Utilization of Public School Facilities
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The Public School Capital Outlay Council (PSCOC) has been directed by the New Mexico Legislature to administer their allocation of state funding to public school facilities. We have about 800 schools in the 89 school districts and 52 state charters (state charters are also districts).

This segment of the PSFA presentation addresses utilization. Utilization relates directly to facility capacity, number of students, and gross square feet. Maximizing utilization reduces both capital and operational costs and begins with proper planning to right size facilities.

Utilization and Capacity Components of the Facility Master Plan (FMP)

Utilization and capacity are components of long range planning, the utilization of each facility is analyzed to identify if the schools are too small or too large, develop solutions to "right size" the schools for their educational program and current and projected enrollment. The utilization is tied directly with square footage and number of classroom.

Utilization analysis identifies the number of classrooms needed to accommodate a given student enrollment. The inputs needed for the analysis are the existing number of classrooms, and classroom schedules. The ideal utilization ratio for traditional elementary schools is 95%-100%; middle and high school can range from 80-90%, depending upon scheduling variations. Once classroom needs are determined, various strategies can then be considered to meet projected classroom needs.

PSFA has developed standard utilization spreadsheets for this analysis. School utilization and capacity has never been looked so closely and so consistently, especially at a state level. The resulting analysis of utilization and capacity of a school facility is usually very surprising to many of the District's. Unfortunately, the majority of Districts have too much capacity and inefficient utilization per their current enrollments. In most of the rural Districts the demographics and population projections are not projecting growth; but indicate decline or flat enrollment. The majority of the Districts have existing facilities that were sized for much larger student enrollments at the time they were built. The utilization analysis exposes this over or under capacity/utilization. Over utilization and capacity results in planning for additional classrooms, boundary changes or perhaps a new school. Underutilization and under capacity results in; the planning committee finding solutions to improve the schools utilization by "right sizing" the schools for the current enrollment, which may be re-purposing, combining schools/consolidation, or demolition of a portion or an entire school, grade reconfigurations, selling the property, etc...

Current Examples of Utilization:

1. **The Springer Municipal Schools:**

Last spring we worked closely with the Springer Municipal Schools District to develop their 5-year Facility Master Plan (FMP), below is the results of the FMP process;

- The District last year had a total of 187 students.
- Three separate school facilities comprised of an elementary (2 elementary schools on the same site) and middle, combined on one campus and separate high school facility across town.
- Prior School Utilization;
    - Forrester ES 63%
    - Wilferth ES 61%
    - Miranda JRHS 80%
    - Springer HS 56%
- The district currently has approx. 102,000 gross square footage (gsf.)

- The PSFA/PSCOC Adequacy Planning Guide (APG) Gross Square Footage Allowance for 187 students is approximately 33,000gsf if the schools are kept separate or 37,000gsf if the schools are all combined.
- The District as whole has approximately 74,000gsf over the APG for a new school, more than twice the amount.
- Using $6.00 per square foot to maintain, heat, cool, etc… this extra or underutilized square feet is costing the District approximately;
    - $447,000 per year
    - $4.4 million in ten years
    - $13.2 million in 30 years
- Note: The District is receiving SEG funds or emergency funding of approximately $180,000 per year to make ends meet in their district.
- As a result of this analysis, , the School Board voted to reconfigure the middle school at the high school site that had an abundance of unused and underutilized classrooms

2. Santa Rosa Consolidated Schools:

- The District last year had a total of 630 students.
- The Santa Rosa Consolidated School District has experienced significant decline in enrollment. Currently there are four schools, three in Santa Rosa and one in Anton Chico. There is a need to create a more efficient utilization of the schools in the City of Santa Rosa. The district developed a new grade alignment where the Santa Rosa Middle School becomes an elementary school and the Santa Rosa High School becomes a middle/ high school.
- School Utilization;
    - Santa Rosa ES 52%
    - Santa Rosa MS 42%
    - Santa Rosa HS 63%
- The 3 schools currently have approx. 206,827 gross square footage (gsf)
- The PSFA/PSCOC APG Gross Square Footage Allowance for 516 students at 3 different school sites is approximately 86,870 gsf.
- The 3 schools together have approximately 120,590gsf over the APG.

- Using $6.00 per square foot to maintain, heat, cool, etc… this extra or underutilized square feet is costing the District approximately;
    - $723,540 per year
    - $7.2 million in ten years
    - $21.7 million in 30 years

3. Albuquerque Public Schools:

- The District last year had a total of 86,746 students.
- The APS schools currently have approx. 14,788,870 gross square footage (gsf)
- The PSFA/PSCOC APG Square Footage Allowance for approximately 10,955,618 gsf, approximately 3,831,252 gsf over APG
- Using $6.00 per square foot to maintain, heat, cool, etc… this extra or underutilized square feet is costing the district approximately 22.9 million a year.

It does not matter if it is a small, medium or large district utilization analysis is very important in planning "right sized" schools, so the districts can be sustainable and successful far into the future.

Capacity

Capacity is a tool that we use to measure how many seats a school has and compares it to its enrollment. It is useful for identifying schools or districts that are overcrowded, have room for additional growth, or might have excess space compared to its enrollment and growth forecast.

So how we measure capacity? One of the key components of the FMP and educational specifications (ed specs) process is to identify and analyze the school's and districts functional capacity. Functional capacity is the capacity of the school based on general education spaces, special education spaces, and educational program and takes into account both capacity with and without portables. In other words, functional capacity is the number of students that the general and special education spaces can accommodate based on room size as well as pupil/teacher ratio guidelines while discounting the spaces used for specialized activities that may not always be available on a regular basis or not appropriate for general education instruction, for example, testing rooms, OT/PT rooms, art or music, Title 1, and computer labs.

Functional capacity really zeros in on the number of students that the facility can serve in its general and special education spaces.

When we analyze a potential project we will examine the functional capacity of the school in question and also district wide capacity in schools of the same type. A capacity analysis reveals several facts:

- How much capacity the school has;
- How many more students it can accommodate;
- Whether capacity is available in other district schools that could potentially handle growth, which is important if the school is requesting an increase in instructional space;
- If the school can handle other functions – i.e. charter or alternative schools; and
- Whether the school has excess capacity that is not likely to be needed and also costing it operations and maintenance dollars that would be better served in the classroom.

How we have used capacity analysis at PSFA? The following section provides examples.

Clovis went from the threat of Cannon Closing to rapid Cannon expansion. By 2010-11, the District was starting to experience growth in its schools with more forecasted as the Air Force was populating the base with its new mission. At the same time, Clovis elementary schools were already small and were having difficulty accommodating its growth at each of its elementary schools, even with using portables. Without portables, the District faced a seat deficiency of over 1,000 seats in its elementary school for its K-6th grade students. Even with portables, the District faced a seat deficiency of 451 seats.

Based on this capacity information, the District put together a plan to pull out their 6th graders out of the elementary schools, go to a middle school model, and apply for PSCOC funds in order to build a new middle school for grades 6th-8th where before they only had two junior highs for grades 7th-8th.

Even with pulling the 6th graders out, the elementary schools still needed some relief and with PSCOC funding, the District expanded the capacity at Bella Vista, La Casita, and Lockwood. We are dealing with the same issue in Hobbs right now in that the entire district is overcapacity in its elementary schools and the Council has awarded the District planning and design funds for a new elementary school.

In Lordsburg we have the opposite situation where we have a large high school with a functional capacity of 364 and a 2012-13 enrollment of 157 students with limited to no growth

projected. As is, the school can accommodate 257 additional students who may never arrive absent of significant economic development in the area. The PSCOC has just provided the District an award where they will use the ed specs process to determine the right size of the school and examine how to utilize its facility as efficiently as possible.

Another example of where we use capacity analysis may be useful is when charter schools are looking for space. At the same time, there might be capacity in an area high school. The question becomes can the charter move into the underutilized space in this high school?

Possibly but there are some issues to consider – we would need to study the high school because we are not sure how that available space is configured. It could be that the available capacity is found in an entire wing or it could be in noncontiguous spaces spread out throughout the campus. We would also need to analyze how the school is utilizing its space.

So in summary, capacity is a valuable tool that we watch closely since it could drive our recommendations.

Educational Specifications

Ed Specs are pre-planning tools that school districts initiate prior to design of a school facility project. Ed Specs can be project specific focusing on one school or they can apply to all district facilities of a certain school type particularly if the district wants to replicate the same enrollment and program district wide.

The PSCOC and PSFA initiated ed specs to precisely define the spaces the school needs in order to deliver its educational program. They describe the overall instructional framework and define the associated functional, spatial, and environmental characteristics of the facilities. In other words, ed specs are the bridge between curriculum and the facility.

Since the ed specs define the exact space the school needs, we are better able to control what we call scope creep and keep the projects the right size for the school's enrollment throughout the life of the project. Scope creep occurs when the GSF increases after design and during construction due to adding program spaces throughout the project, resulting in costly change orders. The cost of the educational specifications is part of the planning and design award for the project and PSCOC funds the state share of the ed specs. PSFA evaluates the project's submittals from program statement to preliminary and schematic design to ensure conformance with the ed specs.

To begin the process, the District hires an facility planner or architect with a strong background in educational facilities. The Districts prepare the ed specs with extensive community involvement from the school community made up of:

- School staff;
- Parents;

- Students;
- District representatives; and
- District leadership.

In addition to the school community, the general community should participate as well including (but not limited to):

- Neighborhood people;
- Business leaders;
- Non-profit organizations;
- Other governmental entities; and
- Other civic organizations.

In short, anyone in the community who might want to participate and might have a vision for the school and district should be involved.

During the meetings, participants articulate how they want the spaces laid out, how much natural light they desire, and the location of certain wings in relation to the other spaces (i.e. locating the kindergarten wing close to parent drop off). They identify the number and configuration of classrooms and how they will be located throughout the building. They discuss the equipment and furnishings they want. And they do this within the context of the allowed gross square footage to adequacy for which the council will pay.

The ed specs also identify the estimated project cost and identifies the state share, local share, as well as the costs of spaces over adequacy, for which the District will bear full responsibility. When complete, the District will have a document that it can hand to the architect so that it can interpret the ed specs into a building design.

We believe that we have been successful and that the districts have bought into the ed specs process based on feedback we have received.

Enrollment

From 2003 to 2013 statewide student enrollment has remained relatively flat with a statewide increase of only 10,112 students or about 4% student growth in the state over the entire period. Within this slight increase, some districts have declined and some have increased. To name a few that have increased - Hobbs, Farmington, and state-authorized charters. Please see

attachment #1 labeled "District 5 Year Student Enrollment Trends" this map that graphically indicates the fluctuations of student enrollment throughout the state between 2008 and 2013.

PED certified 40 day counts:

- For 2005 there were 328,111 students
- For 2013 there were 338,223 students

Gross Square Footage

While enrollment growth has remained relatively flat statewide, the gross square footage of schools has increased by 8M gross square feet (gsf) or 12.5% statewide.

PSFA information:

- In 2005 there was 52 million gsf statewide
- In 2013 there is 60 million gsf statewide
- Though there has been an increase in gsf the average school size has decreased as you will see reflected in attachment #2 labeled "Facility Square Footage and Number of Schools"

Inclusion of the Preventive Maintenance Plan (PMP) into the Facilities Master Plan (FMP) is important;

- The focus of the facilities master plan is to identify and guide capital investments required to provide educational programs to district students and to meet NM statewide adequacy standards.
- The Preventative Maintenance Plan which is a subset of the FMP, goal is to prioritize and schedule preventative maintenance tasks needed to maintain districts facility systems and equipment in effective working order.
- While the purposes of the two plans are different, they are interrelated. Maintenance can prolong a building or building system's life span, but ultimately, any building or system will require cyclical renewal using capital funding.
- Consequently, it is important that the two plans be aligned as much as possible. Continual communication between capital planners and the district's maintenance and operation personnel is vital.
- A maintenance person is vital to the creation of the FMP. They take care of the building and can contribute there working knowledge of systems to the new or remodeled building.