

KNOX COUNTY SCHOOLS

UT TOWER

Bob Thomas, Superintendent



MEMORANDUM

TO: Chair and Members
Knox County Board of Education

FROM: Bob Thomas
Superintendent

DATE: April 20, 2022

RE: Fiscal Year 2023 Capital Budget and Capital Improvement Plan (CIP)
Recommendation

Attached, please find the capital budget recommendation for Fiscal Years 2023 (FY23) through 2027 (FY27). The worksheet that is Attachment A outlines an FY23 capital appropriation proposal with a framework for subsequent years of capital investment. We are proposing an appropriation of \$48.122 million for FY23 to allow us to continue the previously identified construction projects as well as to construct a new elementary school to relieve crowding at Farragut Primary and Intermediate Schools. To reduce the impact of this capital plan recommendation on Knox County's capital debt load, we recommend that the Board designate \$8 million from fund balance to cover the FY23, costs of Physical Plant Upgrades, Security Upgrades and the design phase of the proposed Sterchi Elementary School addition. This will bring the total proposed new debt to \$40.122 million.

As you know we have struggled some to keep pace with timelines due to materials availability and increasing costs in the current construction environment. Based on the current environment, we believe it is prudent to increase our previous estimates of cost for outyear construction projects. We have included these proposed budget increases in the project totals proposed in Attachment A. However, we remain concerned about the volatile nature of construction costs and the availability of materials.

Physical Plant Upgrades

In previous years, we discussed including a level of funding for Physical Plant Upgrades (PPUs) in our general-purpose budget to address projects that are more related to maintenance of plant rather than capital upgrades or capital expansion. This year we will finally be able to address this need with the addition of \$1 million to the maintenance department budget specifically to boost the resources available for general maintenance projects. Therefore, you will not see the smaller systemwide projects in our PPU request with which you have become familiar. We will transition items such as systemwide plumbing, electrical, fire alarm, and flooring repairs as well as FF&E (Furniture, Fixtures and Equipment) expenses to the general purpose budget.

This year we seek to include \$2 million in funds in the capital budget to address a number of projects across the county. Our proposed list of PPU projects is Attachment B, and it includes a number of larger projects such as window replacement at Richard Yoakley School (phase III), sprinkler repair at Christenberry Elementary School, replacing storm drains at Ridgedale School and major repairs to the theatrical lighting at Farragut High School. We are also proposing a significant investment at Austin-East High School to return the baseball field to a playable condition. This field has not been used for sanctioned play for many years and having a playable field on campus will improve the vitality of the baseball program at the school.

Heating, Ventilation and Air Conditioning and Roofing

For FY23, we are proposing a total of \$3 million in new debt as shown in the worksheet that is Attachment C to finance significant HVAC work. We have five sites where we need to replace a significant number of HVAC units or cooling towers. Each of these jobs will cost between \$400,000 and \$600,000. The locations include Austin-East, Fulton, Karns Annex, Powell High School and Vine Middle School.

As we stated in the FY22 Capital plan we have five locations where we will need to make significant repairs or replace HVAC systems in the coming years. One of these sites is Cedar Bluff Middle School. We originally considered requesting an additional designation of \$4 million to replace the HVAC at the school in FY23. In an effort to help smooth the impact of

this project on the County's capital debt, we have scheduled this project for funding and completion in FY24.

Like all areas in construction the cost of roofing work and materials has increased exponentially. We have received guidance from industry professionals that we should plan roofing budgets based on a cost of about \$18 per square foot. This is an over 100% increase from our previous budget calculations, but we have little recourse other than to eliminate roofing from this year's budget and that would not be wise. Therefore, we are requesting \$5 million for roofing in FY23. This will allow us to finish a new roof at Austin-East for about \$3.2 million as well as installing new roofs at Ritta and Pleasant Ridge Elementary Schools.

Foundation Stabilization

This line in the capital budget is a contingency line for which we request funding every other year. The funds are used to address foundation issues that periodically develop at many of our schools. These issues can be caused by anything from erosion, to sink holes and intrusion of tree roots into the foundations. The issues are typically limited in scope and can be economically addressed if we catch them early. We are requesting \$250,000 in this line.

BEP Growth (Modular Classrooms)

In addition to the proposed expenditures cited above and detailed in the attached worksheets, we have also proposed \$800,000 for modular classrooms. This is a significant increase in the projected cost per unit based on the costs we are currently experiencing. This allocation will provide for two, two-room units. We expect one of these units will be targeted for A.L. Lotts Elementary School. We also anticipate that we will need to relocate some portables from Hardin Valley Elementary School as the new Northwest Elementary School comes on Line in August of 2023. While there may be some small savings in moving these portables to another site, the cost will be similar to procuring and installing a new unit.

Systemwide Drives, Parking and Paving

Five years ago, we began the process of systematically addressing the poor condition of the asphalt on many of our school parking lots and drives. Since that time, we have made significant progress completing paving projects for all or parts of the following campuses:

| | |
|---------------------------------|------------------------------|
| South-Doyle Middle | Mooreland Heights Elementary |
| Carter High | Gap Creek Elementary |
| Green Magnet Elementary | Gresham Middle |
| Karns Elementary and Annex | Powell Elementary |
| South Doyle High (Young Campus) | Bearden Middle |
| Richard Yoakley | Inskip Elementary |
| Farragut High | |

There will also be improvements to the condition of parking and drives at Adrian Burnett and Lonsdale Elementary Schools as these new schools come on line.

For FY23 we are proposing paving projects at Bearden High School, Spring Hill Elementary, Corryton Elementary and East Knox Elementary Schools.

Environmental Testing and Remediation

We have a very active environmental testing and remediation program that includes asbestos monitoring and remediation as well as radon and water testing and remediation. We are seeking \$250,000 in FY23 to continue this very important work.

Our asbestos management program was established to comply with federal mandates and guidelines about 30 years ago and is an ongoing program. According to our Asbestos Management Plans, KCS currently has approximately 800,000 square feet of asbestos containing floor tile. Other asbestos materials including thermal system insulation, surfacing materials (ie. plaster, drywall compound), asbestos cement panels, mastics and adhesives, and other miscellaneous materials are present in many of our facilities built in the 1970s or earlier.

The EPA generally encourages schools to manage asbestos materials in place and to abate only during renovation, demolition, or when materials are in poor condition. Presently, our asbestos materials generally appear to be in good condition, but we have several smaller sites where we plan to abate floor tiles as time and manpower permit.

Several years ago, we also began water testing in accordance with state statute and BOE policy. We have completed testing in all our schools built before 1998. Under Board policy and state statute, this is an ongoing biennial commitment at all our schools built in this period. Therefore, we will need to test a minimum of 41 schools in 2023. All our schools built in 1998 and later will be tested every five years as is required in Board policy. Currently, this will leave us with nine sites to be tested by the end of 2024.

We started radon testing and mitigation at our schools about four years ago and have completed testing and required remediation at about 92% of our sites. Of the 84 sites that we have tested to date, only 28 required us to install some level of radon mitigation. We still have 7 sites that need to be tested and possibly mitigated, and we expect to complete these over the next two years.

We are requesting the modest amount of \$250,000 in order to continue this work in FY2023.

Technology Upgrades

We are also requesting a modest \$300,000 appropriation to allow us to address data infrastructure needs as they may present themselves. These funds will be used largely to expand data storage as necessary to accommodate administrative and instructional needs and will also help us maintain the hardware in our data center.

Security Upgrades

The \$3.0 million proposed in security upgrades will be used to fund a number of projects.

1. Work will continue on the multi-year process of replacing and upgrading the locks in all our schools to a more capable system that will both replace older and worn locksets as well as allow us to reduce the dependence on traditional building and

district master keys. We currently have 20 sites complete with this upgrade and an additional 28 sites planned for completion in the coming months with 14 more projected for completion in FY23.

2. The Information Technology Department has started the process to install distributed antenna systems at a number of sites to enhance emergency radio communication at these locations. This is a multi-year, multi-million-dollar process, and IT is working with our contractor to complete this work on a priority that is based on the level of signal degradation at the various locations. This upgrade will affect over 75% of our facilities.
3. We are generally in a maintenance posture with our video systems using upgrade funds to keep our over 6,000 video cameras functioning appropriately. However, we have begun the process of replacing many of our aging video servers to ensure that our surveillance systems continue to function at peak capacity. With the number of servers we have and the cost of these units, this will not be an inexpensive process, but it is a process in which we will be continuously engaged as long as we have video surveillance systems.
4. These funds are also used to maintain our security fencing. We regularly identify areas where added fencing will enhance security at a site, and these funds allow us to address these needs in a timely manner.

School Accessibility

We have established a practice of biennially providing contingency funding for school accessibility projects. Generally, these are smaller projects such as adding chairlifts or improving sidewalks to support specific students who may have mobility challenges with respect to their zoned school. We address these issues throughout the year as they present themselves and as school administrators identify them. We are not seeking any funding in this line item for FY23 as we are projecting a carryover of approximately \$300,000 in this line.

Northwest Elementary School Construction

The construction of the new northwest elementary school is in progress, and it is planned to come on line in August 2023 initially serving about 800-900 students who currently attend Hardin Valley and Karns Elementary Schools. The school is designed to support a student population of about 1200.

As we have discussed, this project includes not just school construction but also work in conjunction with Knox County to widen Coward Mill Road and extend the sewer line to connect with existing service in the area.

North Central Elementary Solution

The North Central Elementary Solution consists of multiple projects; a Brickly McCloud addition; a replacement school for Adrian Burnett Elementary and an addition to Sterchi Elementary School.

The new Adrian Burnett will open this fall, and we will also open the Brickey-McCloud 10-classroom expansion in August 2022. This leaves the construction of the Sterchi Elementary addition and renovation to complete this project.

The Sterchi project is a 250 student addition to the existing school with upgrades to the core amenities such as the cafeteria, library and administrative space. We have adjusted the budget on this project to reflect the current costs per square foot of construction that we are experiencing. This project is budgeted at a total of \$18.5 million over two years. We expect to identify an architect and begin design late this summer with construction bids being accepted in the spring of 2023.

Farragut Elementary School

In the FY22 capital plan the Board approved funds for the purchase of property for the construction of a new elementary school of about 1200 student capacity to relieve the pressure on the current Farragut Primary and Intermediate Schools. We have identified property and a willing seller in the Farragut area and are currently doing our due diligence to determine the

viability of the approximately 25 acre site. Barring any unforeseen circumstances, we will close on the property soon and will then be in a position to begin design and construction of a new school for about 1,200 students. With the FY23 capital plan we begin to budget for the \$32.575 million estimated to be required for the construction of this project. The school is anticipated to be open in August of 2025.

Halls and Gresham Middle School Gyms

Halls and Gresham Middle Schools both have gymnasiums built in the 1930s. While these have been properly maintained, they no longer fully meet the educational needs for this type of facility, and they are increasingly challenging to maintain. Therefore, we are proposing replacing both facilities with new construction.

In the case of Halls project, four classrooms will be included to replace the four temporary classrooms in use at this site. Once the new structure is complete the old gymnasium will be demolished thereby expanding options for a detailed analysis of traffic flow on the high school/middle school campuses. If possible, we would like to find a way to improve ingress and egress on these campuses.

The Halls project is recommended for FY26, and the Gresham project is recommended for FY27.

Beaumont Magnet Academy Solution

As the Board is aware, Knoxville's Community Development Corporation is engaged in a project to transform the Western Heights Community. KCDC has a six year and a 12 year timeline for this project. The speed with which it is completed is dependent on available funding.

It is expected that the increase in housing units in Western Heights will significantly increase the student yield from this community, and we will see an increase in the student population at each of the schools that support this area (Beaumont Magnet Academy, Fulton High and Northwest Middle) with Beaumont Magnet Academy being the most significantly affected. BMA is

currently functioning at or near its capacity as it serves both the Western Heights community and the magnet program. Additionally, the facility sits on approximately six acres with the original portion of the school building dating to 1936. There have been additions in 1943, 1953 and 1996.

Regardless of how fast the Western Heights Transformation is completed, we will ultimately be faced with the need to address an expanded student population at BMA and an aging facility that will only marginally support current and future educational programs. We will begin the analysis now to this address issue, but we must be prepared to invest significant resources in the near future to support our elementary population in this community. We will work hand in hand with KCDC on this project to ensure that the work they have planned and any proposed action on the part of the Knox County Schools will be complementary.

Hardin Valley Academy Addition

We have closely monitored the student population dynamics at Hardin Valley Academy for several years, and while the projection is for the population to stabilize or even decline a bit over the next five years, we believe that it is appropriate to construct a 32 classroom addition to improve the functionality of the school (a net gain of 28 classrooms). This facility currently has 76 classrooms with a student population over 2,000. Our two most comparable high schools, Farragut and Bearden, have 103 and 100 classrooms respectively. This addition is estimated to cost \$10.972 million and will bring HVA to a facility size comparable to the two other high schools we have with a similar student population.

Title IX Solutions

As you are aware, The Board of Education has a long-standing practice of working with athletic booster organizations to allow these groups to invest in athletic programs and facilities at high schools across the county. This practice has led to the creation of disparities between some male and female athletic facilities at some schools and we have begun a process to address these disparities where they exist. This year we completed about \$2 million worth of work to upgrade the softball facility at Farragut High School to make it comparable to the baseball facility. This year we will begin the process to complete about \$4 million worth of work to address the softball

facility at West High School. This will be a larger project than the Farragut High School softball project as no softball field currently exists. Our intent is to construct a facility adjacent to the baseball facility on the West High School campus.

Additionally, our Title IX coordinator will continue to identify areas where we may have issues with equitable facilities. We are currently projecting \$1 million a year in out years for this work, but we will need to annually reassess this level of resourcing.

Fire Alarm Upgrades

Last year, we began the multi-year process of adding carbon monoxide detection and alarms to our fire alarm systems in areas where we use natural gas fired appliances. We currently have 22 schools where upgrades are complete, and we will complete an additional nine schools in FY22. We plan to complete work on an additional 15 schools during FY23. Our intent is to dedicate about \$1 million a year to this project until we complete upgrades at all facilities that use natural gas fired equipment

Bearden Middle School Renovation

The design of Bearden Middle School is such that its physical student capacity is much less than the actual space would calculate to be. Therefore, there is unused and underused space that needs to be redesigned to allow the building to function at its true capacity. We proposed to allocate \$4.5 million in the FY25 Capital plan to begin to address this need.

Knoxville Adaptive Education Center (KAEC) Renovation

KAEC is a critical facility for the Knox County Schools that serves some of our most severely challenged students. We need to look closely at the condition of this facility and plan for a significant refresh in the coming years. Therefore, we are proposing \$2.5 million for this purpose with the project to be implemented in FY24.

Conclusion

This proposed capital improvement plan for FY 2023 continues the commitment and investments identified in the FY 2022 plan, and it also identifies some needs that will have to be addressed in the longer term at some of our older or more heavily used facilities.

With the approval of our ESSER 3.0 spending plan, we can move the renovation work on the Lincoln Park Center forward a number of years as well as begin the process of upgrading all of our classroom flat panel technology without having an impact on the County's capital debt load.

While the construction costs have skyrocketed in recent months, we must continue our investment to maintain our facilities and provide our students and staff a comfortable, healthy and safe learning environment. I believe our current proposal is a reasonable capital improvement plan that builds on the Board's capital priorities and identifies a number of needed longer term investments:

Therefore, I respectfully request the Board of Education adopt this plan as proposed.

Attachments:

- A- FY23-27 Capital Plan Worksheet
- B- Physical Plant Upgrade Recommendations
- C- Roof/HVAC Recommendations

| Electrical | | Request Description (791302XX-570600) | |
|-----------------------------|--|---|---------------|
| Austin East High | | Install Primex clock system | 58,000.00 |
| Carter Elementary | | Install new intercom system | 20,000.00 |
| Farragut High | | Upgrade theater lighting and dimming system | 175,000.00 |
| West Haven | | Install new intercom system | 20,000.00 |
| ***Hardin Valley Elementary | | Add lightning protection to portables / \$30,000.00 | |
| ***South Doyle Middle | | Replace electrical switchgear / \$280,000.00 | |
| | | | \$ 273,000.00 |

| General Construction | | Request Description (791302XX-570600) | |
|-----------------------------|--|---|-----------------|
| Farragut High | | Renovate two CDC kitchens | 80,000.00 |
| Halls Elementary | | Replace windows on front of building | 37,000.00 |
| Halls Middle | | Replace flooring in kitchen & serving line areas | 110,000.00 |
| Richard Yoakley | | Replace windows Phase 3 | 200,000.00 |
| West High | | Replace rusty steel stair rails and roof panels on CTE building | 30,000.00 |
| Austin-East | | Repair baseball field to accommodate TSSAA sanctioned play | 800,000.00 |
| Carter High | | Repair and resurface running track | 130,000.00 |
| | | | \$ 1,387,000.00 |

| Plumbing | | Request Description (791302XX-570600) | |
|--------------------------|--|--|----------------------|
| Bearden Elementary | | Replace main water line | 30,000.00 |
| Christenberry Elementary | | Replace fire sprinkler piping in zones 1 & 2 in dry system | 160,000.00 |
| KAEC | | Replace main water line | 45,000.00 |
| Ridgedale | | Repair/Replace storm drain piping and catch basin | 80,000.00 |
| West View Elementary | | Replace main water line | 25,000.00 |
| | | | |
| Grand Total | | | \$ 340,000.00 |

| | |
|---------------------|------------------------|
| BUDGET TOTAL | \$ 2,000,000.00 |
|---------------------|------------------------|

Knox County Schools
 FY2023 HVAC/Roofing Draft

| HVAC | | Request Description (791330XX-571200) | Budgeted |
|---------------------------|--|--|----------------|
| Systemwide | | Cooling tower, chiller and boiler repairs at various sites | 50,000.00 |
| Systemwide | | Install ductless split units at various sites | 60,000.00 |
| Austin East High - 3 | | Replace various HVAC units (22) | 675,000.00 |
| Fulton High - 2 | | Replace cooling tower | 520,000.00 |
| Karns Annex - 5 | | Replace various HVAC units (23) | 475,000.00 |
| Powell High - 1 | | Replace 11 HVAC classroom rooftop units, cafeteria unit and kitchen unit | 460,000.00 |
| Vine Middle - 6 | | Replace various HVAC units (22) | 460,000.00 |
| West Hills Elementary - 4 | | Install HVAC in gym | 300,000.00 |
| ***Cedar Bluff Middle | | Full HVAC system replacement / \$3,600,000.00 | |
| ***East Knox Elementary | | Install HVAC in gym / \$380,000.00 | |
| ***Fountain City Elem. | | Install new HVAC system / \$4,000,000.00 | |
| ***Spring Hill Elem. | | Install HVAC in gym / \$380,000.00 | |
| | | | \$3,000,000.00 |

Knox County Schools
 FY2023 HVAC/Roofing Draft

| Roofing | Request Description (791331XX-570600) | Budgeted |
|---------------------------|--|-----------------------|
| Austin-East High | Complete sections of roof not replaced in 2020 project | 3,200,000.00 |
| Ritta Elementary | Partial Reroof | 1,200,000.00 |
| Pleasant Ridge Elementary | Reroof | 600,000.00 |
| | | \$5,000,000.00 |
| GRAND TOTAL | | \$8,000,000.00 |