

# **Guide for Space Inventory / Worksheets**

## **Overview of the following Sections**

Information specific to each school is listed in the following section. Rather than repeat the same information redundantly, the following is an explanation of what to expect for each sheet.

The first page includes Person County Global Information System (GIS) data and an aerial of the campus. It also includes information on the building value from Thomas Allen.

The second page includes information on the building life cycle of each addition and any large scale mechanical upgrades which have occurred in the past. This is followed by a image and a chart showing the Maximum ADM based on an even distribution of students in the grade levels.

## **Space Inventory**

This table is an accounting of the number of spaces or square footage of the individual spaces in the building. The following pages describe what each section means.

## **Cost Estimate Worksheet**

Here the costs for any improvements are tabulated. This only includes information for additions and renovations and any associated expenses related to bringing the project to market in the next nine years.

## **Deferred Maintenance**

This table uses general headings per the NCDPI five year Facility Needs Survey. Subcategories with greater detail are combined for an individual topic, for example every door is broken into needs meaning the newest doors only need upgraded locks while some of the older doors need to be replaced wholesale.

Inflation and a contingency are included for each category. Traditionally, 15% is recommended for a contingency, but based on our understanding of the market and our history with estimating, we have reduced that to 10%. Historically, construction inflation increases at about 3% per year and it often takes up to three years to bring a project to market.

## **Plumbing, Mechanical, Electrical, and Fire Alarm Systems**

Steve Campbell, President of Progressive Design Collaborative, visited the schools and provided cost estimates as well as a brief description of the status of each system at the schools. Mr. Campbell is a licensed Engineer and has been designing the PME systems on schools throughout the state for more than twenty years.

**Guide for Utilizing the Space Inventory / Worksheets**

The charts are broken down into three major categories, shown as major columns on the worksheet. The first column deals primarily with the teaching stations, the second column deals with Core Facilities, and the third column deals with the athletic fields at each school. Items at the top of the page describe the school in general.

**General Layout**

**Owner and Year:** At the top is the name of the group that has commissioned the study and year the study was conducted. This is significant when determining the cost of inflation, at the date this information is being used.

**School and Grade:** This section contains the name of the school and its grade levels.

**Major Columns**

The three major column headings describe the contents. Under each is a series of sub columns that will be discussed later.

**Student Capacity:** Under this major column heading is a series of sub-columns and rows that describes the current and proposed student capacity along with how many of what type of instruction space being considered.

**Core Capacity:** Under this major column heading is a series of sub-columns and rows that describes how many square feet of each type of "Core Facilities" space are under investigation.

**Athletics / PE / Facilities:** Under this major column heading is a series of sub-columns and rows that describes how many square feet of each type of "Core Facilities" space are under investigation.

**Implication of Individual Cells**

**Current Student Capacity (NCDPI):** This number is the full ADM Capacity or maximum number of students that can be served by the existing facilities. It is based on a complete program and in order to ensure it is accurate, the calculation process is iterative. Once above this number, any additional student in any classroom will put the school over capacity. Individual grade levels will likely be out of capacity prior to reaching this number.

**Proposed Student Capacity:** This number is the recommended maximum size of the school based on site size, configuration, and policy. This is again the ADM Capacity which counts every seat in every classroom. This is not a suggestion that an increase is warranted, simply it is the highest capacity recommended.

**Sub Categories - Student Capacity**

Spaces under this category are the primary teaching stations. They are further broken down into general types of instruction (Academic, Arts Education, Vocational, etc.). They are further broken down into specific types of instruction for the various grade levels. The number of rooms for a given type of space is listed und the NCDPI Count, followed by an actual count of the rooms in the school.

North Elementary				
Current Student Capacity (NCDPI)	428			
Proposed Student Capacity	428			
Number of Spaces				
Room Name	NCDPI Count	Existing Count	Renovated	New
<b>Academic Spaces</b>				
Pre-K Cls/MS				
Kindergartens	4	4		
Grades 1-3 Cls/MS	12	12	11	
Grades 4-5 Cls/MS	5	6	6	4
4-8 LA/SS/Math				

**Room Name:** Refers to the primary name of the space and the type of instruction conducted there.

**Number of Spaces:** This column, which is further sub-divided into four sub-categories, is the total number of spaces of that type of instruction space.

**NCDPI:** This column refers to the number of each type of instructional space each school should have. This is based on the NCDPI / Person County Minimum Facility Standards which closely follow the NCDPI minimums.

North Elementary				
Current Student Capacity (NCDPI)	428			
Proposed Student Capacity	428			
Number of Spaces				
Room Name	NCDPI Count	Existing Count	Renovated	New
<b>Academic Spaces</b>				
Pre-K Cls/MS				
Kindergartens	4	4		
Grades 1-3 Cls/MS	12	12	11	
Grades 4-5 Cls/MS	5	6	6	4
4-8 LA/SS/Math				

**Existing Facilities:** This section catalogs the existing facilities as to how many rooms are dedicated to a particular type of instruction.

**Renovated:** This section allows for the tracking of spaces that change in type and require physical modifications. The cost of changing a classroom from one type to another varies and only the ones that have cost implications are tracked here. Spaces which are simply swapped to another program without cost are tracked but not shown.

**New:** Any new spaces that are needed to achieve the proposed capacity will be listed here along with how many of that type of space. Costs are tracked on the following pages.

**Note:** This Facility Planning sheet is utilized to specifically identify need and to convert need to cost. It does not show information on the re-allocation of existing spaces, if there are no costs associated with the re-allocation.

**Sub Categories Under Core Capacity**

Spaces under this category are required spaces that are not dedicated as teaching stations. They are further broken down into general types of instruction (Media Center, Food Service, Administrative, etc.). Since these are primarily larger spaces, it is important to look at the square footage of the space rather than a single tally of spaces. It is also appropriate to look at Administrative Suites, in this manner.

Current Core Capacity (NCDPI)		520		
Proposed Core Capacity		520		
Square Footage				
Room Name	NCDPI SF	Existing SF	Renovated	New SF

**Room Name:** Refers to the primary name of the space and the type of instruction conducted.

**Square Footage:** This column is sub-divided into four sub-categories, that are similar in nature to the student capacity calculations.

**NCDPI:** This column refers to the number of square feet of each type of space that each school should have per NCDPI Minimum Standards to achieve the listed Core Capacity.

**Existing Facilities:** This section catalogs the existing facilities and shows how many square feet are dedicated to a particular type of space.

**Renovated:** This section allows for the tracking of spaces that change in type of use and impact cost. If the number in the Renovated column is a positive number, the space is being reallocated from another type of space within the school and has cost implications. If the number is negative, it is being allocated to another use within the school. If costs are associated with a space, a number will show up in the Sub-Total row; if no number is there, there will be only minimal costs associated with the change in function.

**New:** Any new spaces that must be added to provide appropriately for the type of school and the number of students proposed will appear in this column.

**Special Note:** Current Core Capacity (NCDPI) is based on standards discussed in the Capacity Calculations section of this book. For this investigation, the four students / sf is used in calculating both the Media Center and Cafeteria areas.

Current Core Capacity (NCDPI)		520		
Proposed Core Capacity		520		
Square Footage				
Room Name	NCDPI SF	Existing SF	Renovated	New SF

**Sub Categories Under Athletic / PE / Facilities**

Spaces under this category are not prescribed by state standards. Each LEA (Local Education Authority) must create a set of standards for each type of school or set standards unique to each school in the system. These requirements are established by your precedents.

**Facility Spaces:** Refers to the primary name of the space and the type of instruction conducted there.

**Standard:** This column refers to the number of the particular type of space that is required to meet the county standard.

**Existing Facilities:** This section catalogs the existing facilities, as to how many of that particular type of space exist on a campus.

**Renovated:** As the athletic fields age, renovations or changes in code may require substantial work to bring those particular fields or items to the appropriate levels.

**New:** Any new fields or items that are required to meet the county standard.

Cost / Student		\$26,085			
<b>Athletic / PE / Facilities</b>		Number of Spaces			
<b>Facility Name</b>	STD	Existing	Renovated	New	
Track					
Track					
Pole Vault					
High Jump					

Renovations do not include improvements, such as stadium replacement, if it is to continue serving the same program or function. Items in the renovated list here are changing from one type of use to another.

### Cost Summary Worksheet

This section delineates the costs of individual pieces of the program that are to be completed. The costs are in current dollars and are based on the type of construction or renovation required.

Person County Schools Cost Estimate Worksheet 2011				
North Elementary		Proposed Student Capacity	Proposed Core Capacity	
Additions / Renovations		428	520	
Space Type	Number of Spaces	SF	Cost / SF Based on Need	Total Cost
Academic Spaces	4	3,907	233.10	\$965,760
H.S. Science Classrooms	0	0	0.00	\$0
Arts Education	0	0	0.00	\$0
Vocational	0	0	0.00	\$0
Physical Education Etc.	0	0	0.00	\$0
Misc. Spaces (Ct. Hall, Lobby)	0	3,983	287.00	\$1,051,240
Renovations (Classroom, Toilets, Misc)	17	23,105	69.79	\$1,612,500
Media Center	0	0	0.00	\$0
Food Service	0	4,414	381.46	\$1,683,750
Auditorium	0	0	0.00	\$0
Administration	0	0	258.00	\$0
Storage	0	0	0.00	\$0
Staff Support	0	0	259.00	\$0
Renovations	0	1,200	59.00	\$72,000
Track	0	0	0.00	\$0
Football	0	0	0.00	\$0
Soccer Field	0	0	0.00	\$0
Baseball	0	0	0.00	\$0
Softball	0	0	0.00	\$0
Tennis Courts	0	0	0.00	\$0
Field House	0	0	0.00	\$0
Concessions	0	0	0.00	\$0
Play Field	0	0	0.00	\$0
Subtotal New		4,414	\$438.37	\$3,600,770
Circulation/Mechanical/Toilets/Walls	38.00%	2,414	\$438.37	\$1,368,296
Subtotal Renovated		24,305	\$69.31	\$1,684,500
Athletics				\$0
Site Improvements				\$1,006,243
Other ( )				
Sub Total				\$7,659,818
Inflation (2% for 3 years)	9.00%			\$699,394
Contingency (5%)	10.00%			\$834,920
Sub Total				\$8,184,132
A.E. Fees (5%)	10.00%			\$818,413
Financing Charges				\$94,852
Other Fees and Services				
Services-non design				\$103,880
Owners Contingency (lim. equipment)				\$863,264
<b>Total</b>				<b>\$11,164,630</b>

**Space Type:** List of the major headings of the types of spaces listed on the previous page. To determine the particular type of space listed under the major heading, such as classroom, resource room, or computer room, the previous page must be consulted.

**Number of Spaces:** This column is the total number of spaces within that particular major heading. The Space Inventory sheet (previous page) must be consulted to confirm what and how many of the types of spaces are listed.

**SF:** The number of square feet that are required to complete the projects as noted.

**Cost / SF Based on Need:** Athletics directly associated with the potential expansion of the school.

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Media Center	0	0	0.00	\$0
Food Service	0	4,414	381.46	\$1,683,750
Auditorium	0	0	0.00	\$0
Administration	0	0	258.00	\$0
Storage	0	0	0.00	\$0
Staff Support	0	0	259.00	\$0
Renovations	0	1,200	59.00	\$72,000
Track	0	0	0.00	\$0
Football	0	0	0.00	\$0
Soccer Field	0	0	0.00	\$0
Baseball	0	0	0.00	\$0
Softball	0	0	0.00	\$0
Tennis Courts	0	0	0.00	\$0
Field House	0	0	0.00	\$0
Concessions	0	0	0.00	\$0
Play Field	0	0	0.00	\$0
Subtotal New		4,414	\$438.37	\$3,600,770
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<b>Total</b>				<b>\$11,164,630</b>

**Top Section:** This shows the teaching stations of the school. They are the same as the first section on the previous page.

**Middle Section:** This area is dedicated to the Core Facilities and includes any administrative spaces affected.

**Bottom:** Listing of the major categories under Athletic / PE Facilities.

**Circulation / Mechanical / Walls:** The work up to this point is based on net square footage or only the size of the classroom. Additional spaces are needed to make a school function properly including corridors, mechanical rooms, and restroom facilities.

**Total Cost:** This is not an indication that these funds are required. It is a tabulation of the above options and not all may be required for the comprehensive improvement plan.