

To Renovate or Build New: Looking Beyond the Numbers

by Amy M. Yurko, AIA

Many factors contribute to school districts finding themselves at the crossroads of deciding whether to renovate their existing school facilities or to build new ones. Straightforward issues such as comparative construction costs and schedules are critical components of the decision-making process, and guidelines and rules-of-thumb for these issues are well researched and documented in numerous venues. In contrast, subtle and perhaps intangible criteria can easily be overlooked, while their impacts on the decision to build new facilities or renovate existing ones can be quite formidable. A look that reaches beyond numerical issues and toward these intangibles will reveal additional and often key decision-making criteria districts may need to consider in order to successfully decide on their most appropriate direction.

VISION

One of the most important steps in this process is defining the vision for the school. The vision should be largely independent of considerations for physical facilities, whether existing or new. It should define goals for education and student educational outcomes, technology, future flexibility and expansion, identity, community interaction and joint use. The vision can also include facility issues such as goals for operations, efficiency, long-term value, durability and maintenance, security, sustainability, and even aesthetics. It is imperative that these vision issues and any others that are unique to the district are clearly defined and prioritized. The evaluation of both options, building new facilities and renovating existing ones, will rely heavily on a comparison of their abilities to support the defined vision.

Process Diagram:



EVALUATION

Once the school's vision is established, an in-depth evaluation of the existing school can take place. While each situation is inherently unique, and it is impossible to avoid every surprise, enough similarities do exist to distill a list of common categories to consider when embarking on this evaluation. Among these categories are 1) the physical building, 2) its educational adequacy (both current and future), 3) operational issues (both short and long-term), 4) expansion needs & opportunities, 5) aesthetic considerations, 6) historical and community significance, 7) safety/security, 8) accessibility, and 9) sustainability. Begin by assessing the existing building along these broad categories recognizing that each one will typically contain several sub-categories. During the evaluation process, expect that each category may carry a different weight or emphasis and assume that new categories may emerge. The evaluation should be fundamentally objective, but be prepared for subjective opinions to surface as well. In many districts, it can be important to gather, consider and address community opinions and sentiment, particularly if community support and funding plays a role, as is often the case.

Another critical step is to evaluate the possibilities for a new facility in order to honestly be able to compare options for building new with renovation of the existing. A key consideration is the new school's location or site. A school can be a community icon, historically significant, and critical to its neighborhood. Relocating the school may cause unexpected or undesirable effects on its original community. If the school should be relocated, engage the community in exploring options for the adaptive reuse of the existing school building and site. Explore options for partnering, for example, a joint-use or land-swap with the local parks district may allow the existing site to become a community center while also gaining parks district land elsewhere for the new school facility. Considerations for locating a new replacement school site can also include student demographics, site accessibility and traffic issues, opportunities for community use, proximity to shared facilities, distance from similar or competitive facilities (i.e. private schools), available site utilities, impact on the environment, and the site's aesthetic context. The site should also be evaluated for its potential to support educational goals; look for unique land features, solar orientation, prevailing winds and views that might be used to enhance the educational program.

If building a new school on the existing school's site is an option, consider whether the existing school needs to remain operational during construction. If so, a phasing plan should anticipate strategies for maintaining student

safety throughout the on-site construction phase. In any case, the cost and schedule for the new facility should also include expenses associated with temporary facilities, multiple moves and potential schedule disruptions.

FIT ANALYSIS

Once the vision is established and the facilities are evaluated, the critical path item is the fit analysis, which explores how effectively each option will be able to support the vision. There will be many questions to address when completing this step in the decision-making process; several examples follow:

Of the existing facility:

- In what ways does the existing facility support the vision?
- What is the extent of changes required to establish the desired fit?
- What extent of the changes should be infrastructure (structure, mechanical, electrical, technology)?
- Will additional space be required?
- If so, how well will the existing facility and site allow for such additions?
- How well will new technologies be able to be incorporated throughout the facility?
- Will the renovated facility be able to continue to transform in support of evolving curriculum?
- What is the expected life span of the renovated facility?

Of a new facility:

- Is the existing site capable of supporting new construction?
- How well would a new site for the replacement facility be able to support the vision?
- In what ways will a new facility be unable to support the vision?
- Will the character of the replacement facility (noting today's construction methods and costs) be able to favorably compare with that of the school to be replaced?
- What will become of the replaced school (and site)?
- What is the expected life span of the new facility?

VALUE COMPARISON

Again, this has largely been a discussion of issues other than costs, however it is understood that no decision to build new or renovate existing can be made without comparing the numbers – initial costs, site costs, construction, phasing, moving, operations and maintenance for the lifespan of the facility. For example, will the new or renovated facility be expected to last 10 to 25 years or 75 to 100 years? In determining value over a longer period of time, new facilities often look better, and conversely renovated facilities show higher value if the expected life span is shorter. For an accurate value comparison absolute honesty must be exercised in addressing the issue of lifespan, and this honesty must also be carried out in the implementation of either the renovated or the new facility.

A comparison of value must include cost components, but other issues, particularly the educational vision, as well as less tangible issues as discussed above must also be considered. For example, most districts identify the educational vision as their top priority. As educational program needs evolve over time, the school facility needs to be flexible enough to evolve as well. This flexibility may be more difficult to achieve in an older renovated facility, but will hopefully be built-in to the design of a new one.

But how do we quantify a building's historical and/or sentimental significance? There can be a tremendous value in recognizing the important role a school facility has played in its community's history and civic pride. Restoring the school's usefulness is not only one of the purest forms of sustainability (recycling), it can also be a source for enhanced civic pride – a difficult item to quantify in terms of cost, but not so difficult in terms of value.

DECISION

In the recommendation and/or decision-making phase of this process, all points are taken into consideration and prioritized. Some districts assign point-numbering systems and score each option to reveal the best solution. Some hold community forums to explain and discuss and perhaps vote on several options to determine the majority-preferred solution. Some even begin exploring both options simultaneously until one logically governs. For sure, there can be no easy or universal answer, as each school community is inherently unique in its interpretation of value. The important point is that there will be much more to making this decision when comparing value, not simply costs, is the goal.

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