

# Ann Arbor Public Schools 2019 Bond Proposal November 5, 2019



# Presentation Overview

- AAPS Facilities Summary and History
- Impact of Buildings on Student Performance
- Bond Development
  - 2 Year Timeline
  - Capacity and Growth
  - Facilities Condition Assessment
  - AAPS 20-Year Capital Needs
- Financial Impact to the Community
- 2019 Bond: Renewal and Re-Envision Goals
- 2019 Bond: Years 1-6
- Case Studies and Current AAPS Building Conditions
- Ballot Language and Voter Information

# Ann Arbor Public Schools - AAPS

## AAPS serves

- The City of Ann Arbor
- Parts of eight surrounding townships:
  - Ann Arbor, Lodi, Northfield, Pittsfield, Salem, Scio, Superior and Webster townships
- Covering 125 square miles

## AAPS owns and maintains

- ✓ 35 buildings including 32 schools
- ✓ 3.4 million square feet
- ✓ 723 acres



# AAPS Building History

- 5 AAPS school buildings are approaching their 100<sup>th</sup> birthday
  - *Angell Elementary, Ann Arbor Open at Mack (K-8), Bach Elementary, Burns Park Elementary, and Community High School*
- A2 STEAM and Slauson MS built during the 1930's
- Majority of AAPS schools built during postwar years - 1950's - 1970's
- Skyline High School built 2008

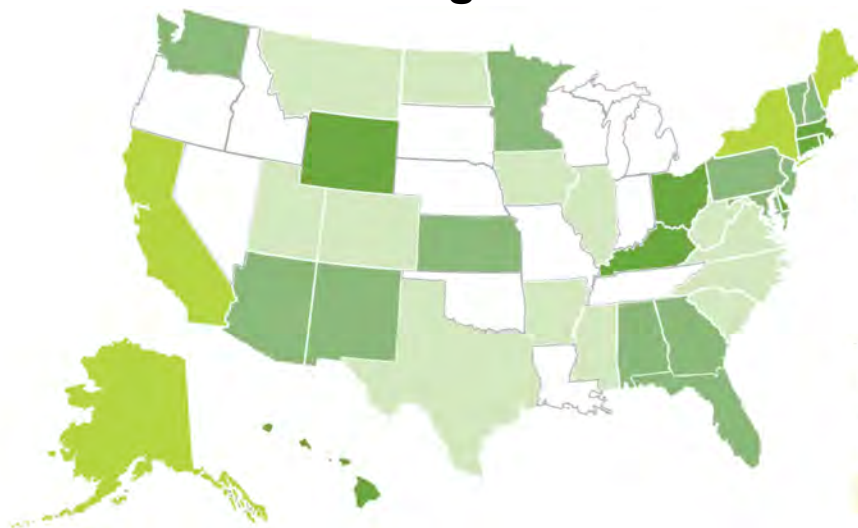
**63**  
**YEARS**  
Average  
Building age



## Key 2019 Bond Information

Due to the state's school funding model, **districts do not receive dedicated state funds** for large capital improvement projects.

Michigan is one of only 12 states that does not provide state funding for school infrastructure.



State funding for public schools varies greatly across the U.S.

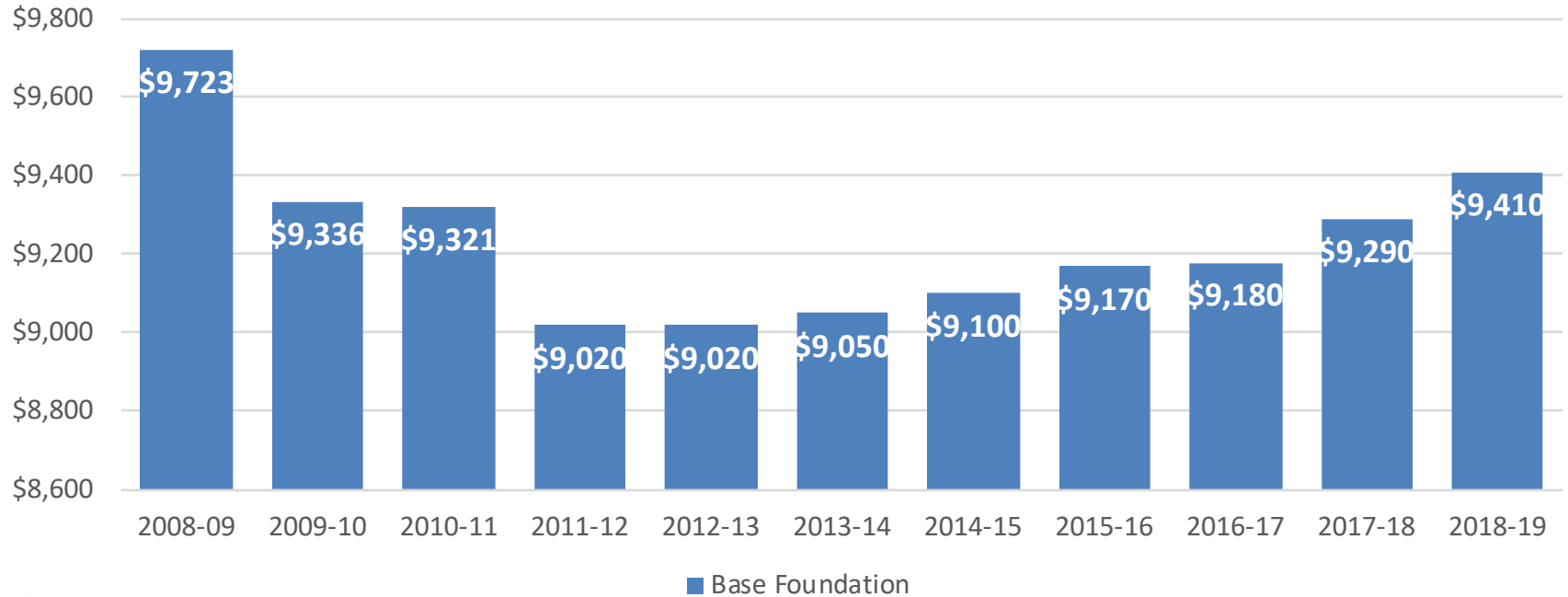
Percentage of school construction funded by state (FY 1994-2013)

- Over 50%
- 26-49%
- 10-25%
- 1-9%
- 0%

12 states provide no support for K-12 construction:

|           |              |
|-----------|--------------|
| Idaho     | Nevada       |
| Indiana   | Oklahoma     |
| Louisiana | Oregon       |
| Michigan  | South Dakota |
| Missouri  | Tennessee    |
| Nebraska  | Wisconsin    |

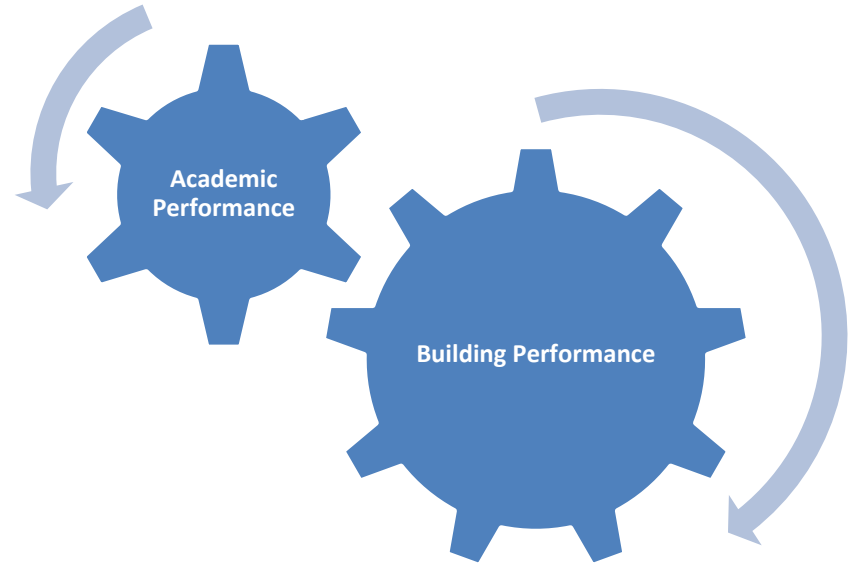
## Per Pupil Foundation Allowance 10 Years Later is **\$313 Less**



# Linking Academic Performance

with

# Building Performance



# “Schools for Health: Foundations for Success”



*Forhealth.org*



# Research Overview – How Students:

**HEAR**

**BREATHE**

**SEE**

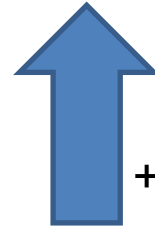
**FEEL**

**THINK  
AND  
LEARN**

Source: “The Impact of School Buildings on Student Health and Performance: A Call for Research”  
<http://www.usgbc.org/Docs/Archive/General/Docs18534.pdf>

# How Students: HEAR

- Clear connection between quality acoustical environments and enhanced performance
- Research: As **reverberation time** increased (above 0.5 to 0.6 seconds), researchers found significant negative impact on short-term memory and speech perception
- Studies identify importance of **low background noise** for speech intelligibility



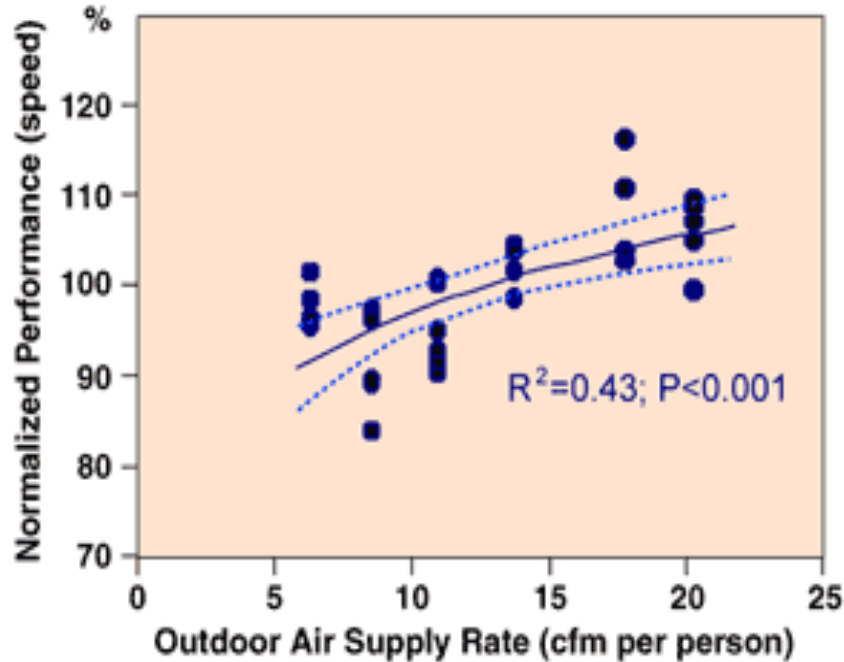
Reverberation time  
above 0.5 to 0.6 seconds  
+ Higher Background Noise



Short-term memory  
+ Speech perception

*Does noise affect learning? A short review on noise effects on cognitive performance in children (Klatte et al, 2011)*

# How Students: BREATHE



As ventilation rates increase, students' performance (related to task speed) increases

Source: Lawrence Berkeley National Laboratory. 2017. *Temperature and School Work Performance*

# How Students: SEE

10-15% Increase  
in Visual Acuity and  
Reading Comprehension

The image shows two identical reading passages about hippos, each with a corresponding illustration of a hippo's head. The passages are identical and contain the following text:

**Hippos**

Many people think a Hippopotamus would eat a person if it had the opportunity. But hippos are plant eaters. They do not eat people. Still, they are mean and fast, so it is best to stay far away from them.

Hippos spend most of the day in shallow African rivers. They like to walk on the bottom of rivers, but they are not looking for food. They are trying to stay cool.

Hippos are excellent swimmers. They can hold their breath for five or six minutes while submerged in the water.

Hippos are nocturnal. At night they move to land to eat grass and plants. They eat for five or six hours a night. They can eat 150 pounds of food in a single meal. Eating large meals allows hippos to live for weeks without eating anything if they must. They live in large mud pits and stay as still as possible to conserve energy.

Hippos have enormous tusks with huge teeth. Their lips are real feet wide, and each tooth weighs about six pounds. Most hippos weigh around 5000 pounds. Only the elephants and rhinos are larger land animals.

**Questions:**

1. What is the main idea of this story?
  - a. Hippos are quick and mean.
  - b. Hippos walk in rivers to stay cool.
  - c. Hippos are large, nocturnal animals.
2. Why do hippos spend most of the day in the rivers?
  - a. They are excellent swimmers.
  - b. They are looking for food.
  - c. They are trying to stay cool.
3. Why do hippos live in large mud pits? Include information from the story to explain your answer.

4. What is the word **submerged** mean in this story?
 

- a. underneath
- b. swimming
- c. floating

5. What is the weather like when the Hippopotamus lives?
 

- a. warm
- b. cool
- c. hot

6. What is the weather like when the Hippopotamus lives?
 

- a. They are excellent swimmers.
- b. They are looking for food.
- c. They are trying to stay cool.

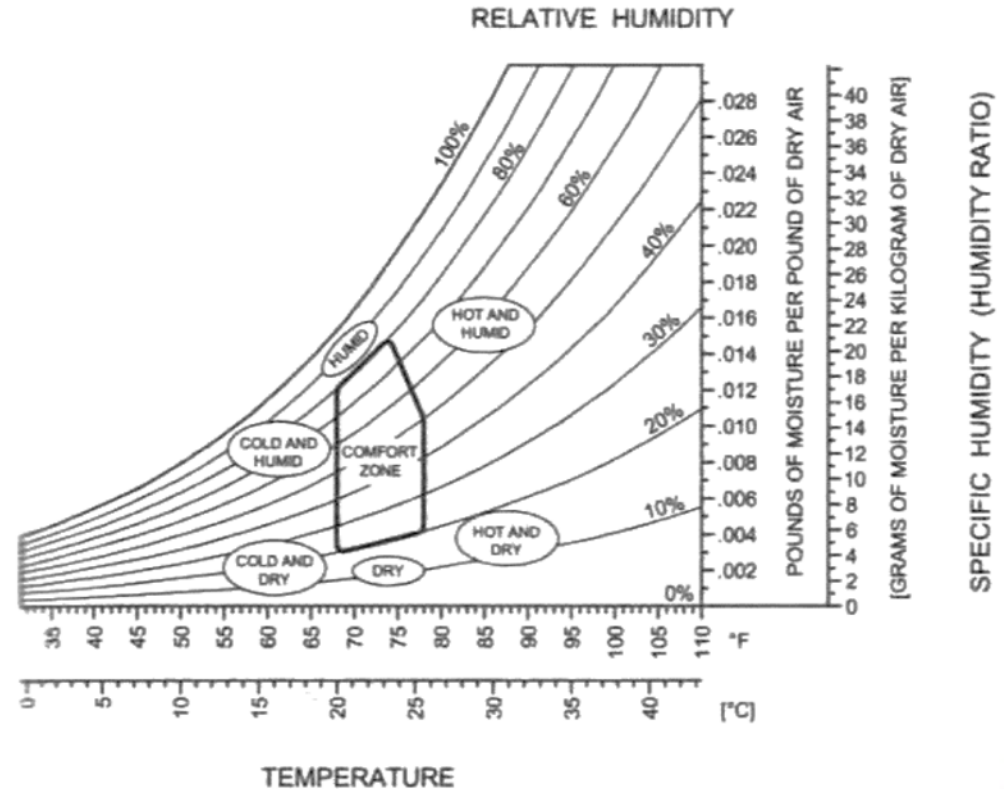
7. Why do hippos live in large mud pits? Include information from the story to explain your answer.

The Kelvin Color Temperature Scale Chart shows a range from 2700K (Candle) to 7000K (Blue Sky). Key points include: 1,500K: Candle; 2,000K: High Pressure; 2,700K-3,200K: Warm White Seesmart LED; 3,000K: 100W Halogen; 4,000K: Clear Metal Halide; 4,800K: Direct Sunlight; 5,000K: Day White Seesmart LED; 6,000K: Cloudy Sky; 7,000K-7,500K: Cool White Seesmart LED; 10,000K+: Blue Sky.

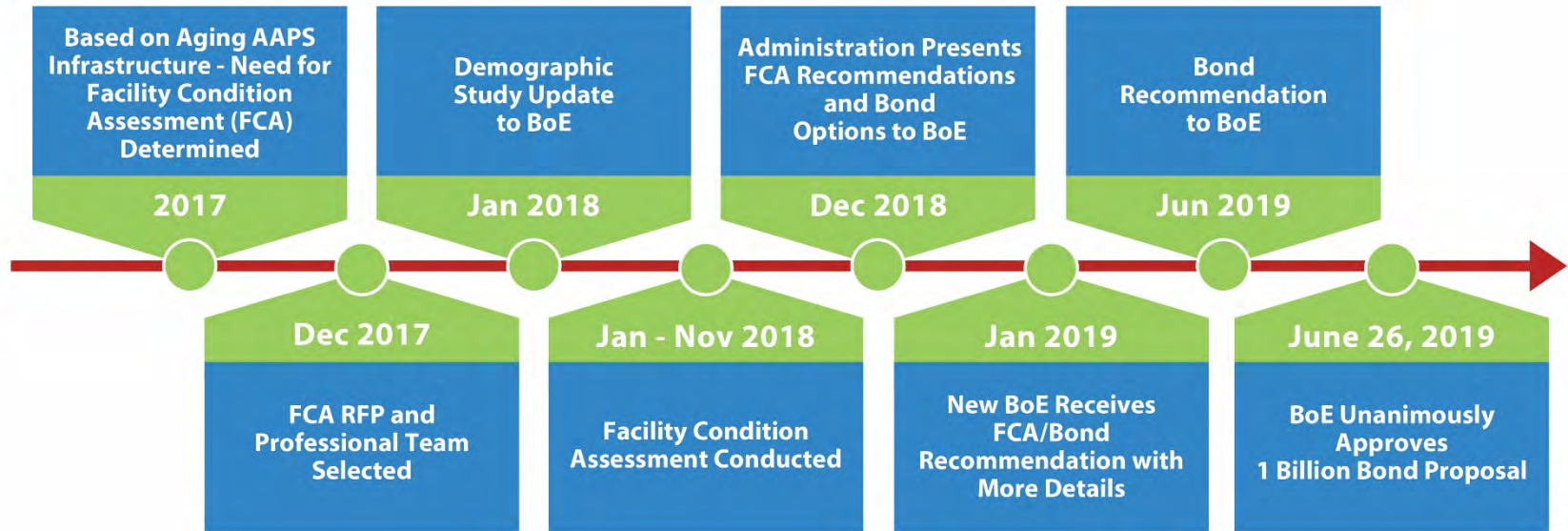
- Recognized relationship between higher student performance and presence of **daylight and views** (Boyce et al., 2003)
- Optimized lighting environments led to as much as **21% increase in student learning rates** (Gordon, 2010)

# How Students: FEEL

- A reasonable and constant temperature and humidity has been shown to positively impact student health and learning and teacher wellbeing
- Research continues to emphasize linkages between **thermal comfort and performance**



# Bond Development Timeline – 2 Years

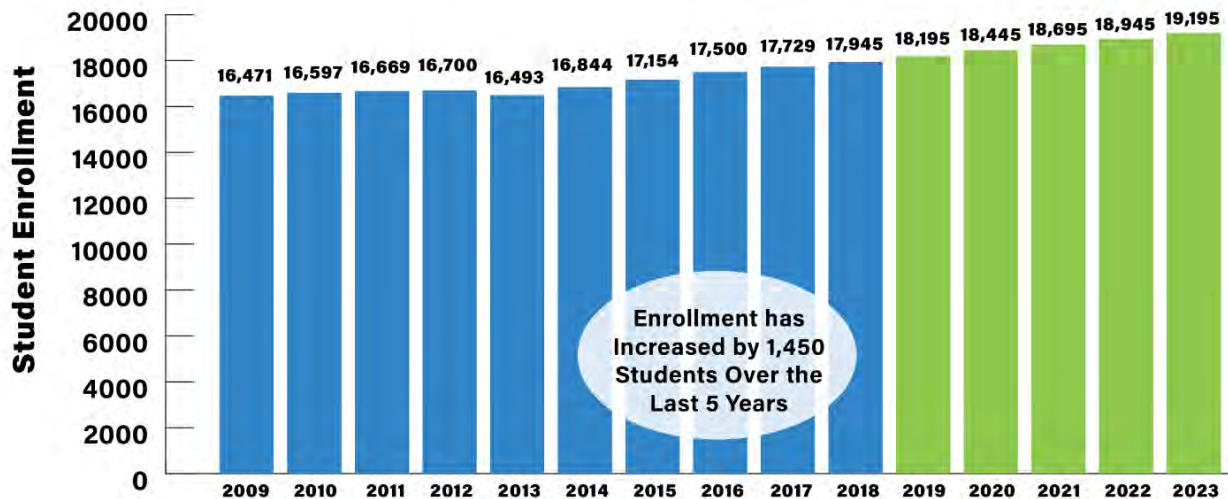


# Capacity & Growth Projections

- 2015 Plante Moran CRESA Analysis: average AAPS school is at 91% capacity; 9 schools at or above 100% capacity; recommended best practice capacity is 80-85%
- 2018 Mitchell Mouat Architects Presentation indicated a total K-12 estimated enrollment increase of approximately **1,250 (+/- 10%) school-aged children within the next five years**

## Student Enrollment Comparison

Fall Count From 2009 (Actual) to 2023 (Projected)



# Facility Condition Index (FCI)

The Facility Condition Index (FCI) is a standard facility management benchmark that is used to objectively assess the current and projected condition of a building asset. FCI is defined as: **the ratio of current year required renewal cost to current building replacement value.**

$$\text{FCI} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$





## 2-Year Facility Condition Index (FCI) - Unabated and with Current Sinking Fund

| Location                  | Current Replacement Value | Square Feet (SF) | 2-Year Capital Needs | 2-Year Capital Needs/SF | 2-Year FCI Unabated | 2-Year FCI w/ Sinking Fund |
|---------------------------|---------------------------|------------------|----------------------|-------------------------|---------------------|----------------------------|
| Preschool                 | \$6,898,500               | 22,995           | \$1,167,566          | \$51                    | 16.9%               | 14.6%                      |
| Abbott Elementary         | \$15,829,500              | 52,765           | \$2,231,876          | \$42                    | 14.1%               | 12.8%                      |
| Allen Elementary          | \$19,616,400              | 65,388           | \$554,733            | \$8                     | 2.8%                | 1.5%                       |
| Angell Elementary         | \$11,060,400              | 36,868           | \$756,229            | \$21                    | 6.8%                | 5.5%                       |
| Bach Elementary           | \$15,927,000              | 53,090           | \$1,055,958          | \$20                    | 6.6%                | 5.3%                       |
| Bryant Elementary         | \$18,057,600              | 60,192           | \$1,996,865          | \$33                    | 11.1%               | 9.7%                       |
| Burns Park Elementary     | \$18,297,600              | 60,992           | \$4,313,382          | \$71                    | 23.6%               | 22.2%                      |
| Carpenter Elementary      | \$15,761,700              | 52,539           | \$6,264,914          | \$119                   | 39.7%               | 38.4%                      |
| Dicken Elementary         | \$12,959,700              | 43,199           | \$2,307,199          | \$53                    | 17.8%               | 16.5%                      |
| Freeman Elementary        | \$9,624,000               | 32,080           | \$2,457,794          | \$77                    | 25.5%               | 24.2%                      |
| Eberwhite Elementary      | \$18,635,100              | 62,117           | \$4,300,412          | \$69                    | 23.1%               | 21.7%                      |
| Haisley Elementary        | \$17,409,600              | 58,032           | \$2,185,010          | \$38                    | 12.6%               | 11.2%                      |
| King Elementary           | \$15,660,000              | 52,200           | \$1,101,534          | \$21                    | 7.0%                | 5.7%                       |
| Lakewood Elementary       | \$12,764,700              | 42,549           | \$922,458            | \$22                    | 7.2%                | 5.9%                       |
| Lawton Elementary         | \$17,702,700              | 59,009           | \$1,060,626          | \$18                    | 6.0%                | 4.6%                       |
| Logan Elementary          | \$17,991,000              | 59,970           | \$2,552,827          | \$43                    | 14.2%               | 12.8%                      |
| Ann Arbor Open Elementary | \$26,553,900              | 88,513           | \$2,486,026          | \$28                    | 9.4%                | 8.0%                       |
| Mitchell Elementary       | \$13,030,500              | 43,435           | \$2,654,477          | \$61                    | 20.4%               | 19.0%                      |
| A2 STEAM                  | \$19,132,800              | 63,776           | \$9,565,512          | \$150                   | 50.0%               | 48.7%                      |
| Pattengill Elementary     | \$16,140,000              | 53,800           | \$4,581,521          | \$85                    | 28.4%               | 27.0%                      |
| Pittsfield Elementary     | \$12,489,300              | 41,631           | \$842,037            | \$20                    | 6.7%                | 5.4%                       |
| Thurston Elementary       | \$17,541,000              | 58,470           | \$1,946,201          | \$33                    | 11.1%               | 9.8%                       |
| Wines Elementary          | \$14,844,600              | 49,482           | \$2,304,810          | \$47                    | 15.5%               | 14.2%                      |
| Clague Middle School      | \$46,800,000              | 156,000          | \$2,343,461          | \$15                    | 5.0%                | 3.7%                       |
| Forsythe Middle School    | \$55,546,800              | 185,156          | \$3,626,412          | \$20                    | 6.5%                | 5.2%                       |
| Scarlett Middle School    | \$48,827,400              | 162,758          | \$3,566,224          | \$22                    | 7.3%                | 6.0%                       |
| Slauson Middle School     | \$57,027,000              | 190,990          | \$3,636,996          | \$19                    | 6.4%                | 5.0%                       |
| Tappan Middle School      | \$64,782,600              | 215,942          | \$4,261,860          | \$20                    | 6.6%                | 5.2%                       |
| Pathways to Success       | \$11,520,600              | 38,402           | \$1,055,702          | \$27                    | 9.2%                | 7.8%                       |
| Huron High School         | \$121,556,100             | 405,187          | \$4,707,678          | \$12                    | 3.9%                | 2.5%                       |
| Pioneer High School       | \$121,407,600             | 404,692          | \$1,910,201          | \$5                     | 1.6%                | 0.2%                       |
| Community High School     | \$17,460,000              | 58,200           | \$3,873,070          | \$67                    | 22.2%               | 20.8%                      |
| Skyline High School       | \$114,169,200             | 380,564          | \$6,398,863          | \$17                    | 5.6%                | 4.3%                       |
| Balas Bldg                | \$13,980,000              | 46,600           | \$1,011,790          | \$22                    | 7.2%                | 5.9%                       |
| Transportation -Main Bldg | \$5,488,200               | 18,294           | \$940,977            | \$51                    | 17.1%               | 15.8%                      |
| <b>TOTAL / AVERAGE</b>    | <b>\$1,042,493,100</b>    | <b>3,474,977</b> | <b>\$96,943,201</b>  | <b>\$41</b>             | <b>13.6%</b>        | <b>12.2%</b>               |

**2-Year Facility Condition Index (FCI)**  
**Unabated and with Current Sinking Fund**  
**Average Condition = POOR (12%)**

**POOR CONDITION:** The buildings are mostly below standard with many elements approaching the end of their service life. A large portion systems exhibit deterioration. Conditions are of significant concern with a strong risk of failure.

| School Condition | FCI Percentage | # Schools Unabated | # Schools w/ Sinking |
|------------------|----------------|--------------------|----------------------|
| Good             | 0-5%           | 3                  | 6                    |
| Fair             | 6-10%          | 15                 | 14                   |
| Poor             | 11-30%         | 15                 | 13                   |
| Critical         | 31-50%         | 2                  | 2                    |
| Divest           | 50%+           | 0                  | 0                    |

$$\text{FCI} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$

### 5-Year Facility Condition Index (FCI) - Unabated and with Current Sinking Fund

| Location                   | Current Replacement Value (3% Escalation) | Square Feet (SF) | 5-Year Capital Needs | 5-Year Capital Needs/SF | 5-Year FCI Unabated | 5-Year FCI w/ Sinking Fund |
|----------------------------|---|------------------|----------------------|-------------------------|---------------------|----------------------------|
| Preschool                  | \$7,465,169                               | 22,995           | \$3,977,001          | \$173                   | 53.3%               | 48%                        |
| Abbott Elementary          | \$17,129,794                              | 52,765           | \$5,287,996          | \$100                   | 30.9%               | 26%                        |
| Allen Elementary           | \$21,227,765                              | 65,388           | \$2,054,347          | \$31                    | 9.7%                | 4%                         |
| Angell Elementary          | \$11,968,943                              | 36,868           | \$4,342,216          | \$118                   | 36.3%               | 31%                        |
| Bach Elementary            | \$17,235,304                              | 53,090           | \$5,856,141          | \$110                   | 34.0%               | 29%                        |
| Bryant Elementary          | \$19,540,919                              | 60,192           | \$8,341,766          | \$139                   | 42.7%               | 37%                        |
| Burns Park Elementary      | \$19,800,633                              | 60,992           | \$9,891,191          | \$162                   | 50.0%               | 45%                        |
| Carpenter Elementary       | \$17,056,425                              | 52,539           | \$11,463,982         | \$218                   | 67.2%               | 62%                        |
| Dicken Elementary          | \$14,024,258                              | 43,199           | \$7,317,970          | \$169                   | 52.2%               | 47%                        |
| Freeman Elementary         | \$10,414,551                              | 32,080           | \$6,310,451          | \$197                   | 60.6%               | 55%                        |
| Eberwhite Elementary       | \$20,165,857                              | 62,117           | \$8,858,382          | \$143                   | 43.9%               | 39%                        |
| Haisley Elementary         | \$18,839,690                              | 58,032           | \$4,899,420          | \$84                    | 26.0%               | 21%                        |
| King Elementary            | \$16,946,371                              | 52,200           | \$6,294,603          | \$121                   | 37.1%               | 32%                        |
| Lakewood Elementary        | \$13,813,240                              | 42,549           | \$4,438,784          | \$104                   | 32.1%               | 27%                        |
| Lawton Elementary          | \$19,156,866                              | 59,009           | \$3,852,730          | \$65                    | 20.1%               | 15%                        |
| Logan Elementary           | \$19,468,848                              | 59,970           | \$7,966,145          | \$133                   | 40.9%               | 36%                        |
| Elementary                 | \$28,735,137                              | 88,513           | \$7,523,527          | \$85                    | 26.2%               | 21%                        |
| Mitchell Elementary        | \$14,100,874                              | 43,435           | \$7,622,085          | \$175                   | 54.1%               | 49%                        |
| A2 STEAM                   | \$20,704,440                              | 63,776           | \$14,137,876         | \$222                   | 68.3%               | 63%                        |
| Pattengill Elementary      | \$17,465,800                              | 53,800           | \$8,259,058          | \$154                   | 47.3%               | 42%                        |
| Pittsfield Elementary      | \$13,515,218                              | 41,631           | \$2,372,037          | \$57                    | 17.6%               | 12%                        |
| Thurston Elementary        | \$18,981,884                              | 58,470           | \$4,915,660          | \$84                    | 25.9%               | 21%                        |
| Wines Elementary           | \$16,063,991                              | 49,482           | \$6,930,149          | \$140                   | 43.1%               | 38%                        |
| Clague Middle School       | \$50,644,328                              | 156,000          | \$19,058,259         | \$122                   | 37.6%               | 32%                        |
| Forsythe Middle School     | \$60,109,622                              | 185,156          | \$17,585,817         | \$95                    | 29.3%               | 24%                        |
| Scarlett Middle School     | \$52,838,266                              | 162,758          | \$11,744,989         | \$72                    | 22.2%               | 17%                        |
| Slauson Middle School      | \$61,711,412                              | 190,090          | \$15,710,719         | \$83                    | 25.5%               | 20%                        |
| Tappan Middle School       | \$70,104,086                              | 215,942          | \$17,431,540         | \$81                    | 24.9%               | 20%                        |
| Pathways to Success        | \$12,466,945                              | 38,402           | \$4,185,408          | \$109                   | 33.6%               | 28%                        |
| Huron High School          | \$131,541,174                             | 405,187          | \$35,044,082         | \$86                    | 26.6%               | 21%                        |
| Pioneer High School        | \$131,380,476                             | 404,692          | \$30,890,566         | \$76                    | 23.5%               | 18%                        |
| Community High School      | \$18,894,230                              | 58,200           | \$7,906,750          | \$136                   | 41.8%               | 37%                        |
| Skyline High School        | \$123,547,486                             | 380,564          | \$27,548,106         | \$72                    | 22.3%               | 17%                        |
| Balas Bldg                 | \$15,128,370                              | 46,600           | \$2,507,419          | \$54                    | 16.6%               | 11%                        |
| Transportation - Main Bldg | \$5,939,021                               | 18,294           | \$1,854,655          | \$101                   | 31.2%               | 26%                        |
| <b>TOTAL / AVERAGE</b>     | <b>\$1,128,127,393</b>                    | <b>3,474,977</b> | <b>\$344,381,827</b> | <b>\$116</b>            | <b>35.8%</b>        | <b>30.5%</b>               |

**5-Year Facility Condition Index (FCI)  
Unabated and with Current Sinking Fund  
Average Condition = CRITICAL (30%)**

**POOR/CRITICAL CONDITION: The buildings are in an unacceptable condition with widespread signs of deterioration. Many building systems exhibit signs of imminent failure.**

| School Condition | FCI Percentage | # Schools Unabated | # Schools w/ Sinking |
|------------------|----------------|--------------------|----------------------|
| Good             | 0-5%           | 0                  | 1                    |
| Fair             | 6-10%          | 1                  | 0                    |
| Poor             | 11-30%         | 13                 | 18                   |
| Critical         | 31-50%         | 15                 | 13                   |
| Divest           | 50%+           | 6                  | 3                    |

$$\text{FCI} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$

## 10-Year Facility Condition Index (FCI) - Unabated and with Current Sinking Fund

| Location                  | Current Replacement Value (3% Escalation) | Square Feet (SF) | 10-Year Capital Needs | 10-Year Capital Needs/SF | 10-Year FCI Unabated | 10-Year FCI w/ Sinking Fund |
|---------------------------|---|------------------|-----------------------|--------------------------|----------------------|-----------------------------|
| Preschool                 | \$8,446,153                               | 22,995           | \$7,619,520           | \$331                    | 90.2%                | 88.3%                       |
| Abbott Elementary         | \$19,380,790                              | 52,765           | \$6,885,448           | \$130                    | 35.5%                | 34.4%                       |
| Allen Elementary          | \$24,017,267                              | 65,388           | \$3,614,043           | \$55                     | 15.0%                | 14.0%                       |
| Angell Elementary         | \$13,541,760                              | 36,868           | \$6,871,166           | \$186                    | 50.7%                | 49.6%                       |
| Bach Elementary           | \$19,500,164                              | 53,090           | \$7,781,160           | \$147                    | 39.9%                | 38.8%                       |
| Bryant Elementary         | \$22,108,756                              | 60,192           | \$12,116,584          | \$201                    | 54.8%                | 53.7%                       |
| Burns Park Elementary     | \$22,402,599                              | 60,992           | \$11,879,560          | \$195                    | 53.0%                | 51.9%                       |
| Carpenter Elementary      | \$19,297,779                              | 52,539           | \$14,844,170          | \$283                    | 76.9%                | 75.8%                       |
| Dicken Elementary         | \$15,867,161                              | 43,199           | \$10,483,702          | \$243                    | 66.1%                | 65.0%                       |
| Freeman Elementary        | \$11,783,109                              | 32,080           | \$6,856,298           | \$214                    | 58.2%                | 57.1%                       |
| Eberwhite Elementary      | \$22,815,816                              | 62,117           | \$10,982,781          | \$177                    | 48.1%                | 47.0%                       |
| Haisley Elementary        | \$21,315,380                              | 58,032           | \$6,456,722           | \$111                    | 30.3%                | 29.2%                       |
| King Elementary           | \$19,173,263                              | 52,200           | \$8,514,854           | \$163                    | 44.4%                | 43.3%                       |
| Lakewood Elementary       | \$15,628,414                              | 42,549           | \$7,376,130           | \$173                    | 47.2%                | 46.1%                       |
| Lawton Elementary         | \$21,674,236                              | 59,009           | \$7,927,206           | \$134                    | 36.6%                | 35.5%                       |
| Logan Elementary          | \$22,027,215                              | 59,970           | \$10,417,387          | \$174                    | 47.3%                | 46.2%                       |
| Ann Arbor Open Elementary | \$32,511,170                              | 88,513           | \$10,253,027          | \$116                    | 31.5%                | 30.4%                       |
| Mitchell Elementary       | \$15,953,845                              | 43,435           | \$11,294,072          | \$260                    | 70.8%                | 69.7%                       |
| A2 STEAM                  | \$23,425,173                              | 63,776           | \$20,171,873          | \$316                    | 86.1%                | 85.0%                       |
| Pattengill Elementary     | \$19,760,950                              | 53,800           | \$10,889,215          | \$202                    | 55.1%                | 54.0%                       |
| Pittsfield Elementary     | \$15,291,229                              | 41,631           | \$4,202,732           | \$101                    | 27.5%                | 26.4%                       |
| Thurston Elementary       | \$21,476,259                              | 58,470           | \$8,229,834           | \$141                    | 38.3%                | 37.2%                       |
| Wines Elementary          | \$18,174,931                              | 49,482           | \$9,500,166           | \$192                    | 52.3%                | 51.2%                       |
| Clague Middle School      | \$57,299,408                              | 156,000          | \$22,299,864          | \$143                    | 38.9%                | 37.8%                       |
| Forsythe Middle School    | \$68,008,521                              | 185,156          | \$21,417,302          | \$116                    | 31.5%                | 30.4%                       |
| Scarlett Middle School    | \$59,781,648                              | 162,758          | \$20,953,669          | \$129                    | 35.1%                | 34.0%                       |
| Slauson Middle School     | \$69,820,798                              | 190,090          | \$20,238,705          | \$106                    | 29.0%                | 27.9%                       |
| Tappan Middle School      | \$79,316,338                              | 215,942          | \$27,260,815          | \$126                    | 34.4%                | 33.3%                       |
| Pathways to Success       | \$14,105,204                              | 38,402           | \$6,703,370           | \$175                    | 47.5%                | 46.4%                       |
| Huron High School         | \$148,826,764                             | 405,187          | \$47,647,264          | \$118                    | 32.0%                | 30.9%                       |
| Pioneer High School       | \$148,644,949                             | 404,692          | \$46,316,001          | \$114                    | 31.2%                | 30.1%                       |
| Community High School     | \$21,377,087                              | 58,200           | \$10,243,712          | \$176                    | 47.9%                | 46.8%                       |
| Skyline High School       | \$139,782,641                             | 380,564          | \$57,249,072          | \$150                    | 41.0%                | 39.9%                       |
| Balas Bldg                | \$17,116,362                              | 46,600           | \$5,217,525           | \$112                    | 30.5%                | 29.4%                       |
| Transportation -Main Bldg | \$6,719,458                               | 18,294           | \$3,565,389           | \$195                    | 53.1%                | 52.0%                       |
| <b>TOTAL / AVERAGE</b>    | <b>\$1,276,372,597</b>                    | <b>3,474,977</b> | <b>\$504,280,338</b>  | <b>\$169</b>             | <b>45.9%</b>         | <b>44.8%</b>                |

10-Year Facility Condition Index (FCI)

Unabated and with Current Sinking Fund

Average Condition = CRITICAL (49%)

**CRITICAL CONDITION:** The buildings are in an unacceptable condition with widespread advanced signs of deterioration. Many of the building systems exhibit signs of imminent failure.

| School Condition | FCI Percentage | # Schools Unabated | # Schools w/ Sinking |
|------------------|----------------|--------------------|----------------------|
| Good             | 0-5%           | 0                  | 0                    |
| Fair             | 6-10%          | 0                  | 0                    |
| Poor             | 11-30%         | 3                  | 5                    |
| Critical         | 31-50%         | 20                 | 19                   |
| Divest           | 50%+           | 12                 | 11                   |

$$\text{FCI} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$

## 20-Year Facility Condition Index (FCI) - Unabated and with Current Sinking Fund

| Location                  | Current Replacement Value (3% Escalation) | Square Feet (SF) | 20-Year Capital Needs | 20-Year Capital Needs/SF | 20-Year FCI Unabated | 20-Year FCI w/ Sinking Fund |
|---------------------------|---|------------------|-----------------------|--------------------------|----------------------|-----------------------------|
| Preschool                 | \$10,811,790                              | 22,995           | \$13,443,114          | \$585                    | 124.3%               | 123.5%                      |
| Abbott Elementary         | \$28,809,050                              | 52,765           | \$12,573,246          | \$238                    | 50.7%                | 49.8%                       |
| Allen Elementary          | \$30,744,133                              | 65,388           | \$11,010,780          | \$168                    | 35.8%                | 35.0%                       |
| Angell Elementary         | \$17,334,598                              | 36,868           | \$9,459,365           | \$257                    | 54.6%                | 53.7%                       |
| Bach Elementary           | \$24,961,858                              | 53,090           | \$11,441,105          | \$216                    | 45.8%                | 45.0%                       |
| Bryant Elementary         | \$28,301,077                              | 60,192           | \$17,064,361          | \$283                    | 60.3%                | 59.4%                       |
| Burns Park Elementary     | \$28,677,221                              | 60,992           | \$19,885,791          | \$326                    | 69.3%                | 68.5%                       |
| Carpenter Elementary      | \$24,702,789                              | 52,539           | \$22,376,713          | \$426                    | 90.6%                | 89.7%                       |
| Dicken Elementary         | \$20,311,308                              | 43,199           | \$14,590,657          | \$338                    | 71.8%                | 71.0%                       |
| Freeman Elementary        | \$15,083,376                              | 32,080           | \$10,723,546          | \$745                    | 71.1%                | 70.2%                       |
| Eberwhite Elementary      | \$29,206,174                              | 62,117           | \$23,904,909          | \$193                    | 81.8%                | 81.0%                       |
| Haisley Elementary        | \$27,285,488                              | 58,032           | \$11,982,515          | \$206                    | 43.9%                | 43.1%                       |
| King Elementary           | \$24,543,398                              | 52,200           | \$13,356,948          | \$256                    | 54.4%                | 53.6%                       |
| Lakewood Elementary       | \$20,005,691                              | 42,549           | \$11,061,960          | \$260                    | 55.3%                | 54.4%                       |
| Lawton Elementary         | \$27,744,854                              | 59,009           | \$12,236,120          | \$207                    | 44.1%                | 43.2%                       |
| Logan Elementary          | \$28,196,697                              | 59,970           | \$17,913,604          | \$299                    | 63.5%                | 62.7%                       |
| Ann Arbor Open            | \$41,617,046                              | 88,513           | \$16,689,543          | \$189                    | 40.1%                | 39.2%                       |
| Mitchell Elementary       | \$20,422,270                              | 43,435           | \$14,739,195          | \$339                    | 72.2%                | 71.3%                       |
| A2 STEAM                  | \$29,986,202                              | 63,776           | \$35,854,499          | \$562                    | 119.6%               | 118.7%                      |
| Pattengill Elementary     | \$25,295,686                              | 53,800           | \$16,066,255          | \$299                    | 63.5%                | 62.7%                       |
| Pittsfield Elementary     | \$19,574,065                              | 41,631           | \$9,331,580           | \$224                    | 47.7%                | 46.8%                       |
| Thurston Elementary       | \$27,491,427                              | 58,470           | \$16,920,019          | \$289                    | 61.5%                | 60.7%                       |
| Wines Elementary          | \$23,265,449                              | 49,482           | \$15,760,571          | \$319                    | 67.7%                | 66.9%                       |
| Clague Middle School      | \$73,348,087                              | 156,000          | \$31,357,749          | \$201                    | 42.8%                | 41.9%                       |
| Forsythe Middle School    | \$87,056,656                              | 185,156          | \$34,661,341          | \$187                    | 39.8%                | 39.0%                       |
| Scarlett Middle School    | \$76,525,563                              | 162,758          | \$31,307,083          | \$192                    | 40.9%                | 40.1%                       |
| Slauson Middle School     | \$89,376,524                              | 190,090          | \$34,172,269          | \$180                    | 38.2%                | 37.4%                       |
| Tappan Middle School      | \$101,531,619                             | 215,942          | \$40,747,248          | \$189                    | 40.1%                | 39.3%                       |
| Pathways to Success       | \$18,055,854                              | 38,402           | \$11,052,153          | \$288                    | 61.2%                | 60.4%                       |
| Huron High School         | \$190,510,841                             | 405,187          | \$89,062,215          | \$220                    | 46.7%                | 45.9%                       |
| Pioneer High School       | \$190,278,102                             | 404,692          | \$64,790,782          | \$160                    | 34.1%                | 33.2%                       |
| Community High School     | \$27,364,478                              | 58,200           | \$14,602,608          | \$251                    | 53.4%                | 52.5%                       |
| Skyline High School       | \$178,933,598                             | 380,564          | \$98,951,045          | \$260                    | 55.3%                | 54.4%                       |
| Balas Bldg                | \$21,910,390                              | 46,600           | \$9,126,793           | \$196                    | 41.7%                | 40.8%                       |
| Transportation -Main Bldg | \$8,601,474                               | 18,294           | \$5,572,377           | \$305                    | 64.8%                | 63.9%                       |
| <b>TOTAL / AVERAGE</b>    | <b>\$1,633,864,834</b>                    | <b>3,474,977</b> | <b>\$823,790,059</b>  | <b>\$281</b>             | <b>58.5%</b>         | <b>57.7%</b>                |

### 20-Year Facility Condition Index (FCI)

Unabated and with Current Sinking Fund

Average Condition = DIVEST (58%)

**DIVEST: Systems failure is widespread and building conditions are exceptionally poor. The buildings have reached the end of their useful life and require replacement, renewal or other significant action.**

| School Condition | FCI Percentage | # Schools Unabated | # Schools w/ Sinking |
|------------------|----------------|--------------------|----------------------|
| Good             | 0-5%           | 0                  | 0                    |
| Fair             | 6-10%          | 0                  | 0                    |
| Poor             | 11-30%         | 0                  | 0                    |
| Critical         | 31-50%         | 14                 | 15                   |
| Divest           | 50%-100%       | 19                 | 18                   |
| Divest +         | 100%+          | 2                  | 2                    |

$$\text{FCI} = \frac{\text{Deferred Maintenance Deficiencies (DMD)}}{\text{Current Replacement Value (CRV)}}$$

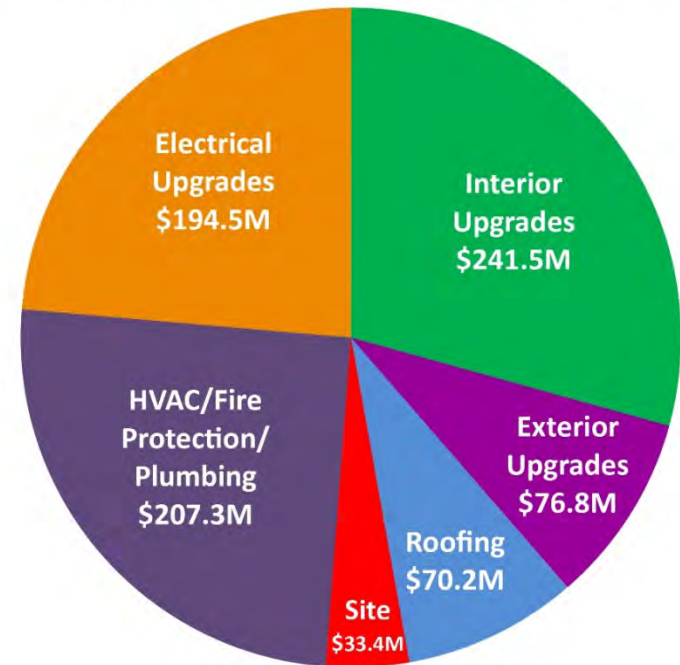
# Facilities Condition Assessment (FCA) – Results

The FCA analysis revealed that in order to maintain AAPS schools in the good condition category, a 20-year investment of more than \$823 million would be required, in the categories depicted.

EMG concluded that the facilities were found to be in overall good to fair condition and have had adequate maintenance over the past few years. However, without substantial upfront investment, many of the schools **will fall into the 'poor' rating** within a few years.

*EMG Executive Summary, 2018*

## 20-Year FCA Investment Recommendations \$823,780,000



# Cost of items NOT included in the FCA

The costs for the elements not included in the FCA total is an additional 20-year \$618M, to include:

| <b>ADDITIONAL INVESTMENT<br/>(Not in FCA)</b>                | <b>ANNUAL COST</b> |
|--|--------------------|
| New schools and classrooms for student population growth     | \$10M/yr           |
| Furniture refresh  | \$1M/yr            |
| Bus fleet refresh  | \$2M/yr            |
| Technology refresh   | \$5M/yr            |
| Maintaining schools in “Good/Exceptional” condition          | \$5M/yr            |
| <b>ANNUAL TOTAL ADDITIONAL INVESTMENT</b>                    | <b>\$23M/yr</b>    |
| <b>20-YEAR TOTAL ADDITIONAL INVESTMENTS (@ 3% inflation)</b> | <b>\$618M</b>      |

# Combined FCA and Non-FCA Capital Infrastructure Investments

*Additional Investment of more than \$1.44B over 20 years*

|                 | FCA<br>RECOMMENDATIONS | OTHER IMPROVEMENTS<br>(Not in FCA) | TOTAL                  |
|-----------------|------------------------|------------------------------------|------------------------|
| 2 Years         | \$148,562,000          | \$46,690,000                       | \$195,252,000          |
| 5 Years         | \$344,378,000          | \$122,110,124                      | \$466,488,124          |
| 10 Years        | \$504,274,000          | \$263,669,224                      | \$767,943,224          |
| <b>20 Years</b> | <b>\$823,780,000</b>   | <b>\$618,018,613</b>               | <b>\$1,441,798,613</b> |

# The Power of Combining the Sinking Fund and a Bond Issue

- Assumption: Sinking Fund renewed at 2.50 mills for 10 years least twice more (2027 & 2037)
- District spends \$8M per year on repairs from the Sinking Fund (over 20 years – total = \$160M)
- Over 20 years District will have collected \$1B from the bond issue and \$613M from the sinking fund

| FUNDING SOURCES                | TOTAL COSTS     |
|--------------------------------|-----------------|
| 2017 Sinking Fund              | \$205M          |
| SF Renewal 2027                | \$331M          |
| SF Renewal 2037<br>(Years 1+2) | \$77M           |
| 2019 Bond                      | \$1B            |
| <b>Total Available Funds</b>   | <b>\$1.613B</b> |
| Less Yearly Repairs            | (\$160M)        |
| <b>20 Years</b>                | <b>\$1.453B</b> |



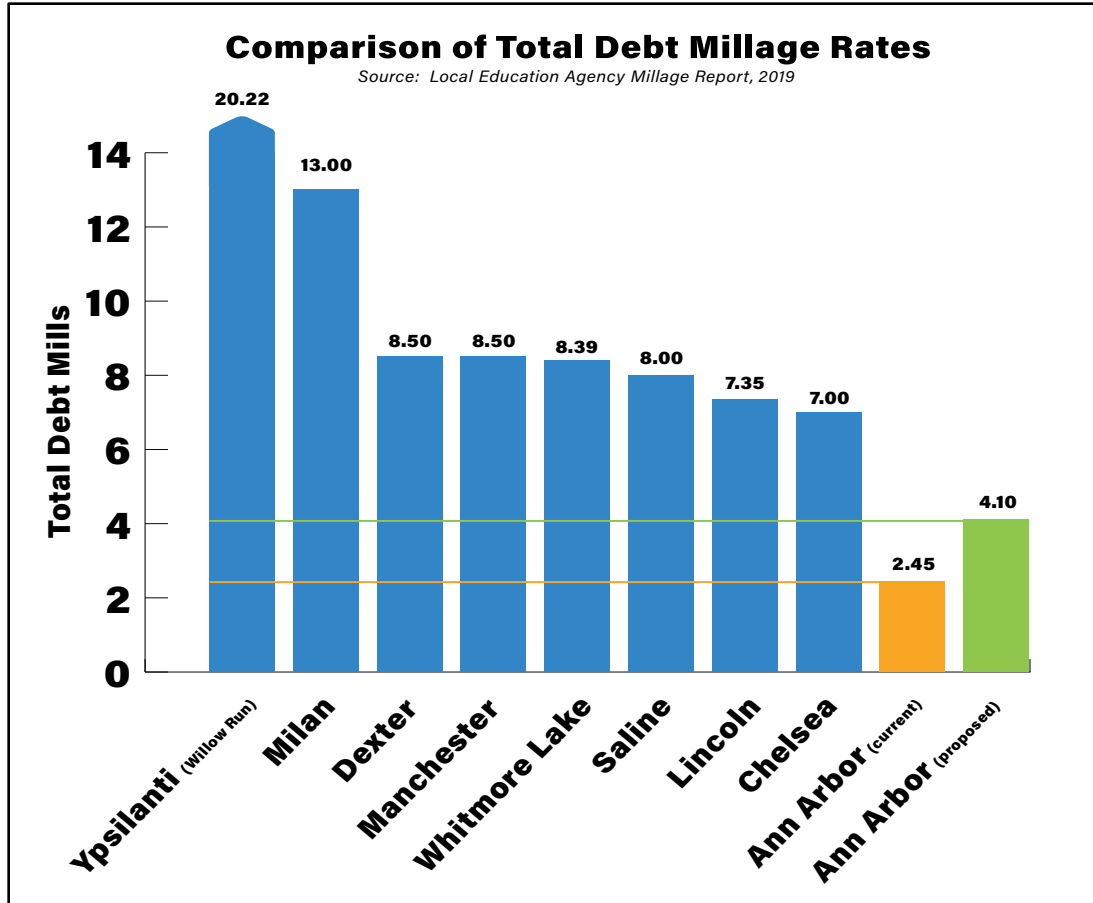
# Financial Impact to the Community

| HOME MARKET VALUE                                  | HOME TAXABLE VALUE | ANNUAL INCREASE | MONTHLY INCREASE |
|--|--------------------|-----------------|------------------|
| \$200,000  | \$100,000          | \$165           | \$13.75          |
| \$300,000  | \$150,000          | \$248           | \$20.67          |
| \$400,000  | \$200,000          | \$330           | \$27.50          |
| Average Taxable Value in Ann Arbor School District | \$138,000          | \$228           | \$19.00          |

\*Township/City Tax Records, 2019

In the first year, the millage rate is projected to increase by 1.65 mills over the 2019 debt levy.

# Financial Impact to the Community



# 2019 BOND PREPARING FOR THE FUTURE GOALS

## TEACHING & LEARNING

Continue the Tradition of  
Academic Excellence

## SAFETY, HEALTH & WELL-BEING

Focus on Development of  
the Whole Child

## SUSTAINABLE & ENVIRONMENTALLY RESPONSIBLE INFRASTRUCTURE

Create Resilient Schools  
for Climate Change

## EFFICIENT & EFFECTIVE SUPPORT SYSTEMS & SERVICES

Continue Technology &  
Transportation Replacement and  
Renewal

# 2019 BOND: Renewal & Re-envision



- Upgrade classrooms and labs
- Improve natural light, air quality, sound
- Enhance performing arts spaces
- Replace musical instruments
- Add social / emotional support areas for counselors, nurses, tutors and speech therapists
- Create STEAM / Makerspace labs
- Address projected growth in student enrollment and overcrowding while maintaining class size
- Collaborative, project-based spaces in all schools
- Build upon long-standing environmental education program with new curricula and instructional models

# 2019 BOND: Renewal & Re-envision

- Add secure entry vestibules
- Upgrade surveillance cameras and access systems
- Ensure safe drinking water and air quality
- Cook healthy local food in the cafeterias
- Install school gardens
- Enhance playgrounds and athletic facilities
- Upgrade parking lots

## SAFETY, HEALTH & WELL-BEING

Focus on Development of  
the Whole Child

# 2019 BOND: Renewal & Re-envision

## SUSTAINABLE & ENVIRONMENTALLY RESPONSIBLE INFRASTRUCTURE

Create Resilient Schools  
for Climate Change

- Prepare our schools to adapt to climate change
- Chart a course for carbon neutrality
- Utilize interior and exterior finishes that are long-lasting and require minimal maintenance and replacement
- Install dimmable LED lighting
- Install renewable solar & geothermal energy sources
- Increase recycling and composting

# 2019 BOND: Renewal & Re-envision

- Add new classroom devices / equipment to support curriculum goals
- Refresh devices and equipment to stay current over next 15 -20 years
- Renovate media centers to support digital learning and collaboration
- Continue bus fleet replacement schedule reduce repair costs, stay up-to-date on efficiency improvements, and promote bus fleet safety
- Provide improved custodial, information technology, public address, and audio/visual support spaces

## **EFFICIENT & EFFECTIVE SUPPORT SYSTEMS & SERVICES**

**Continue Technology &  
Transportation Replacement and  
Renewal**

# 2019 BOND: Renewal & Re-envision

## YEARS 1-6



- Air Conditioning
- Solar Power
- LED Lighting



- Cooking Kitchens
- Cafeteria Renovations
- Safe Drinking Water
- Teaching Gardens



- Media Center Renovations
- STEAM Lab Collaboration Spaces
- Outdoor Classrooms



- Improved Secure Entry
- Front Office Renovations
- Lobby Renovations



- 2 New Schools
- Roofing & Paving
- Music, Arts & Science Furnishings, Equipment & Instruments
- Buses
- Technology
- Middle School Pools
- High School Athletics & Performing Arts Spaces



# School Matrix

|                        | Air Conditioning | LED Lighting | Solar Power | STEM Lab Collaboration Spaces | Media Center Renovations | Arts and Science Equipment and Furnishings | Musical Instruments | Social Emotional Spaces | Teaching Gardens | Cafeteria Renovations | Cooking Kitchens | Improve Secure Entry | Front Office Renovations | Lobby Renovations | Buses | Technology | Middle School Pool Infrastructure | High School Athletics | High School Improvements Arts Spaces |
|------------------------|------------------|--------------|-------------|-------------------------------|--------------------------|--|---------------------|-------------------------|------------------|-----------------------|------------------|----------------------|--------------------------|-------------------|-------|------------|-----------------------------------|-----------------------|--------------------------------------|
| Abbot Elementary       | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Allen Elementary       | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Angell Elementary      | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Bach Elementary        | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Bryant Elementary      | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Burns Park Elementary  | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Carpenter Elementary   | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Dicken Elementary      | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Eberwhite Elementary   | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Haisley Elementary     | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| King Elementary        | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Lakewood Elementary    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Lawton Elementary      | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Logan Elementary       | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Mitchell Elementary    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Pattengill Elementary  | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Pittsfield Elementary  | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Thurston Elementary    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Wines Elementary       | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| A2 Open K-8            | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| A2 STEAM K-8           | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Clague Middle School   | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            | •                                 |                       |                                      |
| Forsythe Middle School | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Scarlett Middle School | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Slauson Middle School  | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Tappan Middle School   | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Pathways to Success    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   |                       |                                      |
| Huron High School      | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |
| Pioneer High School    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |
| Community High School  | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |
| Skyline High School    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |
| Westerman Preschool    | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |
| Staging School 1       | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |
| Staging School 2       | •                | •            | •           | •                             | •                        | •  | •                   | •                       | •                | •                     | •                | •                    | •                        | •                 | •     |            |                                   | •                     |                                      |

# 2019 BOND: Renewal & Re-envision

## PLANNING / DESIGN PROCESS



# Case Study

Washington DC Schools 47,548 Students

## DISTRICT OF COLUMBIA PUBLIC SCHOOLS

### MODERNIZATION PROGRAM

- Over \$4 Billion has been invested to modernize school facilities in the District since the early 2000s.
- Between \$300-\$400M is spent annually on Capital construction projects.
- By 2025 all schools will have received a significant Capital investment.



# Value of Modernized Schools – Washington DC Study

## STUDENTS ARE...



**25% more** proud to go to school in a modernized building

AND



**16% happier,**  
**18% calmer,**  
**17% healthier, and**  
**16% more ready to learn**  
in modernized school classrooms

## IN MODERNIZED SCHOOLS

### STUDENTS ARE...

**9% more** satisfied with thermal comfort



**14% more** satisfied with air quality



**18% more** satisfied with acoustics



**13% more** satisfied with daylight



### FACULTY ARE...

**40% more** satisfied with thermal comfort

**45% more** satisfied with air quality

**30% more** satisfied with acoustics

**45% more** satisfied with daylight

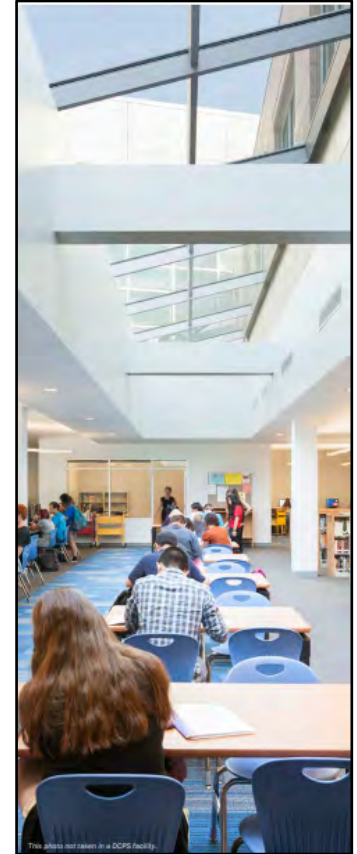
# Modernized Washington DC School



# Modernized Washington DC School




*This photo not taken in a DCPS facility.*



*This photo not taken in a DCPS facility.*

# Modernized Washington DC School





***These are examples  
of the current  
state of our schools***



# Outdated Classrooms



# Kitchens



## Lights and Ceilings



## Interior Doors



## Exterior Doors & Windows



## Elevators



# Mechanical Rooms



# Exhaust Fans



# Electrical Systems



# Boilers



## Building Facades



## Heating Distribution Systems



## Flooring





***This Is What We Want To  
Create!***

# Media Center Renovations



*Pontiac, MI*



*Manassa, VA*



*Bloomfield Hills, MI*



*Dexter, MI*



# Collaborative Spaces



*Bloomfield Hills, MI*



*Edina, MN*



*Manassa, VA*



*Perrysburg, OH*

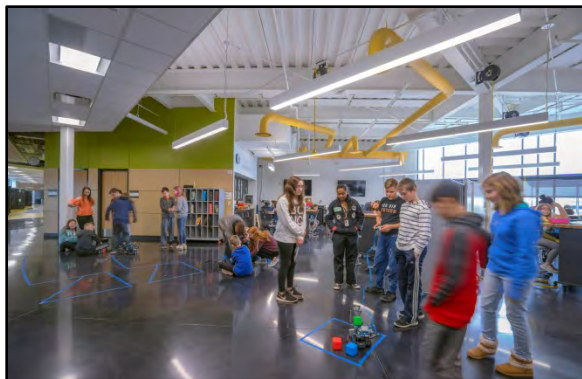
# Collaborative STEAM Labs



*Pico Rivera, CA*



*Pico Rivera, CA*



*Perrysburg, OH*



*Fayetteville, AK*

# Art Rooms



*Beverly Hills, MI*



*Pontiac, MI*



*Perrysburg, OH*



*Port Huron, MI*

# Music Rooms & Instruments



*Perrysburg, OH*



*Canton, MI*



*Spring Lake, MI*



*Perrysburg, OH*

# Natural Light



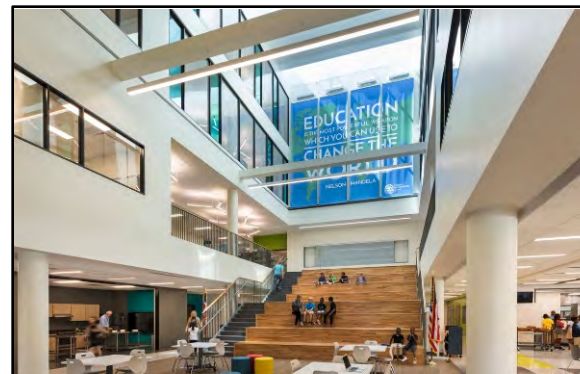
*Dexter, MI*



*Cleveland, OH*



*Novi, MI*



*Cleveland, OH*

*Safety, Health, & Well-Being*

# Playgrounds



*Ann Arbor, MI*



*Novi, MI*



*Port Huron, MI*



*Novi, MI*

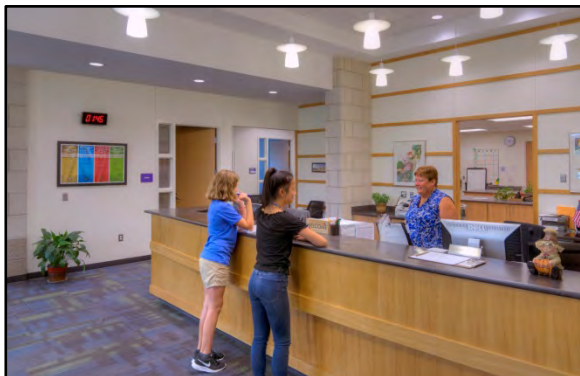
# Secure and Inviting Front Entries



*Troy, MI*



*Spring Lake, MI*



*Troy, MI*



*Canton, MI*

# LED Lighting



*Port Huron, MI*



*Dexter, MI*



*Port Huron, MI*



*Pontiac, MI*



# Solar Energy & Sustainable Features



*Washington D.C.*



*Arlington, VA*



*Perrysburg, OH*



*Brentwood, CA*

# Outdoor Learning



*Bellevue, WA*



*Tacoma, WA*



*Atlanta, GA*



*Grafton, MA*

# Technology, Bus and HVAC Replacements



Northville, MI



Northville, MI

As a reminder...

## For both Bond Funds and Sinking Funds:

All of the work must be contracted

None of the funds can be used to pay AAPS employees

# 2019 Bond Ballot

## ANN ARBOR PUBLIC SCHOOLS BONDING PROPOSAL

Shall the Public Schools of the City of Ann Arbor, County of Washtenaw, Michigan, borrow the principal sum of not to exceed One Billion Dollar (\$1,000,000,000) and issue its general obligation unlimited tax bonds for the purpose of defraying the cost of making the following improvements: constructing additions to and/or remodeling School District buildings, including safety and security improvements, classrooms, laboratories, kitchens, performing arts and pool facilities, and solar, geothermal and other renewable energy improvements; acquiring and/or constructing buildings in the School District, including elementary, middle and high schools; equipping, furnishing, reequipping and refurnishing buildings in the School District, including the acquisition of school buses and musical instruments; acquiring and installing instructional technology equipment in the School District; and acquiring, improving and developing sites, including athletic fields, facilities, structures, parking and playgrounds, in the School District?

The debt millage levy required to retire all bonds of the School District currently outstanding and proposed by this ballot proposal is estimated to be at or below 4.10 mills. The estimated millage to be levied in 2020 to service this issue of bonds is 1.99 mills (\$1.99 per \$1,000 of taxable value) and the estimated simple average annual millage rate required to retire the bonds of this issue is 3.49 mills (\$3.49 per \$1,000 of taxable value). The bonds will be issued in multiple series, payable in the case of each series in not to exceed 22 years from the date of issue of such series.

*(Under State law, bond proceeds may not be used to pay teacher or administrator salaries, routine maintenance or repair costs or other School District operating expenses.)*

# 2019 November 5 Voter Information

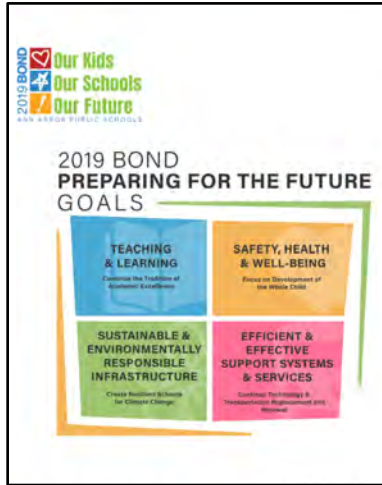
- |                                  |                    |
|----------------------------------|--------------------|
| • Final Date to Register to Vote | Up to Election Day |
| • Final Date to Vote Absentee    | Up to Election Day |
| • Election Day                   | November 5         |

***New laws allow anyone to vote absentee***

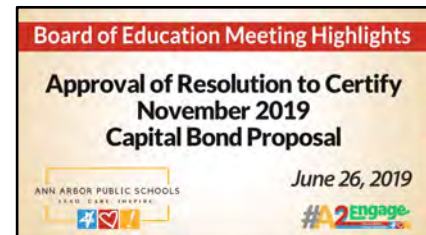
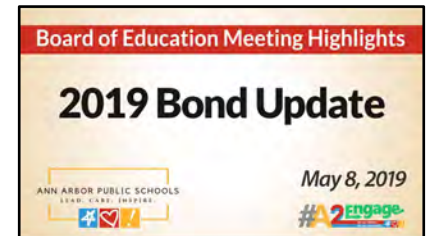
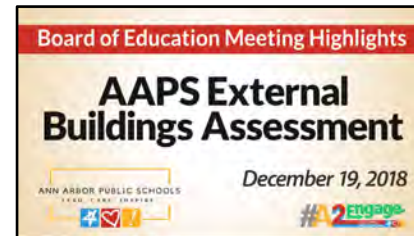
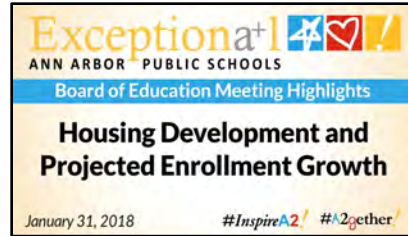
# Conclusions

- The Ann Arbor Public Schools community values a quality education for every child
- AAPS buildings and grounds are aging and in need of major capital investment
- The quality of the built environment directly impacts student achievement and the core mission of the District
- We have received beautiful schools and properties from previous generations, and now it is our responsibility as good stewards to prepare for future generations in AAPS

# 2019 AAPS Bond – Additional Information



**2019 Bond  
Informational  
Report**



**2019 Bond – Board of Education Meeting Highlights**

[www.a2schools.org/2019bond](http://www.a2schools.org/2019bond)

**Please Vote on November 5, 2019 !**