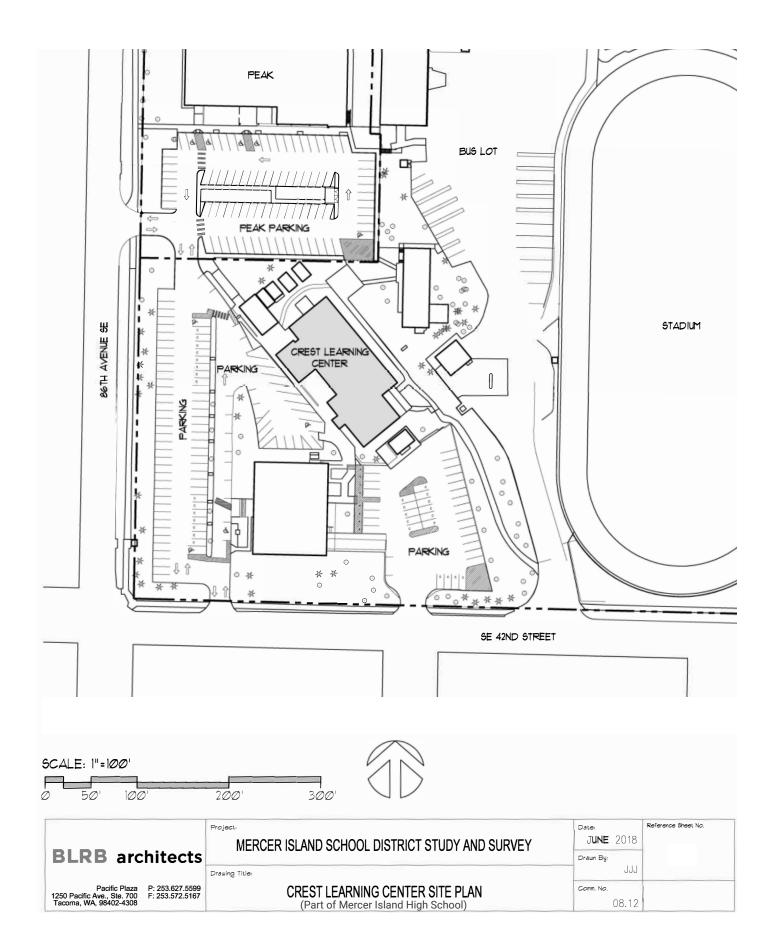


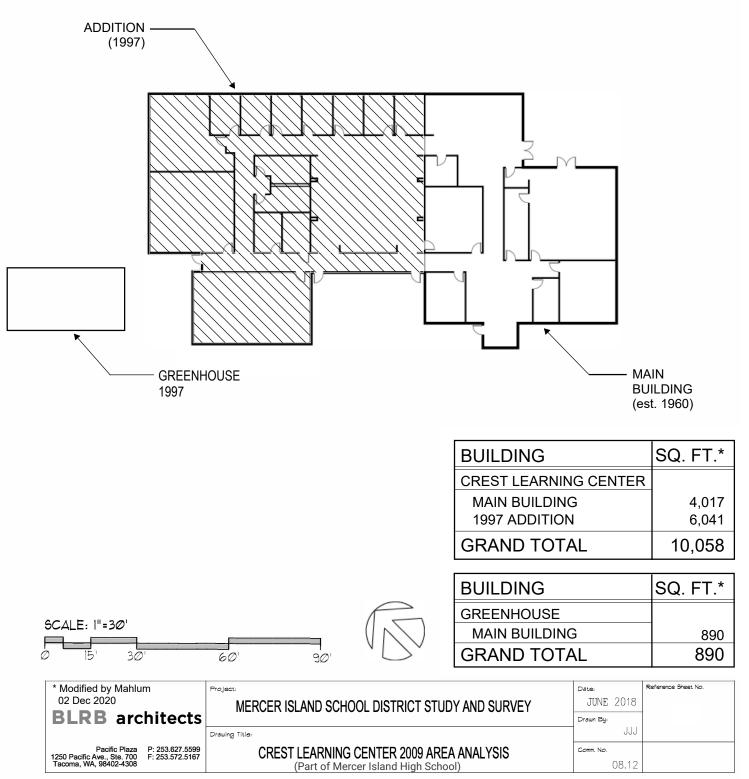
Building Condition Evaluation ICOS Score

Main Building: 83.41

Greenhouse: 90.00

Site: 84.89





* Building areas are within 2% of recorded area, per as-built drawing takeoffs in accordance with WAC 392-343-019. (Mahlum Architects, 2021)

CONSTRUCTION HISTORY

Crest Learning Center, considered a part of Mercer Island High School, was originally built in the early 1960's and renovated and added onto in 1997. The renovation was approximately 4,017 square feet and the addition totaled 6,041 square feet. Selected walls and roof were demolished to accommodate the new program. The existing floor and acoustical ceiling panels were replaced and additional walls were wood framed.

The new addition included space for offices, a Great Room, restrooms, math, a computer lab, and a science room. A greenhouse was added at the northwest corner of the new construction. The addition was constructed of concrete slab on grade and concrete foundations and footings. The roof was constructed of T.J.I joists on glulam beams which rest on the wood-framed walls. Plastic laminate was used at new casework and rooms were finished with carpet, sheet vinyl, VCT, rubber base, acoustical ceiling panels, acoustical ceiling tiles, and vinyl wall covering. Hollow metal doors and relite frames with wood and hollow metal doors were used. The exterior walls were comprised of brick veneer and stucco over wood-framed walls.

The new and remodeled areas received new plumbing fixtures with new domestic water piping. Portions of the existing below ground waste piping was used. The HVAC system was replaced with new gas fired furnaces with a split system condenser and duct coil for the computer room cooling.

The main distribution voltage is 120/208 volt which serves the lighting system and large HVAC loads. The existing service feeder was upgraded to full capacity. 120/208V was provided for servicing computers and miscellaneous equipment. The lighting fixtures were replaced with T8/ compact fluorescents and electronic ballasts. High power factor ballasted metal halide fixtures were used for the exterior lighting. Low voltage systems that were added included fire alarm, telephone/intercom/ clock, computer LAN/WAN network, TV, and a security system.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

The building is a wood-framed structure. The original construction date is not known and assumed to be in the 1960's. There was a major addition and modernization in 1997.

The primary structural system consist of concrete spread footing foundations, concrete slab on grade floor construction, wood stud exterior walls with plywood and brick veneer, open web steel joist at the original roof with tectum roof sheathing and plywood I joist with plywood sheathing at the addition and over the original portion of the building. There is a pre-engineered steel frame greenhouse at one end of the building.

The lateral resisting system of the building are the plywood shear walls and roof diaphragm.

CONDITION EVALUATION

We did not observe any significant signs of structural distress, deterioration or differential settlement.

There have been some changes in the building code since Crest Learning Center was seismically upgraded and added onto in 1997. The current IBC requires a 1.25 importance factor for school design. It is assumed that the existing structure is not in full compliance with the current code.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

Exterior walls are wood-framed walls with plywood sheathing and brick veneer.

CONDITION EVALUATION

No significant signs of structural distress, deterioration or differential settlement.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

The roof is a comprised of asphalt composition shingles over felt and plywood sheathing. The roof positively slopes to metal gutters along the outer perimeter of the building. There are two Polygol skylights above the covered work area on the north side of the building. The roof is properly ventilated with ridge vents. The roof has no fall restraint system.

CONDITION EVALUATION

The roof is in good repair. There is moss buildup on the north side of the roof and in shaded areas. One of the gutters along the east side of the building is damaged.

The roof overbuild over the main entry has been known to have water infiltration. A similar detail shown in the 1996 Construction Set indicates a hemmed piece of flashing that extends on top of the roof line 6" and extends up behind the cement plaster 4". A site inspection indicates that there was no flashing built in that location.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows are aluminum and most of them were added in the 1997 during Phase II development of the project. Most of the windows are operable. Many of these casements have insect screens. The perimeter of the window is caulked and sealed and there is no exposed head flashing. Flashing extends behind the brick sill and out to masonry weeps beneath that sill. All exterior windows are insulated. Windows are equipped with operable mini-blinds at the ground level. Mechanically operated blinds are used in the high volume space above the Great Room.

The exterior door assemblies are hollow metal doors set within hollow metal frames. The hollow metal frames are solid fill grouted. Most of the exterior doors have glazing.

CONDITION EVALUATION

The windows are in good repair. Blinds in the windows in the high volume space above the Great Room no longer function and parts have been discontinued by the manufacturer.

The doors are generally in good repair. The door leading into the covered work area from the corridor has graffiti and should be repainted.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

Painted plywood sheathing comprises the soffit panel which is ventilated along the perimeter, behind the painted wood fascia trim. The soffit has a low level finish, with visible seams and paint. There are recessed light fixtures in the soffit panel. The downspouts are metal. Metal flashing with a drip edge provides the transition between the brick veneer and cement plaster.

CONDITION EVALUATION

The soffit panel and fascia should be repainted as part of general maintenance.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

Generally, the floor finish throughout the building is carpet with rubber base. The store room and art room have VCT floors with rubber base. The restrooms and science room have sheet vinyl flooring with a coved base.

CONDITION EVALUATION

The floors are in good repair, although they are 1997 vintage.

2.2 WALLS

SYSTEM DESCRIPTION

Interior walls are typically gypsum wallboard over wood studs. Most rooms

have vinyl wall covering. Wet walls in the restrooms and in the COT Room have a plastic laminate wainscot.

CONDITION EVALUATION

The walls are generally in good repair. The north wall and soffit above the main entry is damaged from water infiltration. The accessible door in this area has had defects in its hardware causing the closer to not work properly. When this occurs, the door slams, causing the nails in this wall to dislodge.

2.3 CEILINGS

SYSTEM DESCRIPTION

Typically, the ceilings are 2'x4' acoustical ceiling panels. 12"x12" acoustical ceiling tile is attached to the underside of the high volume space in the main entry and Great Room and slopes with the roof. The restrooms, utility room, and store room have gypsum board ceilings. The joists in the art room are exposed.

CONDITION EVALUATION

The ceilings are typically in good repair. There is water damage to the acoustical ceiling panel above the main entry due to heavy rainfalls.

2.4 FIXED EQUIPMENT

SYSTEM DESCRIPTION

The Great Room has built in plastic laminate lower cabinetry and built in bookcases behind sliding whiteboards above.

Teaching spaces are equipped with wallmounted televisions, plastic laminate lower and upper cabinetry, white boards and projection screens.

CONDITION EVALUATION

Manual shades are installed thoughout the building and are all functional.

The reception desk at the main entry is damaged and will require new plastic laminate.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

Power Distribution

Utility Service: The Crest Learning Center is fed underground from an exterior utility transformer. Distribution is 208Y/120V.

Switchboard: The main switchboard is a "Square-D" brand "I-Line" type switchboard rated for 500A at 208Y/120V. The main switchboard has a 500A main breaker and (6) 3-pole breakers. There are (2) 3-pole spaces for future capacity.

Generator: There is no generator installed at this facility and no emergency or standby power is available.

Panelboards: Existing panelboards are "Square-D" brand "NQOD" type boards with available spares and spaces for future capacity.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants and keyed switches are provided at corridor entrances. Occupancy sensors control classroom lighting in conjunction with local switching. Exterior fixtures utilize LED lamps and interior fixtures are mostly linear T-8 fluorescent with compact fluorescent fixtures in offices. Interior fixtures have been partially retrofitted with LED lamps. Exit signs throughout the facility are typically fluorescent and utilize battery packs.

Low Voltage

Intercom/Clock: A Rauland Borg Telecenter System 21 intercom system was installed in 1997 and is housed in the MDF. A terminal enclosure is mounted on the wall of the MDF and contains 66-block terminations and cross-connects. Clock power supplies and transformers are installed in 24"x24"x6" type 1 enclosure mounted on the plywood backboard. Combination intercom/clock speaker devices are located in instructional spaces and the main office. Flush mounted ceiling speakers provide coverage in corridors. Coverage does not extend to speakers in offices.

Telecommunications: Two 19" x 7' equipment racks are located in the MDF. The racks contain Category 5 modular patch panels, wire management, servers, rack mounted optical fiber cabinets, HP Procurve 10/100 Ethernet switches, and power distribution units. A 50 pair unshielded twisted-pair (UTP) backbone cable is installed from the MDF to the Administrative building and is terminated on a 110 wiring block mounted to the plywood backboard. A 25-pair UTP cable is extended from the backboard to a rack-mounted voice cross-connect patch panel. AMP FutureLAN Category 5 riserrated horizontal cables are installed from the patch panels to telecommunications outlets in offices and instructional spaces. The horizontal cables are terminated at each telecommunication outlet on 8-postion 8-conductor modular connectors mounted in a flush mount 6-port AMP faceplate equipped with color-coded icons. The horizontal cabling is terminated using the T568B standard. The horizontal cabling is installed above the accessible ceiling using open cabling methods from the MDF to the telecommunication outlets. One Corning 24-strand 62.5/125 multimode OFNR is installed from the MDF to the Administrative Building. There is not a telecommunication grounding bus bar installed in the MDF. The 50-pair from the Administrative building does not appear to be grounded. There is no dedicated cooling available to the MDF. An exhaust fan grille is located in the ceiling above the racks.

Security: An Ademco Security panel, model number Vista 50P is located in the MDF. The system is monitored by Guardian security. A security key pad for arming and disarming the system and key card reader are located at the main entrance. Exterior doors are equipped with magnetic door contacts and motion detectors are located in the library, the main office, and instructional spaces.

CONDITION EVALUATION

The main switchboard and branch panels appear to be in good condition. They appear to be current models and replacement materials should be readily available.

The main electrical room also serves as the main Telecommunications equipment room and is not properly ventilated.

The exterior utility transformer is rusting.

The interior lighting is in good condition and appears to provide adequate lighting levels.

The existing intercom system is in good operating condition.

The existing security system provides adequate intrusion detection and access control functions but lacks video surveillance capabilities.

The existing Category 5

telecommunications cabling is not certified to support the current 1 Gigabit per second Ethernet transmission standards. Depending on the condition of the cabling and the installation practices, it is possible the cable is capable of supporting current standards if the cabling was reterminated onto new connecting hardware at each end and retested. Alternatively, the cabling could be replaced with a Category 5e or Category 6 cabling plant.

3.2 PLUMBING

SYSTEM DESCRIPTION

Student restrooms are equipped with metered faucets at all sinks. Water closets are equipped with 1.6 GPF flush valves. Urinals are equipped with 0.6 GPF hands-free flush valves. Faucets in adult restrooms are not self metering.

Sinks with bubblers are provided in classrooms, but aerators are missing on all faucets.

Hot water is supplied from a new water heater located in a closet within the custodial room.

CONDITION EVALUATION

The domestic water system is in good condition.

3.3 FORCED AIR HEATING

SYSTEM DESCRIPTION

Heating for the building is provided by 80% efficient gas furnaces serving each zone. The furnaces are located in attic areas and are ducted down to each space.

Thermostats in the building are pushbutton type. Exhaust fans serve the restrooms, work room, kitchen and IDF/ MDF rooms. The gas meter is equipped with a seismic gas valve.

CONDITION EVALUATION

Building systems are in generally good condition. Equipment is, however, inefficient, aging and well into its serviceable life.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

Illuminated fluorescent exit signs with battery back-up are located above the exit doors.

4.2 FIRE CONTROL CAPABILITY

Fire Protection exists at the school. Verification of quick response heads could not be determined.

4.3 FIRE ALARM

SYSTEM DESCRIPTION

The existing fire alarm panel is a "Notifier" brand panel with a "DCX" brand dialer. There appears to be an adequate number of notification and detection devices throughout the facility. The fire alarm panel is not connected to an emergency or standby electrical panel. Flow and tamper switches, as well as a PIV connection and pull stations are monitored by the fire alarm panel. The fire alarm control panel has been recently upgraded to a RF subscriber dialer.

CONDITION EVALUATION

System is in good working condition and appears to meet current code coverage.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Emergency lighting for egress consists of fluorescent fixtures with emergency battery packs. They are located in hallways and larger rooms. Typical classrooms do not have emergency lighting.

CONDITION EVALUATION

System is in good working condition and appears to meet current code coverage with the exception that there appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.

4.5 FIRE RESISTANCE

This facility has one floor of occupied space. It's interior walls are mostly comprised of wood studs with a layer of GWB on both sides. The building is sprinklered.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

Overall, accessibility in the building is good. Throughout the building door thresholds are within height tolerances, interior doors include lever handles, and exterior doors are equipped with pulls and panic hardware and can be operated within tolerances.

Restrooms include the appropriate clearances, access widths, accessible fixtures, and protection from hot waste pipes. The paper towel dispenser controls are mounted too high for current accessibility standards. Grab bars are good, but do not include the required vertical grab bar in the accessible toilet stall that has become a recent requirement.

The mechanically assisted accessible entry door does not function properly. A component of this hardware detaches periodically, causing the door opening mechanism to fail.

The building has one handicapped parking stall. It sits on a slope that appears to be greater than 2%. This stall does not have a clearly designated accessible aisle.

CONDITION EVALUATION

The hardware for the accessible door will have to either be repaired or replaced to comply with accessibility standards. The parking lot will require reconfiguration to fully comply with requirements necessary to an accessible stall.

SITE CONDITION EVALUATION

This building is part of the overall high school campus site plan. It is sited in the southwest corner of the property. To the immediate east of the Crest Learning Center is the District's Maintenance, Operations, and Transportation Building. To the east of this is bus parking and fueling. To the north is the site for the PEAK building that will begin construction in the spring of 2009. To the south is the District Administration Building.

The building is serviced by one parking lot that has 19 parking stalls. There is one designated accessible stall in this lot. The parking lot sits in a depression and slopes uphill significantly to the west. There are two more lots adjacent to the building that services the District Administration Building.

To the north of the building are greenhouses which serve instructional programs at the Learning Center. The building has three outdoor patios.

Physical Condition

PARKING AND DRIVEWAY AREAS

The parking lot was resurfaced and restriped in 2018. The configuration of the lot is very inefficient and counterintuitive. As a result, several car collisions have occurred at this site.

HARD SURFACE PLAY AREAS

There is a hard surface play area with one basketball hoop on the northeast corner of the building. The asphalt appears to be in fair condition. The asphalt walk connected to it and along the east of the building is in poor condition. Vegetation is growing in its cracks and it has many depressions.

DRAINAGE

The catchment basin under the covered work area tends to back up, causing standing water in that area and along the front of the building.

PLAY FIELDS

The site has no play fields.

FENCING

The screening around the heat pump on the north side of the building is in fair condition.

PLAY EQUIPMENT

There is one basketball hoop that appears to be in fair condition.

LANDSCAPING

Landscaping around the site is mature and requires significant effort to keep trimmed. Some areas are overgrown.

OTHER OBSERVATIONS

General site maintenance could be improved. There are concrete masonry units, plant boxes, and other miscellaneous items spread throughout the site.

EDUCATIONAL ADEQUACY ASSESSMENT

The following summary includes programmatic needs and issues identified at Crest Learning Center by the MISD facilities department and the 2010 Study and Survey report.

Site

The parking lot will require reconfiguration to fully comply with requirements necessary to an accessible stall.

Building/Program

The existing building is too small for the programs currently housed within the facility.

New larger greenhouse is needed.

New science classroom or expand/ improve existing classroom to support high school science program.

Safety/Security

No deficiencies noted.

GREENHOUSES

The Crest Learning Center includes one permanently constructed greenhouse and one smaller prefabricated greenhouse, both located in an outdoor fenced growing area. The greenhouses are used as part of the education curriculum.

As greenhouses, these structures do not have the system complexity found in typical education buildings. Only the permanent greenhouse has been assessed and scored, and is in good condition.

Structurally, there are no major deficiencies noted.

Water and power services are in generally good condition.

		i CONDITION RATING SUMMARY D SCHOOL DISTRICT (17400)
MERCER ISLAND	CREST LEARNING CENTER - 01_MAIN BUILDING	-
Profile Name:	Classroom Building - Slabs On Grade	Currently BCA Certified: Yes
Inventory Status	: Recognized	Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Rating	: 83.41 %	Last District Review: 11/25/2020
		Condition Rating Component Priorit
Sub-Assembly	Component	E G F P U N/A Score L M
Foundations	component	
A1010	Standard Foundation	
Slabs on Grade	Standard Foundation	
A4010	Standard Slabs on Grade	
Water and Gas M		
A6010	Building Subdrainage	
Superstructure	0	
B1020	Roof Construction	
Exterior Vertical I		
B2010	Exterior Walls	
B2020	Exterior Windows	
B2050	Exterior Doors and Grilles	
Exterior Horizont	al Enclosures	
B3010	Roofing	
B3020	Roof Appurtenances	
B3060	Horizontal Openings	
Interior Construct		
C1010	Interior Partitions	
C1020	Interior Windows	
C1030	Interior Doors	
C1070	Suspended Ceiling Construction	
Interior Finishes		
C2010	Wall Finishes	
C2020	Interior Fabrications	
C2030	Flooring	
C2050	Ceiling Finishes	
Plumbing		
D2010	Domestic Water Distribution	
D2020	Sanitary Drainage	
D2030	Building Support Plumbing Systems	
HVAC		
D3010	Facility Fuel Systems	
D3020	Heating Systems	
D3050	Facility HVAC Distribution Systems	
D3060	Ventilation	
Fire Protection		
D4010	Fire Suppression	
D4030	Fire Protection Specialties	

Electrical

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

	D5020	Electrical Services and Distribution	90 %	
	D5030	General Purpose Electrical Power	90 %	
	D5040	Lighting	90 %	
Comm	unications			
	D6010	Data Communications	90 %	
	D6020	Voice Communications	62 %	
	D6030	Audio-Video Communications	90 %	
Electr	onic Safety	and Security		
	D7010	Access Control and Intrusion Detection	100 %	
	D7030	Electronic Surveillance	100 %	
	D7050	Detection and Alarm	100 %	
Integr	ated Autom	nation		
	D8010	Integrated Automation Facility Controls	90 %	
Furnis	hings			
	E2010	Fixed Furnishings	90 %	
	E2050	Movable Furnishings	90 %	

	2020-2021 BUILDING	PERINTENDENT OF PUBLIC INSTRUCTION CONDITION RATING SUMMARY SCHOOL DISTRICT (17400)
MERCER ISLAND C	REST LEARNING CENTER - 02_GREENHOUSE	
Profile Name:	Greenhouse	Currently BCA Certified: Yes
Inventory Status:	Recognized	Last BCA Certify: 3/14/2021
Reviewed By:	Consultant	Last District Review: 11/25/2020
Condition Rating:	90.00 %	Last District Review: 11/25/2020
		Condition Rating Component Priority
Sub-Assembly C	omponent	EGFPUN/A Score LMH
Superstructure		
B1020	Roof Construction	
Exterior Vertical E	nclosures	
B2010	Exterior Walls	
B2050	Exterior Doors and Grilles	
Exterior Horizonta	l Enclosures	
B3010	Roofing	
Plumbing		
D2010	Domestic Water Distribution	
HVAC		
D3010	Facility Fuel Systems	
D3020	Heating Systems	
Fire Protection		
D4030	Fire Protection Specialties	
Electrical		
D5030	General Purpose Electrical Power	
D5040	Lighting	
Electronic Safety a	nd Security	
D7050	Detection and Alarm	
Equipment		
E1040	Institutional Equipment	
Furnishings		
E2050	Movable Furnishings	

		D SCHOOL DISTRICT (17400)		
	REST LEARNING CENTER			
Profile Name:	High School - Urban	Last Review:	3/14	/2021
Inventory Status:	Recognized			
Condition Rating:	84.89 %			
		Condition Rating	Component	Priority
Sub-Assembly C	Component	EGFPUN/	A Score	LMH
Site Improvement				
G2020	Parking Lots		62 %	
G2030	Pedestrian Plazas and Walkways		62 %	
G2060	Site Development		90 %	
G2080	Landscaping		62 %	
Liquid and Gas Site	e Utilities			
G3010	Water Utilities		90 %	
G3020	Sanitary Sewerage Utilities		90 %	
G3030	Storm Drainage Utilities		90 %	
Electrical Site Imp	rovements			
G4010	Site Electric Distribution Systems		90 %	
G4050	Site Lighting		90 %	

ADMINISTRATION BUILDING

4160 86th Avenue SE Mercer Island, WA 98040 206.236.3310

SITE INFORMATION

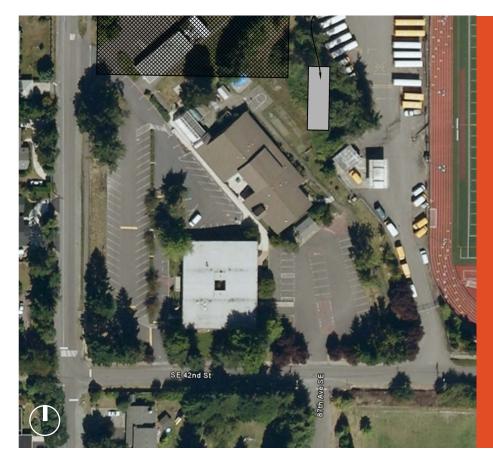
County:	KING	Original Construction:	1966
Site Area:	30.90 ACRES	Modernization:	1987, 2019-20
	(Part of MIHS site)	Additions:	1977
Zoning:	R-9.6	Area (Permanent):	16,100 GSF
Tax Parcel:	1824059005	Portables:	0
Jurisdiction:	CITY OF MERCER ISLAND	Grades:	N/A
Police	MERCER ISLAND	Capacity (Permanent):	N/A
Jurisdiction:	POLICE DEPARTMENT	Enrollment (2019-20):	N/A
Fire Jurisdiction:	MERCER ISLAND FIRE		

DEPARTMENT

BUILDING INFORMATION

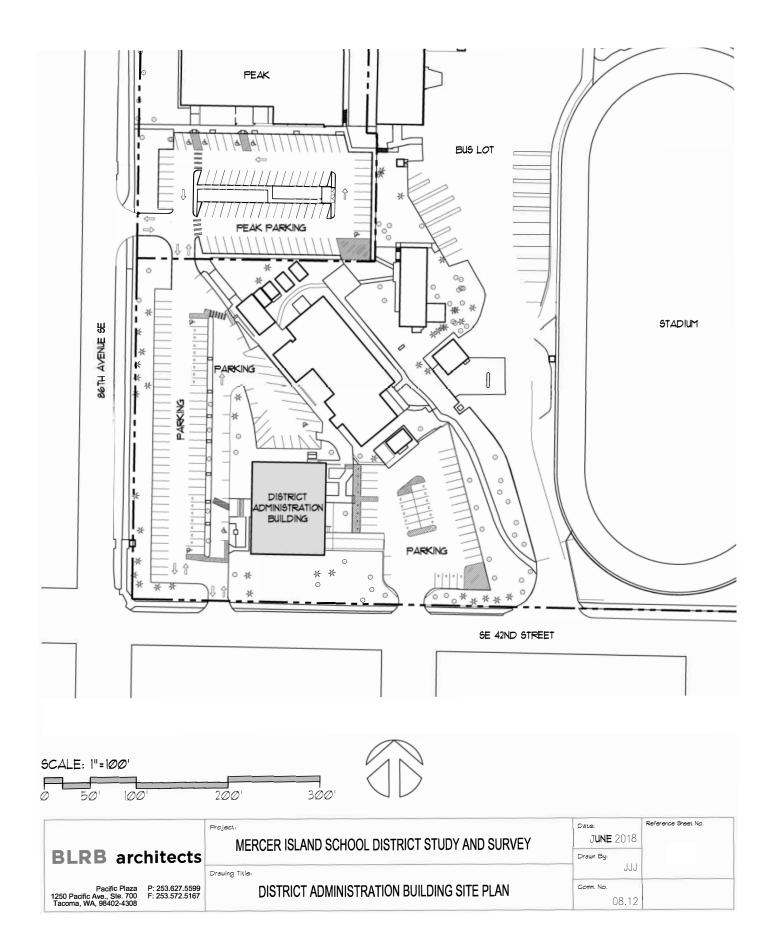
TEACHING SPACES

N/A



Building Condition Evaluation ICOS Score

The Adminsitration Building is a support facility and is therefore not recognized by OSPI. Building information and assessment rating summaries are included for reference only.



CONSTRUCTION HISTORY

The District Administration Building was originally constructed in 1966 to house the administrative staff and provide storage for the District. The original program consisted of warehouse storage, information research, and publications on the ground floor. The upper level housed offices for District staff, a curriculum library, a vault, restrooms, a kitchenette, and general storage. An internal open court provided daylight to internal offices. Bus parking was located in the parking lot to the east of the District Administration Building. The Administration Building was reviewed under the 2018 update, however it was not scored under the ICOS system due to the fact it does not house students.

The mechanical system in the publications or print room was updated. The curriculum library was eventually repurposed into the Board Room. In 1977, approximately half of the internal open court was in-filled to provide space for a new lunchroom adjacent to the existing kitchenette and a new Duplicator Room.

In 1987, the existing lunchroom and kitchenette were re-purposed into a secretary area, reception area, and a small conference room. The existing waiting room and secretary space, adjacent to the main entry was turned into a conference room. The southern and western halves of the existing upper floor were renovated to accommodate more office space with the Special Education/ Services located to the south. The Lunchroom was moved to the southeast of the building.

The warehouse on the ground floor was significantly reduced in 1987 to allow space for relocation of the curriculum library, board room, kitchenette, and additional restrooms. This lower floor renovation (boardroom, kitchenette and restrooms only) was sprinkled at that time. The reception lobby and administration offices were remodeled in 2019 and 2020. New doors were added in 2019 to create a vestibule for energy conservation. While no remodel or renovations have taken place, there have been staff moves and finish upgrades through the years.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

The administration building is a two-story combination concrete, steel and wood structure. It was original constructed in 1965. The structural system consists of concrete spread footing foundations, concrete slab on grade ground floor construction, concrete exterior walls up to the main level, concrete columns, beams and pan floor joist at the main level, steel columns and open web wood roof trusses with plywood sheathing.

The lateral resisting system for the building consists of the concrete shear walls and diaphragms at the base and steel moment frame with plywood roof diaphragm above the main floor.

CONDITION EVALUATION

We observed no significant signs of structural distress, deterioration or differential settlement.

The steel moment frame above the main level does not meet current seismic detailing. The interior non-structural partitions can provide redundant lateral load path for the wood structure above the main floor.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

Exterior walls below the main level are reinforced concrete walls. The walls above the main floor are not load bearing and consist of wood-framed fins and windows.

CONDITION EVALUATION

We observed no significant signs of structural distress, differential settlement or deterioration in the exterior walls. There was some minor damage to the upper portions of the exterior mansard walls from what appears to be woodpeckers. This damage is minor and is considered an ongoing maintenance item.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION

The exterior roof is a built up roof that is relatively flat with minimal slope to four internal drains adjacent to the internal courtyard. The perimeter of the building has two overflow scuppers at the west end of the building and two scuppers located on the east end. These overflows are 5 $\frac{1}{2}$ " x 5 $\frac{1}{2}$ " and are approximately 2" above the roofline. The roof has no fall restraint system.

This building was reroofed in 1988. It was built up over the existing roofing membrane. This was a built-up roof over 1 ½" of insulation.

CONDITION EVALUATION

The roof is in poor condition. The roofing membrane is blistering in several locations. There has been water intrusion around the exhaust fans and flues. The roof has been known to leak into the warehouse on the ground floor during heavy rainfall via the boiler stack. The roof hatch is difficult to operate and needs to be replaced.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows original to the building were reglazed 15 years ago with insulated units. These windows are set in wood forms. The windows on the east elevation at the lower level are original to the 1987 tenant improvement have insulated glazing set in an aluminum window frame.

CONDITION EVALUATION

The exterior windows are in good repair. The man door leading into the warehouse is difficult to open in the morning.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

The soffit panel is painted ½" plywood attached to the underside of 32" Trus-Joists. The soffit doesn't appear to have venting. Lights are recessed into this soffit. The joists are faced with painted cedar. Metal flashing over a 2"x8" piece of cedar provides the coping piece.

CONDITION EVALUATION

The exterior trim is in good repair. The soffit requires air circulation for adequate ventilation.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

The interior floors are generally carpeted with a rubber base. Originally these floors had VCT which was covered by a layer of carpet later, and an additional layer of carpet which is now the finished surface. The east entry and kitchen at the ground level have VCT flooring. The warehouse has a sealed concrete floor. Restroom floors are tiled.

CONDITION EVALUATION

The floors are generally in good repair.

2.2 WALLS

SYSTEM DESCRIPTION

The interior walls are typically gypsum wallboard covered with vinyl wall covering. The restroom walls have a tile wainscot. Some of the lower level walls are painted CMU and concrete.

CONDITION EVALUATION

Walls are generally in good repair.

2.3 CEILINGS

SYSTEM DESCRIPTION

Most of the ceilings are 2'x4' acoustical ceiling panels. The upper floor has 12"x12" acoustical ceiling tiles in some rooms and corridors. The restrooms and main entry have a gypsum wallboard soffit.

CONDITION EVALUATION

Ceilings are generally in fair repair. The ceiling panels are damaged where water infiltration from the roof occurs.

2.4 FIXED EQUIPMENT

No fixed equipment. (The print shop and all associated equipment have been removed.)

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

Power Distribution Utility Service: The Administration Building is fed underground from a polemounted, exterior utility transformer. Distribution is 208Y/120V

Switchboard: The main switchboard is a "Federal Pacific" brand "FPE" type switchboard rated for 600A at 208Y/120V. The main switchboard does not have a main disconnect; instead, there are (6) disconnects for downstream panelboards.

Generator: The existing generator is a 15kW "Generac" brand natural gas 208Y/120V generator with a 50A output breaker. The generator and associated ATS were installed in 2012.

Panelboards: Several existing panelboards are "Square-D" brand "NQOD" type boards with only minimal spares or spaces for future capacity. Other existing panelboards are "Federal Pacific" brand "FPE" type panels with no spares or spaces for future capacity.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and timeclock. Interior fixtures are locally switched by occupants. Exterior fixtures utilize LED retrofit lamps and interior fixtures are mostly 4' LED T-8 retrofit lamps or compact fluorescent fixtures.

Low Voltage

Intercom/Clock: There is no intercom/ clock or overhead paging system present. Paging functions are accomplished using speaker phones.

Telephone System: A Nortel Meridian PBX system is located in a separate telephone room on the basement level. Trunk cabling is extended from the telephone room the MDF located down the hall. The Octel voicemail is at capacity.

Telecommunications: The Main Distribution Frame (MDF) for the facility is located on the basement level. A 400-pair telco service is terminated on a demarcation point mounted on the plywood backboard. T1 circuits provide voice and data connections to service providers and other schools in the District. There are no grounding busbars visible in the MDF. 110 and 66 wiring blocks provide cross-connections from PBX to horizontal cabling serving work areas. An independent air-conditioning unit provides cooling to the space. The room houses (3) 19" equipment racks. The racks contain optical fiber terminations, category 6 modular patch panels and wire management. The following optical fiber cables are terminated in the MDF:

- > 6-strand singlemode optical fiber to city of Mercer Island (dark)
- > 24-strand singlemode (Qwest service)
- > 12-strand 62.5/125 multimode to Crest Learning Center
- > 12-strand 62.5/125 multimode to Mercer Island High School
- > K-20 singlemode optical fiber service

Four-plex electrical receptacles provide power to the equipment racks and wallmounted equipment.

The optical fiber, and UTP voice backbone cables enter the building through underground conduits and pull boxes located in the loading dock area.

Riser-rated category 6 horizontal cabling is installed from racks in MDF to telecommunication outlets in offices. The horizontal cabling is installed above the accessible ceilings using open cabling methods and is terminated on surface mounted telecommunication outlets. Security: An Ademco Security panel, model number Vista 50-KP6139 is located in the MDF. The system is monitored by Guardian security. Security key pads for arming and disarming the system are located in the loading dock area and at the main entrance.

CATV Distribution: The CATV service cable enters the building in the loading dock area. The service cable terminates in an 18"x18"x6" wall-mounted enclosure on RCA a 50 900Mhz 4-way splitter, model number VH-140. The cabling is distributed on a 50 900Mhz 4-way splitter over RG-6 coaxial cabling.

CONDITION EVALUATION

The main switchboard is old and not in good condition. Replacement parts are not readily available for this vintage and manufacturer of switchboard.

In the main switchboard, the bending radius of the branch panel conductors is tight and appears to violate code.

Replacement parts are readily available for the newer Square D panels, but replacement parts are not readily available for the Federal Pacific panels.

The interior lighting is in good condition and appears to provide adequate lighting levels. Exterior light fixture lenses are yellowing and should be replaced.

The intrusion detection and access control functions of the security system are in good condition. However there are no security cameras at the facility to provide video recording or monitoring.

3.2 PLUMBING

SYSTEM DESCRIPTION

Plumbing fixtures on the upper level do not meet ADA requirements. Lavatories are not metered.

CONDITION EVALUATION

The domestic water system and fixtures are all in generally fair condition.

3.3 FORCED AIR HEATING

SYSTEM DESCRIPTION

There is no boiler redundancy. The boiler is a Patterson Kelly boiler P-k series model N-700 with 700 btu in/595 btu out. A compression tank is used instead of an expansion tank. Heating is provided by a single hydronic heating pump with no backup. The building has no air separator or Pot feeder/constant volume system. Several areas of hydronic piping are missing insulation.

A newer Trane chiller was installed in 2017.

The building has a five-zone multizone unit air handler with Belimo actuator that is approximately two years old. The air handler has a pump and the dampers (OA and SA) are original and not modulating.

There is a separate system for CU/R and 320 ES which has a heat pump, Carrier, and dual circuit. The building utilizes Hydronic duct heaters.

OA Ductwork in the storage area is not insulated. The Data room has its own air conditioning and carrier. It appears as though additional HVAC units were not added for additional square footage during renovations.

The range requires exhaust fan to comply with current code requirements. There is no economizer on the multizone system and the ventilation is not adequate or per code. The temperature sensors have no thermostats for control. The multizone units do not have CO2 and EF was installed at the copiers.

SYSTEM DESCRIPTION

Building systems are all in poor condition ,with exception of air-conditioning, which is good. Systems are inefficient and well into their serviceable life expectancy with many notable deficiencies throughout all components.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

Illuminated exit signs appear to be supplied by the emergency generator distribution or supplied with battery backup and are located above the exit doors.

4.2 FIRE CONTROL CAPABILITY

The 1987 tenant improvement added a sprinkler system to rooms that were part of that contract. There is no sprinkler system on the upper floor.

The emergency exit leading out of the north side of the lower floor does not have panic hardware. The secondary egress leading out of the boardroom to outside does not connect to a path, but terminates into a planter with stairs. Landscaping in that area makes emergency egress difficult.

4.3 FIRE ALARM SYSTEM

SYSTEM DESCRIPTION

The existing fire alarm panel is a "Gamewell" brand "Zans 400" series panel with a "Guardian" brand with recent RF subscriber type dialer. There are five initiating circuits and three signaling circuits within the building, although the quantity of both notification and detection devices seem relatively low. These circuits use an open-cabling method. The fire alarm panel is not connected to an emergency or standby electrical panel and the latch holding the panel closed is broken.

CONDITION EVALUATION

System is an older non-addressable system and appears to be in good working condition. The coverage is minimal and does not appear to comply with current code requirements.

4.4 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Exit signs are typically fluorescent with "bug eye" egress fixtures are installed throughout the facility.

CONDITION EVALUATION

System appears to be in working condition but does not appear to be of sufficient quantity to meet current code coverage. There appears to be no emergency egress for the exterior path of egress to comply with current codes. Batteries may be nearing end of life for code required egress time.

4.5 FIRE RESISTANCE

The wall between the warehouse and adjacent rooms is not rated. There is no indication of fire dampers at ducts penetrating the wall or firestop at pipes and conduit. This wall is shown as a one-hour wall in the 1987 construction documents.

The wall between the east entry corridor and the boardroom is shown as a one-hour wall in the 1987 construction documents, but the gypsum wallboard does not extend to underside of structure above.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

The District Administration Building was built in 1965. A tenant improvement was done in 1987 added a ground floor entry, relocated the board room to the lower floor, added a curriculum library, kitchen, restrooms, and a storage room. The upper floor tenant improvement added office space, a conference room, and a personnel/ file area. The 1987 renovations improved accessibility; however, codes have changed dramatically since then.

There are two accessible stalls in the western parking lot, facing the main entry. One of the stalls does not have a designated access aisle or pathway to the curb ramp. The other stall has a designated access aisle and path that crosses one way traffic. The handrail for the ramp leading into the building does not have acceptable graspability or extensions. The main stair leading into the building is 19'-8" wide and does not have intermediate handrails. The handrails are also not compliant because of insufficient graspability and extensions. The top landing of the entry stair is greater than 30" above finish floor. The handrail at this location serves as a guard as well and varies in height between 37"-38" above finish floor. The guardrails are vertical and are more than 4" apart.

The eastern parking lot does not have designated accessible stalls even though the entry and ramp is ADA compliant. There is no accessible route from the parking lot to the concrete sidewalk. In order for a person with disabilities to access the ground floor, they would have to park in the Crest Learning Center handicap stall (which is not fully compliant) and enter via the ramp to the north of the east entry. This ramp does not have adequate handrail extension beyond the bottom landing. Although the approach to both entries does not comply with current standards, both doors have a mechanically assisted accessible entrance operated by a button.

The building does not have an elevator and the entries are on opposite sides of the building and there is no accessible path around the perimeter. There is one stair in the building which does not have a continuous outer handrail. The inner handrail also serves as the guard and is interrupted by pipe stanchions. This rail also does not have code compliant extensions. The rail is 34" above finish floor and has a wire mesh infill panel at the top landing and at the top stair flight. These stairs present a falling hazard.

Accessible restrooms built in 1987 are located downstairs. These restrooms have compliant clearances, fixture heights, and accessory heights. There is no insulation on hot water waste piping, and the accessible stall does not have a vertical grab bar required in current standards. The restrooms upstairs were built in 1965 and have no provisions for accessibility. Drinking fountains are not accessible.

With a 30" aisle way, the kitchen downstairs does not have sufficient maneuverability or clearances. The sink and countertop are too high for a person with disabilities at 36" above finish floor.

Since the handles of many doors throughout the building are close to walls, they do not have compliant minimum maneuvering clearances. Only the interior doors that were added in 1987 have lever handles.

The inner courtyard has an approximate 3" threshold outside and is not accessible.

CONDITION EVALUATION

Accessibility is extremely poor in this building. Significant tenant improvements would be required to bring it up to current standards. Parking lot improvements and site work are also required to make this building accessible.

SITE CONDITION EVALUATION

The building is a component of the overall high school campus site plan. It is sited in the southwest corner of the property. To the north of the building sits the Crest Learning Center and its parking lot. The building is flanked by two parking lots on the east and west side. Both of these parking lots were resurfaced and restriped over the summer to gain additional parking and repair the lots that were in poor condition. The western parking lot has two accessible stalls.

Physical Condition

PARKING AND DRIVEWAY AREAS

The parking lot surfaces are in good to fair condition. The extruded concrete curbs in the eastern parking lot, particularly around the loading dock area have been severely damaged by vehicle tires and are broken in several locations.

HARD SURFACE PLAY AREAS

This site has no hard surface play areas.

DRAINAGE The site has adequate drainage.

PLAY FIELDS The site has no play fields.

FENCING This site has no fencing.

PLAY EQUIPMENT This site has no play equipment.

LANDSCAPING

Landscaping is generally well maintained and in fair condition.

Landscaping in southwest corner of property is in fair to poor condition.

EDUCATIONAL ADEQUACY ASSESSMENT

Not applicable.

	STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION 2020-2021 BUILDING CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)		
MERCER ISLAND A	DMINISTRATION - 01_MAIN BUILDING		
Profile Name:	Administrative	Currently BCA Certified: No	
Inventory Status:	Non-Recognized	Last BCA Certify:	
		Condition Rating Component	Priority
Sub-Assembly C	omponent	E G F P U N/A Score	LMH
Foundations			
A1010	Standard Foundation		
Water and Gas Mi	tigation		
A6010	Building Subdrainage		
Superstructure			
B1010	Floor Construction		
B1020	Roof Construction		
Exterior Vertical E	nclosures		
B2010	Exterior Walls		
B2020	Exterior Windows		
B2050	Exterior Doors and Grilles		
B2070	Exterior Louvers and Vents		
Exterior Horizonta	l Enclosures		
B3010	Roofing		
B3020	Roof Appurtenances		
B3060	Horizontal Openings		
Interior Constructi	on		
C1010	Interior Partitions		
C1020	Interior Windows		
C1030	Interior Doors		
C1040	Interior Grilles and Gates		
C1070	Suspended Ceiling Construction		
Interior Finishes			
C2010	Wall Finishes		
C2020	Interior Fabrications		
C2030	Flooring		
C2050	Ceiling Finishes		
Plumbing	-		
D2010	Domestic Water Distribution		
D2020	Sanitary Drainage		
D2020	Building Support Plumbing Systems		
HVAC	0		
D3010	Facility Fuel Systems		
D3010	Heating Systems		
D3020	Cooling Systems		
D3050	Facility HVAC Distribution Systems		
D3050 D3060	Ventilation		
Fire Protection	Ventilation		
D4010	Fire Suppression		

Electrical

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION	
2020-2021 BUILDING CONDITION RATING SUMMARY	
MERCER ISLAND SCHOOL DISTRICT (17400)	

	D5020	Electrical Services and Distribution	62 %	
	D5030	General Purpose Electrical Power	90 %	
	D5040	Lighting	90 %	
Com	munications			
	D6010	Data Communications	90 %	
	D6020	Voice Communications	90 %	
	D6030	Audio-Video Communications	62 %	
	D6060	Distributed Communications and Monitoring	90 %	
Elec	tronic Safety	and Security		
	D7010	Access Control and Intrusion Detection	100 %	
	D7030	Electronic Surveillance	100 %	
	D7050	Detection and Alarm	100 %	
Inte	grated Auton	nation		
	D8010	Integrated Automation Facility Controls	62 %	
Furn	ishings			
	E2010	Fixed Furnishings	62 %	
	E2050	Movable Furnishings	90 %	

STATE OF WASHINGTON - SUPERINTENDENT OF PUBLIC INSTRUCTION SITE CONDITION RATING SUMMARY MERCER ISLAND SCHOOL DISTRICT (17400)

	IVIERCER ISEA	
MERCER ISLAND	ADMINISTRATION	
Profile Name:	Administrative	Last Review:
Inventory Statu	s: Non-Recognized	
Condition Ratin	g: 66.34 %	
		Condition Rating Component Priority
Sub-Assembly	Component	EGFPUN/A Score LMH
Site Improveme	nt	
G2010	Roadways	
G2020	Parking Lots	
G2030	Pedestrian Plazas and Walkways	
G2060	Site Development	
G2080	Landscaping	
Liquid and Gas S	ite Utilities	
G3010	Water Utilities	
G3020	Sanitary Sewerage Utilities	
G3030	Storm Drainage Utilities	
G3060	Site Fuel Distribution	
Electrical Site Im	provements	
G4010	Site Electric Distribution Systems	
G4050	Site Lighting	
Site Communica	tions	
G5010	Site Communications Systems	

MARY WAYTE POOL BUILDING

8815 SE 40th Street Mercer Island, WA 98040 206.588.1117

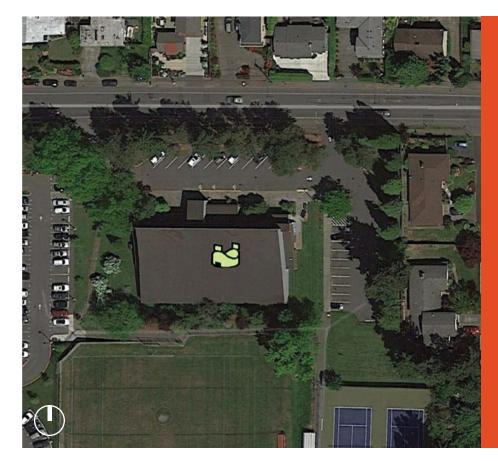
SITE INFORMATION

County:	KING	(
Site Area:	1.64 ACRES	ľ
Zoning:	R-9.6	/
Tax Parcel:	1824059043	/
Jurisdiction:	CITY OF MERCER ISLAND	F
Police Jurisdiction:	MERCER ISLAND POLICE DEPARTMENT	(E
Fire Jurisdiction:	MERCER ISLAND FIRE DEPARTMENT	

BUILDING INFORMATION		
Original Construction:	1973	
Modernization:	N/A	
Additions:	N/A	
Area (Permanent):	16,263 GSF	
Portables:	0	
Grades:	N/A	
Capacity (Permanent):	N/A	
Enrollment (2019-20):	N/A	

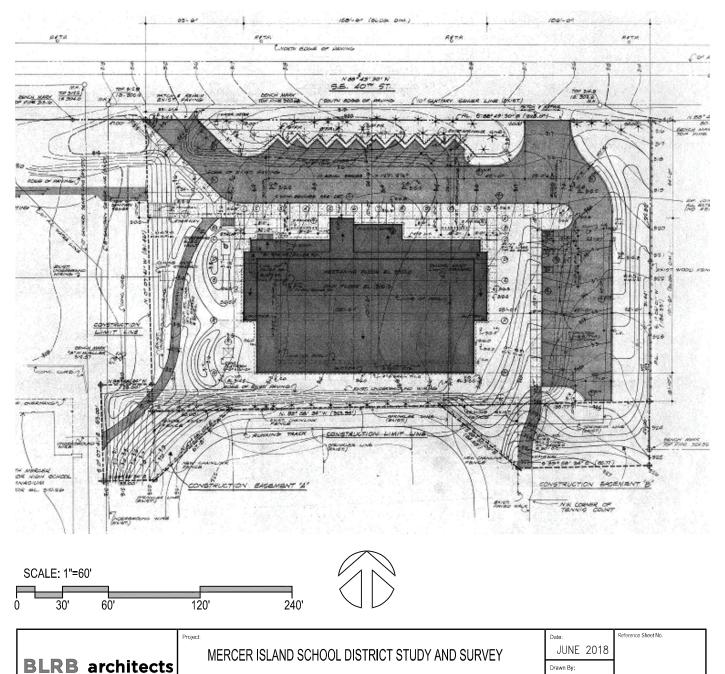
TEACHING SPACES

N/A



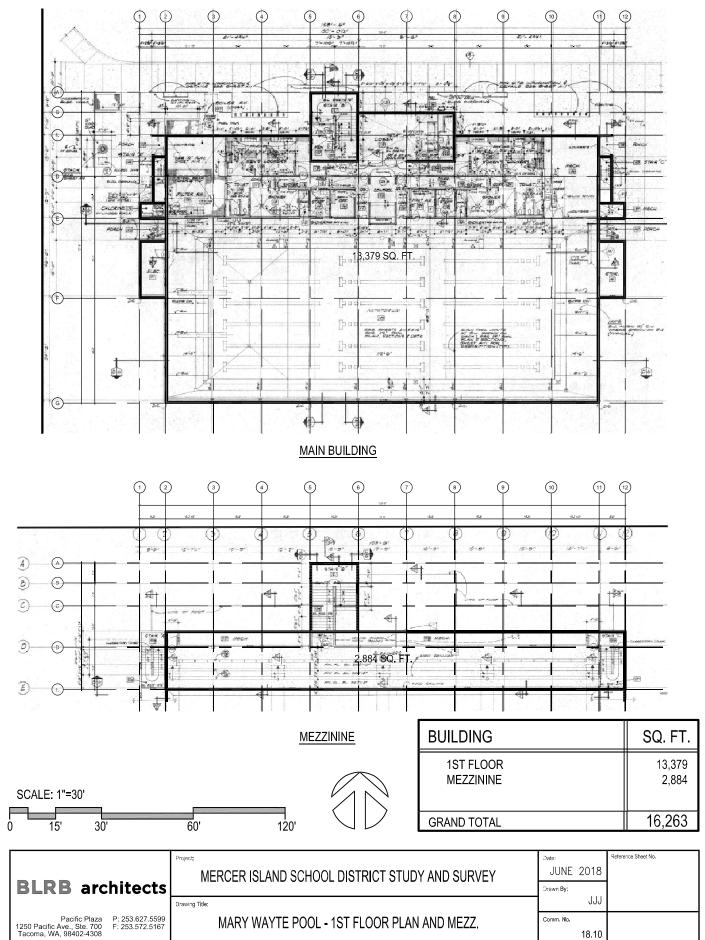
Building Condition Evaluation ICOS Score

The Mary Wayte Pool Building is a support facility and is therefore not recognized by OSPI. Building information and assessment rating summaries (building only) are included for reference only.



		4	1
	Drawing Title:	JJJ	
Pacific Plaza P: 253.627.5599 1250 Pacific Ave., Ste. 700 F: 253.572.5167 Tacoma, WA, 98402-4308	MARY WAYTE POOL SITE PLAN	Comm. No. 18.10	

CHAPTER 01 | INVENTORY & AREA ANALYSIS MARY WAYTE POOL BUILDING



18.10

CONSTRUCTION HISTORY

The Mary Wayte Pool Building was originally constructed in 1973, as part of the King County Parks Forward Thrust Pool program on leased property from the District. The District took ownership of the building from King County in 2011. The building has always been a pool, designed by Kirk, Wallace, McKinley Architects. It is a wood-framed construction single story-building with a mezzanine for spectator viewing purposes.

The site has remains relatively unchanged since its construction. It has 21 parking spaces, which include two handicap stalls. Hard surface coverage of the lot is approximately 22% of the total area.

BUILDING CONDITION EVALUATION

1.0 Exterior Building Condition

1.1 FOUNDATION/STRUCTURE

SYSTEM DESCRIPTION

The building is primarily a wood-framed structure. The primary structural system consist of shallow concrete spread footing foundations, concrete slab on grade floor construction, wood stud exterior walls with, glulam beams and light wood framing with plywood sheathing at the roof. The second floor appears to be structural concrete supported by CMU bearing walls.

The lateral force resisting system of the building is the plywood shear walls and roof diaphragm. At the second floor, the concrete floor acts as a diaphragm spanning between CMU shear walls.

FOUNDATION/STRUCTURE CONDITION EVALUATION

We did not observe any significant signs of structural distress, deterioration or differential settlement. The current IBC requires a 1.25 importance factor for school design. It is assumed that the existing structure is not in full compliance with the current code.

1.2 EXTERIOR WALLS

SYSTEM DESCRIPTION

Exterior walls are wood-framed walls with plywood sheathing.

CONDITION EVALUATION

No significant signs of structural distress, deterioration or differential settlement.

1.3 EXTERIOR ROOF

SYSTEM DESCRIPTION The exterior roof is a metal roof installed in 2019 and includes a fall restraint.

CONDITION EVALUATION

The roofing material was replaced in 2019, so it is in excellent to good condition.

1.4 EXTERIOR WINDOWS/DOORS

SYSTEM DESCRIPTION

The windows were re-glazed years ago with insulated units in a most places. The windows are aluminum set in wood forms.

CONDITION EVALUATION

The exterior windows are clerestory windows and appear to have been changed out over the years to be insulated aluminum windows but it is difficult to tell their condition due to the height in the building.

1.5 EXTERIOR TRIM

SYSTEM DESCRIPTION

The soffit panel is painted ½" plywood attached to the underside of joists. Lights are mounted on the soffit. Metal flashing will need to be replaced when the next time the roof is replaced.

CONDITION EVALUATION

The exterior trim is in fair repair. The soffit requires air circulation for adequate ventilation. However, the roof itself has rigid insulation and therefore is not vented currently.

2.0 Interior Building Condition

2.1 FLOORS

SYSTEM DESCRIPTION

The interior floors are generally exposed aggregate concrete. The locker rooms have a sealed concrete floor. Shower floors are tiled with 1x1 tile.

CONDITION EVALUATION

The floors are generally in good repair. Given the age of the original construction it is reasonable to assume the original VCT flooring has asbestos in the tile and mastic however the district has had it evaluated and it does not.

2.2 WALLS

SYSTEM DESCRIPTION

The interior walls are typically gypsum wallboard covered with stucco. The restroom walls have a tile wainscot.

CONDITION EVALUATION

Walls are generally in good repair.

2.3 CEILINGS

SYSTEM DESCRIPTION

The ceilings in the main lobby are exposed cedar panels. Ceilings in the main pool facility are exposed wood trusses, purlins, joists, and decking. GWB with a stucco skim coat in the stairwells and locker rooms

CONDITION EVALUATION

Ceilings are generally in fair repair.

3.0 Mechanical/Electrical Systems Condition

3.1 ELECTRICAL

SYSTEM DESCRIPTION

Power Distribution Utility Service: The building is fed underground from a pole-mounted, exterior utility transformer. Distribution is 208Y/120V.

Switchboard: The main switchboard was replaced in 2019.

Generator: There is no generator on site.

Panelboards: Several existing panelboards are "GE" brand boards with only minimal spares or spaces for future capacity.

Lighting

Exterior fixtures are controlled by a contactor, photocell, and time clock. Interior fixtures are locally switched by occupants. All interior and exterior lighting has been changed to LED.

CONDITION EVALUATION

The main electrical switchboard and all panels are new and in good condition.

3.2 PLUMBING

SYSTEM DESCRIPTION

All plumbing fixtures are low-flow after hydro-metrics work done in 2020.

Hot water is fed from a relatively newer hot water heater located in the boiler room. Corrosion/scaling was observed on domestic piping and fittings.

CONDITION EVALUATION

There is extensive corrosion throughout the plumbing system. There is no fire protection system. The pool supply and drainage system was recently relined and appear to be functioning well.

3.3. FORCED AIR HEATING

SYSTEM DESCRIPTION

New boilers and AHU installed under an ESCO project and DOC grant in 2020. Hydronic piping in the boiler room is showing signs of corrosion. Plumbing lines routed under the pool were recently recoated and appear to be functioning well.

There is inadequate ventilation throughout the building and humidity levels appeared to be higher than what is recommended for a pool hall.

CONDITION EVALUATION

Mechanically, the systems are new and in good condition.

4.0 Safety/Building Code

4.1 MEANS OF EXIT

While the facility has not been remodeled over the years there have been upgrades

to the illuminated exit signs and supplied with battery back-up and are located above the exit doors.

4.2 FIRE CONTROL CAPABILITY

The facility does not have a sprinkler system.

The emergency exits do not meet current ADA panic hardware requirements but rather are vintage crash bar exiting device. The secondary egress leading out of the boardroom to outside does not connect to a path, but terminates into a planter with stairs. Landscaping in that area makes emergency egress difficult.

4.3 EMERGENCY LIGHTING

SYSTEM DESCRIPTION

Exit signs are typically fluorescent with "bug eye" egress fixtures are installed throughout the facility.

CONDITION EVALUATION

System appears to be in working condition but does not appear to be of sufficient quantity to meet current code coverage. Batteries may be nearing end of life for code required egress time.

5.0 Provisions for the Handicapped

5.1 PROVISIONS FOR THE HANDICAPPED

SYSTEM DESCRIPTION

ADA improvements have been made, but the site is still not fully compliant.

There are two accessible stalls in the eastern parking area, around the corner from the main entry. One of the stalls does not have a designated access aisle or pathway to the curb ramp. The other stall has a designated access aisle and path that crosses one way traffic.

The building does not have an elevator and the entry is located mid building with egress exits from the mezzanine on both the east and west sides. There is a main stair in the middle of the building near the main entrance.

Drinking fountains are not accessible.

Since the handles/knobs of many doors throughout the building are close to walls, they do not have compliance.

CONDITION EVALUATION

Accessibility is extremely poor in this building. Tenant improvements would be required to bring it up to current standards. Parking lot improvements and site work are also required to make this building accessible.

Site Condition Evaluation

The building is a component of the overall high school campus site plan. It is sited in the northeast corner of the property. To the north of the building sits the main parking lot, but there is a bit of parking on the east side as well.

The west side parking lotdrive is used by Northwood Elementary School and the parking area is used by MIHS. The eastern parking lot has two accessible stalls.

Physical Condition

PARKING AND DRIVEWAY AREAS

The parking lot surfaces are in good condition.

DRAINAGE

The site has adequate drainage.

PLAY FIELDS

The site has no play fields.

FENCING

The site has no fencing.

PLAY EQUIPMENT

The site has no play equipment

LANDSCAPING

Landscaping is generally well maintained.

EDUCATIONAL ADEQUACY ASSESSMENT

Not applicable.

CHAPTER 02 LONG-RANGE EDUCATIONAL & FACILITIES PLAN

A long-range (minimum of six years) educational and facilities plan setting forth the projected facility needs and priorities of the district based on the educational plan.

This Chapter will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

DESCRIPTION

This chapter includes the following information:

 Long-Range Facility Plan Report (Executive Summary)

SUMMARY

In the summer of 2019, Mercer Island School District undertook an effort to develop a Long-Range Facility Plan. Mahlum was selected to facilitate this process and assist with preparation of the plan, which was completed in September 2020 and accepted by the School Board on December 2, 2020.

The primary purpose of the Long-Range Facility Plan is to evaluate the adequacy of existing educational facilities within the context of current educational objectives, set the stage to plan for future capital improvements for those facilities as needed, and address how student population will be accommodated over the next 10 years and beyond.

The Plan provides a strategic framework for management of the District's facilities over time, such that they continually support the ongoing success of District students, staff, and community. The Long-Range Facility Plan results from a synthesis of three primary considerations: educational program (evaluating the adequacy of existing educational facilities within the context of current educational objectives). enrollment and capacity (understanding how student populations will be accommodated over the next 10 to 20 years), and facility condition (considering deferred maintenance, modernization, and replacement of existing buildings and sites). Plan proposals that address these primary considerations are guided by a strategic vision established by the District and informed by input from the broader District community.

The Executive Summary section of the Long-Range Facilities Plan report is included on the following pages, and the complete report and appendices can be found on the Mercer Island School District website.

LONG-RANGE PLAN SCENARIO

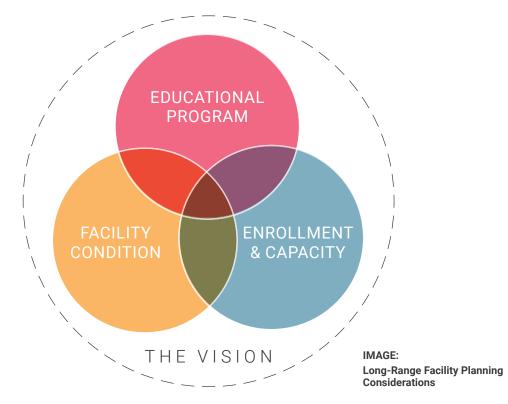
The Long-Range Facility Plan scenario represents the preferred approach with regard to the prioritization of District need over the next ten years and beyond. It is the culmination of an in-depth planning process conducted by the Mercer Island School District, Board of Directors, Facilities Planning Committee, and the broader Island community. The selected plan scenario prioritizes Islander Middle School first, replacement of Island Park Elementary School second, and Mercer Island High School / Crest Learning Center projects third. These projects are followed by West Mercer, Lakeridge, the remaining high school projects, and finally Mary Wayte Pool.

It is important to note that while the preferred plan scenario identified the order of projects, and broadly outlines their potential scope, the specific timing of each project and how they may be grouped together in phases has not been determined as part of this Long-Range Facility Plan.

It is anticipated that the District, School Board, and community will reconfirm the Long-Range Facility Plan prior to moving forward with any future capital measure. At that time, further development of project scope and cost will be completed. One or more projects may be planned in the same phase, depending on level of community support and funding parameters.

Specific capital facilities plan information will be updated at that time, as noted above.

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EXECUTIVE SUMMARY

INTRODUCTION & PROCESS

PURPOSE

In the summer of 2019, Mercer Island School District (the District) undertook an effort to develop a Long-Range Facility Plan. Mahlum was selected to facilitate this process and assist with preparation of the plan.

The primary purpose of the Long-Range Facility Plan is to evaluate the adequacy of existing educational facilities within the context of current educational objectives, set the stage to plan for future capital improvements for those facilities as needed, and address how student population will be accommodated over the next 10 years and beyond.

The Plan provides a strategic framework for management of the District's facilities over time, such that they continually support the ongoing success of District students, staff, and community.

The Long-Range Facility Plan results from a synthesis of three primary

considerations: educational program (evaluating the adequacy of existing educational facilities within the context of current educational objectives), enrollment and capacity (understanding how student populations will be accommodated over the next 10 to 20 years), and facility condition (considering deferred maintenance, modernization, and replacement of existing buildings and sites). Plan proposals that address these primary considerations are guided by a strategic vision established by the District and informed by input from the broader District community.

PROCESS

A District Leadership Team (DLT) was assembled to provide input during the planning process and participate with a Facility Planning Committee (FPC) to develop recommendations for plan options. The DLT was comprised of key District leadership, including representation in the areas of administration, finance, curriculum, communications, facilities management, and technology. The FPC was assembled to assist with plan development. The Committee included participation by parents from various schools and neighborhoods, School Board members, community and business leaders, representatives from local regulatory agencies, and student representatives.

The Committee met with the planning team five times over the course of the planning process. These three-hour meetings covered the following topics:

- > Vision & Educational Program (Meeting 1)
- Capacity & Enrollment / Existing Conditions (Meeting 2)
- > Plan Development (Meetings 3-5)

In addition, input related to District goals and needs was gathered from teachers and staff, students, and the broader community, which informed the development of the plan. Periodic updates were presented to the Board of Directors during Board meetings throughout the planning process.

SECTION 01 | EXECUTIVE SUMMARY



Due to the unforeseen constraints of the pandemic that developed towards the end of this process, in the Spring of 2020, the second round of staff, student, and wider community engagement was postponed, as was the final FPC meeting to review the community's feedback and finalize the plan.

It was determined by the District that the best course of action was to complete the planning process and document the Long-Range Facility Plan that was developed by the FPC with strong consensus. The District plans to gather community input at a later date when inperson meetings are again possible.

This document represents the collaborative effort of the District Leadership Team, Facility Planning Committee, Board of Directors, and the broader Island community.

VISION & EDUCATIONAL PROGRAM

DISTRICT VISION, VALUES & MISSION

The Board of Directors has approved new Policy 0001 that sets the District's direction by defining its core values, vision, and mission. The new values, vision, and mission statements center the District's work on students as the priority and educating the whole child.

The Student-Focused Fundamentals, also developed by the Board, sustain accountability of these goals through an annual monitoring and measuring process.

Values

Students are the priority. We believe in:

- > Supporting the whole child.
- Creating inclusive and equitable learning settings.
- Ensuring our school communities are safe and supportive.
- Providing rigorous and challenging learning.

Vision

Inspiring our students to be lifelong learners as they create their futures.

Mission

The District will foster learning by engaging students in thinking critically, solving problems creatively, and working collaboratively.

For more information regarding the District's values, vision, and mission, refer to Section 02: Vision & Educational Program.

PLANNING GOALS

In addition to the District's vision for educational programs, the planning team worked with the FPC to identify a set of goals specifically associated with the Long-Range Facility Plan. These goals were organized into topical categories by the planning team and prioritized by the FPC, via a voting process, to better understand which objectives were deemed most critical.

After gaining a deeper understanding of District need and reviewing the additional goals developed by teachers, students, and the community during outreach sessions, the Committee confirmed and reprioritized the planning goals.

The most highly prioritized goals across all categories include:

 Provide built-in, flexible and adaptable spaces



- Provide more opportunities for occupational learning
- Provide visible sustainability (and explain why)
- > Improve traffic impact around schools
- Provide next generation project-based learning labs for science
- Create spaces that students are excited to be in
- > Provide small, collaborative spaces throughout the schools
- > Plan for safer pedestrian / bike access to school
- > Provide support spaces for teachers
- > Improve gymnasium / athletic spaces and fields
- Rethink outdoor spaces (for use during the rainy season)
- Create adaptable environments that accommodate future technology needs

Traffic and safety around the schools was a concern for the Committee. The District is committed to partnering with the City of Mercer Island to ensure any future school designs facilitate safe bicycle and pedestrian access to and through school sites and connections with City improvements off-site.

EDUCATIONAL PROGRAM

To further inform the planning process, District representatives identified need related to specific educational programs, with a focus on those needs having physical space implications that may impact the Long-Range Facility Plan.

It was recognized that all needs may not be addressed in the first phase of the Long-Range Facility Plan, therefore, those items remaining should be "kept on the radar" for future phases of work.

Educational program goals were defined for each grade level grouping:

Elementary School

- > Improve/expand special education spaces
- Improve multipurpose space by adding a gymnasium or cafeteria
- > Add shared learning areas outside of classrooms

Middle School

- > Improve/connect special education spaces
- Complete replacement project to create equitable learning spaces

High School

- Improve/increase capacity of alternative education space (Crest Learning Center)
- Provide a variety of specialized spaces to expand the College & Career Readiness (CCR) program
- > Improve older high school science labs
- Improve/expand PE and athletics spaces to provide equity and teaching space
- > Improve/expand performing arts areas
- > Improve general education spaces
- > Improve shared support areas

Support / Other Programs

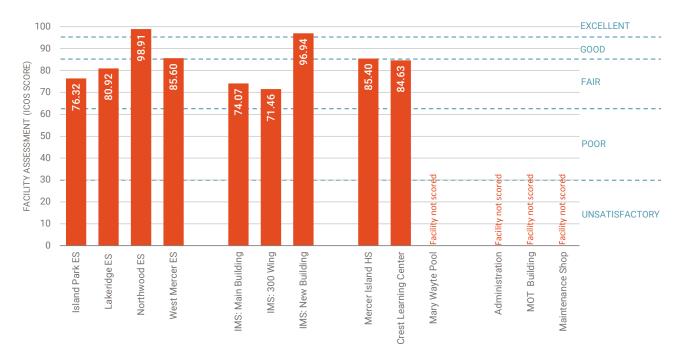
- > Relocate the Adult Transition Program out of Crest Learning Center
- > Modernize library/multimedia centers
- > Provide space for technology
- > Provide space for professional learning

A complete list of the planning goals that were developed, as well as further information about the District's educational goals, can be found in Section 02: Vision & Educational Program.

SECTION 01 | EXECUTIVE SUMMARY

CHART:

Facility Assessment Comparison



EXISTING CONDITIONS

Mercer Island School District's educational and support facilities vary in age, condition, and level of educational adequacy. Information about the physical condition of existing District facilities provides a metric for evaluating one component of District need.

There are currently seven school facilities in the District, including four elementary schools, one middle school, one high school, and an alternative high school. District support facilities include Mary Wayte Pool, the Administration Building, and two maintenance/transportation buildings.

The Boys and Girls Club PEAK facility is a joint-use facility that is owned by the Boys and Girls Club and situated on District-owned property. Private and charter schools on the Island are not included in this Long-Range Facility Plan. Due to the scarcity of available property on the Island, the District does not own any undeveloped sites that are in reserve for future use.

FACILITY CONDITION ASSESSMENT

A facility assessment of all District educational facilities was completed in 2018 by a separate consultant. A chart summarizing assessment scores is shown above. Recently constructed facilities, including Northwood Elementary School and the new Islander Middle School building, scored over 95 percent, indicating that they are in excellent condition.

All other District facilities, which are older, still had relatively high assessment scores, all between 71 and 85 percent. West Mercer Elementary School and Mercer Island High School fall into the "good" condition category and all other facilities are in the "fair" condition category. This is likely due to substantial renovation of these facilities completed during the mid-nineties, and because they have been well maintained by the District. None of the facility assessment scores indicate a need to replace a school facility solely based on its condition.

SAFETY & SECURITY

Specific elements that impact safety in the District were also evaluated, including seismic condition, security, water and air quality, and transportation.

The seismic evaluation indicates that collapse is not anticipated at any District facility, however significant damage, that may not be repairable, should be expected at the older facilities. Security measures, such as secure entrances and cameras, have been implemented across the District. Water and air quality testing has been done and is ongoing, and there are no issues related to this at any District school facilities.

Safe transportation routes for pedestrians, bicycles, automobiles, and buses is a necessity for the District, including access to, from, and between school facilities, as well as pick-up, drop-off, service access, sidewalks, bicycle storage, and parking areas. Transportation conditions vary at each school. Elements that are within District property boundaries, such as parking and drop-off areas, are incorporated into the Long-Range Facility Plan and can be addressed by the District. Larger systemic issues, such as connections between schools and neighborhoods, require coordination with other jurisdictional entities on the Island and are not under District control.

EDUCATIONAL ADEQUACY

Educational adequacy addresses the following question:

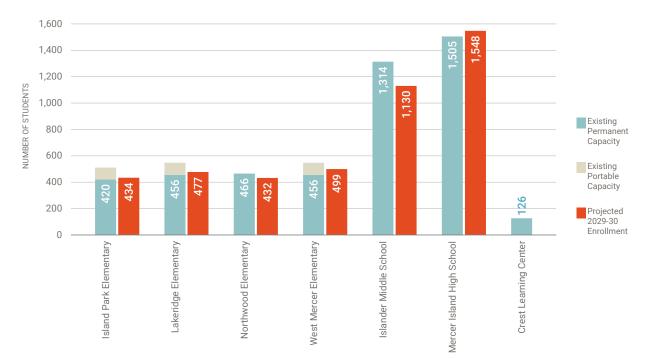
How well does the facility create a successful environment for learning, inspiring, and building community?

Although educational adequacy can be difficult to quantify, a 2010 Study and Survey of District facilities evaluated

SECTION 01 | EXECUTIVE SUMMARY

CHART:

Existing District Capacity & Projected 2029 Enrollment (Middle Range)



this facility-related consideration in a number of different areas, including building configuration and environmental components, such as natural light and ease of wayfinding.

The Long-Range Facility Plan process updated and expanded this information through building tours, Principal interviews, and outreach meetings with teachers, staff, and students who use the buildings every day. In addition, the area per student was evaluated for all existing school facilities in the District, as another metric for educational adequacy.

Detailed information relating to facility condition assessment, safety and security, and educational adequacy is included in Section 03: Existing Conditions.

CAPACITY & ENROLLMENT

Mercer Island School District currently serves over 4,300 students in kindergarten through 12th grade. The success of the District's educational programs is fostered in part by the ability of each school to house the students, teachers, and spaces needed for effective teaching and learning.

EXISTING CAPACITY

Each school facility has an established capacity, based on the number of

teaching stations in the building, a target number of students per classroom, and a scheduling utilization factor.

Using an agreed upon methodology for establishing capacity at each grade level, the planning team determined that Mercer Island School District has a total permanent capacity of 4,743 seats, including 1,798 at the elementary level, 1,314 at the middle school level, and 1,631at the high school level, including the Crest Learning Center.

ENROLLMENT FORECASTING

Enrollment forecasts are used, in part, to determine whether a school district will need to add or modify facility space to meet educational program or configuration needs. The District received updated student enrollment projections, prepared by Educational Data Solutions LLC, in December 2019. The 10-year enrollment forecast integrates District enrollment trends with local area population, enrollment, and housing trends.

District enrollment projections for the next 10 years indicate an overall increase in student enrollment at the elementary level, and relatively flat enrollment at the middle and high school levels. As shown in the chart above, it is anticipated that District enrollment will flatten out and even decline somewhat between 2020 and 2025, with enrollment growing again in the latter part of the forecast period (2025 to 2030), when more development activity and population growth is expected.

The current District enrollment is 4,387 students. Over the next ten years, total District enrollment is projected to increase by approximately 133 students, resulting in a total of 4,520 total students by 2029-30. This is an overall increase of approximately three percent districtwide.

ACCOMMODATING ENROLLMENT

The chart above compares existing capacity and projected enrollment for each school in the District. This comparison assumes current school boundaries, programs, and conditions.

Based on this analysis, all of the District's school facilities have enough existing capacity to accommodate projected enrollments through 2029-30, including both existing permanent and existing portable capacity. At the high school level, projected enrollment can be accommodated at both the MIHS and Crest Learning Center facilities, which together accommodate 1,631 students.

Additional capacity and enrollment information is included in Section 04: Capacity & Enrollment.



FPC Planning Exercise

LRFP GUIDING PRINCIPLES

APPROACH

- Elementary Schools: replace or fully modernize, depending on cost implications
- > Middle School: replace remaining buildings rather than fully modernize
- > High School: implement renovation/ limited modernization with an emphasis on educational adequacy/ program need
- > Crest: relocate and expand in a new location that is closer to the high school (and consider co-location with administration or other programs)
- Implement needed repairs as necessary at all facilities, to maintain operations

PRIORITIZATION

- > Do something at every grade level as soon as you can
- > Island Park Elementary should be one of the first three projects; prioritization for remaining elementary schools is West Mercer and then Lakeridge
- > Islander Middle School should be one of the first three projects
- The first projects at the high school level include CCR, Shared Support, and Crest/ Administration
- Prioritize improvement projects that have the primary purpose of supporting education

PLAN DEVELOPMENT

The FPC engaged in three planningfocused meetings, to develop and refine the Long-Range Facility Plan. In addition, outreach sessions were held during the planning process and garnered specific input related to District need. Feedback from District teachers and staff, students, and the broader Island community informed the work of the Committee and the development of the Plan.

PROJECT IDENTIFICATION & APPROACH

After establishing planning goals, and gaining an understanding of the District's vision, educational program, existing facility conditions, and projected enrollment growth, the Committee identified potential projects to address District need. Through a series of exercises, members developed a preferred approach to address the need at each identified facility, balancing District need and anticipated community support. Approaches that were considered for each facility included: no work, renovation, major modernization (upgrade to 50-year building), educational adequacy improvements, additions, and full replacement with a new facility.

PLAN DEVELOPMENT

Committee input regarding planning goals and approaches was used to develop a list of major projects that address District need. The projects include replacement of the three older elementary schools (Island Park, West Mercer, and Lakeridge), the older middle school buildings (100/200 and 300 Buildings), and Crest Learning Center, as well as a number of program-related improvement projects at the high school. Support facilities that were determined to need replacement at some point in the future were the administration building and Mary Wayte Pool.

Using this set of projects as a base, Committee groups developed two rounds of plan scenarios. The projects were organized along a priority timeline by each group, The second round scenarios, were used as the basis for moving forward in the planning process.

PLAN PRIORITIZATION

Consolidation of plan approaches was used as means to streamline the prioritization process and identify a preferred plan approach. Three strategies were explored In order to facilitate consolidation of the five Committee plan proposals:

- > Focus on major projects
- > Combine high school level projects
- > Adjust location of "outliers"

Guiding Principles

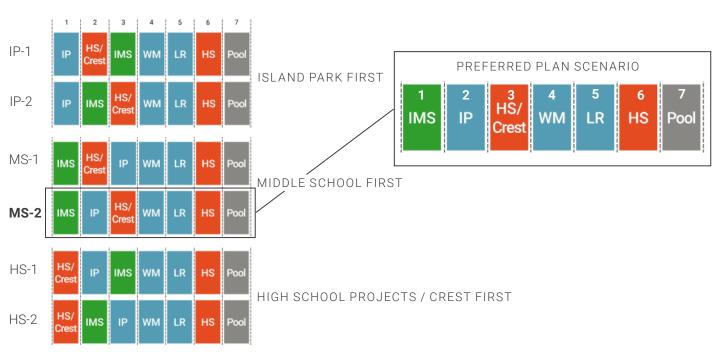
The Long-Range Facility Plan guiding principles are a set of basic tenets which evolved out of the Facility Planning Committee's plan proposals. They can be used to inform and guide subsequent planning discussions. The guiding principles, shown above, are separated into two categories, those that relate to the Committee's overall "approach" to projects and those that relate to the "prioritization" of projects.

As plan development progressed, the Committee focused on five plan alternatives. An additional approach (IP-2) was added to the five scenarios, to align with the first guiding principle: "Do something at every grade level as soon as you can" and include all possible priority orders for the first three projects.

With the addition of this option, the six scenarios fall into three basic groups (shown opposite): those that prioritized replacement of Island Park Elementary School first (IP-1 and IP-2), those that prioritized completion of Islander Middle

DIAGRAM:

Long-Range Facility Plan Scenarios



School first (MS-1 and MS-2), and those that prioritized MIHS projects and Crest first (HS-1 and HS-2).

Committee members were asked which sequence of projects they most supported, considering the following criteria:

- > Facility condition (Which facility is in the worst condition?)
- > Greatest benefit (Which learning environment is the worst?)
- > Broadest impact (Which project impacts the most students?)
- > Committee goals (Which project best aligns with the top planning goals?)
- > Community support (Which projects will make sense and resonate with the broader community?)

The MS-2 planning scenario had the most Committee support, with 73% of the votes. (85% supported doing the middle school first, including votes for both MS-1 and MS-2.)

PREFERRED PLAN SCENARIO

The Long-Range Facility Plan scenario, illustrated in the above diagram and described on the following page, represents the preferred approach with regard to the prioritization of District need over the next ten years and beyond. It is the culmination of an in-depth planning process conducted by the Mercer Island School District, Board of Directors, FPC, and the broader Island community.

The MS-2 plan scenario selected by the FPC prioritizes Islander Middle School first, replacement of Island Park Elementary School second, and Mercer Island High School / Crest Learning Center projects third. These projects are followed by West Mercer, Lakeridge, the remaining high school projects, and finally Mary Wayte Pool. A detailed description of the preferred plan scenario is included on the following page, and additional information about the planning process and results is included in Section 05: Plan Development.

It is important to note that while the preferred plan scenario identified the order of projects, and broadly outlines their potential scope, the specific timing of each project and how they may be grouped together in phases has not been determined as part of this Long-Range Facility Plan.

NEXT STEPS

Due to the Coronavirus pandemic, the second round of community outreach meetings were not held or incorporated into the Long-Range Facility Plan process. When the District and the community are ready to move forward with large-scale construction, outreach will be made to update the plan as needed, as well as to gather feedback about the LRFP recommendations. This effort will provide additional input on proposed Long-Range Facility Plan scenarios, particularly with regard to confirmation of the first three projects.

It is anticipated that the District, School Board, and community will reconfirm the Long-Range Facility Plan prior to moving forward with any future capital measure. At that time, further development of project scope and cost will be completed. One or more projects may be planned in the same phase, depending on level of community support and funding parameters.

LONG-RANGE FACILITY PLAN: PREFERRED PLAN SCENARIO

PROJECT 1: ISLANDER MIDDLE SCHOOL PHASE II

Replacement of the remaining older middle school buildings (100/200 and 300) to complete the middle school facility.

- > 1,300 student capacity
- > Plan flexibility for future expansion

PROJECT 2: ISLAND PARK ELEMENTARY SCHOOL

Replacement of the existing elementary school facility.

- > 450-500 student capacity
- > Plan flexibility for future expansion

PROJECT 3: MERCER ISLAND HIGH SCHOOL (VARIOUS PROJECTS) & CREST LEARNING CENTER

Addition and/or improvement projects that may include:

College & Career Readiness (CCR)

- > New hands-on (STEM/ maker space / life skills) lab(s) and support
- > Robotics lab expansion
- > Broadcast studio expansion
- > Art room expansion
- > New journalism classroom
- > Other specialized learning areas

Science

> Improvements to older existing science labs with the goal of equivalency to newer science labs

Performing Arts

- > Theater upgrade and/or expansion
- New dedicated teaching space for drama, dance, and performance (black box theater)

PE / Athletics

- Expansion to create equitable practice space, locker rooms, and team rooms
- > Dedicated PE classroom
- > Gymnasium improvements
- > Field improvements

General Education

- > Improvements to existing general classrooms
- > Technology and aesthetic upgrades
- > Shared learning / study areas
- Increase flexibility and opportunities for collaboration

Shared / Support Areas > Library modernization

- > Counseling improvements
- > Teacher offices / support
- > New gender-inclusive restrooms
- > Parking improvements

Crest Learning Center

- > Replacement of existing Crest facility
- > 200 student capacity (150% of existing size)
- > Add a second large greenhouse

PROJECT 4: WEST MERCER ELEMENTARY SCHOOL

Replacement of existing elementary school facility.

- > 450-500 student capacity
- > Plan flexibility for future expansion

PROJECT 5: LAKERIDGE ELEMENTARY SCHOOL

Replacement of existing elementary school facility.

- > 450-500 student capacity
- > Plan flexibility for future expansion

PROJECT 6: MERCER ISLAND HIGH SCHOOL: VARIOUS PROJECTS

Remainder of Mercer Island High School projects that were not previously completed in Project 3.

PROJECT 7: MARY WAYTE POOL

Replacement of the existing Mary Wayte Pool facility.

CHAPTER 03 DEMOGRAPHIC DATA

Demographic data including population projections and projected economic growth and development.

DESCRIPTION

This chapter includes the following additional information:

- > OSPI Cohort Survival Enrollment Projection Report 1049
- Form 1066 Students with Disabilities Enrollment
- Mercer Island School District Enrollment Trends and Projections Report

SUMMARY

Demographic and enrollment projections for the Mercer Island School District have been developed utilizing the following information: Mercer Island School District Enrollment Trends and Projections, dated December 2019, as prepared by William L. (Les) Kendrick, Educational Data Solutions, LLC.

This report is included on the following pages, and includes population projections and projected economic growth for Mercer Island, as well as 10year district enrollment projections.

DISTRICT ENROLLMENT PROJECTIONS

District enrollment projections for the next 10 years indicate an overall increase in student enrollment at the elementary level, and relatively flat enrollment at the middle and high school levels. It is anticipated that District enrollment will flatten out and even decline somewhat between 2020 and 2025, with enrollment growing again in the latter part of the forecast period (2025 to 2030), when more development activity and population growth is expected.

The current District enrollment is 4,387 students. Over the next ten years, total District enrollment is projected to increase by approximately 133 students, resulting in a total of 4,520 total students by 2029-30. This is an overall increase of approximately three percent districtwide.

OSPI COHORT SURVIVAL ENROLLMENT PROJECTION - REPORT 1049

School District: Mercer Island

County: King

Educational Service District: ESD 121

SFO Region: Northwest

Grade	2014 Actual	2015 Actual	2016 Actual	2017 Actual	2018 Actual	2019 Actual	Survival Percentage
Kindergarten	246	233	242	269	242	236	
Grade 1	287	273	256	280	296	259	110.71
Grade 2	317	305	298	261	294	302	104.87
Grade 3	317	343	324	313	276	303	105.65
Grade 4	361	326	356	336	321	307	104.82
Grade 5	358	356	348	367	344	331	102.78
Grade 6	360	378	363	371	382	358	104.45
Grade 7	358	369	398	367	371	388	102.09
Grade 8	374	356	363	408	384	393	102.17
Grade 9	364	398	368	368	403	386	102.08
Grade 10	333	368	412	367	368	407	101.06
Grade 11	364	332	361	403	361	362	98.46
Grade 12	319	334	317	340	398	353	95.58
Total	4,358	4,371	4,406	4,450	4,440	4,385	

Grade	2020 Projected	2021 Projected	2022 Projected	2023 Projected	2024 Projected	2025 Projected
Kindergarten	245	245	245	245	246	246
Grade 1	261	271	271	271	271	272
Grade 2	272	274	284	284	284	284
Grade 3	319	287	289	300	300	300
Grade 4	318	334	301	303	314	314
Grade 5	316	327	343	309	311	323
Grade 6	346	330	342	358	323	325
Grade 7	365	353	337	349	365	330
Grade 8	396	373	361	344	357	373
Grade 9	401	404	381	369	351	364
Grade 10	390	405	408	385	373	355
Grade 11	401	384	399	402	379	367
Grade 12	346	383	367	381	384	362
Total	4,376	4,370	4,328	4,300	4,258	4,215



OFFICE OF SUPERINTENDENT OF PUBLIC INSTRUCTION School Facilities and Organization Old Capitol Building PO BOX 47200 OLYMPIA WA 98504-7200 (360) 725-6265 TTY (360) 664-3631

ESD	CO	DIST
121	17	400

ENROLLMENT COUNT 2020–21

School District Mercer Island School District 17400

1. ENROLLMENT REPORT AS OF LATEST OCTOBER 1 COUNT

Enter the number of students with developmental disabilities (as reported on actual October headcount enrollment) who are assigned to a specially designated self-contained classroom for at least 100 minutes per school day. Enter pre-kindergarten students with disabilities at 50 percent of the actual headcount enrollment. Reference: WAC 392-343-035.

Grade	October Enrollment per above definition
Pre-Kindergarten	31
Kindergarten	12
1	16
2	19
3	26
4	19
5	23
6	26
7	38
8	36
9	39
10	49
11	20
12	37
Total	391

11/30/2020

SIGNATURE OF SUPERINTENDENT/DESIGNEE

DATE

Return to: School Facilities and Organization Office of Superintendent of Public Instruction Old Capitol Building PO BOX 47200 OLYMPIA WA 98504-7200

Fax Number: (360) 586-3946

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Mercer Island School District Updated Projections

Prepared by

William L. ("Les") Kendrick Ph.D. Educational Data Solutions, LLC P.O. Box 9693 Seattle, WA 98109

Educational Data Solutions, LLC December 2019

Introduction

The following is an update of an enrollment forecast that was completed for the Mercer Island in early 2017. Since the 2017 update some demographic conditions have changed. Enrollment growth in King County, overall, has slowed in the past two years with more families opting to live in the outlying regions of King County, and even further north and south in Pierce and Snohomish County. In addition, births in King County were lower in 2017 and 2018, primarily due to women having fewer children. We do not know if this is an enduring or temporary trend. We should also note that home sales and prices in King County and Mercer Island were on an upward swing between 2012 and 2017, but recent data shows a slowing of home sales in Mercer Island and the County as a whole, perhaps because prices have increased so rapidly.

Perhaps as a result of these trends Mercer Island's enrollment growth has slowed and even declined some over the past two years. At this time we expect enrollment in Mercer Island to flatten out and even decline some between 2020 and 2025, We expect enrollment to start growing again in the latter part of the forecast period (2025 to 2030) when we expect more development activity and population growth.

Introduction

Given the current demographic conditions and the uncertainty inherent in predicting the future we recommend that the District give ample attention, not only to the main forecast, but also to the low and high alternatives that show what might happen if population and housing growth in Mercer Island and King County were to be lower or higher than what we have assumed in our main model.

It is possible that Mercer Island could see larger enrollment declines in the near term than we have assumed in the medium range forecast, given recent demographic trends. We believe, however, that looking out over the decade it is also likely that these declines will eventually cease with a turn toward the more positive trend that we see in the medium range forecast. The comprehensive plan from the City speaks to the need for additional housing in the City and we believe that given continuing growth in the Puget Sound, additional housing and population growth will eventually work its way into future city planning, especially with the extension of light rail across the the region.

The assumption of greater population and housing growth between 2025 and 2030 is one of the guiding assumptions of our forecaset. This forecast also assumes that we will see continuing population growth in King County and the Puget Sound, but that the growth trends going forward will be more modest than the trends we saw between 2012 and 2017 when Seattle and the region was booming. Amazon is reported to be finishing their hiring for the Seattle area over the next one to two years. For this reason we may see more modest population growth trends in the near term, consistent with the County forecasts obtained from the State of Washington.

3

Introduction

It is possible, of course, that Amazon or some other large employer in the region will increase their hiring at a more rapid pace than expected resulting in continuing large population gains over the next decade. The high range forecast in this document recognizes that possibility and the District should give some consideration to what steps might be taken if enrollment were to trend higher than expected.

As a general rule enrollment trends on the Island are dependent on either the turnover of existing homes, resulting in net gains of families with children, or the development of new housing that brings additional families with children to Mercer Island. Home sales and new home development are two critical factors to keep an eye on in gauging the potential for future growth.

The next section of this report provides an executive summary of our findings in the form of bullet points. After this presentation we present specific data on enrollment, births, population, and housing. Each section is preceded by a set of bullet points that highlight the important information to keep in mind when viewing the charts and tables. The final section presents a series of alternative forecasts that were used to help us develop our main forecast. After this, there is a brief presentation of the methodology used to created the forecast and detailed numbers by grade level for the low, medium, and high range forecast options that are recommended for planning.

- Enrollment in the Mercer Island School District is tracking below the medium range forecast that was completed in 2017.
- Enrollment in the District has declined in the past two years.
- The 2017 forecast predicted that elementary enrollment growth would slow some between 2017 and 2020, but it has slowed even more than expected with smaller than expected kindergarten classes.
- A look at the data suggests that while the District still sees more families with preschool age children move in than move out of the District prior to those children reaching school age, the District's share of the kindergarten population has declined in the past two years. This suggests that either more families than usual are leaving before their children reach school age, or fewer families with preschool age children are moving in (or, of course, a combination of the two).
- K-12 enrollment growth in King County has slowed considerably over the past two years compared to the period between 2012 and 2017.

- There is evidence in the latest Puget Sound enrollment data that some families with children have been migrating to the outlying regions of King County and even into Kitsap, Pierce and Snohomish County where housing is more affordable.
- This is not a universal trend, however, since there are still affluent families opting to live in areas that are close to Seattle and other urban job centers. Lake Washington saw tremendous enrollment growth over the past year and the Seattle School District saw a net gain of over 600 students.
- There are still families migrating to the Puget Sound who are relatively affluent and can choose to live in more expensive areas, but this population is generally smaller than the population of families that are opting to live in the outlying regions.
- Births in King County in 2017 and 2018 were lower than the numbers that we saw between 2012 and 2016. This is primarily due to women having fewer children. As a result of this trend, we have lowered our long range forecast of the King County K-12 population, predicting less growth than the model that we were using for the 2017 forecast.

- The lower birth forecasts means that we are predicting less K-12 growth over the next decade in King County and Mercer Island than the model completed in 2017.
- Home sales and prices have also started to moderate and even decline some after the rapid increase that we saw between 2012 and 2017. A continuing drop in prices could eventually result in more sales and more population growth of families with children on the Island, especially if home prices moderate a bit.
- We are still predicting that King County K-12 enrollment will grow over the next decade but due to the recent change in births we are predicting less growth and we expect continued migration to more affordable areas in King County and even to the outlying regions in Kitsap, Pierce and Snohomish County by residents that are new to the region.
- In Mercer Island specifically, we are predicting that the recent trends will result in less growth and even enrollment declines in the near term (2020 to 2025) with enrollment eventually trending up in the latter part of the forecast period (2025 to 2030). During the latter period we expect the extension of light rail to spur some additional development on the Island resulting in improving K-12 enrollment trends. This assumption is consistent with the City's comprehensive plan goals for more affordable housing options in the future.

- As always, there is uncertainty when predicting the future. For this reason we have developed low and high alternatives to our medium range forecast which show what might happen if population and housing growth were to be lower or higher than what we have assumed in our medium range model.
- As noted in the introduction, K-12 enrollment growth on the Island is dependent on the turnover of existing homes or the development of new housing which brings more families with children into the District. Home sales and new home development are critical factors to keep an eye on when planning for the future.
- The District should also pay particular attention to Kindergarten enrollment. There are still some fairly large birth cohorts projected to enter the schools over the next couple of years (2020 and 2021). If the District's share of the birth cohort continues to drop, enrollment will likely drop more dramatically than what we have assumed in the medium range forecast. On the other hand, if the District's share stabilizes or shows a marked increase, enrollment may well remain at its current level or even increase some.

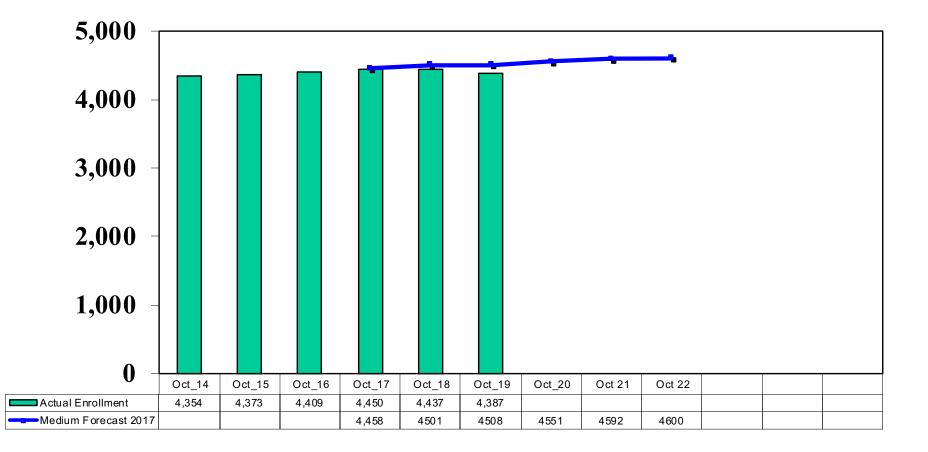
• Although we are predicting some decline in middle school enrollment in the near term, this is primarily due to the size of the cohorts that are rolling in at 5th grade (in some years smaller than usual) or rolling out at the 8th grade (in some years larger than usual). In general, the District sees a net increase at the secondary grades from migration (more families moving in than out) suggesting that the District may be a "move-up" choice for families who are looking to buy a bigger home when their children are older. This is why the turnover of new homes or the development of additional housing are critical factors for enrollment trends.

Enrollment Trends Mercer Island and King County

Enrollment Trends

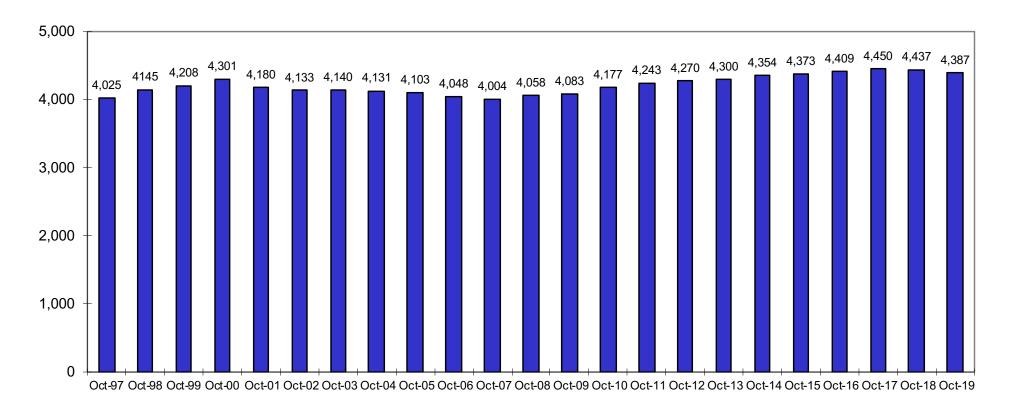
- Enrollment in the Mercer Island School District is tracking below the projection completed in 2017.
- Enrollment growth in King County has slowed over the past two years. Based on the most current year of enrollment data, K-12 enrollment in the Puget Sound is continuing to increase with more growth migrating to Kitsap, Pierce, and Snohomish County.
- Mercer Island's share of the King County K-12 population has declined over the past five years, indicating the the District is growing at a slower rate than the rest of the County.
- Based on the latest birth and population forecasts for King County, we expect K-12 enrollment growth in the County to continue growing over the next decades.
- Given the latest birth data (see the section on births) we are, however, predicting less K-12 enrollment growth in King County and Mercer Island over the next decade than we were predicting in 2017.

Forecast from 2017 Compared to Actual Enrollment

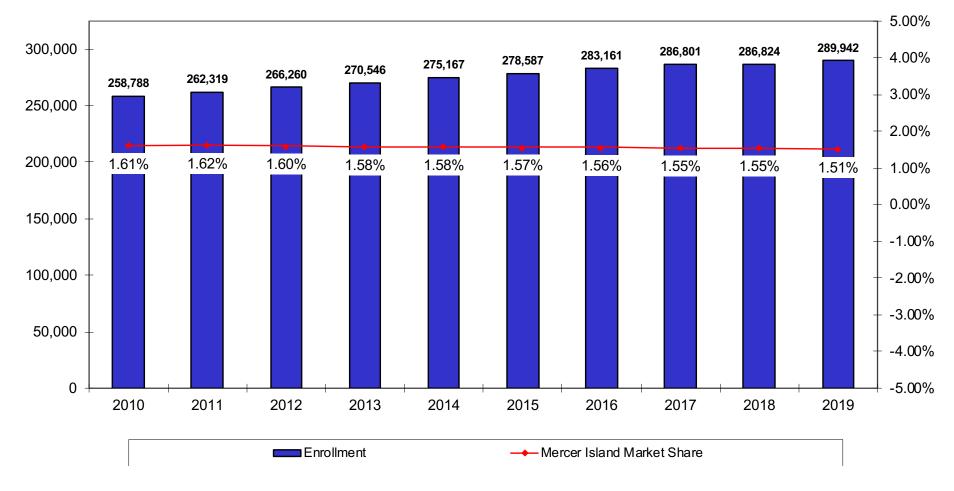


District Enrollment Trend

P223 Enrollment (October) Does Not Include Full-Time Running Start Students or Students Enrolled in Open Doors

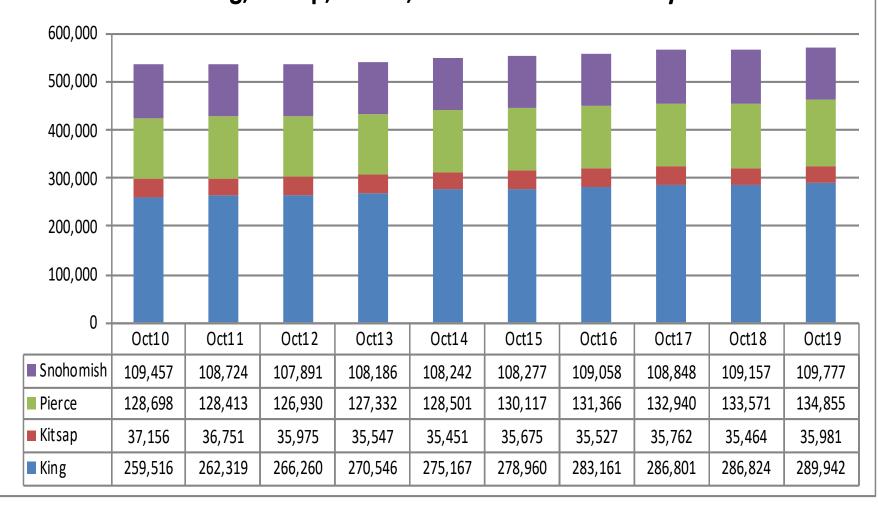


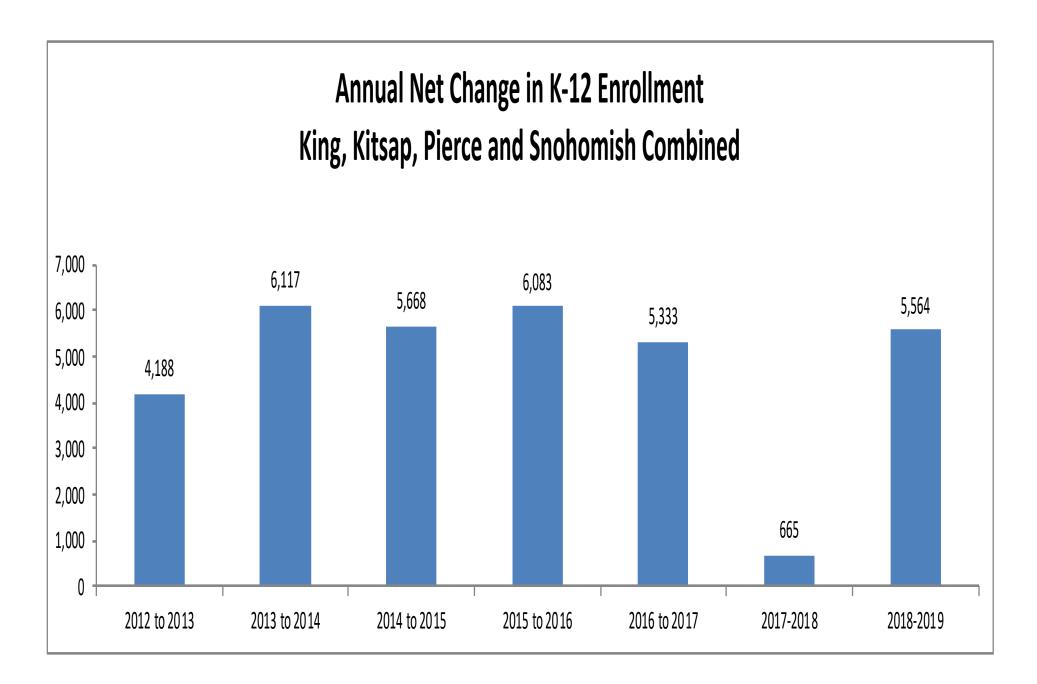
King County Public Schools Enrollment Trend and Mercer Island Market Share



Trends and Projections – Dec 2019

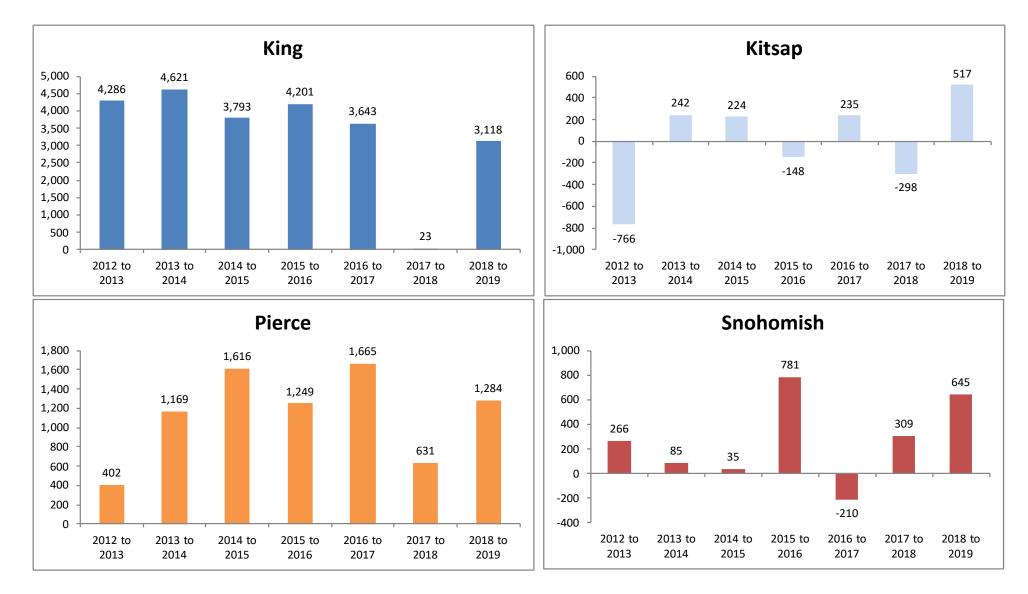
Public School Enrollment for the Puget Sound King, Kitsap, Pierce, and Snohomish County



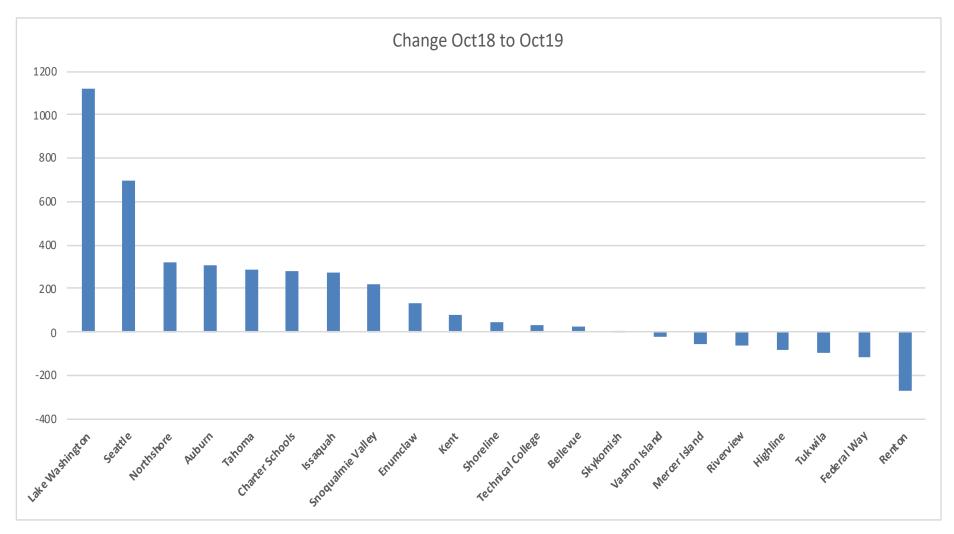


Trends and Projections – Dec 20196

Annual Net Change in Enrollment by County Since 2012 (Numbers may have changed since the original reporting date)



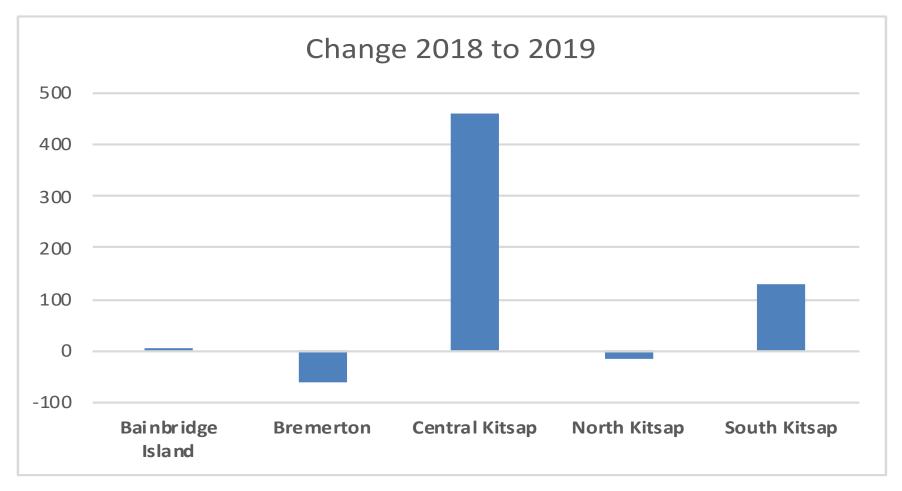
King County Public School Districts Change in Enrollment Between Oct 2018 to Oct 2019



Trends and Projections – Dec 2019

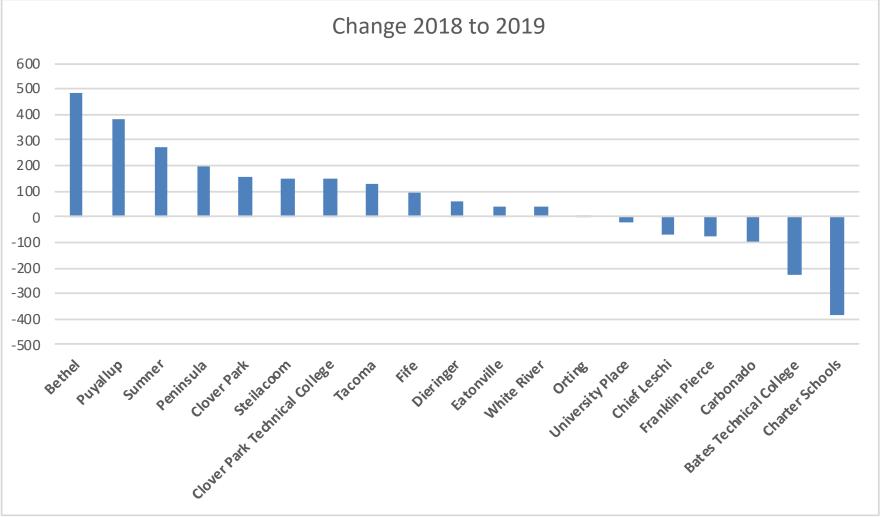
Kitsap County Public School Districts Change in Enrollment Between Oct 2018 and Oct 2019

Please Note: Bremerton's enrollment includes the Skills Center



Trends and Projections - Dec 2019

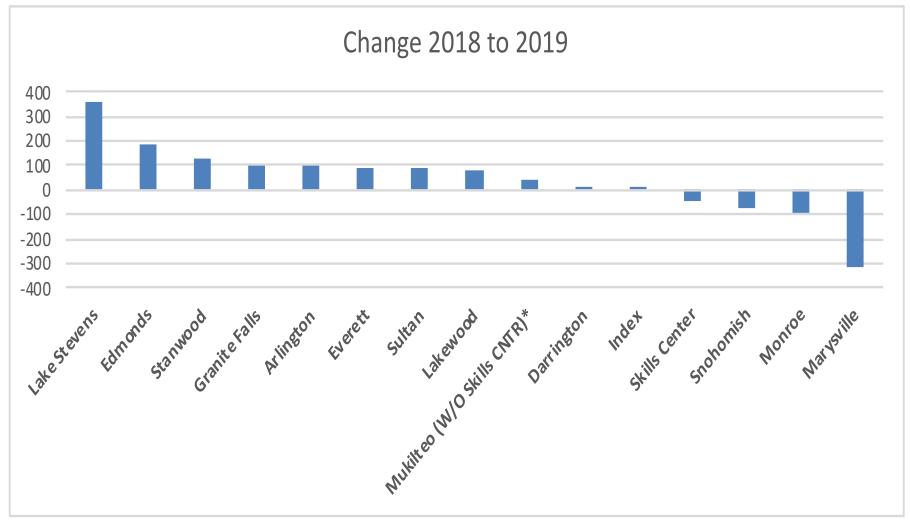
Pierce County Public School Districts Change in Enrollment Between Oct 2018 and Oct 2019



Trends and Projections – Dec 2019

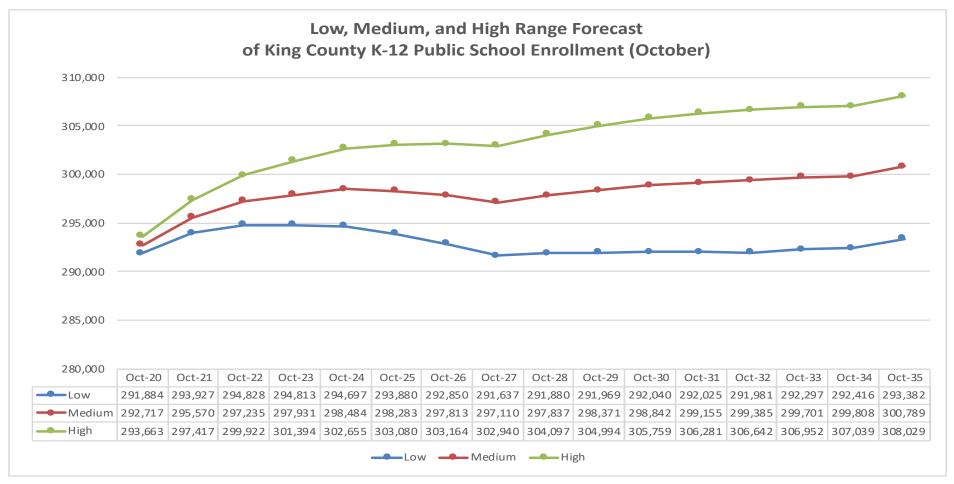
Snohomish County Public School Districts

Change in Enrollment Oct 2018 and Oct 2019



Forecast of the King County K-12 Population

Using Cohort Survival, Actual Births, Birth Forecasts and Projected Changes in Population Growth During Certain Time Periods



Enrollment Patterns Mercer Island School District

Note: The bullet point comments in this section are the same as those in the 2017 report. Only the data has been updated. The comments still apply.

Enrollment Patterns

- Grade progression rates show the net gains or losses that occur when families with children move in and out over the course of a year. A rate greater than one indicates a net increase and a rate less than one indicates a net loss.
- To create a grade progression rate you divide the enrollment at a particular grade (say second grade) by the enrollment at the prior grade from the previous year (say first grade). These are also known as cohort survival ratios. This is the method that the State facilities department uses when doing forecasts for all school districts in the State.
- In Mercer Island the cohort survival/grade progression rates are greater than one at most grades indicating that more families with children move in than move out over the course of the year at most grades.
- The exception to this pattern occurs mostly at the 11th and 12th grade where dropouts, or students opting for full-time Running Start programs can sometimes lead to net losses in enrollment.

Enrollment Patterns

- Grade progression rates do not apply to kindergarten since there is no previous grade.
- At the kindergarten level we can compare enrollment in a given year to births that occurred five years prior. We can compare enrollment to the County births to get a sense of overall market share in the County.
- We can also compare enrollment to births on Mercer Island.
- Kindergarten enrollment generally exceeds the number of births on the Island that occurred five years prior to each enrollment year. This indicates that the number of families with preschool age children who move into the District over a five year period generally exceeds the number who move out.
- Because many families move in at the secondary level the high school graduating classes are generally substantially larger than the following year's kindergarten class. The District will only grow if it sees larger kindergarten classes or large net gains of students at the continuing grades.

Grade Progression Rate Example

- Rates for Different Grade Levels:
 - Elementary: K-4 moves into Grades 1-5
 - Middle schools: Grades 5-7 move into 6-8
 - High school: Grades 8-11 move into 9-12
 - A ratio greater than 1 indicates a net gain from families moving in over the course of a year; less than 1 indicates a net loss (more moving out than moving in).

Grade	<u>2007</u>	<u>2008</u>
K	232	254
1	276	270
2	294	290
3	255	305
4	311	281
5	<u>279</u>	<u>318</u>
	3654	3726
	K-4 Total	Gr1-5 Total

K-4 Total	Gr1-5 Total	<u>Ratio</u>
1368	1464	107%

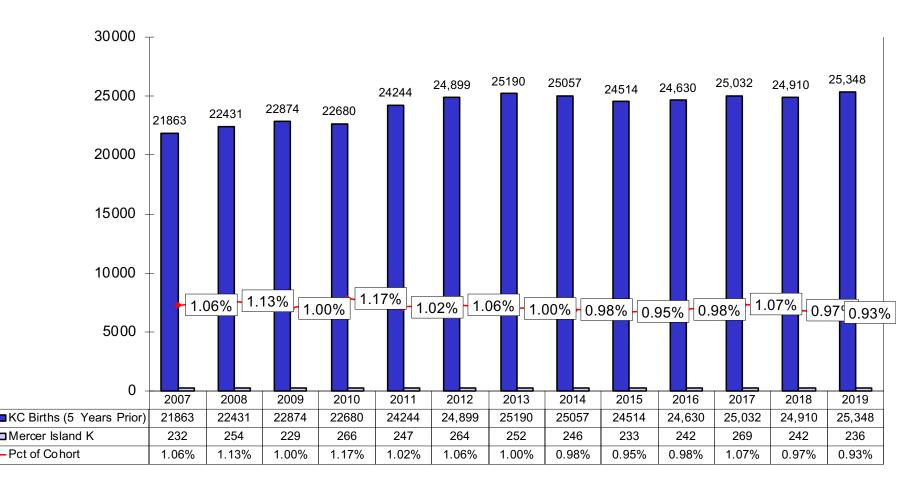
Average Grade Progression Rates (3, 5, and 10 Year Averages) Cohort Ratio Averages for the Mercer Island School District



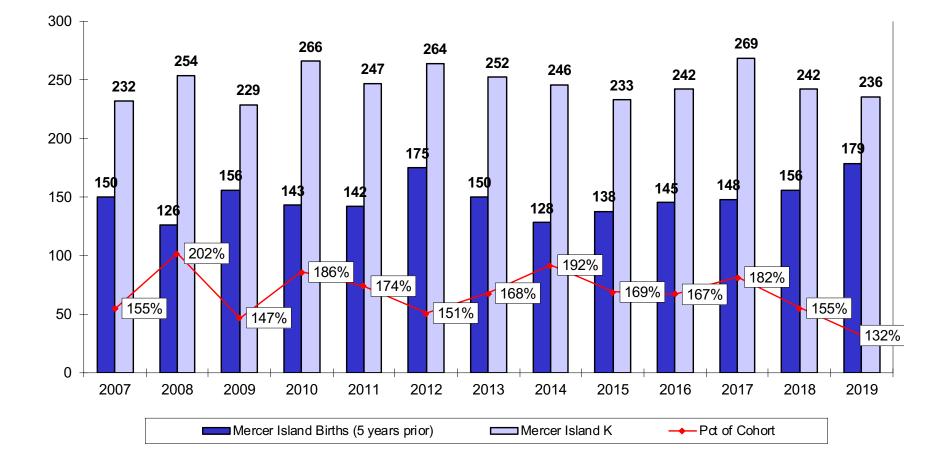
Trends and Projections – Dec 2019

Mercer Island

K Enrollment as a Percent of King County Births



Mercer Island K Enrollment as a Percent of City Births



Trends and Projections – Dec 2019

Birth Trends

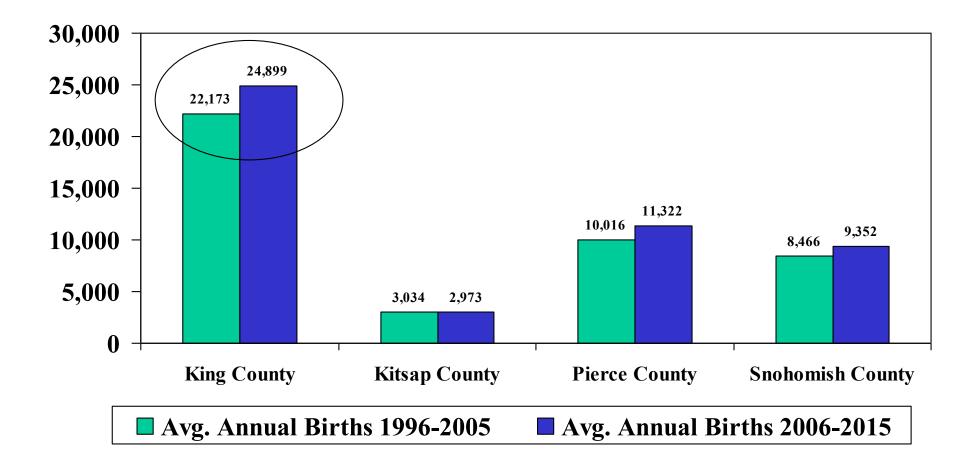
Births and Enrollment

Key Points and Highlights

- There were approximately 2,700 more births per year on average in King County between 2006 and 2015 than in the previous decade (1996 to 2005). This trend continued into 2016, but births dropped to a lower than expected level in 2017 and 2018, primarily because women are having fewer children.
- Based on the latest births, fertility rates, and subsequent birth forecasts we expect a lower K-12 enrollment growth trend in King County over the next decade than we were predicting in 2017.
- We still expect overall kindergarten and elementary enrollment in the County to grow over the next few years, as the recently larger birth cohorts enter the schools.
- Comparing City of Mercer Island births to Kindergarten enrollment five years later we can observe that more families with preschool age children move in, than move out, of the City prior to the children reaching school age. The District's share of the kindergarten population has dropped, however, in the past two years.

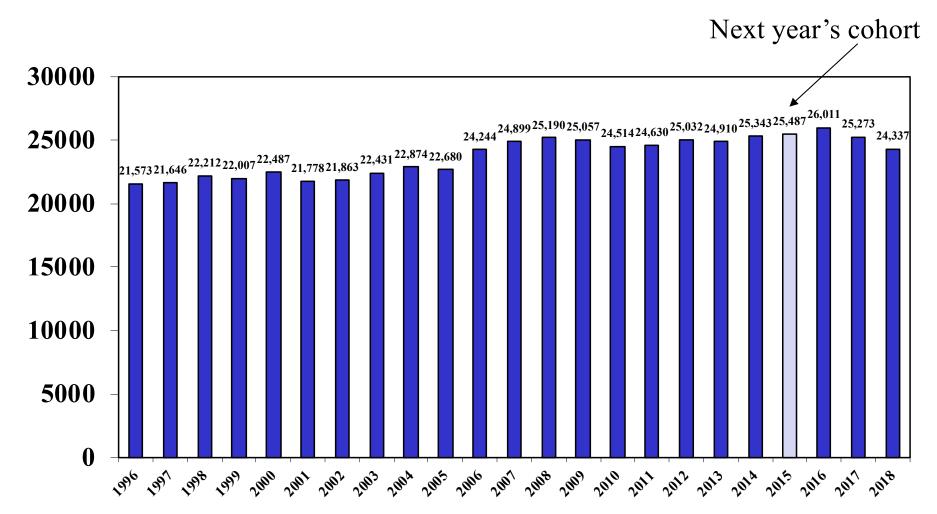
Average Annual Births by County

Source: State of Washington Department of Health Birth Files



King County Births

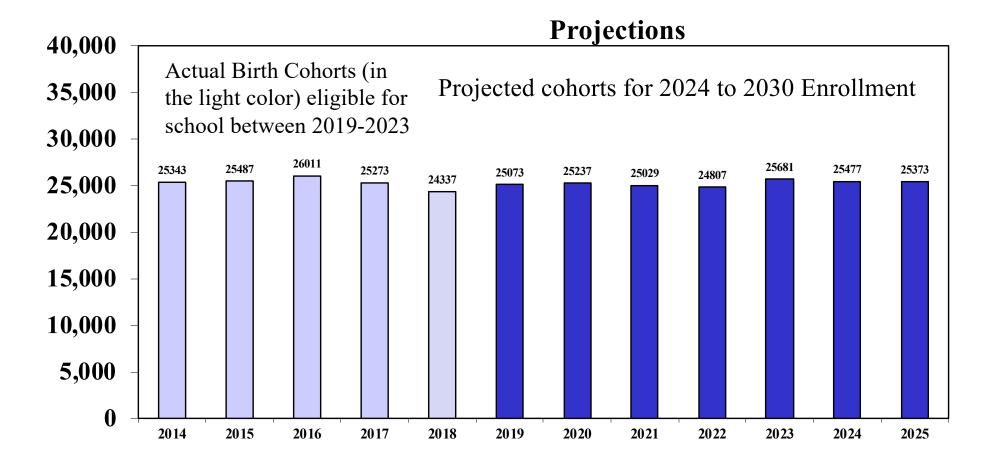
Source: Washington State Health Department



Trends and Projections – Dec 2019

King County Birth Projections

(Based on the Average of 2016 to 2018 Fertility Rates and Projected Growth in Females in Their Child-Bearing Years Using the OFM Medium Range Population Forecast)



Population Trends

Population Trends

- The population of King County has been growing at a faster pace than expected between 2012 and 2019. Growth did slow some between 2017 and 2018 but the estimated net population gain in 2019 was similar to the large gains we saw between 2014 and 2017.
- Much of this growth has been driven by a strong economy anchored by extensive hiring at Amazon. The company is expected to reach its hiring goal in the Seattle area over the next one to two years. After that time period they are expected to mostly maintain current employment levels (this is based on newspaper reports about the company rather than first hand information).
- The State is predicting that population growth in King County will be more moderate over the next decade compared to the trends that we saw over the past decade.
- We expect Mercer Island to grow at a lower rate than the overall County over the next decade.

Population Trends

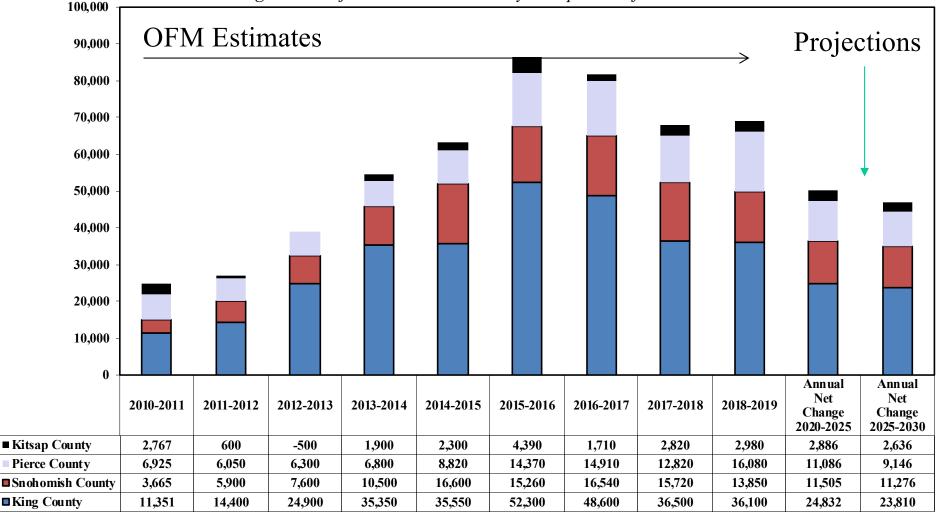
- We developed low, medium, and high range population forecasts for the District based on information about projected growth in the City from the Puget Sound Regional Council.
- The Council's land use forecast assumes a growth trend that is similar to the City's comprehensive plan.
- The Council's land vision forecast from two years ago, assumes greater density is possible and thus greater population growth.
- We applied the assumed growth rates from each of these forecasts to the current estimated population in 2019 to create low and high forecasts of the District's population. We also created a medium range estimate that is in-between these two numbers.
- These population forecasts were used to help us create low, medium, and high range forecasts of the District's enrollment.

County Net Population Change and Projections Puget Sound Counties

Source: Office of Financial Management of the State of Washington

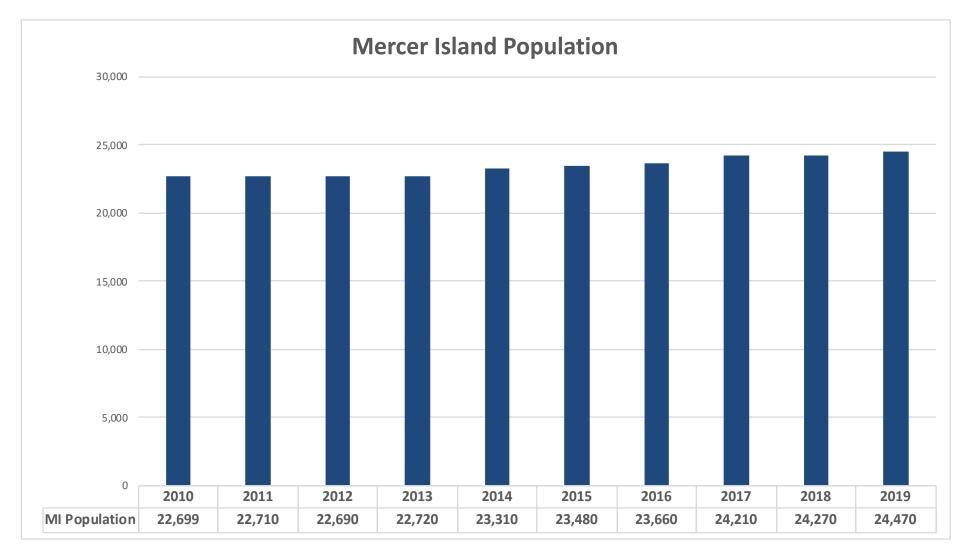
Projections for 2020, 2025 and 2030 are from the Growth Management Medium Range Projections Released by the State in December 2017.

Note: Growth Management Projections Will Most Likely Be Updated After the 2020 Census



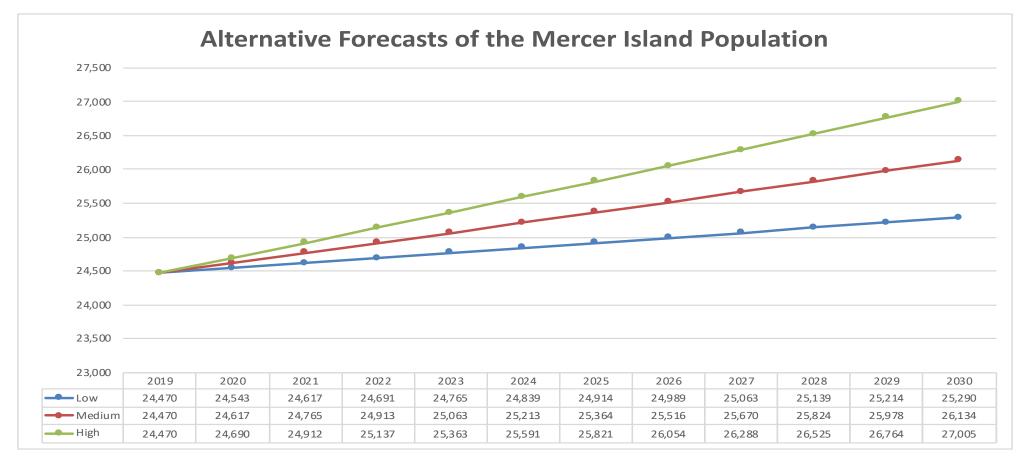
Trends and Projections - Dec 2019

Mercer Island Population Census and State Estimates



Mercer Island Resident Population Forecasts

Alternative Forecasts Based on Different Assumptions About Growth. We used the Puget Sound Regional Land Use* and Land Vision Forecasts from two years ago to help us calibrate these forecast estimates. Rather than take the specific numbers from those forecasts we took the projected growth rates and applied them to the current estimate of the population (2019) to get our low and high numbers. The medium estimate is in-between the high and low estimates.



*The PSRC Land Use Baseline forecast is similar to the Mercer Island City Comprehensive Plan Assumptions.

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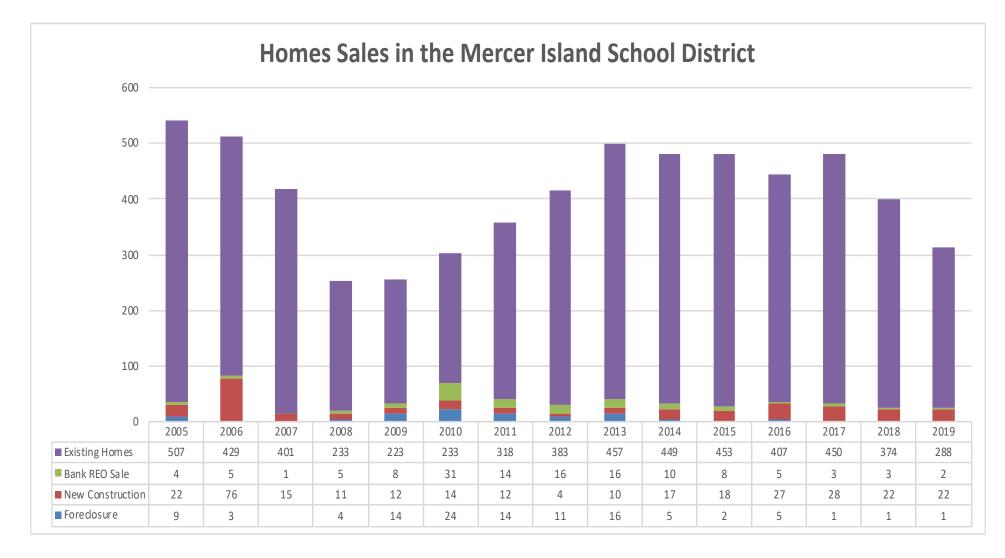
- Home sales in Mercer Island have dropped some in 2018 and 2019 compared to the trends we saw between 2013 and 2017.
- Over 1,100 units were added to the District's housing stock between the 2000 and 2010 Census period. About half as many units have been added to the District's housing stock between 2010 and 2019.
- Based on permit activity, data from MetroStudy, and forecast data from the Puget Sound Regional Council we are predicting that just over 500 additional units will be added to the District's housing stock by 2030. This number is much lower than the period between 2000 and 2010 when the town center units were added and may well result in less enrollment growth and even declines in enrollment in the near term period of the forecast (2020 to 2025). We are expecting the bulk of additional housing development to occur between roughly 2023 and 2030.
- As mentioned in the 2017 report, a net gain of housing might occur in cases where an existing single family unit is torn down and replaced with two or more units. Greater density as well as the development of new land can result in housing increases.

- We have created alternative forecasts of future housing growth. Similar to our population forecasts we have used the PSRC land-use and PSRC land-vision forecasts, as well as an alternative that is somewhere in the middle.
- Based on our reading of the City comprehensive plan and the PSRC documents we expect some increase in multi-family housing units, relative to single family over time (especially with the high forecast estimate). But it is likely that single family units will still make up between 65%-70% of the City's housing stock.
- Based on 2010 Census data there are approximately 42 students for every 100 housing units in the District. This number is higher than either Lake Washington or Bellevue, and well above the rate in Seattle (see page 48). The 2019 estimate for the District shows a similar number (42 students per 100 homes). It has not changed.

- Assuming this number remains the same we can estimate how many students might be enrolled in the future by multiplying the number of students per house by our alternative housing forecasts.
- A forecast based on the low, medium, and high range housing numbers is presented in the forecast section of this report.

Home Sales in Mercer Island

Source: MetroStudy Assessor's Data



Puget Sound Regional Council Estimate of Permitted Units in Mercer Island

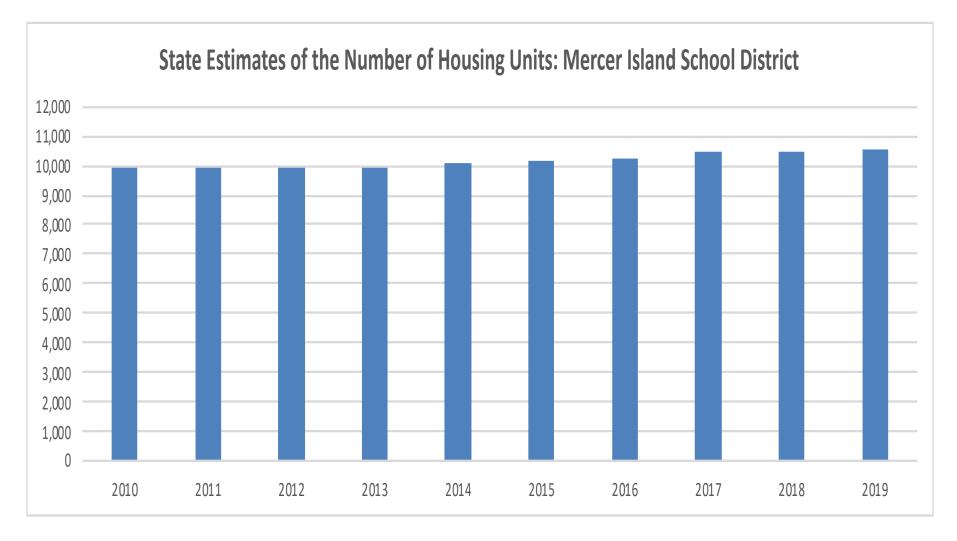
Year	JURIS	NEWUNITS	LOSTUNITS	NETUNITS	SF	MF1-2	MF3-4	MF5-9	MF10-19	MF20-49	MF50+	MH	OTH
2011	MERCER ISLAND	196	-21	175	2	7	0	0	0	0	166	0	0
2012	MERCER ISLAND	121	-21	100	4	4	0	6	0	0	86	0	0
2013	MERCER ISLAND	66	-45	21	19	2	0	0	0	0	0	0	
2014	MERCER ISLAND	272	-43	229	18	2	0	0	0	0	209	0	0
2015	MERCER ISLAND	67	-40	27	25	2	0	0	0	0	0	0	0
2016	MERCER ISLAND	20	-12	8	7	1	0	0	0	0	0	0	0
2017	MERCER ISLAND	89	-38	51	39	12	0	0	0	0	0	0	0
	Total	831	-220	611	114	30	0	6	0	0	461	0	0

Permit data is collected by the Puget Sound Regional Council from Cities and Counties on an annual basis. Data for 2018 is not yet available

LostUnits = Demolished units NetUnits = Difference between New and Lost SF = Single Family Units MF# = Multi-family units with differing numbers

Number of Housing Units

Source: Office of Financial Management, State of Washington



Trends and Projections – Dec 2019

				Rounded	Rounded
		Census 2010	Census	Estimated	Estimated
	P223 Oct	Total	2010	K-12 Students	K-12 Students
School District	<u>2010 Enroll</u>	Housing Units	Occupied Units	<u>Per 100 Homes</u>	Per 100 Occupied
Tahoma	7,394	13,835	13,153	53	56
Snoqualmie Valley	6,019	13,693	12,635	44	48
Auburn	14,343	32,762	30,704	44	47
Kent	26,630	60,010	56,621	44	47
lssaquah	16,881	38,765	36,642	44	46
Federal Way	21,724	50,518	47,551	43	46
Mercer Island	4,177	9,930	9,109	42	46
Enumclaw	4,472	10,516	9,877	43	45
Riverview	3,152	7,470	7,019	42	45
Tukwila	2,908	7,353	6,817	40	43
Northshore	19,390	49,801	46,787	39	41
Highline	18,101	50,913	47,160	36	38
Bellevue	18,008	56,376	50,892	32	35
Lake Washington	24,592	76,389	71,711	32	34
Shoreline	8,808	28,028	26,561	31	33
Vashon Island	1,421	5,552	4,606	26	31
Renton	13,558	48,991	45,526	28	30
Seattle	46,794	308,858	283,793	15	16
Skykomish	49	823	330	6	15

K-12 Public School Students Per House (King County Districts)

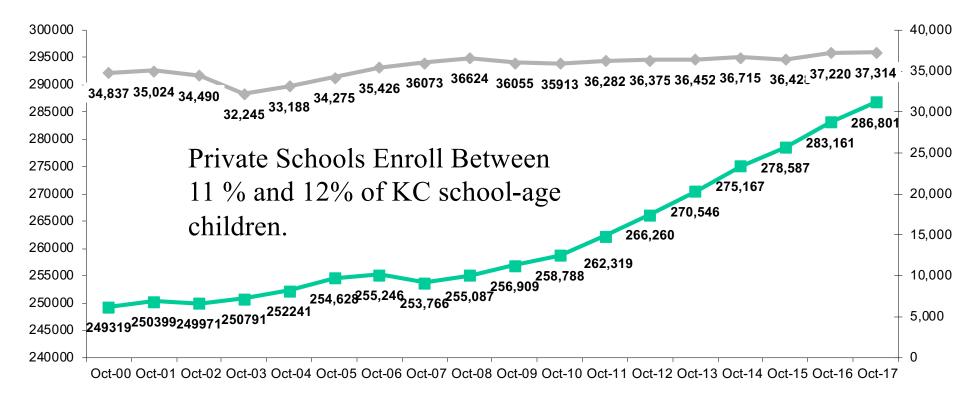
*Note: The number of K-12 students per house is estimated using Census housing counts and the October 2010 P223 enrollment. The number of students per 100 homes was rounded to the nearest whole number.

Private Schools

Private Schools

- Students on Mercer Island may attend private schools that are located on the Island, in Seattle, or in other areas around the Puget Sound.
- Private school enrollment in King County has increased some since 2010 but still makes up between eleven and twelve percent of the County's overall school enrollment. This percentage has remained relatively constant over the decade.
- Private school enrollment has been declining in Pierce and Snohomish County over the past decade.
- Enrollment for private schools located on Mercer Island, has declined by about 35 students since hitting a peak in 2010.
- There is no evidence at this time that private schools are having a significant impact on Mercer Island's enrollment, however, data for the 2018-19 school year is not available from the State at this time.

Public and Private School Enrollment King County (K-12 Only) Source: P223 and P105 Report --State of Washington Headcount

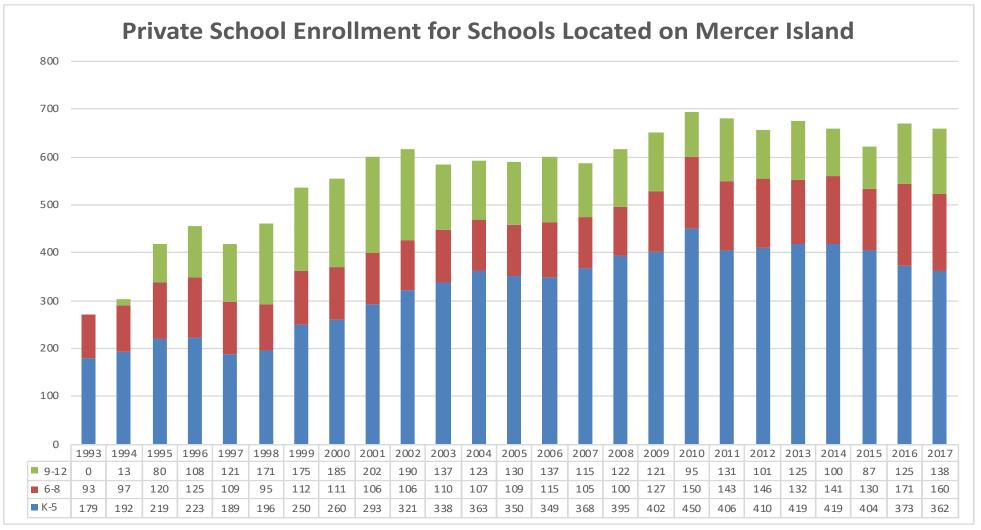


Private Schools Public Schools

Trends and Projections – Dec 2019

Enrollment for Private Schools Located in Mercer Island's Service Area

Source: OSPI Private School Enrollment Data



Trends and Projections – Dec 2019

Enrollment Projections

Alternative Projections Based on Different Models

- Before creating our final forecast models we created a set of alternative forecasts based on different methods. Some of the alternative forecasts (like the cohort models) consider births and enrollment trends by grade. Other forecasts predicted the total enrollment only based on housing, population and births. A description of each forecast is provided below.
- **3, 5, and 10 year Cohort Models:** These models show what might happen if the average of the grade level enrollment trends for the past three, five, and ten year period were to continue into the future. These models can be good if you believe that the most recent trends (e.g., the most recent three years) will not change much in future years. They are less reliable when future demographic trends look different from the recent past.
- Linear Models Based on County Births and Local Population: These models use the number of County births, and projected births along with the three alternative forecasts of Mercer Island's population to predict K-12 enrollment. Generally the higher the births and the population the higher the enrollment since these two indicators are highly correlated with enrollment. This is not universally true, however, especially if population consists mostly of young singles, or older childless couples.

Alternative Projections Based on Different Models

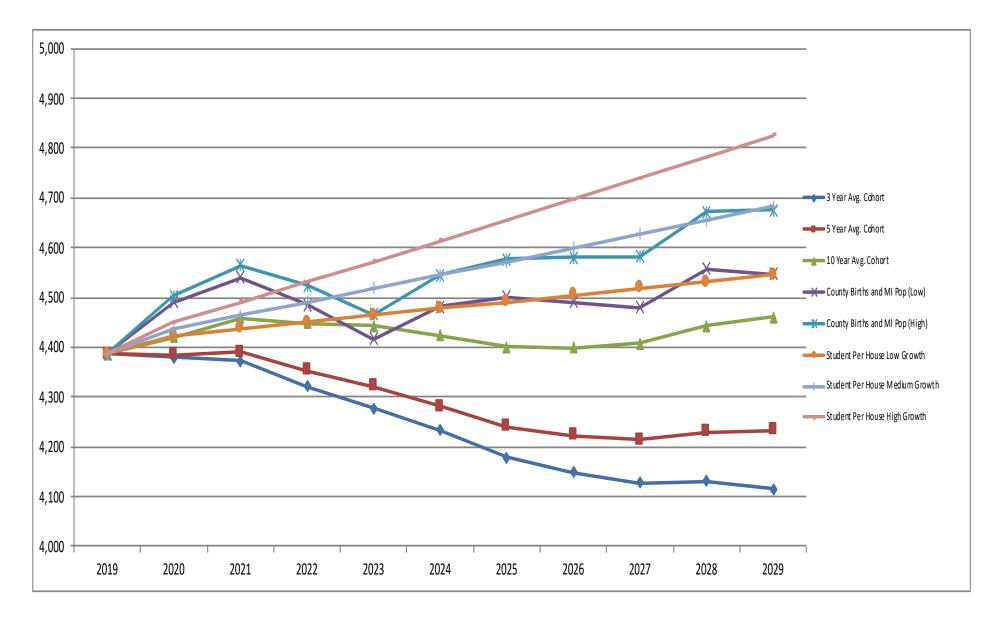
- Housing Yield Forecasts: These models apply the number of K-12 public school students per house from the 2010 Census to the alternative projected totals of future housing units in the District. These models assume that the number of students per house remains relatively stable over the course of the forecast. This is a reasonable assumption for the initial years of the forecast though it is possible that the number of students per house could change in future years based on the specific combination of housing types (multi-family versus single family) and/or based on changes in the percentage of the population that is school age. The assumptions that it will remain stable is supported by the latest data for 2019 which shows about the same number of students per house as the 2010 Census count. It has not changed much over the past decade.
- **Results:** The results of these different models are shown on the following pages. In general the average of multiple forecasts is often a better indicator of the future than any one forecast. Our final forecast numbers were adjusted for predicted growth and gains in housing and population so that they would correspond relatively close to the low, medium, and high range estimates presented here. As can be observed from the graph on page 57 there is substantial variation in the different models which suggests we are facing a high degree of uncertainty about the future.

Forecast Estimates Using a Variety of Methods

Cohort Forecasts*	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
3 Year Avg. Col	ort 4,387	4,379	4,372	4,321	4,277	4,233	4,179	4,149	4,128	4,132	4,115	4,084
5 Year Avg. Col	ort 4,387	4,384	4,389	4,352	4,321	4,281	4,241	4,222	4,214	4,230	4,232	4,218
10 Year Avg. Col	ort 4,387	4,420	4,459	4,448	4,443	4,423	4,401	4,400	4,408	4,443	4,460	4,458
Linear Models (Based on Total Enr	ollment Only '	10 Year His	tory)									
County Births and MI Pop (L	ow) 4,387	4,491	4,540	4,486	4,416	4,482	4,502	4,491	4,479	4,557	4,546	4,544
County Births and MI Pop (Hi	gh) 4,387	4,503	4,565	4,523	4,466	4,545	4,578	4,580	4,581	4,673	4,676	4,688
Students Per House Forecast (Bas	ed on Alternativ	e Pop/Hous	ing Foreca	sts								
Student Per House Low Gro	vth 4,387	4,424	4,437	4,451	4,464	4,477	4,491	4,504	4,518	4,531	4,545	4,559
Student Per House Medium Gro	vth 4,387	4,437	4,464	4,491	4,518	4,545	4,572	4,600	4,627	4,655	4,683	4,711
Student Per House High Gro	vth 4,387	4,451	4,491	4,531	4,572	4,613	4,655	4,696	4,739	4,781	4,824	4,868
Average of	all Forecasts	4,436	4,465	4,450	4,434	4,450	4,452	4,455	4,462	4,500	4,510	4,516

*Kindergarten enrollment in the cohort forecasts is based on the District's average share of the County birth cohort (K enrollment compared to births) for the past three, six, and ten years, multiplied by actual and projected birth cohorts expected to enroll between 2020 and 2030

Graph of Alternative Forecasts



Final Enrollment Projections Methods and Assumptions

An enrollment forecast is based on assumptions and mathematical calculations that convert these assumptions into numbers. The previous sections have identified a number of assumptions about births, grade level enrollment trends, population, and housing growth that are likely to impact the district in the coming years. This section describes the specific assumptions that guided the development of the forecasts.

The forecasts in this document were based on consideration of several factors:

The size of future birth cohorts and the projected share of that cohort that is likely to enroll in Mercer Island kindergartens.

Average grade-to-grade growth as students progress through the grades.

Predicted growth in the K-12 population based on alternative housing and population forecasts for the District.

The number of public school students per house.

٦

The relationship between public and private school enrollment.

Methods and Assumptions

Births and Kindergarten Enrollment

Both county and city births were used to project kindergarten. The number of county births is known through 2018 which means we can predict kindergarten enrollment based on actual births out to 2023. Beyond that point births were projected based on the most recent fertility rates for the county and the forecast of the number of women likely to reach their childbearing years over time, using the medium range county forecast from the State. Births for the city of Mercer Island are also known through 2018. Births on Mercer Island beyond 2018 were predicted based on the correlation between city and county births. On average city births make up about six-tenths of a percent of the births in the county. This trend has been relatively consistent over the past decade.

Projecting Kindergarten Enrollment

Kindergarten enrollments were projected using birth-to-k ratios. The birth-to-k ratio compares the kindergarten enrollment in a given year to births five years prior to that year. The District's birth-to-k ratio has averaged about one percent of county births over the past decade. The District's share of city births is greater than 100% since there are families with preschool age children who move to Mercer Island before their children reach kindergarten age. The projection model uses the six year median birth-to-k ratio for both the city and the county to predict future enrollment, taking an average of the two estimates. This method was deemed reasonable since the number of city births is very small and does not always capture the larger birth trends that are likely to affect K-12 enrollment in the county. We also know from our linear models (reported earlier) that County births together with projected population totals for Mercer Island are highly correlated with K-12 enrollment.

Continuing Grades

Projecting Grades 1-12

The forecasts at grades one to twelve were based on grade level cohort ratios which predict the net gain and/or loss in enrollment as students progress from one grade to the next. We used the average rate from the past three years which reflects the most recent trends. The enrollment at each grade level was multiplied by the appropriate cohort ratio to project enrollment forward and then adjusted for projected changes in population and housing growth over time.

Adjustments for Population Growth

Adjustments for Population Growth

The cohort model shows what might happen if the current trends were to continue indefinitely into the future, with some adjustments for projected changes in the birth trends over time. What we also need to consider, however, is the effect of additional population and housing growth in Mercer Island and the county, especially growth in the K-12 population.

Our previous models based on population and housing provide us with alternative estimates of future enrollment. We applied growth factors to our forecasts to simulate the effects of low, medium and high growth rates. In other words, we tried to get our forecast to align as closely as possible with the low, medium, and high range estimates provided in the earlier section of this report. The numbers will differ to some degree, of course, because they take into account the size of each year's graduating class and each year's entering kindergarten, as well as the way in which students roll up through the grades. The final numbers in all of the models are, close to the low, medium, and high range alternative forecast estimates presented earlier.

The medium range forecast shows the District declining some in the near term with enrollment remaining relatively flat (2020 to 2025). After that time period we are predicting that enrollment will began growing again due the development of additional housing. Our medium range forecast in this report is lower overall than the one from the previous report, due primarily to our projection of lower K-12 County enrollment growth than in our previous forecast (2017).

Considerations

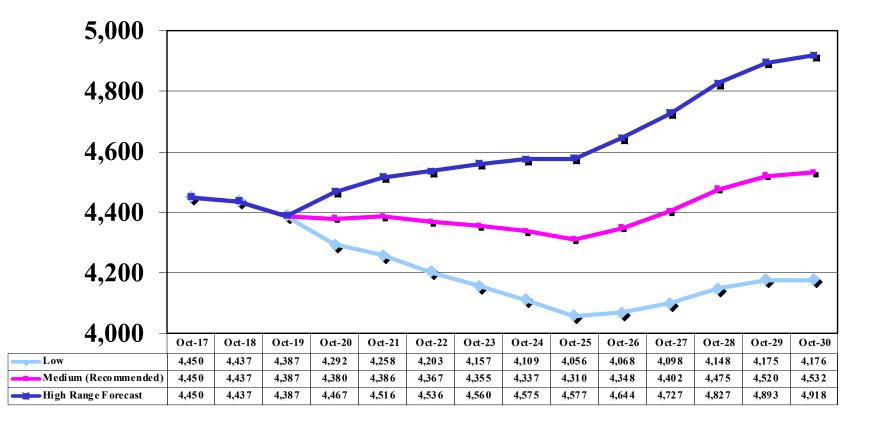
The low and high forecasts show what might happen if housing and population growth were to be lower or higher than what is assumed in the medium range forecast. Enrollments may well decline more than expected over the next few years (similar to the low forecast) if home sales remain low and there is relatively little new development. In addition, we are starting to see slow downs in K-12 population growth in King County. The high range forecast, on the other hand, shows what might happen if housing and population growth were to be higher than expected for a variety of reasons (increased housing density, greater availability of affordable housing, or if the recently greater than expected population growth in Seattle and King County were to continue indefinitely into the future). Currently we are predicting that population growth in King County will moderate some over the next decade, consistent with State forecasts.

There is greater variation between the low, medium, and high range forecasts in this year's report than in our last report. This is due to the greater variation that we are seeing in our alternative forecast models. It also indicates a greater degree of uncertainty when predicting the future.

Finally, these forecasts assume that changes in enrollment are equal from year to year. In reality enrollment may grow a lot in one year, a little in another, decline in another year and stay at the same level in the following year. The recommended forecast assumes a certain amount of growth between now and 2025 and a different rate of growth between 2026 and 2030. The actual growth in a given year may vary from the averages assumed over the different periods of the forecast.

Mercer Island District Forecast Alternative Forecasts 2020-2030

Based on Grade Level Trends and Alternative Projections of Population and Housing



Appendix A

Final Forecast Numbers Headcount Forecasts by Grade Level Mercer Island (October Headcount Enrollment)

Births	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>
Mercer Island Births	140	130	167	136	121	155	132	150	126	156	143	142	175	150	128	138	145	148	156	179
King County Births	21817	21573	21646	22212	22007	22487	21778	21863	22,431	22874	22680	24244	24,899	25190	25057	24514	24,630	25,032	24,910	25,348
K Enroll as % of Cnty	1.20%	1.11%	1.05%	1.05%	0.95%	1.11%	1.14%	1.06%	1.13%	1.00%	1.17%	1.02%	1.06%	1.00%	0.98%	0.95%	0.98%	1.07%	0.97%	0.93%
K Enroll as a % of City	186%	184%	136%	171%	172%	161%	188%	155%	202%	147%	186%	174%	151%	168%	192%	169%	167%	182%	155%	132%
City % of County Cohort	0.64%	0.60%	0.77%	0.61%	0.55%	0.69%	0.61%	0.69%	0.56%	0.68%	0.63%	0.59%	0.70%	0.60%	0.51%	0.56%	0.59%	0.59%	0.63%	0.71%
	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>
K	261	239	227	233	208	250	248	232	254	229	266	247	264	252	246	233	242	269	242	236
1	259	276	257	257	260	224	283	276	267	283	280	294	277	298	287	273	256	280	296	259
2	306	277	291	276	259	274	227	294	294	280	304	294	311	297	317	305	298	261	293	302
3	330	309	276	308	282	266	290	255	306	311	305	305	310	336	317	343	324	313	276	303
4	314	330	309	297	330	292	275	311	281	316	339	320	331	337	361	326	356	336	321	307
5	360	318	332	331	301	345	306	279	320	280	328	341	322	339	358	356	348	367	344	331
6	362	356	316	349	341	301	353	298	282	347	282	343	362	338	360	378	363	371	382	358
7	350	364	368	325	359	339	304	369	304	290	346	311	348	370	358	369	398	367	371	388
8	349	352	369	381	340	352	343	308	365	314	305	357	320	350	374	356	363	408	384	393
9	343	347	354	351	392	344	343	334	336	383	320	337	362	332	364	398	368	368	403	386
10	350	335	343	360	355	387	346	337	341	350	393	335	339	364	333	368	412	367	368	407
11	340	334	343	333	364	363	379	342	348	357	358	407	336	342	364	332	361	403	360	364
12	<u>377</u>	<u>343</u>	<u>348</u>	<u>339</u>	<u>340</u>	<u>366</u>	<u>351</u>	<u>369</u>	<u>360</u>	<u>343</u>	<u>351</u>	<u>352</u>	<u>388</u>	<u>329</u>	<u>319</u>	<u>334</u>	<u>320</u>	<u>340</u>	<u>397</u>	<u>353</u>
Tot	4,301	4,180	4,133	4,140	4,131	4,103	4,048	4,004	4,058	4,083	4,177	4,243	4,270	4,284	4,358	4,371	4,409	4,450	4,437	4,387
Growth	93	-121	-47	7	-9	-28	-55	-44	54	25	94	66	27	14	74	13	38	41	-13	-50
Percent	2.2%	-2.8%	-1.1%	0.2%	-0.2%	-0.7%	-1.3%	-1.1%	1.3%	0.6%	2.3%	1.6%	0.6%	0.3%	1.7%	0.3%	0.9%	0.9%	-0.3%	-1.1%
	1830	1749	1692	1702	1640	1651	1629	1647	1722	1699	1822	1801	1815	1859	1886	1836	1824	1826	1772	1738
	1061	1072	1053	1055	1040	992	1000	975	951	951	933	1011	1030	1058	1092	1103	1124	1146	1137	1139
	1410	1359	1388	1383	1451	1460	1419	1382	1385	1433	1422	1431	1425	1367	1380	1432	1461	1478	1528	1510

Low Range Forecast

											Project	ed Birth	s				
							<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	2020	2021	2022	2023	<u>2024</u>	2025
	<u>6 year Trer</u>	nds at Kinde	ergarten			City Births	163	162	179	146	150	151	150	149	154	153	152
	<u>Median</u>	<u>SD+1</u>	<u>SD-1</u>			Cnty Births	25,487	26,011	25,273	24,337	25,073	25,237	25,029	24,807	25,681	25,477	25,373
% County	0.98%	1.03%	0.93%			% County	1.00%	0.99%	1.06%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%	0.97%
% City	166%	187%	145%			% City	156%	159%	150%	162%	162%	162%	162%	162%	162%	162%	162%
City % of County	0.60%	0.66%	0.53%														
Rollup																	
Rate Used	Adjusted fo	r Future Po	p/Housing	Growth													
<u>3 Year</u>	<u>2020</u>	<u>2021-22</u>	<u>2023-25</u>	<u>2026-30</u>	Private		<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
0.97%	0.970	0.975	0.983	0.986	1.000	K	254	258	268	237	244	245	243	241	250	248	247
1.095	0.975	0.990	0.995	0.996	1.000	1	252	275	279	292	258	266	273	271	268	278	276
1.029	0.975	0.990	0.995	0.996	1.000	2	260	257	280	286	299	264	282	290	288	285	295
1.045	0.975	0.990	0.995	0.996	1.000	3	308	269	265	291	297	311	278	297	306	303	300
1.071	0.975	0.990	0.995	0.996	1.000	4	316	326	285	283	311	317	328	294	314	323	320
1.029	0.975	0.990	0.995	0.996	1.000	5	308	322	332	292	289	318	323	335	300	321	330
1.045	0.980	0.990	0.995	0.996	1.000	6	339	319	333	345	303	301	332	338	350	313	335
1.010	0.980	0.990	0.995	0.996	1.000	7	354	339	318	335	347	305	313	346	352	365	326
1.049	0.980	0.990	0.995	0.996	1.000	8	399	368	352	332	350	362	306	315	348	354	367
1.001	0.984	0.990	0.995	0.996	1.000	9	387	395	365	350	331	348	378	320	329	363	370
1.005	0.975	0.990	0.995	0.996	1.000	10	378	385	393	364	350	331	353	384	324	334	368
0.985	0.975	0.990	0.995	0.996	1.000	11	391	369	375	385	357	343	331	353	384	324	334
0.976	0.975	0.990	0.995	0.996	1.000	12	<u>346</u>	<u>377</u>	<u>356</u>	<u>364</u>	<u>374</u>	<u>346</u>	<u>326</u>	<u>315</u>	<u>336</u>	<u>365</u>	<u>308</u>
						Tot	4292	4258	4203	4157	4109	4056	4068	4098	4148	4175	4176
						Change	-95	-34	-55	-46	-48	-53	12	30	50	27	1
						Percent	-2.2%	-0.8%	-1.3%	-1.1%	-1.1%	-1.3%	0.3%	0.7%	1.2%	0.7%	0.0%
						K-5	1698	1707	1710	1680	1698	1720	1728	1728	1725	1757	1768
						6-8	1092	1025	1004	1013	1000	968	952	999	1050	1032	1028
						9-12	1502	1526	1489	1464	1412	1369	1389	1371	1373	1386	1380
						Projection	-	nty K-12									
						KC K-12	292,717	295,570	297,235	297,931	298,484	298,283	297,813	297,110	297,837	298,371	298,842
						Market share	1.47%	1.44%	1.41%	1.40%	1.38%	1.36%	1.37%	1.38%	1.39%	1.40%	1.40%

Medium Range Forecast (Growth Rates Based off of the Medium Range Pop/Housing Forecast)

	-							-		-	Projecte	ed Birth	s				
							<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	2020	2021	2022	2023	<u>2024</u>	2025
<u>6</u>	<u>ð year Trer</u>	nds at Kinde	<u>rgarten</u>			City Births	163	162	179	146	150	151	150	149	154	153	152
	<u>Median</u>	<u>SD+1</u>	<u>SD-1</u>			Cnty Births	25,487	26,011	25,273	24,337	25,073	25,237	25,029	24,807	25,681	25,477	25,373
% County	0.98%	1.03%	0.93%			% County	1.02%	1.01%	1.08%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%	0.99%
% City	166%	187%	145%			% City	159%	162%	153%	165%	165%	165%	165%	165%	165%	165%	165%
City % of County	0.60%	0.66%	0.53%														
Rollup																	
Rate Used	Adjusted fo	r Future Po	p/Housing	Growth													
<u>3 Year</u>	<u>2020</u>	2021-22	<u>2023-25</u>	<u>2026-30</u>	Private		<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
0.97%	0.990	0.995	1.003	1.006	1.000	K	259	263	274	241	249	250	248	246	255	253	252
1.095	0.995	1.000	1.005	1.006	1.000	1	257	284	288	301	266	274	281	279	277	286	284
1.029	0.995	1.000	1.005	1.006	1.000	2	265	264	292	298	311	275	294	302	299	297	307
1.045	0.995	1.000	1.005	1.006	1.000	3	314	277	276	307	313	327	292	313	321	319	316
1.071	0.995	1.000	1.005	1.006	1.000	4	323	336	297	297	330	336	349	312	333	343	340
1.029	0.995	1.000	1.005	1.006	1.000	5	314	332	346	307	307	341	347	360	322	344	354
1.045	1.000	1.000	1.005	1.006	1.000	6	346	328	347	363	322	323	360	366	379	340	363
1.010	1.000	1.000	1.005	1.006	1.000	7	361	349	332	352	368	327	340	379	385	399	357
1.049	1.000	1.000	1.005	1.006	1.000	8	407	379	366	350	371	389	332	345	385	391	405
1.001	1.004	1.000	1.005	1.006	1.000	9	395	407	380	369	352	374	410	350	364	406	413
1.005	0.995	1.000	1.005	1.006	1.000	10	386	397	409	383	372	355	382	420	359	373	416
0.985	0.995	1.000	1.005	1.006	1.000	11	399	380	391	405	379	368	359	386	424	362	377
0.976	0.995	1.000	1.005	1.006	1.000	12	<u>353</u>	<u>389</u>	<u>371</u>	<u>383</u>	<u>397</u>	<u>372</u>	<u>354</u>	<u>345</u>	<u>371</u>	<u>408</u>	<u>348</u>
						Tot	4380	4386	4367	4355	4337	4310	4348	4402	4475	4520	4532
						Change	-7	7	-19	-12	-18	-28	38	54	73	45	12
						Percent	-0.2%	0.2%	-0.4%	-0.3%	-0.4%	-0.6%	0.9%	1.3%	1.7%	1.0%	0.3%
						K-5	1732	1757	1772	1751	1776	1803	1811	1811	1808	1842	1853
						6-8	1114	1057	1045	1065	1062	1038	1031	1090	1149	1130	1126
						9-12	1533	1573	1550	1540	1500	1468	1505	1501	1518	1548	1553
						Projection I	King Cour	nty K-12									
						KC K-12	292,717	295,570	297,235	297,931	298,484	298,283	297,813	297,110	297,837	298,371	298,842
						Market share	1.50%	1.48%	1.47%	1.46%	1.45%	1.44%	1.46%	1.48%	1.50%	1.52%	1.52%

Trends and Projections – Dec 2019

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High Range Forecast

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							<u>2015</u>	<u>2016</u>	<u>2017</u>	<u>2018</u>	<u>2019</u>	2020	2021	2022	2023	2024	2025
	<u>6 year Tre</u>	nds at Kinde	ergarten			City Births	163	162	179	146	150	151	150	149	154	153	152
	<u>Median</u>	<u>SD+1</u>	<u>SD-1</u>			Cnty Births	25,487	26,011	25,273	24,337	25,073	25,237	25,029	24,807	25,681	25,477	25,373
% County	0.98%	1.03%	0.93%			% County	1.04%	1.03%	1.10%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%	1.01%
% City	166%	187%	145%			% City	162%	166%	156%	169%	169%	169%	169%	169%	169%	169%	169%
City % of County	0.60%	0.66%	0.53%														
Rollup																	
Rate Used	Adjusted for	or Future Po	p/Housing	Growth													
<u>3 Year</u>	<u>2020</u>	<u>2021-22</u>	<u>2023-25</u>	<u>2026-30</u>	<u>Private</u>		<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>2025</u>	<u>2026</u>	<u>2027</u>	<u>2028</u>	<u>2029</u>	<u>2030</u>
0.97%	1.010	1.015	1.023	1.026	1.000	K	264	268	279	246	254	255	253	251	260	258	257
1.095	1.015	1.010	1.015	1.016	1.000	1	262	292	297	310	274	282	290	288	285	295	293

Tot	4467	4516	4536	4560	4575	4577	4644	4727	4827	4893	4918
12	<u>360</u>	<u>401</u>	<u>386</u>	<u>402</u>	<u>421</u>	<u>399</u>	<u>383</u>	<u>377</u>	<u>410</u>	<u>455</u>	<u>392</u>
11	407	391	406	426	402	395	388	423	469	404	424
10	394	409	426	403	395	381	414	459	396	416	468
9	403	420	395	387	373	400	444	383	402	453	461
8	415	391	381	367	394	417	359	377	425	432	448
7	369	360	345	370	391	350	368	414	422	437	391
6	353	338	361	382	342	346	390	397	411	368	393
5	321	342	360	322	326	366	372	385	345	369	379
4	329	346	309	312	350	357	370	331	354	364	361
3	320	285	287	322	329	343	307	329	338	335	332
2	270	272	304	310	324	286	306	314	312	309	320
1	262	292	297	310	274	282	290	288	285	295	293
K	264	268	279	246	254	255	253	251	260	258	257

Change	80	49	19	25	15	1	68	83	100	66	25
Percent	1.8%	1.1%	0.4%	0.5%	0.3%	0.0%	1.5%	1.8%	2.1%	1.4%	0.5%
K-5	1767	1807	1835	1823	1856	1889	1898	1898	1893	1929	1941
6-8	1137	1089	1087	1119	1127	1113	1117	1188	1257	1237	1232
9-12	1563	1620	1613	1618	1592	1574	1629	1641	1677	1727	1745
Projection k	(ing Cour	<u>ty K-12</u>									
KC K-12	292,717	295,570	297,235	297,931	298,484	298,283	297,813	297,110	297,837	298,371	298,842
arket share	1.53%	1.53%	1.53%	1.53%	1.53%	1.53%	1.56%	1.59%	1.62%	1.64%	1.65%

Consultant Background and Experience

Dr. Kendrick was the demographer for the Seattle Public schools from 1990 to 1997. In that capacity he provided enrollment projections to facilitate staffing and facilities planning and helped with the management of the student assignment system He also provided analysis of the relationship between demographics and test scores.

Since 1997 he has worked as a consultant providing demographic analysis and enrollment projections for local school districts. Over the past 20 years his clients have included the following Districts: Auburn, Bainbridge Island, Bellingham, Bellevue, Bethel, Bremerton, Central Kitsap, Edmonds, Enumclaw, Federal Way, Marysville, Mercer Island, Monroe, North Kitsap, Olympia, Renton, Seattle, South Kitsap, Shoreline, Snoqualmie Valley, Sumner, and Tukwila. He also does annual enrollment projection work for the Everett, Highline, Mukilteo, Northshore, Puyallup, and Tacoma School Districts. He has worked in all four counties of the Puget Sound and is familiar with the different trends and patterns across the region.

CHAPTER 04 ABILITY TO PROVIDE CAPITAL FUNDS

The ability of the district to provide capital funds by local effort.

This Chapter will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

DESCRIPTION

This chapter includes the following information:

- > Assessed valuation of Mercer Island School District
- Outstanding bonded indebtedness of the District
- > Current bonding capacity of Mercer Island School District
- > A comparison of results to the estimated project cost (this section will be completed at a later date as noted above)

SUMMARY

The Mercer Island School District has received strong support from its voters in past elections. The District has also run three Capital Levy Elections since 2001. All three passed with strong community support, averaging over 69% "YES" votes.

The State Matching Ratio is 20% for the Mercer Island School District. However, the District does not currently qualify for State matching funds for any new construction based on the fact that all of the District's educational facilities were modernized and expanded in the midnineties utilizing State matching dollars. By a vote of the people, the Mercer Island School District can have outstanding debt equal to 2.5% of the assessed valuation. Based on this information, the District has the capacity to tax itself to improve the educational facilities for its students.

ASSESSED VALUATION & BONDING CAPACITY

As reported by Seattle N.W. Securities on November 19, 2020.

TOTAL ASSESSED VALUATION (10.14.2020):	\$15,258,769,576.00
MAXIMUM ALLOWED DEBT (2.5% OF A.V.):	\$381,469,239.40
OUTSTANDING VOTED DEBT:	\$76,585,000.00
REMAINING DEBT CAPACITY:	\$304,884,239.40

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CHAPTER 05 EXISTENCE OF A SCHOOL HOUSING EMERGENCY

The existence of a school housing emergency.

DESCRIPTION

This chapter includes the following information:

> Determination that there is no school housing emergency

SUMMARY

District enrollment projections for the next 10 years indicate an overall increase in student enrollment at the elementary level, and relatively flat enrollment at the middle and high school levels. It is anticipated that District enrollment will flatten out and even decline somewhat between 2020 and 2025, with enrollment growing again in the latter part of the forecast period (2025 to 2030) and resulting in a projected three percent enrollment increase districtwide.

Due to this relatively stable enrollment and the available bonding capacity, the District does not have a school housing emergency, as defined in WAC 392-343-115.

None of the District's schools have been damaged from catastrophes or natural disasters such as fires, earthquakes, wind damage or other related structural failures. All of the District's current permanent and temporary facilities are fully operational.

CHAPTER 06 RACIAL BALANCE

The need to improve racial balance and/or to avoid creation or aggravation of racial imbalance.

DESCRIPTION

This chapter includes the following information:

- Districtwide minority population data and percentages of districtwide population
- Minority population data for individual school facilities and percentages of districtwide population

SUMMARY

The Mercer Island School District is committed to a policy of nondiscrimination for all students and employees (Policy No. 3210). The District's Long-Range Facility Plan will not adversely impact the racial balance within the District as outlined in WAC 392-343-115(5).

Mercer Island School District has White/ Caucasian enrollment of approximately 57.6% of total District enrollment. Enrollment statistics are shown on the following charts.

At the elementary school level, students of ethnic backgrounds are relatively evenly distributed. Given the relatively balanced ethnic mixes within each neighborhood school, there is no reason to adjust attendance boundaries to address a racial imbalance at the elementary level. At the middle school and high school levels, all District students attend the same school. Therefore, racial distribution is "self-leveling," with no opportunity for racial imbalance.

DISTRICTWIDE MINORITY POPULATION

MERCER ISLAND SCHOOL DISTRICT		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	3	0.1%
Asian	996	23.8%
Black / African American	36	0.9%
Hispanic	227	5.4%
Multiracial	507	12.1%
Native Hawaiian or Other Pac. Islander	5	0.1%
White / Caucasian	2,413	57.6%
District Total	4,187	100%

MINORITY POPULATION BY FACILITY

ISLAND PARK ELEMENTARY SCHOOL		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	0	0.0%
Asian	93	9.3%
Black / African American	2	5.6%
Hispanic	27	11.9%
Multiracial	53	10.5%
Native Hawaiian or Other Pac. Islander	0	0.0%
White / Caucasian	193	8.0%
School Total	368	8.8%

LAKERIDGE ELEMENTARY SCHOOL		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	0	0.0%
Asian	103	10.3%
Black / African American	1	2.8%
Hispanic	12	5.3%
Multiracial	71	14.0%
Native Hawaiian or Other Pac. Islander	1	20.0%
White / Caucasian	215	8.9%
School Total	403	9.6%

MINORITY POPULATION BY FACILITY, CONTINUED

NORTHWOOD ELEMENTARY SCHOOL		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	2	66.7%
Asian	126	12.7%
Black / African American	5	13.9%
Hispanic	34	15.0%
Multiracial	44	8.7%
Native Hawaiian or Other Pac. Islander	0	0.0%
White / Caucasian	195	8.1%
School Total	406	9.7%

WEST MERCER ELEMENTARY SCHOOL		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	0	0.0%
Asian	115	11.5%
Black / African American	5	13.9%
Hispanic	34	15.0%
Multiracial	68	13.4%
Native Hawaiian or Other Pac. Islander	0	0.0%
White / Caucasian	206	8.5%
School Total	428	10.2%

ISLANDER MIDDLE SCHOOL		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	0	0.0%
Asian	246	24.7%
Black / African American	10	27.8%
Hispanic	66	29.1%
Multiracial	135	26.6%
Native Hawaiian or Other Pac. Islander	0	0.0%
White / Caucasian	576	23.9%
School Total	1,033	24.7%

MERCER ISLAND HIGH SCHOOL		
Federal Race / Ethnicity	Number of Students	Percent of District
American Indian / Alaska Native	1	33.3%
Asian	313	31.4%
Black / African American	13	36.1%
Hispanic	54	23.8%
Multiracial	136	26.8%
Native Hawaiian or Other Pac. Islander	4	80.0%
White / Caucasian	1,028	42.6%
School Total	1,549	37.0%

CHAPTER 07 TYPE & EXTENT OF NEW &/OR ADDITIONS

The type and extent of new and/or additions to existing school facilities required in order to meet current educational needs and the current state building code.

DESCRIPTION

This chapter includes the following information:

> Determination that there are no new facilities and/or additions needed to accommodate enrollment growth

SUMMARY

As described in Chapter 3, the student population is projected to increase by approximately three percent districtwide over the next 10 years. This projected growth can be accommodated within the existing capacity of the district.

Therefore, Mercer Island School District does not have a need for new school facilities or new additions to existing school facilities specifically to add capacity and accommodate existing or projected student enrollment growth.

Facility needs related to facility condition and educational adequacy are identified in Chapter 8. This includes a discussion regarding additions that may be required, however the scope has not yet been determined. Please refer to Chapter 8 for more information.

CHAPTER 08 MODERNIZATION NEEDS

A cost/benefit analysis on the need to modernize and/or replace existing school facilities in order to meet current educational needs and the current state building code.

This Chapter will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election. A cost benefit discussion will be provided at that time.

DESCRIPTION

This chapter documents the following needs for each District school facility:

- Modernization and/or replacement of existing areas needed due to facility condition deficiencies
- Modernization of existing areas and/ or new additions or replacement needed due to educational adequacy deficiencies

As noted above, project costs for modernization and additions, and cost / benefit analysis for facility replacement, will be updated at a later date, when project scopes are more clearly defined.

SUMMARY

The District has a need for modernization and/or additions at existing schools, or facility replacement, in order to meet current educational needs and address facility deficiencies.

In most cases, additional area is needed to meet specifically identified programmatic needs, such as specialized teaching spaces and small group/pullout learning areas. However, at Crest Alternative Learning Center, a districtwide alternative high school program, there is a need for added capacity due to increased demand for this program and a significant unmet need. Programmatic needs requiring additional square footage have been identified at all District school facilities, except the recently completed Northwood Elementary School and Islander Middle School Phase 1 Building.

PRIORITIZED PROJECTS

Modernization and/or replacement projects have been prioritized as follows in the Long-Range Facility Plan:

Project 1: Islander Middle School

Replacement of the remaining older middle school buildings (100/200 Building and 300 Building) to complete the middle school facility.

Project 2: Island Park Elementary School

Replacement of the existing elementary school facility.

Project 3: Mercer Island High School / Crest Learning Center

Various addition and/or improvement projects at the high school and replacement and expansion of the Crest Learning Center facility.

Project 4: West Mercer Elementary School

Replacement of the existing elementary school facility.

Project 5: Lakeridge Elementary School Replacement of the existing elementary school facility.

MODERNIZATION NEEDS FOR SCHOOL FACILITIES

PROJECT 1: ISLANDER MIDDLE SCHOOL

The recently constructed Phase 1 middle school building (New/Main Building) does not have any modernization or additional space needs.

The two older buildings on site (100/200 Building and 300 Building) will require significant modernization or complete replacement to complete the middle school facility and meet the district's program needs. Identified improvements address site, health and life-safety, infrastructure, materials and systems conditions, and educational program needs, as well as addressing space needs in the facility.

Specific facility condition issues are documented in Chapter 1. Improvements related to educational adequacy that require additional space are included below.

 Provide a new school broadcast studio and editing room

- > Expand science classrooms in the 300 Building to support current STEM programs and accommodate more storage
- Increase classroom size in the remaining older buildings, to provide adequate project work areas and storage
- > Provide small group learning/pull-out areas in the remaining older buildings to support general education, ideally distributed throughout the school

PROJECT 2: ISLAND PARK ELEMENTARY SCHOOL

Island Park Elementary School will require significant modernization or complete replacement to meet the district's model program for an elementary school. Identified improvements address site, health and life-safety, infrastructure, materials and systems conditions, and educational program needs, as well as addressing space needs in the facility.

Specific facility condition issues are documented in Chapter 1. Improvements related to educational adequacy that require additional space are included below.

- Provide a new gymnasium separate from the multipurpose room
- Provide a new dedicated art/science classroom with dedicated storage
- Provide a new special education classroom and OT/PT therapy room, ideally in a centralized special education area
- Increase classroom size, to provide adequate project work areas and storage
- Provide small group learning/pull-out areas to support general education, ideally distributed throughout the school
- > Provide multiple sensory rooms or "safe spaces" that are distributed throughout the school and easily accessible

- > Provide additional storage in the library
- Expand administration area to accommodate an adequately-sized health room, nurse's office, staff workroom, staff lounge, records storage, conference room, and PTA room
- > Provide permanent facilities for the before / after care program
- > Provide new student restrooms in or adjacent to kindergarten classrooms
- > Provide additional staff restrooms

PROJECT 3A: MERCER ISLAND HIGH SCHOOL

Mercer Island High School will require modernization and additions to address educational adequacy needs for various programs.

Specific facility condition issues are documented in Chapter 1. Improvements related to educational adequacy that require additional space are included below.

- Provide new and expanded teaching spaces for the College & Career Readiness program:
 - New hands-on (STEM/ maker space/ life skills) lab(s) and support
 - New journalism classroom
 - Robotics lab expansion
 - Broadcast studio expansion
 - Art room expansion
 - Other specialized learning areas
- > Provide new and expanded teaching spaces for the Performing Arts program:
 - New black box theater (200 seats), to provide dedicated teaching space for drama, dance, and performance
 - Expansion of the existing theater, stage, and back-of-house support areas
- > Provide new and expanded teaching spaces for the Music program:
 - Additional space to accommodate program growth

- Provide new and expanded teaching and support spaces for the PE/ Athletics program:
 - New dedicated PE classroom
 - Expansion to create equitable practice space, locker rooms, and team rooms
- > Provide expanded teaching and support spaces for the Science program:
 - Expand older science classrooms/ labs to accommodate current science instruction and provide equivalency with newer science labs
 - Provide additional science department storage
- Provide new and expanded teaching and support spaces for General Education:
 - Increase classroom size, to provide adequate project work areas and storage
 - New small group learning / pull-out areas to support general education, ideally distributed throughout the school
- > Provide new and expanded support spaces:
 - Expand counseling area and health room to provide better access and confidentiality
 - Additional teacher office and support space
 - New gender-inclusive restrooms throughout the facility

PROJECT 3B:

CREST LEARNING CENTER

Crest Learning Center will require significant modernization or complete replacement to accommodate both the capacity need and educational program need of the District's alternative high school. Identified improvements address site, health and life-safety, infrastructure, materials and systems conditions, and educational program needs, as well as addressing space needs in the facility. Specific facility condition issues are documented in Chapter 1. Improvements related to educational adequacy that require additional space are included below.

- Increase capacity to 200 students (approximately 150 percent) to accommodate program demand
- Provide a new or expanded science lab/classroom to support high school science curriculum
- > Provide a new large greenhouse
- Expand and reconfigure parking lot to comply with accessibility requirements

PROJECT 4: WEST MERCER ELEMENTARY SCHOOL

West Mercer Elementary School will require significant modernization or complete replacement to meet the district's model program for an elementary school. Identified improvements address site, health and life-safety, infrastructure, materials and systems conditions, and educational program needs, as well as addressing space needs in the facility.

Specific facility condition issues are documented in Chapter 1. Improvements related to educational adequacy that require additional space are included below.

- Provide a new gymnasium separate from the multipurpose room
- > Provide a new dedicated art/science classroom with dedicated storage
- Provide a new special education classroom
- Increase classroom size, to provide adequate project work areas and storage
- Provide small group learning/pull-out areas to support general education, ideally distributed throughout the school
- > Provide additional storage in the library

- > Expand administration area to accommodate an adequately-sized health room, nurse's office, student waiting area, additional administrative and student service offices, conference room, records storage, an enlarged staff workroom and lounge, and a PTA room
- > Expand covered play area
- Expand parking lot to accommodate staff parking

PROJECT 5: LAKERIDGE ELEMENTARY SCHOOL

Lakeridge Elementary School will require significant modernization or complete replacement to meet the district's model program for an elementary school. Identified improvements address site, health and life-safety, infrastructure, materials and systems conditions, and educational program needs, as well as addressing space needs in the facility.

Specific facility condition issues are documented in Chapter 1. Improvements related to educational adequacy that require additional space are included below.

- Provide a new gymnasium separate from the multipurpose room
- > Provide a new dedicated art/science classroom with dedicated storage
- Provide new music room adjacent to the stage
- Increase classroom size, to provide adequate project work areas and storage
- Provide small group learning/pull-out areas to support general education, ideally distributed throughout the school
- Expand administration area to accommodate a staff workroom, records storage, and conference room
- Provide new student restrooms in or adjacent to kindergarten classrooms

CAPITAL COST DUE TO DEFERRED MAINTENANCE

The need and the estimated capital cost to restore to design specifications the major building systems and subsystems that have deteriorated due to deferred maintenance.

DESCRIPTION

This chapter includes the following information:

 Determination that there is no deterioration due to deferred maintenance

SUMMARY

The Mercer Island School District has traditionally been diligent in the maintenance of District facilities. Upon review of the planned capital projects, none are ascertained as being the result of deferred maintenance.

Proposed projects in the Long-Range Facilities Plan are the result of replacement of facilities and systems due to age, code upgrades, and educational programmatic changes.

CHAPTER 10 TIMELINE FOR COMPLETION

A determination of the district's timeline for completion of the school facilities project.

This Chapter will be updated with the next OSPI Form D-3 to be submitted, which will occur no earlier than after the next successful capital bond election.

CHAPTER 11 INVENTORY IN NEIGHBORING DISTRICTS

An inventory of accessible unused or underutilized school facilities in neighboring school districts and the physical condition of such school facilities.

DESCRIPTION

This chapter includes the following information:

- > Letters from neighboring school districts reagarding their ability to provide facilities to house nonresident students and the physical condition of any such facilities
- > School board resolution as to space availability in neighboring districts

SUMMARY

A survey of neighboring school districts was conducted to determine if accessible unused or underutilized school facilities were available for use by the Mercer Island School District. Each neighboring district was sent a letter requesting if school facilities were currently vacant or scheduled to be vacated within the next six years.

Letters were sent to the following districts:

- > Bellevue School District
- > Renton School District
- > Seattle Public Schools

Letters were returned by all three districts and are included on the following pages. None of the districts reported any unused or underutilized space.



MERCER ISLAND SCHOOL DISTRICT #400

4160 86th AVE SE • Mercer Island, Washington 98040 www.mercerislandschools.org

BUSINESS SERVICES

Tyrell Bergstrom, Executive Director of Finance tyrell.bergstrom@mercerislandschools.org 206-236-3295

Karen Hubbert, Business Specialist karen.hubbert@mercerislandschools.org 206-236-3310

December 16, 2020

Dr. Ivan Duran **BELLEVUE SCHOOL DISTRICT** 12111 NE 1st Street Bellevue, WA 98005

Re: Mercer Island School District **OSPI Study & Survey** Space Availability in Adjacent Districts Sent via email to: durani@bsd405.org; pattersony@bsd405.org

Dear Dr. Duran,

The Mercer island School District No. 400 is embarking upon capital improvement program and will be seeking state funding from the Office of Superintendent of Public Instruction. Washington Administrative Code Section 392-341-080(10) requires a documented survey of adjacent school districts to identify the existence and location of any available, suitable school plant facilities meeting the district's needs and which are currently vacant or are scheduled to be vacant within six years.

Does your district have, or will you have suitable facilities available? Please check the appropriate box below and return this document via email to me at: tyrell.bergstrom@mercerislandschools.org.

Thank you for making the time to assist our district.

Kind Regards,

Ty Bergstrom, Chief Financial Officer



No, this district does not have available facilities.

Yes, this district has suitable facilities available. Please attach a list with pertinent data such as size, condition and location.

Printed Name & Title

JACK MCLEOD EXECUTIVE DIRECTOR FACILITIES BENE 27-JAN-2



MERCER ISLAND SCHOOL DISTRICT #400

4160 86th AVE SE • Mercer Island, Washington 98040 www.mercerislandschools.org

BUSINESS SERVICES

Tyrell Bergstrom, Executive Director of Finance tyrell.bergstrom@mercerislandschools.org 206-236-3295

Karen Hubbert, Business Specialist karen.hubbert@mercerislandschools.org 206-236-3310

December 16, 2020

Dr. Damien Pattenaude RENTON SCHOOL DISTRICT 300 SW 7th Street Renton, WA 98057

Re: Mercer Island School District **OSPI Study & Survey** Space Availability in Adjacent Districts Sent via email to: damien.pattenaude@rentonschools.us; sandra.dolph@rentonschools.us

Dear Dr. Pattenaude,

The Mercer island School District No. 400 is embarking upon capital improvement program and will be seeking state funding from the Office of Superintendent of Public Instruction. Washington Administrative Code Section 392-341-080(10) requires a documented survey of adjacent school districts to identify the existence and location of any available, suitable school plant facilities meeting the district's needs and which are currently vacant or are scheduled to be vacant within six years.

Does your district have, or will you have suitable facilities available? Please check the appropriate box below and return this document via email to me at: tyrell.bergstrom@mercerislandschools.org.

Thank you for making the time to assist our district.

Kind Regards,

Ty Bergstrom, Chief Financial Officer

No, this district does not have available facilities.

Yes, this district has suitable facilities available. Please attach a list with pertinent data such as size, condition and location.

Signatu

Damien Pattenarde, Superintendent de Date Signed 1/4/2021

Printed Name & Title



MERCER ISLAND SCHOOL DISTRICT #400

4160 86th AVE SE • Mercer Island, Washington 98040 www.mercerislandschools.org

BUSINESS SERVICES

Tyrell Bergstrom, Executive Director of Finance tyrell.bergstrom@mercerislandschools.org 206-236-3295 Karen Hubbert, Business Specialist karen.hubbert@mercerislandschools.org 206-236-3310

December 16, 2020

Dr. Denise Juneau, Superintendent SEATTLE SCHOOL DISTRICT 2445 3rd Avenue South Seattle, WA 98134

Re: Mercer Island School District OSPI Study & Survey Space Availability in Adjacent Districts Sent via email to: dmjuneau@seattleschools.org; mpgonzalesmill@seattleschools.org

Dear Dr. Juneau,

The Mercer island School District No. 400 is embarking upon capital improvement program and will be seeking state funding from the Office of Superintendent of Public Instruction. Washington Administrative Code Section 392-341-080(10) requires a documented survey of adjacent school districts to identify the existence and location of any available, suitable school plant facilities meeting the district's needs and which are currently vacant or are scheduled to be vacant within six years.

Does your district have, or will you have suitable facilities available? Please check the appropriate box below and return this document via email to me at: tyrell.bergstrom@mercerislandschools.org.

Thank you for making the time to assist our district.

Kind Regards,

Ty Bergstrom, Chief Financial Officer



No, this district does not have available facilities.

Yes, this district has suitable facilities available. Please attach a list with pertinent data such as size, condition and location.

Fred Podesta

Fred Podesta, Chief Operations Officer

Dec 21, 2020

Signature

Printed Name & Title

Date Signed

CHAPTER 12 ADJUSTMENT OF SCHOOL ATTENDANCE AREAS

The need for adjustments of school attendance areas.

DESCRIPTION

This chapter includes the following information:

 Determination that there is no need for adjustments of school attendance areas

SUMMARY

ADJUSTMENTS WITHIN MERCER ISLAND SCHOOL DISTRICT

Based on the current projected enrollment growth, Mercer Island School District does not anticipate the need to make any school attendance area adjustments.

A fourth elementary school was added with 2014 bond funds, and elementary school students were redistributed throughout the District at that time. Middle school and high school enrollments include the entire district, so adjustments within the District are not applicable at these grade levels.

ADJUSTMENTS AMONG NEIGHBORING DISTRICTS

Since the neighboring districts in the area do not have current or projected available space, the need to adjust school district boundaries in these districts is not applicable.