



# District-Wide Physical Assessment Executive Summary

November 17, 2015





### UPPER ARLINGTON SCHOOLS 2015 FACILITIES ASSESSMENT



#### Executive Summary

The Moody Nolan/Korda/EMH&T/Turner team is pleased to present the Upper Arlington Board of Education with this report of its findings and recommendations for the existing facility assessment of the district's nine (9) educational facilities. Per the district's request, the team reviewed the 2014 Ohio Facilities Construction Commission (OFCC) Facility Assessment prepared by VAA, LLC, Future Think, and Regency Construction Services, Inc. Upon review of the assessment, the team found a discrepancy in square footage measurements in two schools, which prompted the OFCC to issue a revision on November 4, 2015. The team then conducted its own observations of the existing facilities, and compiled this independent assessment report. The team has also taken the assessment information and projected costs for renovations into future time frames when the work should be performed based on urgency and life cycle. These projections are broken down into three categories: immediate need (0-5 years), intermediate need (5-10 years), and deferred need (10-15 years).

#### The Process:

The Moody Nolan/Korda/EMH&T/Turner team conducted a thorough assessment of each facility between August 14, 2015 and October 26, 2015 to evaluate the condition of the buildings and site features as well as to confirm the notations made in the OFCC assessment. The team photo-documented its findings as well as made notations on printed floor plans. Team members collaborated throughout the assessment as to how existing conditions should be remedied and discussed how urgently the district should address these conditions. Moody Nolan, Korda, EMH&T, and Turner then reviewed and compiled notes to develop building specific assessments and cost projections. As the team evaluated each system and component of the buildings, it used the following assumptions/clarifications to govern the decisions:

- The OFCC's Ohio School Design Manual (OSDM) standards would be the basis of the design for replacement solutions. With the exception of LED lighting, no "higher" quality solutions were assumed. If such solutions were to be desired by the community, these would be decided upon in a later phase of planning.
- No educational adequacy evaluations are contained in this physical facilities assessment report. Therefore, our assessment does not include any monies for renovations to facilitate reprograming of existing spaces or building additions.
- The cost information provided in the OFCC assessment is based on OFCC cost guidelines, which are updated every year with input from construction managers, contractors, and architects from across the state. The estimated cost for each recommended work item and category was evaluated and either confirmed, or adjusted, based on current market pricing for similar projects. As one of the largest construction management firms in Ohio, Turner regularly receives bids for projects in the K-12 and higher education markets. Through this bidding process, Turner collects actual bid unit prices and maintains an extensive database of that pricing for reference when preparing estimates on future projects, and for pricing building assessments.
- Costs to maintain and repair what the OFCC describes as Locally Funded Initiatives (LFI's) were not included in the 2014 OFCC assessment. These include programs such as performing arts and athletics facilities and amenities. The Moody Nolan/Korda/Turner team conducted a thorough review of these facilities and have integrated that review into our assessment and recommendations.

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- Maintaining a safe environment for students and staff is the highest priority, and construction activities should be planned in a way to minimize disruption to school operations. These costs include premiums for working in smaller areas of the building at a time (in lieu of working in all areas at the same time), and setting up temporary facilities. Temporary facilities could take the form of temporary classrooms within existing space, modular units on site, or temporary walls to separate students and staff from construction work. These costs are included.
- Contingencies have been included. The OFCC assessment included a 7% construction contingency but did
  not include design, estimating, and owner contingencies. Construction contingency is used to cover
  unforeseen costs incurred during construction. Prior to construction, industry convention is to also
  include design, estimating, and owner contingencies to address scope refinement through the design
  process. We have included these contingencies at an aggregate value of 10% in addition to the 7%
  construction contingency.
- Other Project Related Costs, also known as "soft costs", have been included as well. The OFCC assessment included these scope elements; the calculation however assumes all the work to take place concurrently. Since this project would be phased, we modified these costs to reflect those commensurate of phased construction as described above. The table below outlines the scope and costs percentages included as Other Project Related Costs.

| OTHER PROJECT RELATED COSTS                | Multiple Phase<br>Design &<br>Construction |
|--|--|
| Land Survey                                | 0.03%                                      |
| Soil Borings/Phase I Envir. Report         | 0.10%                                      |
| Agency Approval Fees (Bldg. Code)          | 0.75%                                      |
| Construction Testing                       | 0.60%                                      |
| Printing - Bid Documents                   | 0.18%                                      |
| Advertising for Bids                       | 0.05%                                      |
| Builders Risk Insurance                    | 0.12%                                      |
| Bond Fees                                  | 0.00%                                      |
| Design Professional Services               | 7.75%                                      |
| Construction Manager Services              | 6.50%                                      |
| Commissioning and Maintenance Plan Advisor | 0.80%                                      |
| Other Project Related Costs Contingency    | 1.12%                                      |
|  | 18.00%                                     |

#### **Cost Summary**

The buildings and facilities in large part appear to have been very well maintained, which has allowed them to outlast a typical life expectancy. In general, the team agrees with the OFCC assessment that a large portion of the building systems and materials are past their expected efficient useful life span and should be replaced, which would require an investment in significant building renovations. The total cost to provide the minimum

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recommended improvements across the district, if started in 2015, is estimated to be \$156,132,800. This estimate is \$47,666,900 higher than the OFCC estimate of \$108,465,900 for the reasons noted within the report. If these costs are deferred to the future time frames as indicated below and in the detailed building assessments, the total estimated renovation costs increase to \$188,434,700, to include inflation over 15 years.

#### **Understanding the Numbers**

The OFCC assessment estimate of \$108,465,900 assumes that all of the repair and maintenance costs would be incurred shortly after the completion of the assessment. The team's charge from the district was to use this data to accurately estimate the cost of "the current path," which is conducting preventative maintenance on the buildings and repairing systems as needed. In order to estimate the full cost of implementing these repairs over time, the team had to include several costs not considered in the OFCC estimate. Those costs include design/estimating/owner contingency (\$10.8 million), other project-related costs for phased construction (\$9.2 million), and additional phasing and swing space costs (\$1.4 million). The team also included costs for work items outside of the scope of the OFCC assessment (\$24.4 million) and of work related to site athletics/outdoor recreation spaces (\$1.9 million).

|   |               | COSTS TO DEFER RENOVATIONS |              |              |               |
|---|---------------|----------------------------|--------------|--------------|---------------|
| SCHOOL                                  | 2015 Costs    | 0-5 YEARS                  | 5-10 YEARS   | 10-15 YEARS  | TOTAL         |
| Burbank Early Childhood School          | \$6,483,600   | \$3,486,800                | \$2,169,500  | \$2,467,300  | \$8,123,600   |
| Barrington Elementary School            | \$14,407,400  | \$6,365,200                | \$10,314,600 | \$1,029,800  | \$17,709,600  |
| Greensview Elementary School*           | \$8,060,200   | \$7,813,000                | \$1,244,600  | \$0          | \$9,057,600   |
| Tremont Elementary School               | \$8,079,700   | \$3,863,900                | \$5,748,600  | \$217,400    | \$9,829,900   |
| Wickliffe Progressive Elementary School | \$9,127,800   | \$8,208,000                | \$1,474,600  | \$797,600    | \$10,480,200  |
| Windermere Elementary School            | \$11,258,500  | \$3,850,500                | \$9,080,500  | \$1,159,200  | \$14,090,200  |
| Hastings Middle School                  | \$23,561,100  | \$1,551,600                | \$28,509,000 | \$331,200    | \$30,391,800  |
| Jones Middle School                     | \$16,002,200  | \$2,667,400                | \$8,674,800  | \$10,846,900 | \$22,189,100  |
| Upper Arlington High School             | \$59,152,300  | \$59,488,400               | \$3,468,800  | \$3,605,500  | \$66,562,700  |
| TOTAL                                   | \$156,132,800 | \$97,294,800               | \$70,685,000 | \$20,454,900 | \$188,434,700 |

\*Includes updated pricing from November Building Team Meeting presentation

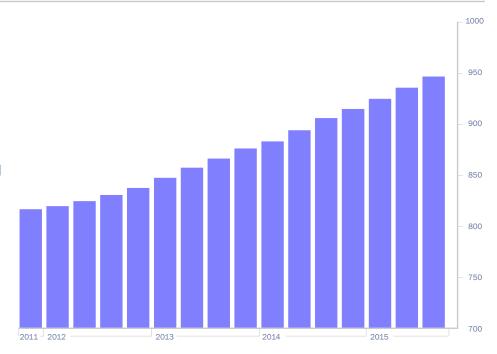
#### **Inflation and Escalation**

Deferment of the renovations results in a higher overall capital expenditure due to inflation in the construction market, which is similar to consumer inflation, but is subject to influence by different factors. The primary factors influencing inflation in the construction market are changes in material and equipment pricing, labor costs and the availability of skilled labor, and the impact of market conditions on the level of overhead and profit that contractors will include when they bid on the work (contractors will increase margins during a busy market and decrease margins in a slower market). Turner tracks inflation in the construction market and publishes the Turner Cost Index on a quarterly basis, which is included with this report. Over the last 10-15 years, the cost index has indicated inflation trending at a 3% - 4% increase annually, with the most recent three years trending over a 4% annual increase. Based on this data, this assessment forecasts an annual escalation rate of 4% to the mid-point of each of the three time frames discussed above, which would be 2 ½ years, 7 ½ years and 12 ½ years respectively.

### **Turner Building Cost Index**

"While the cost of engineered and manufactured construction components decreased in **Third Quarter, material lead** times for delivery have been extended mainly due to a reduced availability of production and fabrication facilities to support market demands."

Attilio Rivetti Vice President





| Quarter          | Index | $\bigtriangleup$ % |
|------------------|-------|--------------------|
| 3rd Quarter 2015 | 949   | 1.17               |
| 2nd Quarter 2015 | 938   | 1.19               |
| 1st Quarter 2015 | 927   | 1.09               |
| 4th Quarter 2014 | 917   | 0.99               |

| Year | Average Index | $\triangle$ % |
|------|---------------|---------------|
| 2014 | 902           | 4.4           |
| 2013 | 864           | 4.1           |
| 2012 | 830           | 2.1           |
| 2011 | 812           | 1.6           |
| 2010 | 799           | -4.0          |
| 2009 | 832           | -8.4          |
| 2008 | 908           | 6.3           |
| 2007 | 854           | 7.7           |
| 2006 | 793           | 10.6          |
| 2005 | 717           | 9.5           |
| 2004 | 655           | 5.4           |
| 2003 | 621           | 0.3           |
| 2002 | 619           | 1.0           |

The Turner Building Cost Index is determined by the following factors considered on a nationwide basis: labor rates and productivity, material prices and the competitive condition of the marketplace.

Concord-Carlisle High School Concord, Massachusetts



**Furner**