Why we did an assessment

• To assess the condition of all our facilities and develop a long-range facilities plan to review with members of the MPS community.

• To assure that MPS facilities provide a suitable learning environment for MPS students.
### What we did

- Engage a team of school facility experts; including architects, engineers and construction managers to assess the overall condition of occupied and unoccupied facilities.
- Visited all MPS facilities and sites
- Created a visual inventory of all MPS buildings and grounds.
- Counseled with MPS district and building administrators.

### Midland Public Schools

<table>
<thead>
<tr>
<th>What we did</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Assessed likely demographics of MPS over the next 15 years.</td>
</tr>
</tbody>
</table>

  School age population will level out at 7,200 students. Down 2,800+ students from the high in 2003.

  High School age population is expected to level out at 150% of the capacity of either High School facility.

  Elementary and Middle School populations will decrease modestly. |
Issues considered

- MPS buildings are aging – 88% of the buildings are over 50 years old. Average age of MPS school building is 61 years old.
- Some facilities have been closed and are deteriorating
- Many schools are not energy efficient
- MPS does not have a sinking fund to finance basic maintenance
- Buildings do not have safety features found in current educational designs.
- The MPS general fund and reserves are shrinking and not sufficient to make necessary repairs and upgrades.

Midland Public Schools
Background information

- School districts typically issue bonds to upgrade, renovate, and construct school facilities. To pay principal and interest on bonds, districts levy a debt millage.

- MPS has not had a debt millage since Dow High and Woodcrest were built in the late 1960s.

- Money from a 2.0 mill sinking fund levy was used to maintain MPS facilities between 2003 and 2012. This levy financed more than $43 million which was used to maintain our facilities.
  - Sinking fund generated approximately $33/sq ft in construction over ten years.
  - Current renovation costs range from $50 - $100/sq ft.

In May 2013 MPS asked voters to approve a 0.9 mill technology bond and renew the 2.0 mill sinking fund.

- School district voters turned down both of these requests totaling 2.9 mills.
### Midland County:

<table>
<thead>
<tr>
<th>District</th>
<th>Millage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bullock Creek</td>
<td>7.0</td>
</tr>
<tr>
<td>Meridian</td>
<td>5.25</td>
</tr>
<tr>
<td>Coleman</td>
<td>1.83</td>
</tr>
<tr>
<td>Midland Public Schools</td>
<td>0.0</td>
</tr>
</tbody>
</table>

### Surrounding Districts:

<table>
<thead>
<tr>
<th>District</th>
<th>Millage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mt. Pleasant</td>
<td>5.44</td>
</tr>
<tr>
<td>Saginaw</td>
<td>5.3</td>
</tr>
<tr>
<td>Freeland</td>
<td>4.2</td>
</tr>
<tr>
<td>Pinconning</td>
<td>3.55</td>
</tr>
<tr>
<td>Clare</td>
<td>3.44</td>
</tr>
<tr>
<td>Frankenmuth</td>
<td>3.1</td>
</tr>
<tr>
<td>Bay City</td>
<td>2.99</td>
</tr>
<tr>
<td>Harrison</td>
<td>2.85</td>
</tr>
<tr>
<td>Saginaw Twp.</td>
<td>2.8</td>
</tr>
<tr>
<td>Farwell</td>
<td>2.1</td>
</tr>
<tr>
<td>Gladwin</td>
<td>2.1</td>
</tr>
<tr>
<td>Beaverton</td>
<td>1.63</td>
</tr>
<tr>
<td>Midland</td>
<td>0.0</td>
</tr>
</tbody>
</table>
What are similar districts levying?

Similar Districts:

<table>
<thead>
<tr>
<th>District</th>
<th>Millage Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chippewa Valley</td>
<td>8.64</td>
</tr>
<tr>
<td>Rockford</td>
<td>8.5</td>
</tr>
<tr>
<td>E. Lansing</td>
<td>8.1</td>
</tr>
<tr>
<td>Brighton</td>
<td>7.9</td>
</tr>
<tr>
<td>Howell</td>
<td>7.7</td>
</tr>
<tr>
<td>Novi</td>
<td>7.6</td>
</tr>
<tr>
<td>Portage</td>
<td>5.3</td>
</tr>
<tr>
<td>Troy</td>
<td>4.7</td>
</tr>
<tr>
<td>Birmingham</td>
<td>3.9</td>
</tr>
<tr>
<td>Ann Arbor</td>
<td>3.45</td>
</tr>
<tr>
<td>Traverse City</td>
<td>3.1</td>
</tr>
<tr>
<td>Lapeer</td>
<td>3.0</td>
</tr>
<tr>
<td>Grosse Pointe</td>
<td>2.8</td>
</tr>
<tr>
<td>Bloomfield Hills</td>
<td>2.5</td>
</tr>
<tr>
<td>Midland</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Midland Public Schools

How we compare

Of the approximately 550 school districts in Michigan:

- MPS is 1 of 61 districts that do not have a debt millage.
- MPS is 1 of 29 districts without a debt millage or a sinking fund.
What MPS needs from the community

MPS needs you to listen to the facility assessment findings and react to the information presented.
## Purpose & Process

### Purpose
- Assess overall condition of occupied and unoccupied facilities
- Make recommendations on how to extend useful life of the buildings and grounds

### Process
- Visited all of District’s facilities/sites
- Visual inventory of all buildings & grounds
- Meet with administrators & building managers

---

### Participants
- **District Personnel**
  - Michael Moeggenberg – Director of Operations
  - Blake Sobol – Director of Technology
  - Chris Sabourin – Technology and Media Curriculum Specialist
  - Building Principals
  - Building Managers
- **French Associates**
  - Architect
  - Civil Engineer
  - Mechanical & Electrical Engineers
  - Barton Malow Technology
- **Barton Malow Company**
### Overview of findings

- Buildings and grounds are, overall, in fairly good condition.
- Maintenance efforts have extended the useful life of the infrastructure.
- Sinking Fund improvements were a good investment.
- Many of the infrastructure components are nearing the end or past their useful life and/or not very efficient.
- Investments will be needed to extend the useful life of the facilities.

### Areas of Concern
Midland Public Schools

Areas of concern

Aging Facilities

<table>
<thead>
<tr>
<th>MPS Building</th>
<th>Age</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adams Elementary</td>
<td>52</td>
</tr>
<tr>
<td>Carpenter Street School</td>
<td>88</td>
</tr>
<tr>
<td>Chestnut Hill Elementary</td>
<td>57</td>
</tr>
<tr>
<td>Cook Elementary</td>
<td>66</td>
</tr>
<tr>
<td>Eastlawn Elementary</td>
<td>69</td>
</tr>
<tr>
<td>Franklin Center</td>
<td>65</td>
</tr>
<tr>
<td>Mills Elementary</td>
<td>55</td>
</tr>
<tr>
<td>Parkdale Elementary</td>
<td>59</td>
</tr>
<tr>
<td>Plymouth Elementary</td>
<td>62</td>
</tr>
<tr>
<td>Seibert Elementary</td>
<td>56</td>
</tr>
<tr>
<td>Woodcrest Elementary</td>
<td>45</td>
</tr>
<tr>
<td>Central Middle School</td>
<td>77</td>
</tr>
<tr>
<td>Jefferson Middle School</td>
<td>51</td>
</tr>
<tr>
<td>Northeast Middle School</td>
<td>64</td>
</tr>
<tr>
<td>H. H. Dow High School</td>
<td>47</td>
</tr>
<tr>
<td>Midland High School</td>
<td>59</td>
</tr>
</tbody>
</table>

Average Age of MPS School Building: 61 Years

88% of MPS Facilities are over 50 years old

Midland Public Schools

Specific areas of concern

- Eastlawn Elementary (built in 1945)
  - Site constraints for expansion
  - Overall age/condition

- Northeast Middle School (built in 1950)
  - Settlement/condition of exterior brick
  - Overall age/condition
  - Crack monitoring

- Woodcrest Elementary
  - Subsurface moisture issues

Midland Public Schools
### Specific areas of concern

- **Carpenter Elementary (built in 1926)**
  - Original heating system
  - Inflexible layout
  - More difficulty to implement new mechanical/electrical improvements
  - Site constraints for expansion

- **Central Middle School (built in 1937)**
  - Original heating system
  - Inflexible layout
  - More difficult to implement new mechanical/electrical improvements

### Districtwide areas of concern

**Safety & Security**

- Unsecure entrances
- Parking lot traffic flow issues
- Inadequate exterior lighting
- Failing public address systems
- Limited video surveillance
- Limited door access control
- Aging bus fleet
### Energy Efficiency
- Original boilers
- Original classroom unit ventilators
- Pneumatic temperature controls
- Original single pane windows

### Healthy Learning Environments
- Improve indoor air quality
- Natural lighting

---

<table>
<thead>
<tr>
<th>Areas of concern</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Vacant Buildings and Property</strong></td>
</tr>
<tr>
<td>• Cost to repurpose for educational use is high</td>
</tr>
<tr>
<td>• Located within residential areas</td>
</tr>
<tr>
<td>• Limited alternative use(s)</td>
</tr>
<tr>
<td>• Most likely value is limited to land size/value</td>
</tr>
<tr>
<td>• Building demolition</td>
</tr>
<tr>
<td>• Central Middle School</td>
</tr>
<tr>
<td>• Partially occupied</td>
</tr>
<tr>
<td>• Desire to maintain a Performing Arts Center</td>
</tr>
</tbody>
</table>
## Observations from the Lens of the 21st Century

### Elementary Media Centers are less than adequate
- Lack of space for collaborative learning opportunities
- Multi-purpose/gymnasiums are less than adequate. Consider looking at repurposing of existing gym/cafeterias into media centers and providing new multi-purpose spaces

### Areas of Concern

### Technology
- Limited classroom technology
- Aging infrastructure
- Network and wireless capacity limitations
- Printer and copier lease expenses
- Need flexible and sustainable multi-year plan
Cost Summary Report

Estimate Development

• Facility audits: Thorough review of district facilities
• Accurate estimates: Drawn upon historical data and current bid market
• Detailed estimate: These figures summarize thousands of lines of data.
• Options: District has ability to add/delete projects as necessary to meet desired program

Midland Public Schools
## Estimate Categories

- Districtwide facility needs
- Elementary renovations/additions
- Vacant buildings
- Central campus
- Bus replacement

### Districtwide Facility Needs

Renovations and infrastructure projects in all occupied facilities. Special consideration given to life safety and assuring equity across facilities, grade levels, and programs.

$93 - $99M
## Districtwide facility needs

$93M - $99M

### Cost breakdown by grade level:

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Cost</th>
<th>% of total construction</th>
<th>% of total square footage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Schools</td>
<td>$40M</td>
<td>42%</td>
<td>50%</td>
</tr>
<tr>
<td>Middle Schools</td>
<td>$18.5M</td>
<td>20%</td>
<td>23%</td>
</tr>
<tr>
<td>High Schools</td>
<td>$36M</td>
<td>38%</td>
<td>27%</td>
</tr>
</tbody>
</table>

### Safety & Security

- Create secure entrances
- Improve parking lot traffic flow
- Upgrade exterior lighting
- Replace PA systems
- Install video surveillance
- Expand door access control
### Architectural Building Components

- Replace aging roofing
- Replace original single pane windows
- Replace original interior and exterior doors
- Install ADA compliant door hardware
- Replace balance of aging flooring
- Replace original classroom chalkboards
- Replace original classroom cabinets
- Replace original furnishings (backboards, bleachers, theatre seating, sound systems)

### Mechanical & Electrical

- Replace original boilers with high efficiency boiler systems
- Replace original classroom unit ventilators
- Replace pneumatic controls with direct digital controls
- Provide districtwide energy management system
- Install lighting occupancy sensors for energy efficiency
Districtwide facility needs
$93M - $99M

Exterior Work
• Replace failing asphalt parking lots
• Replace cracking sidewalk
• Correct storm drainage issues
• Replace damaged perimeter fencing
• Athletic facility needs

Furniture & Equipment
• Replace broken classroom desks and chairs
• Provide classroom technology
• Upgrade technology infrastructure

Additional Elementary Enhancements
Repurpose existing gym/cafeterias into media centers and provide new multi-purpose spaces to relieve capacity issues and create 21st century learning spaces.

$18 - $20M
Central, Carpenter & Eastlawn opportunities

Given their relative locations, limited longevity, concerns of overall age (70+ years), condition, and high cost of rehabilitation, additional opportunities are offered for your consideration.

$3.5 - $13M

<table>
<thead>
<tr>
<th>Considerations</th>
<th>Additional Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demo unused portion of Central and renovate Performing Arts Center</td>
<td>+$3.5M</td>
<td>$15M</td>
</tr>
<tr>
<td>Convert Central into an elementary school and renovate Performing Arts Center (no work at Carpenter and Eastlawn)</td>
<td>+$5M</td>
<td>$16.5M</td>
</tr>
<tr>
<td>Demo unused portion of Central and renovate Performing Arts Center. Build new elementary school with 50 year life on Central site (no work at Carpenter and Eastlawn)</td>
<td>+$13M</td>
<td>$24.5M</td>
</tr>
</tbody>
</table>

Facility needs budget includes $11.5M in base renovation in these facilities to extend their useful life approximately 15-20 years.
Vacant Buildings
Demolition of facilities due to limited life expectancy, the high cost of meeting current building code requirements, and inability to meet current educational expectations. Cost includes any known environmental concerns and returning land to a greenbelt.

$0 - $2M

Bus Replacement

$2M - $6M
Bus replacement

$2M – $6M

Current Fleet Information

Current Fleet:
- 58 buses
- Purchased between 2002-2013
- Range from 50,000 to 220,000 miles

- 41% of the fleet has over 120,000 miles
- 34% of the fleet is 9+ years old
- 62% of the fleet will have over 200,000 miles by 2018

Based on a 10-15 year/200,000+ miles replacement criteria, MPS will need to replace at a minimum 32% of its fleet within the next four years.

Cost Summary of Potential Projects
## Cost Summary

<table>
<thead>
<tr>
<th>Category</th>
<th>Range of Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Districtwide facility needs</td>
<td>$93M - $99M</td>
</tr>
<tr>
<td>Elementary additions/renovations</td>
<td>$18M - $20M</td>
</tr>
<tr>
<td>Vacant buildings</td>
<td>-                - $2M</td>
</tr>
<tr>
<td>Central campus</td>
<td>$3.5M - $13M</td>
</tr>
<tr>
<td>Bus replacement</td>
<td>$2M - $6M</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$116.5M - $140M</td>
</tr>
</tbody>
</table>

**Midland Public Schools**

### What Does This Mean for MPS?

[Image of triangle graphic with question]

[Logo and text: Barton Malow - Experience the Excellence • Midland Public Schools]
In the late 1960s, a generation of Midland residents committed to providing students with quality learning facilities.

- Dow High School
- Jefferson Middle School
- Woodcrest Elementary

Now it is time for our generation to make a similar investment for future generations.

Benefits

- General fund relief:
  - Energy efficiency
  - Fewer buildings to maintain
  - Technology replacement
  - Busing replacement
  - Maintenance relief

- Extend life of present buildings
- Improve safety and security for staff and students
- Continue to attract families seeking MPS quality of education
- Continue to provide diverse programming our families expect
OR...

- Diminished quality of life
- Buildings age and deteriorate
- Shorter life of buildings
- Community does not attract young families
- General fund cannot provide diverse programming
- Fall behind technology
- Extend walk zones and eliminate athletic busing
- Future generations need to build multiple buildings

MPS needs to know...

1. Do you share these concerns?
2. What will be the community’s major concerns?
3. Should we pursue a bond proposal?
   - 2.1 – 2.9 mills over 12-15 years
   - 1 mill is equivalent to $1 for every thousand dollars of taxable value.
What’s next?

• Gather insight by sharing this information in a series of open forums with our community, our parents, and our educators.

• Use that insight to provide the Board of Education specific options to consider.

• Bring a plan to the voters of Midland in February 2015