# Appendix B: Facility Conditions Index Report

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# Combined Condition Assessment

## *Bow Elementary School*

19801 Prevost Street, Detroit, Michigan

DRAFT

February 2017

DTMB
Technology, Management & Budget
State Facilities Administration

SRO
STATE SCHOOL REFORM/REDESIGN OFFICE
Michigan Department of Technology, Management and Budget

LARA
LICENSING AND REGULATORY AFFAIRS
CUSTOMER DRIVEN. BUSINESS MINDED
Bureau of Construction Codes

## Executive Summary

This Combined Condition Assessment is the product of a collaborative site assessment and survey by the Department of Technology Management and Budget, State Facilities Administration (SFA) and the Department of Licensing and Regulatory Affairs (LARA) Bureau of Construction Codes at the request of the State School Reform/Redesign Office (SRO).

It has been designed to provide a general condition overview of the facility and major site assets. A team visits the site and collects data to determine two factors in eight facilities categories:

**Factors:**

- ***Remaining Service Life*** of Facility Elements or Systems which is then utilized to calculate an ***Age-Based Condition Index***.
- ***Operating Condition*** based upon visual observations the day of the visit along with supporting information/records provided by staff or contact personnel.
- Results of the two factors above are averaged/combined to produce a single ***Combined Condition Score (CCS)*** for the site.

**Facilities Categories:**

- Structure – Foundation, Parking Lots, Sidewalks, Access
- Exterior – Walls, Windows, Stairways, Doors
- Roofing – Roofing Type and Condition
- HVAC – Air Handlers, Boilers, Chillers, Gas Piping, Cooling Towers, Pumps, Exhaust, etc.
- Electrical – Service & Distribution, Lighting, Emergency Generator, Fire Alarm, Kitchen
- Plumbing – Restrooms, Backflow, Domestic Water/Heating, Distribution, Fire System
- Conveying – Elevators, Lifts
- Interior Construction – Doors, Stairways, Walls, Ceilings, Flooring

**Results:**

***The Bow Elementary School*** assessment was performed on ***February 13, 2017*** by the LARA team and resulted in a ***CCS*** of: **49.2**

## Combined Condition Score (CCS)

There are many ways to measure physical condition of a facility. Performing full, detailed assessments necessary to calculate a Facility Condition Index (FCI), Extended Facility Condition Index (EFCI) or Facilities Needs Index (FNI) are very demanding in terms of input resources up front. This project required an efficient, lean approach whereby an assessment team could move through occupied space quickly with minimal disruption while collecting data. The output needed to be measurable and consistent. While additional information such as annual

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reinvestment rates and replacement costs may also be desirable, these were outside the scope of this first visit.

The DTMB State Facilities Administration (SFA), Building Operations Division assesses buildings within their own portfolio for capital planning purposes. These assessments may be age-based, where the age of building elements or assets are compared to their respective design-life; or observed-condition-based where defects and site conditions are observed and rated.

The Combined Condition Score is a combination of both the age-based condition index and observed condition, equally weighted and averaged together resulting in a number between 0 and 100. This number will be indicative of overall facility condition and can be used to order facilities by respective condition relative to others.

- A score of 100 indicates a brand new, unoccupied facility with no construction defects and no code violations.
- A score of 0 indicates a very old facility with no usable architectural elements or attached assets.
- Realistically speaking, all occupied buildings will score more than zero and less than 100.
- The lower the score, the less cost effective to operate the building. A good rule-of-thumb is when the score falls below 34, equivalent annual cost to replace a facility will be less than continuing to operate and maintain the existing facility.

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Building Exterior

Building Roof, Exhaust Fan and Condenate Return Pumps

Site Narrative

The assessment team completed the site visit/inspection on February 13, 2017. The Team reviewed the exterior of the building including roofing, exterior walls, generator and outdoor mechanicals. The team then moved inside and reviewed interior finishes and mechanicals including but not limited to, walls and ceilings, foundations, boiler heating, plumbing, HVAC systems, and electrical systems in the building. The following was validated/noted during the inspection with site personnel:

- The site was originally constructed in 1949.
- The building is brick 2-story with a coal-tar, built-up roof system.
- A kitchen-area renovation was completed circa 2010 according to site contact(s).

The full Combined Condition Assessment is as follows:

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BUILDING NAME: Bow Elementary-Middle School  BUILT: 6/1/1949  ASSESSMENT DATE: 2/13/2017

| CATEGORY | SUB-CATEGORY | TYPE | INSTALLED DATE | (YEARS) SERVICE LIFE | AGE | REMAINING SERVICE LIFE | AGE-BASED CONDITION INDEX | INSPECTED OPERATING CONDITION | COMMENTS |
|---|---|---|---|---|---|---|---|---|---|
| STRUCTURE | | | | | | 0.6 | 11.9 | 75.0 | |
| | FOUNDATION | | 6/1/1949 | 75.0 | 67.7 | 7.3 | 18.4 | 75.0 | |
| | PARKING LOTS | | 6/1/1994 | 15.0 | 22.7 | -7.7 | 0.0 | 75.0 | |
| | PEDESTRIAN PAVING | | 6/1/1994 | 25.0 | 22.7 | 2.3 | 17.3 | 75.0 | |
| | | | | | | | | | |
| EXTERIOR | | | | | | 29.8 | 70.2 | 75.0 | |
| | WALLS | | 6/1/1994 | 70.0 | 22.7 | 47.3 | 89.5 | 75.0 | |
| | WINDOWS | | 6/1/1994 | 30.0 | 22.7 | 7.3 | 42.6 | 75.0 | |
| | STAIRWAYS | | 6/1/1994 | 75.0 | 22.7 | 52.3 | 90.8 | 75.0 | |
| | DOORS | | 6/1/1994 | 35.0 | 22.7 | 12.3 | 57.8 | 75.0 | |
| | | | | | | | | | |
| ROOF | | | | | | -2.7 | 0.0 | 71.9 | |
| | ROOF COVERING | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 71.9 | |
| | | | | | | | | | |
| HVAC | | | | | | 8.1 | 22.2 | 63.1 | |
| | AIR HANDLING UNITS | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 50.0 | |
| | BOILERS | | 6/1/1994 | 30.0 | 22.7 | 7.3 | 42.6 | 53.6 | |
| | CHILLERS | | | | | | | | |
| | GAS PIPING SYSTEMS | | 6/1/1994 | 75.0 | 22.7 | 52.3 | 90.8 | 50.0 | |
| | COOLING TOWERS | | | | | | | | |
| | PUMPS | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 75.0 | |
| | EXHAUST SYSTEMS | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 75.0 | |
| | WALK IN FREEZERS | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 75.0 | |
| | VENT AND POOL HEATERS | | | | | | | | |
| | COOLING PIPING | | | | | | | | |
| | | | | | | | | | |
| ELECTRICAL | | | | | | -2.7 | 33.6 | 50.0 | |
| | ELECTRICAL SERVICE/DISTRIBUTION | | 6/1/1994 | 50.0 | 22.7 | 27.3 | 79.3 | 50.0 | |
| | LIGHTING | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 50.0 | |
| | EMERGENCY GENERATOR | | | | | | | | |
| | KITCHEN EQUIPMENT | | 6/1/2010 | 20.0 | 6.7 | 13.3 | 88.7 | 50.0 | |
| | INTERCOM / PA EQUIPMENT | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 50.0 | |
| | FIRE ALARM SYSTEM | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 50.0 | |
| | | | | | | | | | |
| PLUMBING | | | | | | 7.3 | 47.9 | 53.0 | |
| | RESTROOMS | | 6/1/1994 | 30.0 | 22.7 | 7.3 | 42.6 | 67.9 | |
| | BACKFLOW PREVENTERS | | 6/1/1994 | 10.0 | 22.7 | -12.7 | 0.0 | 50.0 | |
| | GENERAL | | 6/1/1994 | 35.0 | 22.7 | 12.3 | 57.8 | 50.0 | |
| | FOOD SERVICE | | 6/1/2010 | 35.0 | 6.7 | 28.3 | 96.3 | 50.0 | |
| | DOMESTIC WATER HEATING | | 6/1/1994 | 15.0 | 22.7 | -7.7 | 0.0 | 50.0 | |
| | WATER DISTRIBUTION | | 6/1/1994 | 75.0 | 22.7 | 52.3 | 90.8 | 50.0 | |
| | FIRE SUPPRESSION | | | | | | | | |
| | | | | | | | | | |
| CONVEYING | | | | | | | | | |
| | ELEVATORS | | | | | | | | |
| | | | | | | | | | |
| INTERIOR CONSTRUCTION | | | | | | 24.3 | 63.4 | 75.0 | |
| | DOORS | | 6/1/1994 | 40.0 | 22.7 | 17.3 | 67.7 | 75.0 | |
| | STAIRWAYS | | 6/1/1994 | 50.0 | 22.7 | 27.3 | 79.3 | 75.0 | |
| | WALLS | | 6/1/1994 | 75.0 | 22.7 | 52.3 | 90.8 | 75.0 | |
| | CEILINGS | | 6/1/1994 | 20.0 | 22.7 | -2.7 | 0.0 | 75.0 | |
| | FLOORS | | 6/1/1994 | 50.0 | 22.7 | 27.3 | 79.3 | 75.0 | |

| BUILDING EXTERIOR $FT^2$ |
|---|
| 59,100 |

| AVERAGE | | | | | COMBINED CONDITION SCORE |
|---|---|---|---|---|---|
| SERVICE LIFE | AGE | REMAINING SERVICE LIFE | CONDITION INDEX | OBSERVED CONDITION | |
| 36.5 | 23.2 | 9.2 | 35.6 | 62.8 | 49.2 |

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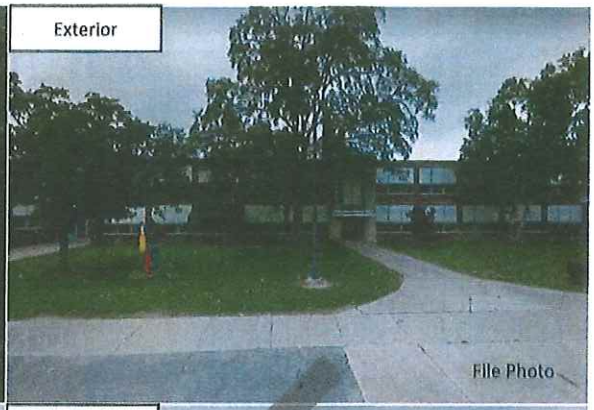
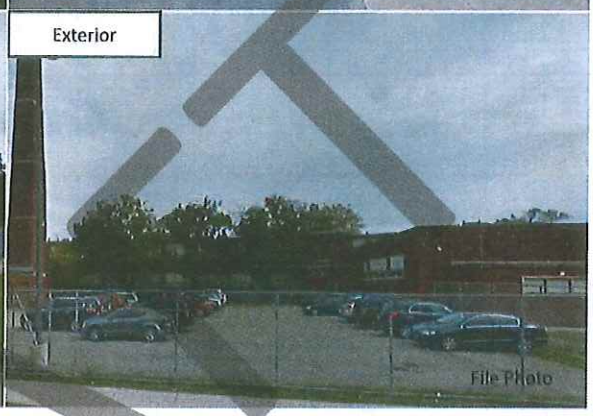
Exterior


Exterior
File Photo

Exterior


Exterior
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Exterior

Exhaust

Condensate Pump

# BUILDING

| | | | |
|---|---|---|---|
| 4 | NEW | New or like-new condition; no issues to report; no expected failures | No issues / violations or adverse conditions / less than 3 years old |
| 3 | GOOD | Good condition; no reported issues or concerns | No issues / violations or adverse conditions other than new |
| 2 | FAIR | Average wear for building age; not new but no issues | Violations-90 days |
| 1 | POOR | Worn from use-end of expected lifecycle | Violations-45 days |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable |

| | |
|---|---|
| Bow Elementary | SCHOOL NAME |
| 19801 Prevost St | ADDRESS |
| | BUILDING |
| 2/13/2017 | SURVEY DATE |
| John M. Tisdale | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| **Civil** | | | | | | | |
| | Perimeter Fencing | | 3 | | | | |
| | Paving Parking Lot (Asphalt / Concrete) | | 3 | | | | |
| | Curbing | | 3 | | | | |
| | On-Site Signage | | 3 | | | | |
| | Pedestrian Access (Michigan Barrier Free & Safety) | | 3 | | | | |
| **Site Facilities** | | | | | | | |
| | Loading Dock | | | | | N/A | |
| **Michigan barrier free Compliance** | | | | | | | |
| | Handicap Parking | | | | | N/A | |
| | Accessible Entry | | 3 | | | | |
| | Exterior Ramps and walks | | 3 | | | | |
| | Barrier free route (ROW - Sidewalk to Bldg. Entry) | | 3 | | | | |
| | Building Entry | | 3 | | | | |
| **Foundation/Footings** | | | | | | | |
| | Structure | | 3 | | | | |
| **Columns/Beams/Walls** | | | | | | | |
| | Structure | | 3 | | | | |
| | Applied Fireproofing Systems | | | | | N/A | |
| **Roofing** | | | | | | | |
| | Roof Openings (Skylights) | | | | | N/A | |
| | Roof Openings (Access) | | 3 | | | | |
| | Roof Equipment Curbing | | 3 | | | | |
| | Leakage | | 3 | | | | |
| | Ponding Water | | 3 | | | | |
| | Roof Drains | | 3 | | | | |
| | Gutters / Downspouts | | 3 | | | | |
| **Exterior Walls** | | | | | | | |
| | Exterior Finish | | 3 | | | | |

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# BUILDING

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| Bow Elementary | SCHOOL NAME |
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| | BUILDING |
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| John M. Tisdale | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| | Expansion / Control Joints | | 3 | | | | |
| | Thermal Condition | | 3 | | | | |
| | Soffits | | 3 | | | | |
| | General Appearance | | 3 | | | | |
| **Doors / Windows / Louvers** | | | | | | | |
| | Windows | | 3 | | | | |
| | Louvers and Vents | | 3 | | | | |
| | Main Entry Doors | | 3 | | | | |
| | Main Entry Hardware | | 3 | | | | |
| | Other Exterior Doors | | 3 | | | | |
| | Other Exterior Door Hardware | | 3 | | | | |
| **General** | | | | | | | |
| | Wall Finishes (Classrooms) | | 3 | | | | |
| | Wall Finishes (Corridors) | | 3 | | | | |
| | Wall Finishes (Restrooms) | | 3 | | | | |
| | Wall Finishes (Others) | | | | | N/A | |
| | Ceilings | | 3 | | | | |
| | Cabinetry | | | | | N/A | |
| | Moveable / Operable Walls | | | | | N/A | |
| **Interior Doors** | | | | | | | |
| | Door & Frame Condition | | 3 | | | | |
| | Hardware Condition | | 3 | | | | |
| | Hallway Fire Door | | 3 | | | | |
| | Cafe / Concession Security Gates / Roll-up Doors | | 3 | | | | |
| **Flooring** | | | | | | | |
| | ACT | | | | | N/A | |
| | Drywall | | | | | N/A | |
| | Other | | | | | N/A | |
| | Carpet | | | | | N/A | |

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# BUILDING

| | | | |
|---|---|---|---|
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| | |
|---|---|
| Bow Elementary | SCHOOL NAME |
| 19801 Prevost St | ADDRESS |
| | BUILDING |
| 2/13/2017 | SURVEY DATE |
| John M. Tisdale | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| | VCT | | | | | N/A | |
| | Tile | | 3 | | | | |
| | Terrazzo | | | | | N/A | |
| | Wood | | 3 | | | | |
| | Sealed Concrete | | | | | N/A | |
| **Stairs** | | | | | | | |
| | Landing finish | | 3 | | | | |
| | Stair treads | | 3 | | | | |
| | Stair nosings | | 3 | | | | |
| | Handrails | | 3 | | | | |
| **Toilet Rooms** | | | | | | | |
| | Flooring | | 3 | | | | |
| | Walls | | 3 | | | | |
| | Signage | | 3 | | | | |

***Any violations reported in this school assessment were not given to the facility as violations to be corrected in order to maintain the certificate of occupancy for the facility. Any violations reported in this school assessment were not cited as part of a school safety inspection, they are strictly for the use of the assessment report.

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# MECHANICAL

| | | | | | |
|---|---|---|---|---|---|
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| 1 | POOR | Worn from use -end of expected lifecycle | Violations-45 days | 2/13/2017 | SURVEY DATE |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable | J.Paradine | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| **Gas System** | | | | | | | |
| | Piping | | | 2 | | | |
| | Other (Vented Interior Regulators) | | | 2 | | | |
| | Gas PRV (Proximity to OA intakes) | | | 2 | | | |
| | Science Classroom Emergency Off Switch | | | | | N/A | |
| **Cooling Plant** | | | | | | | |
| | Distribution Piping (2 pipe or 4-pipe) | | | | | N/A | |
| | Chillers (Age, Refrigerant, Heat Rejection Method) | | | | | N/A | |
| | Cooling Towers (Age, Materials, VFD, Sufficiency) | | | | | N/A | |
| | CHW Pump Volute Insulation type (foamglass, Armaflex, phenolic foam, fiberglass, mineral wool) | | | | | N/A | |
| | Plant Piping & Valves (Corroded/Isolation valves) | | | | | N/A | |
| | Chilled Water Pipe Insulation & Jacket (Foamglass Armaflex | | | | | N/A | |
| | Campus Piping & Valves (Corroded/Isolation valves) | | | | | N/A | |
| | Refrigeration Room Monitoring and Ventilation | | | | | N/A | |
| **Heating Plant** | | | | | | | |
| | Boilers (Age, Fuel Type, Input/Output) | | | 2 | | | |
| | Pumps (VFD / Sound / Suction Pressure) | | 3 | | | | |
| | Plant Piping & Valves (Corroded/Isolation valves) | | | 2 | | | |
| | Campus Piping & Valves (Corroded/Isolation valves) | | | 2 | | | |
| | Boiler Room E-Stop | | | | | N/A | |
| **Dedicated Airside Heating Systems** | | | | | | | |
| | Heating-Only Air Handling Units (Age) | | | | | N/A | |
| | Duct Furnaces (Fuel, Type, Age, Mission) | | | | | N/A | |
| | Unit Heaters (Fuel, Type, Age, Mission) | | | 2 | | | |
| | Heating-Only Unit Ventilators (year, condition) | | | | | N/A | |
| **Air Distribution** | | | | | | | |
| | Outside Air Units (Age, HR Type, ERV, Unitary, VAV) | | | 2 | | | |
| | Rooftop ACUs (Age, Gas Heat or Heat Pump) | | | | | N/A | |

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# MECHANICAL

| | | | | | |
|---|---|---|---|---|---|
| 4 | NEW | New or like-new condition; no issues to report; no expected failures | No issues / violations or adverse conditions / less than 3 years old | Bow | SCHOOL NAME |
| 3 | GOOD | Good condition; no reported issues or concerns | No issues / violations or adverse conditions other than new | | ADDRESS |
| 2 | FAIR | Average wear for building age; not new but no issues | Violations-90 days | | BUILDING |
| 1 | POOR | Worn from use -end of expected lifecycle | Violations-45 days | 2/13/2017 | SURVEY DATE |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable | J.Paradine | SURVEYOR |

| | | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|---|
| | Central Station AHUs (Age, Type/Geometry, VAV, typ. SAT dual path unit) | | | | | | N/A | |
| | Terminal Units (VAV, VAV/reheat, Heat source, Close- off VAV, SFPU, PFPU) | | | | 2 | | | |
| **Exhaust Systems** | | | | | | | | |
| | Restrooms | | | | | | N/A | |
| | Locker Rooms | | | | | | N/A | |
| | Kitchen | Hood Systems (Grease or Heat only, Ansul system, Heat sensor start) | | 3 | | | | kitchen upgrade 2010 is what staff said. |
| | | Exhaust Fan Outlet height (Is it <40") | | 3 | | | | |
| | Science | Room Emergency Exhaust (Operation) | | | | | N/A | |
| | | Fume Exhaust (Latest year certified, sash height, manifolded, VAV, fan location) | | | | | N/A | |
| | | Stack outlet height (is it <10') | | | | | N/A | |
| | Art Kiln | Exhaust Fan / Exhaust Hood | | | | | N/A | |
| **Refrigeration Systems** | | | | | | | | |
| | Freezer Systems (Age, Location, Refrigerant) | | | 3 | | | | |
| | Cooler Systems (Age, Location, Refrigerant) | | | 3 | | | | |
| **Indoor Swimming Pool Systems** | | | | | | | | |
| | Vent and Pool Heater | | | | | | N/A | |
| **Fire Alarm System and Fire Suppression** | | | | | | | | |
| | Fire suppression | | | | | | N/A | |

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# PLUMBING

| | | | | | |
|---|---|---|---|---|---|
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| 1 | POOR | Worn from use -end of expected lifecycle | Violations-45 days | 2/13/2017 | SURVEY DATE |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable | Kole Myers | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| **Site Utilities** | | | | | | | |
| | Backflow Preventer | | | 2 | | | boiler room / no report |
| | Water Service Piping | | | 2 | | | galvinazed/ covered |
| **Roofing** | | | | | | | |
| | Roof Drains (piping) | | | 2 | | | |
| **Toilet Rooms** | | | | | | | |
| | Toilet Partitions | | 3 | | | | |
| **General** | | | | | | | |
| | Custodial Closets (Mop Sinks) | | | 2 | | | |
| | Laboratory Sinks | | | | | N/A | |
| | Eyewash / Emerg. Shower (Tepid Water) | | | | | N/A | |
| | Showers (Self metering, Shutoff) | | | | | N/A | |
| | Kitchen (POU Grease, Interceptor) | | | 2 | | | Kitchen |
| | Grease (Indoor/outdoor, Interceptor) | | | | | N/A | |
| | Water Fountains (Self contained water cooler, bubbler) | | | 2 | | | stainles bubblers |
| | Sewer Ejector systems | | | 2 | | | |
| | Dilution Tanks (Science Classrooms/Neutralization tanks) | | | | | N/A | |
| | DWV | | | 2 | | | |
| **Restrooms** | | | | | | | |
| | Water Closets | | | 2 | | | |
| | Urinals | | | 2 | | | |
| | Lavatories / Sinks | | 3 | | | | Newer |
| **Water Distribution** | | | | | | | |
| | Water Distribution Piping | | | 2 | | | |
| | Water Heaters (Separate from Bldg. Heating / Kitchen) | | | 2 | | | Kitchen included |
| | Water Meter | | | 2 | | | |
| **Food Service** | | | | | | | |
| | SS Sinks | | | 2 | | | |
| | Mop Sinks | | | | | N/A | |

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# PLUMBING

| | | | |
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| | |
|---|---|
| SCHOOL NAME | Bow |
| ADDRESS | 19801 Prevost st |
| BUILDING | |
| SURVEY DATE | 2/13/2017 |
| SURVEYOR | Kole Myers |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| | Water and Drains | | | 2 | | | |
| Domestic Water Heating | | | | | | | |
| | Dedicated Heater for Kitchen | | | | | N/A | |
| | Recirculation Pump (Operating- Yes/No) | | | 2 | | | |

***Any violations reported in this school assessment were not given to the facility as violations to be corrected in order to maintain the certificate of occupancy for the facility. Any violations reported in this school assessment were not cited as part of a school safety inspection, they are strictly for the use of the assessment report.

DRAFT

# BOILER

| | | | | | |
|---|---|---|---|---|---|
| 4 | NEW | New or like-new condition; no issues to report; no expected failures | No issues / violations or adverse conditions / less than 3 years old | Bow | SCHOOL NAME |
| 3 | GOOD | Good condition; no reported issues or concerns | No issues / violations or adverse conditions other than new | | ADDRESS |
| 2 | FAIR | Average wear for building age; not new but no issues | Violations-90 days | | BUILDING |
| 1 | POOR | Worn from use -end of expected lifecycle | Violations-45 days | 2/13/2017 | SURVEY DATE |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable | J.Paradine | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| **Heating Plant** | | | | | | | |
| | Boilers (Age, Fuel Type, Input/Output) | | | 2 | | | |
| | Pumps (VFD / Sound / Suction Pressure) | | | 2 | | | |
| | Plant Piping & Valves (Corroded/Isolation Valves) | | | 2 | | | |

***Any violations reported in this school assessment were not given to the facility as violations to be corrected in order to maintain the certificate of occupancy for the facility. Any violations reported in this school assessment were not cited as part of a school safety inspection, they are strictly for the use of the assessment report.

DRAFT

# ELEVATOR

| | | | | | |
|---|---|---|---|---|---|
| 4 | NEW | New or like-new condition; no issues to report; no expected failures | No issues / violations or adverse conditions / less than 3 years old | Bow | SCHOOL NAME |
| 3 | GOOD | Good condition; no reported issues or concerns | No issues / violations or adverse conditions other than new | | ADDRESS |
| 2 | FAIR | Average wear for building age; not new but no issues | Violations-90 days | | BUILDING |
| 1 | POOR | Worn from use -end of expected lifecycle | Violations-45 days | 2/13/2017 | SURVEY DATE |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable | J.Paradine | SURVEYOR |

**Elevator State Serial Number:**

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| | Machine Room Equipment | | | | | N/A | |
| | Door Operators and Operating Equipment | | | | | N/A | |
| | Interior Cab / Signage / Emerg. Phone | | | | | N/A | |
| | Hoistway Pit | | | | | N/A | |
| | Landing Fixtures | | | | | N/A | |
| | Operating Condition | | | | | N/A | |
| | Ropes / Hoisting Equipment | | | | | N/A | |
| | Hoistway Equipment | | | | | N/A | |
| | Fire and Emergency Service | | | | | N/A | |

***Any violations reported in this school assessment were not given to the facility as violations to be corrected in order to maintain the certificate of occupancy for the facility. Any violations reported in this school assessment were not cited as part of a school safety inspection, they are strictly for the use of the assessment report.

DRAFT

# ELECTRICAL

| | | | |
|---|---|---|---|
| 4 | NEW | New or like-new condition; no issues to report; no expected failures | No issues / violations or adverse conditions / less than 3 years old |
| 3 | GOOD | Good condition; no reported issues or concerns | No issues / violations or adverse conditions other than new |
| 2 | FAIR | Average wear for building age; not new but no issues | Violations-90 days |
| 1 | POOR | Worn from use -end of expected lifecycle | Violations-45 days |
| 0 | CRITICAL | Extremely worn or damaged | Violations / Imminent danger or inoperable |

| | |
|---|---|
| Bow Elementary | SCHOOL NAME |
| 19801 Prevost | ADDRESS |
| School | BUILDING |
| 2/13/2017 | SURVEY DATE |
| Lance Ash | SURVEYOR |

| | | 4 | 3 | 2 | 1 | 0 | COMMENTS / RECOMMENDED ACTION |
|---|---|---|---|---|---|---|---|
| **Electrical Supply** | | | | | | | |
| | Service Switchgear/Electrical Service (Observed Condition) | | | 2 | | | |
| | District-owned Site Transformers (Observed Condition) | | | 2 | | | |
| | Motor Control Centers | | | 2 | | | |
| **Electrical Distribution** | | | | | | | |
| | Equipment | | | 2 | | | |
| | Panelboards (Condition & Capacity) | | | 2 | | | |
| | Feeders (Observed Condition) | | | 2 | | | |
| | Devices (Switches & Receptacles) | | | 2 | | | |
| | TSS - Surge Suppression | | | | | N/A | |
| | Transformers | | | 2 | | | |
| **Lighting** | | | | | | | |
| | Classroom (Instructional) | | | 2 | | | |
| | Corridor / Common Areas | | | 2 | | | |
| | Restrooms | | | 2 | | | |
| | High Bay Areas | | | 2 | | | |
| | Emergency (Condition & Code Compliance) | | | 2 | | | There were several exit/emergency lights |
| | Exterior Perimeter (Building Mounted) | | | 2 | | | |
| | Lighting Controls (Building Level) | | | 2 | | | Outside lights are being controlled with |
| **Other** | | | | | | | |
| | Kitchen Equipment Supply | | | 2 | | | |
| | Emergency Generator (Observed Condition) | | | | | N/A | |
| | Intercom / PA Systems (Observed Condition) | | | 2 | | | |
| | Fire Alarm System (Observed Condition) | | | 2 | | | |

***Any violations reported in this school assessment were not given to the facility as violations to be corrected in order to maintain the certificate of occupancy for the facility. Any violations reported in this school assessment were not cited as part of a school safety inspection, they are strictly for the use of the assessment report.

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# Appendix C: SCHOOL QUALITY MAPS

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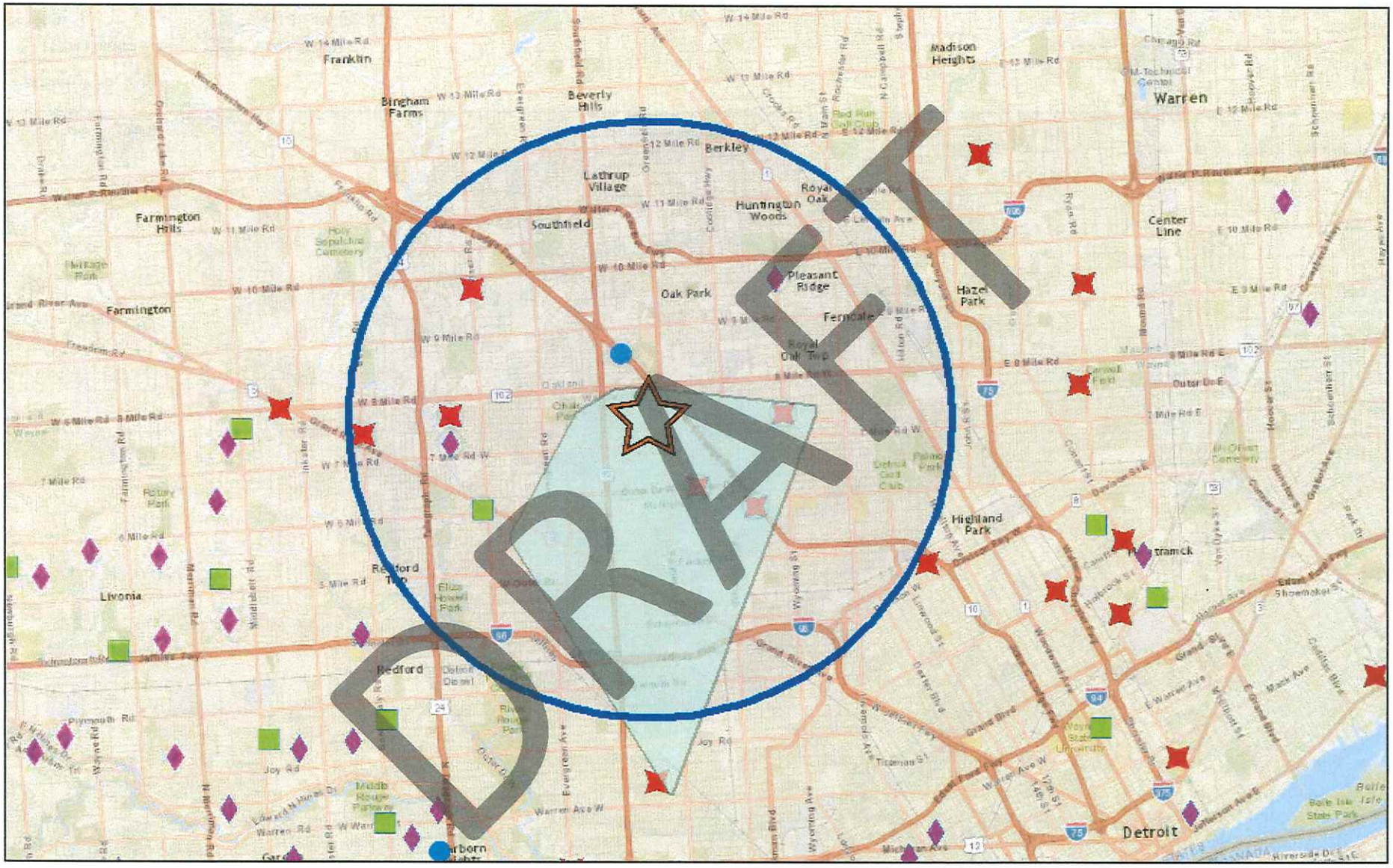
# Bow ES-MS: Qualifying Schools Within 5 Miles




February 18, 2017

Est. Service Area

**Schools**

Elementary School

ES-MS

Middle School

Most Grades (PK-12)

Selected School: Bow Elementary-Middle School

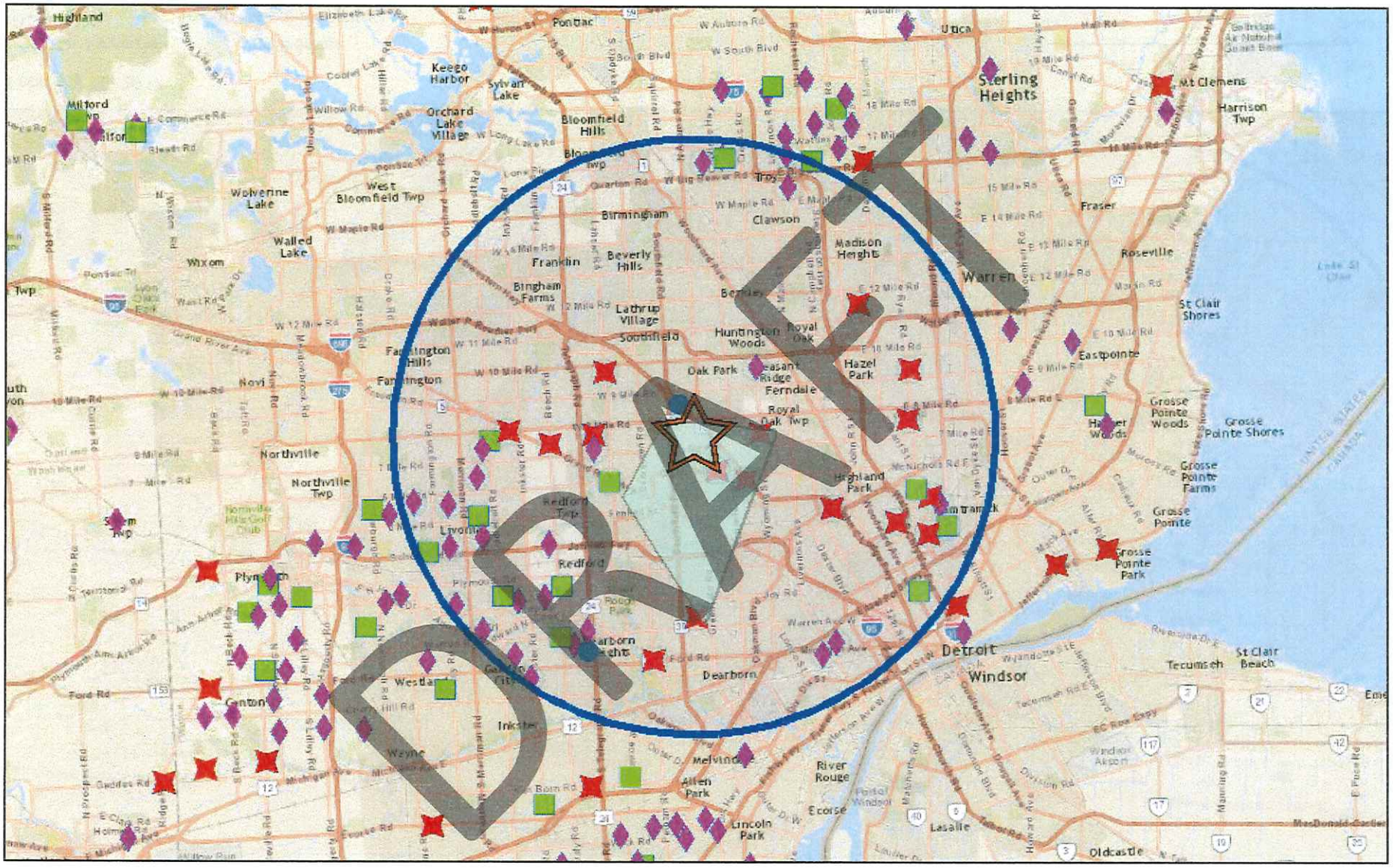
0 1.25 2.5 5 mi

0 2 4 8 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Area Schools radius: 5 Miles | Map: State of Michigan - CSS (2017©)

# Bow ES-MS: Qualifying Schools Within 10 Miles




February 18, 2017

Est. Service Area

**Schools**

Elementary School

ES-MS

Middle School

Most Grades (PK-12)

Selected School: Bow Elementary-Middle School

0 2.5 5 10 mi

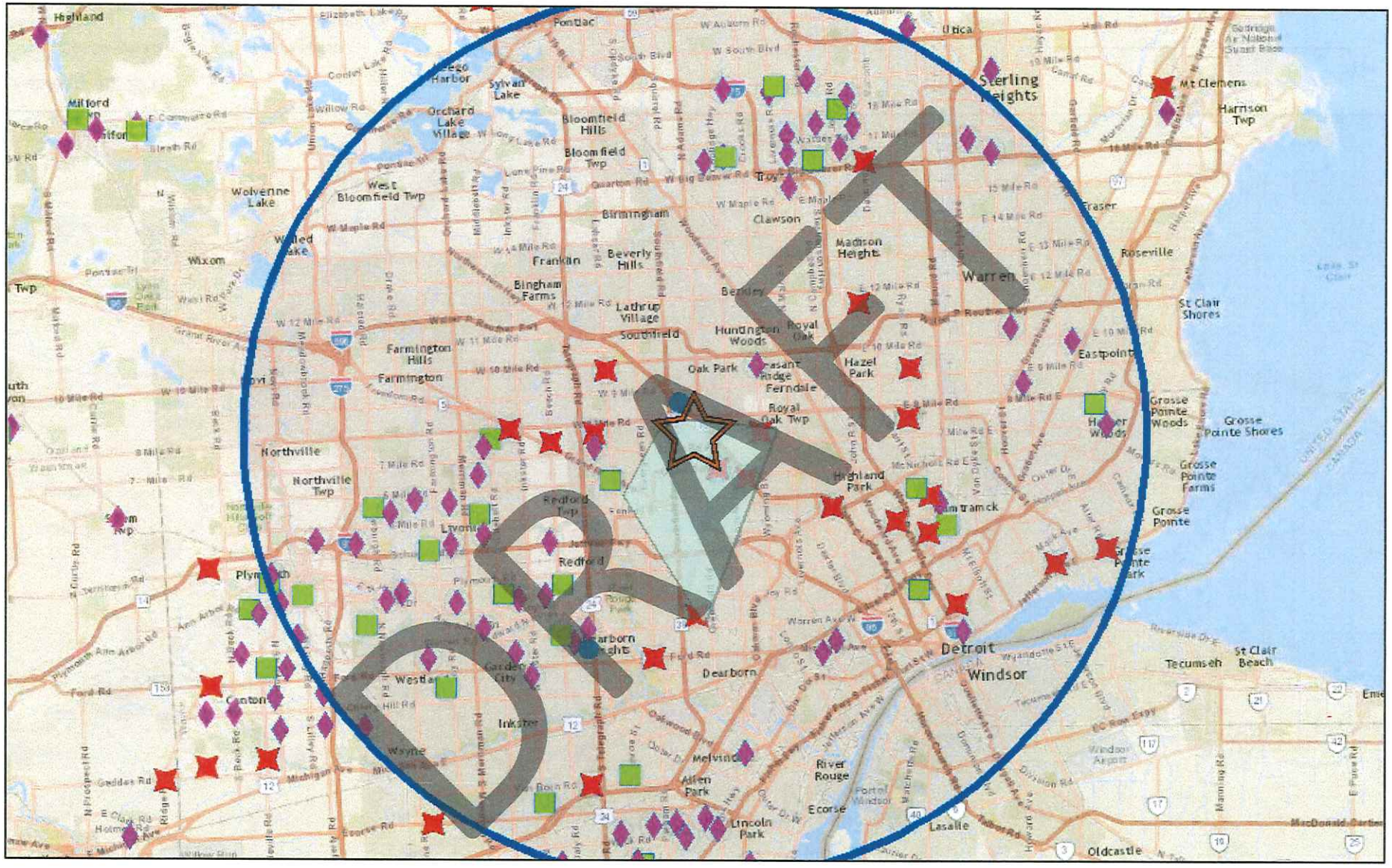
0 4 8 16 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),



Area Schools radius: 10 Miles | Map: State of Michigan - CSS (2017©)

# Bow ES-MS: Qualifying Schools Within 15 Miles




February 18, 2017

Est. Service Area

**Schools**

Elementary School

ES-MS

Middle School

Most Grades (PK-12)

Selected School: Bow Elementary-Middle School

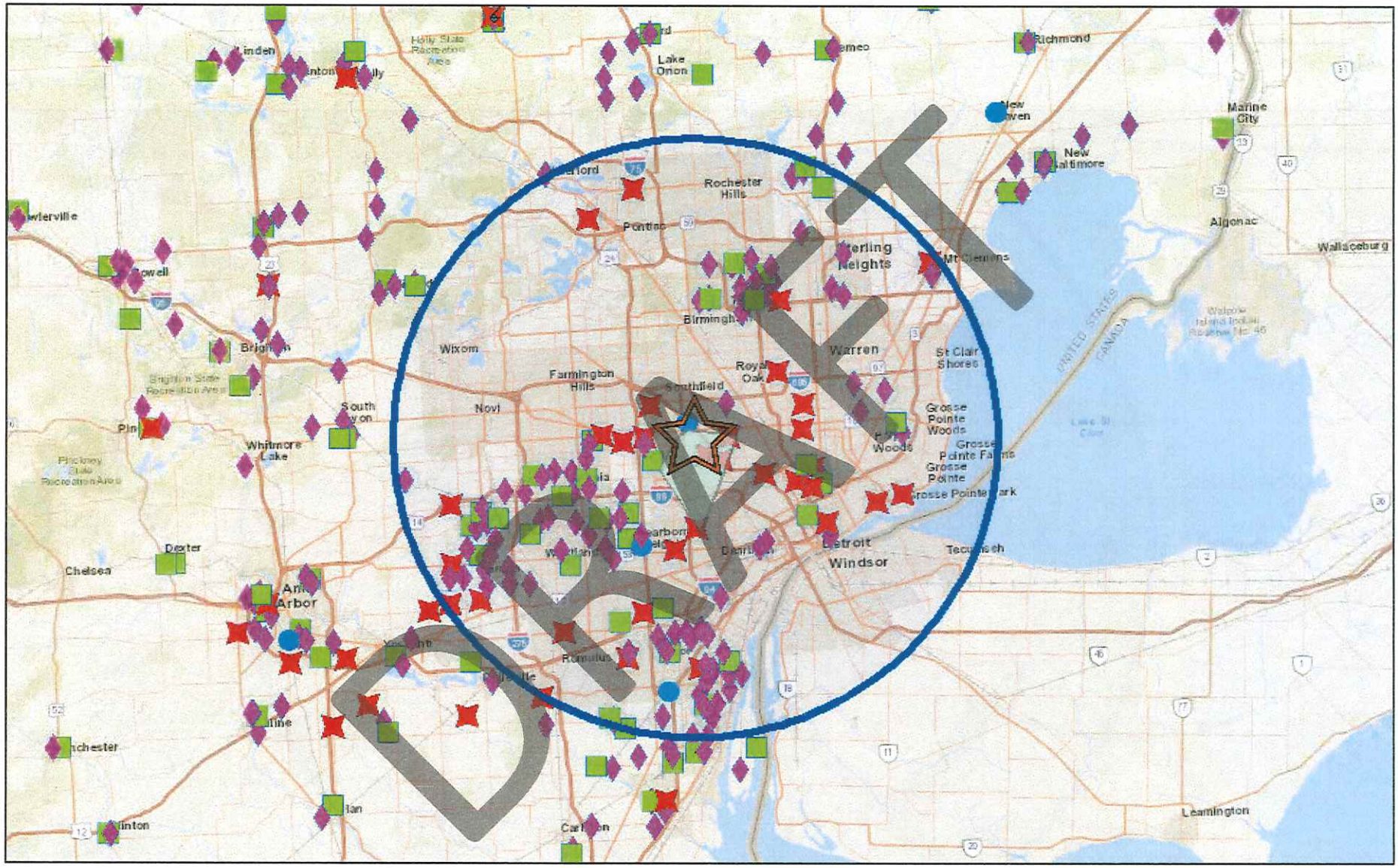
0 2.5 5 10 mi

0 4 8 16 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Area Schools radius: 15 Miles | Map: State of Michigan - CSS (2017©)

# Bow ES-MS: Qualifying Schools Within 20 Miles




February 18, 2017

Est. Service Area

**Schools**

Elementary School

ES-MS

Middle School

Most Grades (PK-12)

Selected School: Bow Elementary-Middle School

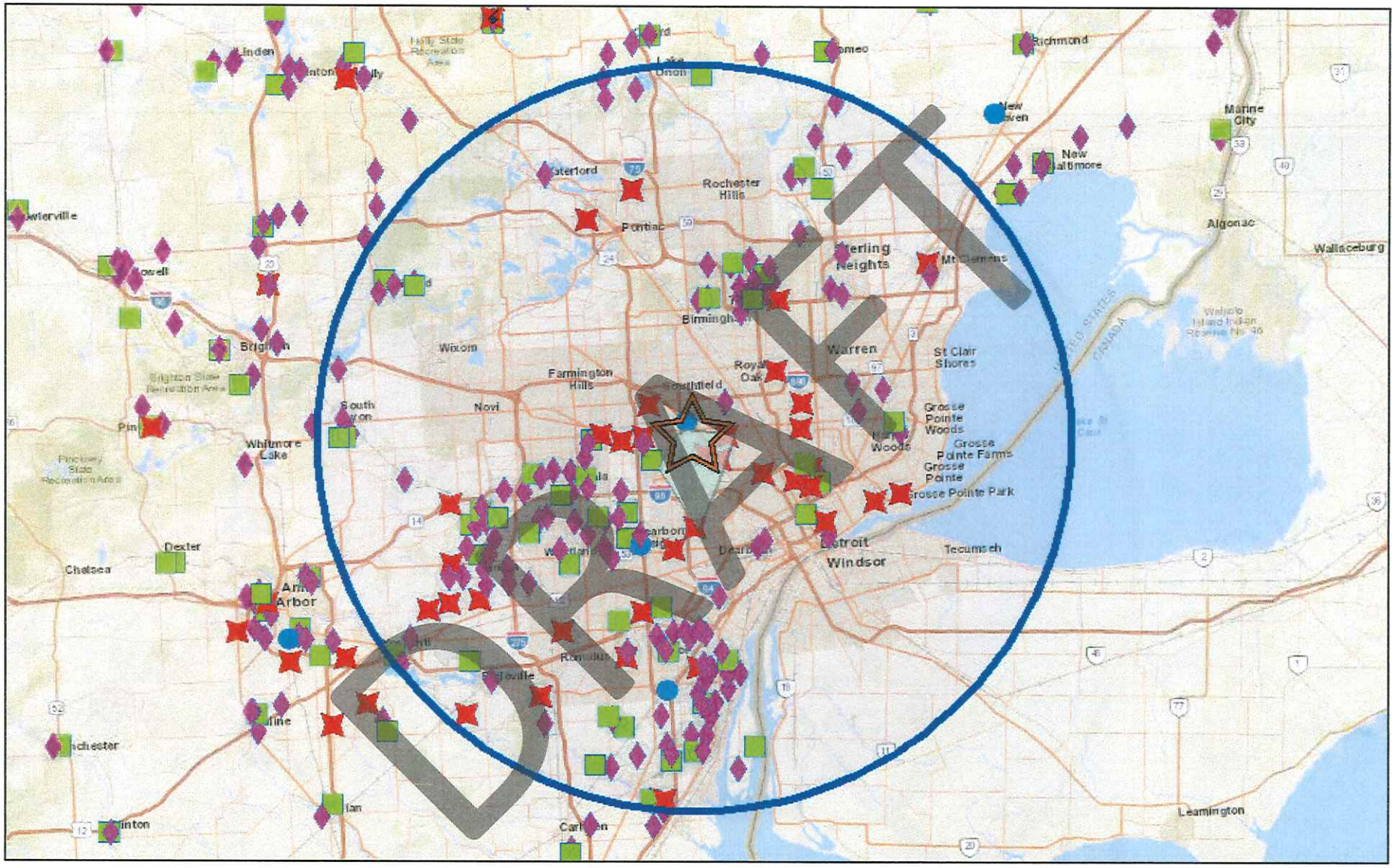
0 5 10 20 mi

0 5 10 20 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Area Schools radius: 20 Miles | Map: State of Michigan - CSS (2017©)

# Bow ES-MS: Qualifying Schools Within 25 Miles




February 18, 2017

Est. Service Area

**Schools**

Elementary School

ES-MS

Middle School

Most Grades (PK-12)

Selected School: Bow Elementary-Middle School

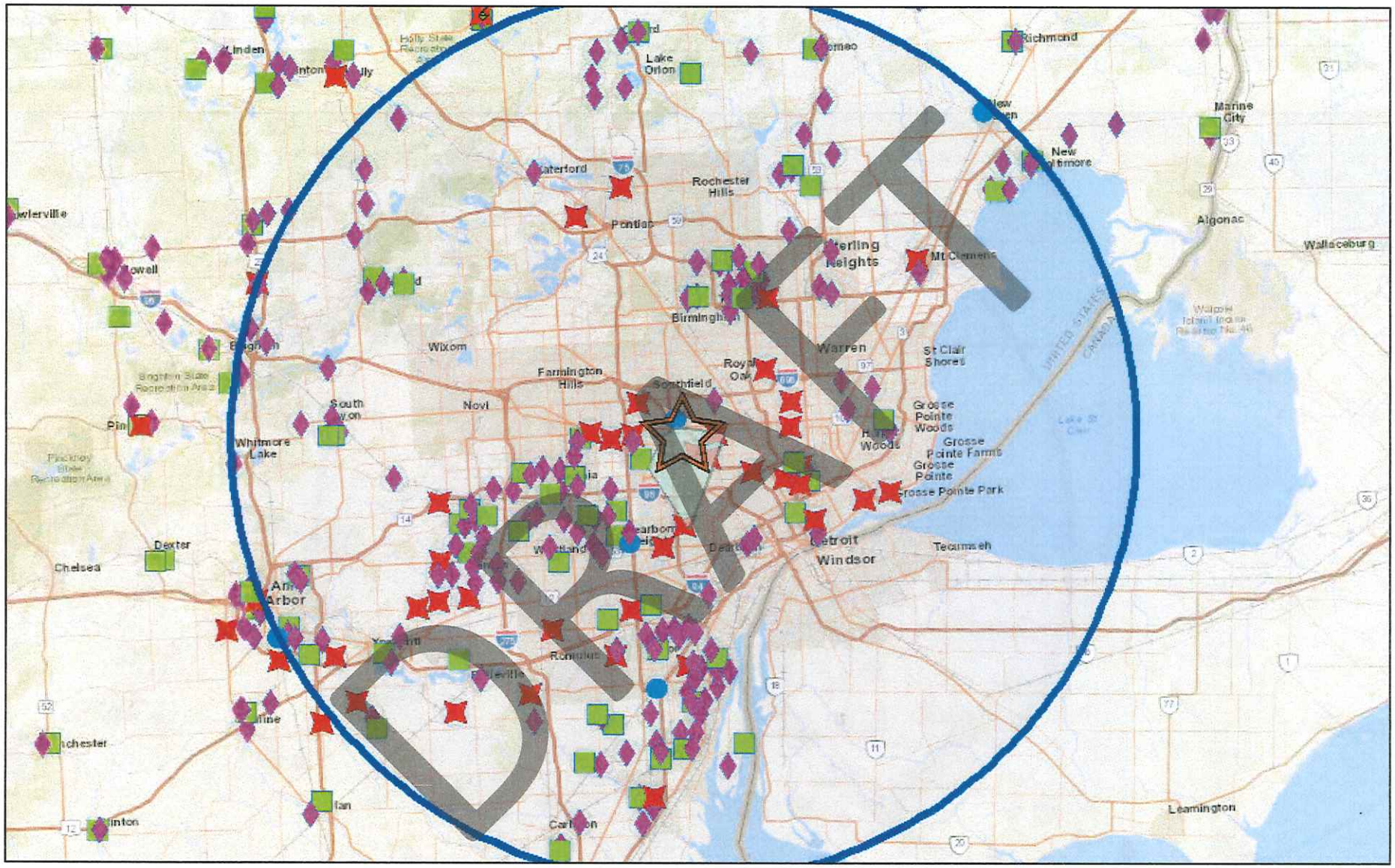
0 5 10 20 mi

0 5 10 20 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Area Schools radius: 25 Miles | Map: State of Michigan - CSS (2017©)

# Bow ES-MS: Qualifying Schools Within 30 Miles




February 18, 2017

Est. Service Area

**Schools**

Elementary School

ES-MS

Middle School

Most Grades (PK-12)

Selected School: Bow Elementary-Middle School

0 5 10 20 mi

0 5 10 20 km

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand),

Area Schools radius: 30 Miles | Map: State of Michigan - CSS (2017©)

# Appendix D: Financial Impact

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**Appendix D: Financial Impact**

| Schools Identified for the Next Level of Accountability Outstanding Obligations | | |
|---|---|---|
| **Detroit Public Schools Community District** | | |
| **Loan Type** | **Loan Balance** | **Maturity** |
| No Debt | | |

| Schools' Potential Losses from School Closures | | | | | | |
|---|---|---|---|---|---|---|
| **Schools** | **Allowance** | **Student Count (Losing)** | **Foundation (Losing)** | **Student Count (Total)** | **Foundation (Total)** | **% of Foundation** |
| Ann Arbor Trail Magnet School | $ 7,552 | 346 | $ 2,612,992 | 45,198.72 | $ 341,340,733.44 | 0.77% |
| Bow Elementary-Middle School | $ 7,552 | 520 | $ 3,927,040 | 45,199.72 | $ 341,348,285.44 | 1.15% |
| Clark, J.E. Preparatory Academy | $ 7,552 | 661 | $ 4,991,872 | 45,200.72 | $ 341,355,837.44 | 1.46% |
| Detroit Collegiate Preparatory High School @ Northwestern | $ 7,552 | 556 | $ 4,198,912 | 45,201.72 | $ 341,363,389.44 | 1.23% |
| Detroit Institute of Technology at Cody | $ 7,552 | 269 | $ 2,031,488 | 45,202.72 | $ 341,370,941.44 | 0.60% |
| Durfee Emementary-Middle School | $ 7,552 | 474 | $ 3,579,648 | 45,203.72 | $ 341,378,493.44 | 1.05% |
| Fisher Magnet Upper Academy | $ 7,552 | 456 | $ 3,443,712 | 45,204.72 | $ 341,386,045.44 | 1.01% |
| Gompers Elementary-Middle School | $ 7,552 | 777 | $ 5,867,904 | 45,205.72 | $ 341,393,597.44 | 1.72% |

**Appendix D: Financial Impact** *(continued)*

| Schools' Potential Losses from School Closures | | | | | | |
|---|---|---|---|---|---|---|
| **Schools** | **Allowance** | **Student Count (Losing)** | **Foundation (Losing)** | **Student Count (Total)** | **Foundation (Total)** | **% of Foundation** |
| Henderson Academy | $ 7,552 | 695 | $ 5,248,640 | 45,206.72 | $ 341,401,149.44 | 1.54% |
| Marquette Elementary-Middle School | $ 7,552 | 589 | $ 4,448,128 | 45,207.72 | $ 341,408,701.44 | 1.30% |
| Mason Elementary School | $ 7,552 | 437 | $ 3,300,224 | 45,208.72 | $ 341,416,253.44 | 0.97% |
| Osborn Academy of Mathematics | $ 7,552 | 266 | $ 2,008,832 | 45,209.72 | $ 341,423,805.44 | 0.59% |
| Osborn College Preparatory Academy | $ 7,552 | 200 | $ 1,510,400 | 45,210.72 | $ 341,431,357.44 | 0.44% |
| Osborn Evergreen Academy of Design and Alternative Energy | $ 7,552 | 327 | $ 2,469,504 | 45,211.72 | $ 341,438,909.44 | 0.72% |
| Sampson Academy | $ 7,552 | 300 | $ 2,265,600 | 45,212.72 | $ 341,446,461.44 | 0.66% |
| Thirkell Elementary | $ 7,552 | 645 | $ 4,871,040 | 45,213.72 | $ 341,454,013.44 | 1.43% |
| **TOTAL** | $ 7,552 | 7,518.00 | $ 56,775,936 | 45,214.72 | $ 341,461,565.44 | 16.63% |
| | | | | | | |
| **DPSCD 2016 Federal Revenues** | **General Fund** | $ 141,120,709.00 | | | | |
| | **Food Service** | $ 46,134,274.00 | | | | |
| | **Debt Service** | $ 13,396,896.00 | | | | |
| | **Total** | $ 200,651,879.00 | | | | |

*Source: Michigan Department of Treasury*