

BUILDING CONDITION ASSESSMENT APPROACH

1. Discovery
 - a. Documentation Review - The McKinstry team collects and reviews all available data for the facilities including site plans, as-builts, equipment inventory, all backing data from previous condition assessments and studies, maintenance plans & work order data from CMMS, and long-term facility/capital plans
 - b. Key Staff Interviews - the McKinstry assessment team conducted stakeholder interviews to include district facility operations personnel. These interviews will discuss the district's operations, perceived facility deficiencies, and any planned capital projects or changes in facility use. The facility assessment team also documented any issues noted during the site assessments at each individual school by onsite personnel, including principals and custodial staff.
2. Facility Assessments
 - a. McKinstry performed walkthrough by our team of facility assessors. These experts updated the existing inventory of the NSD assets (originally developed from our 2016 building condition assessment) that identifies and describes building equipment and systems. McKinstry use the Unifomat system to assess systems but vary the depth of detail depending on its influence on capital plans.
 - b. McKinstry ensures consistency of assessment approach by assigning one lead assessor to the project (supported as needed) and by following OSPI guidelines for assigning equipment condition.
 - c. McKinstry assessors determine the "condition age" of the systems by identifying any deferred maintenance or lack of preventative maintenance. (The "condition age" is not necessarily the real age of the system. For example, if a 5-year-old boiler has never been maintained, its "condition age" may be 10 years old).
 - d. During our walkthrough, McKinstry's team identified major building and maintenance deficiencies that need to be addressed over the next 30 years.
3. Prepare Lifecycle Estimates
 - a. Using our team's experience with all the building systems, cost data, and past experiences, an opinion of probable cost was developed by the facility condition assessment team for each element within the scope.
4. Prepare BCA
 - a. We compile all field observation reports, along with documented interviews, into a final working presentation.

SYSTEMS REVIEWED - 8,109 TOTAL ASSETS DISTRICTWIDE

- **Heating System** - Identify boilers, furnaces, and major labeled equipment.
- **Ventilation System** - Identify the ventilation systems at the property and assess its overall condition.
- **Air Conditioning System** - Identify the material air-conditioning components, including cooling towers, chillers, and major labeled equipment.
- **Roofing System** - Material roof systems, including roof type, reported age, slope, drainage, or any unusual roofing conditions. The team will observe for evidence of material repairs, significant ponding, or evidence of material roof leaks.
- **Electrical System** - Identify the electrical service provided and distribution system at the subject property. Observation and evaluation will include switchgear, transformers, emergency generators and main distribution panels.
- **Plumbing** - Identify the material plumbing systems at the subject property, including domestic water supply, domestic hot water production over 80 gallons, sanitary sewer, primary backflow preventer or any special or unusual plumbing systems (such as fuel systems, gas systems).
- **Vertical Transportation** - Identify the existing vertical transportation equipment and provide an overall assessment. Detail deficiencies for each elevator and provide an analysis of the remaining useful life, along with budgets for any expected expenditures up to and including modernization or replacement.
- **Building Envelope** - Identify the material elements of the building exterior, to include walls, doors, windows, and fire escapes. This will also include the façade, curtain-wall systems, glazing, exterior sealant, exterior balconies, and stairways. Observations may be subject to grade, accessible balconies, and rooftop vantage points.
- **Structural Components** - Evaluate the footings, foundations, slabs, columns, floor framing system, and roof framing system as part of the structural inspection for soundness. Observations will be subject to grade and visibility of components. This is a visual inspection only and no structural testing of components or materials will be undertaken.
- **Site Paving** - Observe and evaluate the site paving and/or Site components including pavement, curbs, drains and sidewalks.
- **Commercial Kitchen** - Major Equipment (above approximately \$2,000 value) such as:
 - Walk-in freezer and refrigerator equipment
 - Ovens, stoves, broilers, grills
 - Reach-in refrigerators and freezers
 - Dishwashers
 - Fryers
- **High Level (system level) only:**
 - Alarm Panels
 - Emergency generators
 - Exhaust hood fire suppression
 - Underground infrastructure - electrical, gas, water, sewer
 - Bridges
 - Storm water conveyances
 - Playgrounds
 - Sports and Ground Facilities Assessment
 - Auditorium/Pool
 - Turf Field Assessments
 - Field Assessments including irrigation and drainage
 - Life Safety/Security

Facilities Master Plan

CRITERIA – FUNCTIONAL PERFORMANCE



- **Lighting Systems** - Major lighting systems will be identified. No lighting counts will be performed.
- **Building Controls Systems** - Centralized building automation systems (building controls) will be identified for each school. The team will estimate the age of the system and the lifespan. No equipment will be assessed, and no system upgrades will be investigated.

Assets Categories for Bond Consideration

Equipment Type

- Lockers
- Millwork/Furniture
- Security
- Fire Protection
- Conveyance
- Door/Hardware
- Flooring
- Interior Ceilings
- Interior Walls
- Control Systems
- Lighting
- Electrical Distribution
- HVAC Distribution and Circulation
- HVAC Generation
- Pool Equipment
- Domestic Water Distribution
- Science and Tech Equipment
- Kitchen Equipment
- Roofing and Gutter System
- Exterior Walls and Windows
- Bleachers
- Fencing
- Sporting Fields and Courts / Playgrounds / Scoreboards

BCA SCORING CRITERIA FOR NORTSHORE SCHOOL DISTRICT

- Asset Condition
- Estimated Replacement Cost
- Estimated Remaining Life
- Classroom Impact
- EUI Rating (Building level)

Asset Score	Description
5	Requires systems replacement. Asset is not operational, operating poorly, or beyond its useful life expectancy.
4	Requires additional maintenance or major repairs. Component is close to the end of its expected useful life
3	Routine maintenance as well as minor repairs. Asset is operational.
2	Routine maintenance only. Component aging but exhibits no damage
1	Preventive maintenance only. New or easily restorable to "like new" condition