School Spotlight - Samuel A. Mudd Elementary School, Charles County

WINTER NEWSLETTER

In This Issue:

Assessment and Funding Workgroup 01
Topic Spotlight: Total Cost of Ownership 02
School Spotlight: Samuel A. Mudd E.S. 03
75% CIP Publication 04
Updates 05

Interagency Commission on School Construction
The Workgroup on the Assessment and Funding of School Facilities has published their preliminary report, which was adopted on November 19th and is available on the IAC’s website. The Workgroup recognizes that it is premature to complete their work until a statewide assessment of school facilities is complete and plan to reconvene to revisit their draft recommendations once assessment data becomes available.

The nine-member Workgroup met six times between June and November and published preliminary findings on December 1st. The group focused heavily on a potential standards-based process for allocating funding to projects and preliminarily recommended a pilot program with new funding that will determine project eligibility based upon the results of the statewide school facilities assessment. The Workgroup also extensively discussed the total cost of ownership of school facilities (including the first cost to construct the facility and the cost to own and operate the facility for 30 years) and facilities maintenance.

The group framed their conversations around finding solutions to school facilities needs in the state that are both educationally effective and fiscally sustainable. Before the Workgroup begins to meet again, the IAC will schedule and host regional meetings to discuss the Workgroup’s preliminary recommendations and the details of a potential standards-based pilot program.
### Topic Spotlight: Total Cost of Ownership

Within an environment in which increasing facilities needs and costs are bumping up against limited available resources, it’s essential that every portfolio owner gets the greatest possible value out of each dollar spent. This means that, when making design and construction decisions, a facility owner needs to consider the total cost of ownership (TCO) associated with the various potential solutions. TCO is made up of the cost of installation or construction plus the ongoing costs of operating and maintaining the system over a given period of time. The cost of maintaining includes the cost of replacing the system one or more times if the system’s expected life span is shorter than the given period of time.

Comparing the TCO of epoxy-resin terrazzo flooring to that of school-grade vinyl-tile flooring provides a good example of the power of a TCO analysis. According to data compiled by the National Terrazzo & Mosaic Association (NTMA), the cost to install epoxy-resin terrazzo flooring in the mid-Atlantic region is $17.00 per square foot (SF), or nearly 12 times the cost of vinyl-tile flooring at $1.42 per SF. Terrazzo flooring might appear unaffordable when looking only at up-front costs. However, when maintenance and replacement costs over the full 40-year comparison period are included, the TCO over 40 years for vinyl-tile flooring adds up to $61.28 per SF, while the TCO for epoxy resin terrazzo flooring is only $37.40 per SF — a 61% savings over time. To learn more about TCO, visit our webinar series at iac.maryland.gov.

### Thank you Ms. Schaefer

Following 27 years of state service at the Department of General Services and Interagency Commission on School Construction, Deputy Director Joan Schaefer has retired on December 31, 2019. She helped to herald in numerous programs for the IAC including the recent School Safety Grant Program and Healthy School Facility Fund and oversaw the release of multiple annual maintenance reports. Her service was acknowledged by the IAC at the 12/12/19 IAC meeting where Chairperson Superintendent Salmon presented a Governor’s citation honoring her achievements.
School Spotlight: Samuel A. Mudd Elementary

The newly renovated and expanded Dr. Samuel A. Mudd Elementary School in Charles County shows the value of careful analysis of the total cost of ownership (TCO), both in choosing whether to replace or renovate and expand a worn-out facility and for the selection of building systems and materials. Dr. Samuel A. Mudd ES was built in 1967 as a 45,746 GSF open-plan school with minimal windows. By 2015, many of its building systems had reached the end of their life spans and the facility was insufficient to support 21st-century teaching and learning.

At the 2015 CIP state cost of $336/GSF including site development, a new school built at the current IAC baseline size of 71,837 GSF for an enrollment of 586 would have had an estimated TCO of $53.1 million over 30 years. Charles County Public Schools (CCPS) obtained an estimate to demolish 5,363 GSF, renovate 40,383 GSF, and add 36,436 new GSF to the existing facility for a total of 74,719 GSF at a project cost of just over $20 million and an estimated TCO of $50.1 million over 30 years—a 6% savings. The availability of swing space just two miles away allowed for the use of winter months to complete interior renovations, thereby saving time and money. The result is a welcoming facility with greatly increased natural lighting from placing classrooms along the building perimeter and in bump-outs from the core.

The Dr. Samuel A. Mudd ES building also demonstrates the powerful impact of administrative decisions and solutions on a school facility. For example, this community highly values classroom space, and was able to maximize the available classroom space by having lockers in the hallway rather than cubbies in the classroom. Blinds were installed, consistent with best practices, to ensure areas of visual refuge in the event of an emergency. However, to encourage the good administrative policy of leaving the blinds up in all other instances, which is a best practice for protecting child welfare, the administrative decision was made to install unattractive blinds in a plain black material. These administrative and design details may seem small, but have a powerful impact on the cost to own the facility over time and the usability of the facility for its students and teachers. Due to construction-cost inflation and the discovery of hidden conditions, the project cost grew to $23.8 million by closeout. As built, the TCO for the renovated and expanded (continued on next page...)

Before

After

Before

After

Winter Edition Newsletter
School Spotlight (Continued)

... Dr. Samuel A. Mudd ES is now estimated to be $53.9 million, which is within 1.6% of a baseline-sized replacement facility.

In order to reduce costs and minimize TCO, CCPS’s systems selections included the following: Durable and easily maintainable masonry walls in most interior areas; A single off-white paint color for almost all interior walls in the school; A highly efficient full-geothermal HVAC system that can maintain desired temperatures while running only from 5:00am through 7:00pm daily; and color-path-embedded terrazzo floors that incur fewer upkeep costs than alternative flooring types. Daily care for the terrazzo is a quick once-over with a ride-on scrubber using water and a small amount of 305 Neutral cleaner. CCPS’s maintenance division helped pay for the installation of the terrazzo in order to reduce long-term costs of operations and maintenance.

75% CIP Publication

Across the state of Maryland, local education agencies continue to be challenged with maintaining their aging capital investments. The Interagency Commission on School Construction is committed to providing funding for eligible projects as well as technical assistance to develop tangible projects and policies that can help meet the needs of the Maryland's students and teachers.

To address local school construction needs, on December 12, 2019 the Interagency Commission on School Construction approved the funding of 86 projects and 4 local planning projects that comprise 75% or $210 million of the FY 2021 Governor’s preliminary school construction budget. Approval of these projects represent the State’s commitment to provide funding to address local needs within the context of State goals and budgetary constraints. The next round of recommendations will be presented at the Commission’s meeting on February 6, 2020. To view the recently published FY 2021 CIP, visit our website at iac.maryland.gov and follow the Annual Capital Improvement Programs tab on the left sidebar. For additional information, please do not hesitate to contact staff at iac.pscp@maryland.gov or (410) 767-2153.
Open Hiring Recruitments

The Interagency Commission on School Construction is currently hiring! Please check our website's home page at iac.maryland.gov to view listings for regional facilities managers, financial managers, administrators, and more.

Primary IAC Email Address Update

The Interagency Commission on School Construction has updated their primary email address. Please utilize iac.pscp@maryland.gov as the primary source of communication with the IAC. All correspondence to the previous email iac.msde@maryland.gov is being forwarded. Thank you.

Upcoming Events

- **February 6th**: IAC Meeting, 9:00 AM
- **February 6th**: 90% CIP Recommendations Release
- **March 12th**: IAC Meeting, 9:00 AM
- **April 9th**: IAC Meeting, 9:00 AM
- **After May 1**: 100% CIP Recommendations Release