

Visit www.nacdb.com/cs for time saving tools.

GROW

OFFICIAL PUBLICATION OF THE



10 Guaranteed Ways to Lower Your Construction Costs

PLUS:

The **4** Most Important Things In a Building Program



Making Good **Construction Decisions**

JANUARY 09

Why Design Build Works

Lower construction costs, faster construction time and faster overall project delivery are the biggest advantages of the single-source approach



A design build team is closely involved from start to finish in producing a product that meets the congregation's needs rather than merely acting as professional advisors. The church's building committee deals with a unified design-construct team working together on its behalf.

4 Good Reasons to Use Design Build

1. Better control of costs, schedule and quality of workmanship because your architect and builder are working hand-in-hand

from the very beginning of the project. Together they can evaluate different

building materials and methods that will save time and money. You also eliminate a lot of the time spent in the bidding process and redesign of a traditional project — which means you can start using your new facility sooner.

2. Good stewardship of time. Your time can be spent on determining your church's needs, instead of coordinating between the architect and builder.

3. A more peaceful experience. Studies published by the American Institute of Architects show that there are significantly fewer disputes and litigation issues with a master builder team. The

single point of responsibility eliminates finger pointing and increases the incentive to get the problems solved.

4. Guaranteed construction costs. Since the architect and builder are working hand-in-hand, you get a firm estimate of the costs. This gives you the information you need to make "go, no-go" decisions during design. It also gives you one person to hold responsible for maintaining the budget.



GREG BARRON
President

You Can Control Rising Construction Costs



In today's volatile economic world where the news and emotions can swing from one extreme to the other on an hourly basis, there is one thing you can count on - **prices will continue to go up.**

In the month or so it takes to price a project, lock down suppliers and subcontractors, obtain building committee approval and sign the contract, prices often increase making the process much more complicated. And we're not just talking about a few dollars.

How do you create a place of worship that meets the spiritual and physical needs of your congregation, yet doesn't wipe you out financially? The most obvious answer, and the one most building committees turn to, is to eliminate areas like storage, classrooms and breakout rooms. However, these are one of the least expensive areas to build, so the sav-

ings vs. the lost space isn't a worthwhile tradeoff. That leaves the worship facility and key elements such as kitchens and restrooms, which are the most expensive to build.

From the start of the design process you should be looking for creative ways to save costs while staying true to the goals of your project. Design build companies experienced in the field of worship and educational facilities such as those affiliated with the NACDB are at the forefront of the latest trends and techniques and can serve as a valuable resource.

Creative thinking and an experienced partner can ensure you have the best opportunity to deliver the type of facility you want and your congregation deserves even in today's economic environment. Contact us today to find out how our Members can help you!



"The passion and vision of the NACDB to help the Church was so contagious that I jumped at the chance to serve as the association's Executive Director."

TOBEY VANWORMER
Executive Director

VISION

The vision of The National Association of Church Design Builders (NACDB) is to create a nationwide association of firms committed to the practical application of biblical values resulting in their excellence as specialists in consulting, designing and building church facilities that focus on the ministry needs and styles of the churches they serve.

10 Guaranteed Ways to Lower Your Construction Costs

From determining the type of construction, painting the walls and heating your new church, here are many avenues that can help you lower your construction costs.

Written by Rene M. Charest

1 Facilities Assessment
The easiest way to save money is to build only what you need. By conducting a facility needs assessment you can understand specifically what types, sizes and quantities of space are required. Building space you don't need is an expensive luxury. A Certified Church Consultant (CCC) can provide you with preprinted forms to aid in the need assessment process.

2 Design & Structure
A design build contractor works with four basic types of construction for the building shell; masonry with red iron, pre-engineered building, concrete tilt up, and wood framed. The region you are located in has a great amount of impact on the type of structure you build. The type of architectural design also impacts the shell that you build. The most inexpensive method to construct is the pre-engineered building. This, however, can also be the least attractive. Concrete tilt ups are becoming more cost effective but also create a square box-type building. The most flexible is the masonry with red iron or the wood structure. They happen to be the most expensive, however, and prices fluctuate constantly because steel and wood are commodities that can vary 40 percent to 50 percent throughout the year. Once again, understanding your facility needs helps you determine the best type of construction to use.

3 Property
When building on a new property it is important to locate the utilities to be sure that the distance from the structure is as short as possible. Underground utilities can run up to \$200 per linear foot. Misplacement of a building can create hundreds of thousands of dollars of wasted money. Have your design build contractor create a "master plan" to locate the structure in the best possible location. Also check with the city and county on "off-site"

improvements needed, who will pay to widen streets, or install sidewalks, etc.? Sometimes money is set aside by cities or counties to help pay for these.

Have your design build contractor create a "master plan" to locate the structure in the best possible location.

4 Utilities
Some properties are located in counties and others in cities; still others are under future annexation to adjacent cities even though they are still technically in a county. This is important because without city amenities you must provide your own water (from wells) and sewer (from septic systems) as well as gas (propane) instead of natural gas. City annexation can sometimes be achieved during the planning process and allows the opportunity to use their utilities. This can save \$75,000 to \$500,000 of upfront costs depending on the size of the project. Check with the local building and planning departments to see if these options are available to you. They may take some time and money to research but in the end great savings can be achieved.

5 HVAC Equipment
Air conditioning and heating has improved so much in the last 10 years that a system today can be 10 times more efficient than one installed 12 years ago. You can choose from energy sources like natural gas, propane, electric, as well as photovoltaic solar panels. It is important you find the cheapest source of energy available in your area and purchase equipment that takes advantage of that energy source.

Heating has reached exciting new levels of improvement that can even recapture

lost heat from the water heater and use it to heat the facility. Proper sizing of ductwork by a professional "air balancer" properly distributes your heating and cooling, lending to energy savings of 10 percent to 15 percent per month.



6 Plans
The most expensive process most churches follow is to hire an architect and draw a set of plans with no input from the professional builders and subcontractors who construct the facility. One California architect once said that his favorite type of project was one that never got built. He stated that once the plans are complete he gets paid in full and if the job is never built he has no headaches or questions about his design.

Bringing in a design build contractor with the design build subcontractors at the very beginning helps prevent budget busting plans. They also provide excellent cost savings ideas. In addition, only simple elevations are needed for capital

> continued P.4

Ten Guaranteed Ways to Lower Your Construction Costs
> continued from P.3

campaign efforts. These should only cost approximately \$5,000. A color rendering is a great visual tool for raising funds.

7 Wall Finishes
 Interior finishes can be very expensive. The simplest finish is drywall with a light spray on texture and paint. Wallpaper is a great way to achieve a washable wall surface that can last years. The wallpaper must be a vinyl surface that can be cleaned with a light detergent to remove stains like fingerprints or other fluids. Most churches allow the volunteers to paint the children rooms with murals. Each grade can provide the paint and labor to do these



rooms and the contractor can reduce his price by that amount. Remember that many different colored paints require a lot of extra touch-up paint stored for future use.

8 Lighting Fixtures
 Lighting has reached new levels in our industry. Churches are doing more plays and performances and the type of lighting is essential for proper viewing in the congregation. Bad lighting bothers parishioners, as well as wastes electricity. A lighting professional should be involved from the very beginning to ensure that the appropriate light is used in the correct places. There are natural fluorescent lights that are easy on the eyes and save 15 percent to 20 percent more energy than standard incandescent lights. Simply send the plans to a lighting supplier who can price several types of lighting and offer a great variety of options.

9 Electrical Conduit
 Audio and video equipment require lots of cable and electricity. During construction it is very inexpensive to run conduit through walls and ceilings. Once the walls are covered up it becomes expensive and messy to open up walls and install new wiring. Low voltage wire many times does not need conduit, but any wire with 110 volts or

greater must be inside a protected conduit. Make sure any subcontractor who needs to install wire is on the site before any insulation or drywall is placed. Finally, before covering the walls make sure to check for cut or broken wires. Running conduit is cheap and some extra planning and additional lines makes it easier to change and expand the audio/visual later.

Bringing in a design build contractor with the design build subcontractors at the very beginning helps prevent budget busting plans.

10 Plumbing Fixtures
 When choosing toilets, sinks and faucets it is best to get a total quantity list of what is needed and have several distributors provide prices for these items. Many times there can be as much as 50 percent difference between suppliers. Brand names can sometimes be deceiving and there are less known companies with products that provide the same warranties with much lower costs.

UNDER CONSTRUCTION

Work is being done all over the United States! Here's a sample of some projects our members are completing.



FLORIDA (Orlando)
 Centro Internacional de la Familia
 54,000 Sq. Ft.
 Corcoran Companies

FLORIDA (Clermont)
 Family Christian Center
 14,000 Sq. Ft.
 Corcoran Companies

ILLINOIS (Sauk Village)
 First Baptist Church of Sauk Village
 11,000 Sq. Ft.
 Professional Church Visioning Group

ILLINOIS (Godfrey)
 Godfrey First United Methodist Church
 20,000 Sq. Ft.
 Malone Church Solutions

INDIANA (Greenwood)
 Mt. Auburn United Methodist Church
 23,200 Sq. Ft. Addition
 T&W Church Solutions

INDIANA (Indianapolis)
 Turning Point Family Worship Center
 23,700 Sq. Ft. Addition
 T&W Church Solutions

MISSISSIPPI (Madison)
 Broadmoor Baptist Church
 68,000 Sq. Ft. Addition
 Harrell Contracting Group

TEXAS (Baytown)
 Second Baptist Baytown
 45,000 Sq. Ft. Addition
 GL Barron Company, Inc.

WASHINGTON (Kent)
 River of Life Church Youth Center
 33,690 Sq. Ft.
 BCRA Design

WISCONSIN (Green Bay)
 Prince of Peace Parish
 25,500 Sq. Ft.
 The Selmer Company

CHECK WITH THE NACDB OR YOUR LOCAL DESIGN BUILDER FOR EVEN MORE PROFILES OF CURRENT PROJECTS.

Making Good Construction Decisions

Written By Kurt Williams

Once heard that the only place that a church facility can be designed perfectly, built under budget, on time and with no stress is in one—or maybe two—building committee meetings. It is interesting that the actual construction of a church facility can take from six to 24 months, based on the size, yet there is a belief—or hope—that the decisions to make the project possible can be made in six to 24 days. **This approach of talking on Monday, drawing on Tuesday and digging on Wednesday has six distinct phases:**

1. Enthusiasm
2. Disillusionment
3. Panic
4. The search for the guilty
5. The punishment of the innocent
6. Praise and honor for the non-participants

Great projects are built on good construction decisions. Good construction decisions are made long before the “bricks

and sticks” arrive on the job site. The success of any project is directly tied to the prayer, planning and preparation that go into it. There are two types of construction decisions: cost and stewardship decisions and facility decisions that deal with design and functional relevance.

Cost & Stewardship Decisions

When the least amount of resources is being invested, the project team actually has the most influence on the project design and construction costs. Time spent early in a planning process will directly influence the cost of the project. A myth exists that “value engineering,” or saving the church money, can take place after the design is complete. After the project design is complete, the typical approach to “value engineering” is to decrease quality or decrease square footage. This chop-and-hack approach is not only contrary to positive momentum, but most importantly, it is contrary to the vision and mission of the church.

Nearly 50 percent of America’s churches have a set of plans hidden behind the pastor’s door that will never be built. On average, the other 50 percent that did build lost their pastor within 18 months of the completion of their new facility. The No. 1 reason for these disconnects is the lack of an integrated project team

A good discovery process keeps the project team in step and protects the project from potentially disastrous surprises.

and a discovery process that guides the team carefully through planning each unique project. True value engineering and good construction decisions are made early in the process with a team approach of owner-architect-contractor equally yoked and in step, pulling for the same goal. A good discovery process keeps the project team in step and protects the project from potentially disastrous surprises.

Key components of discovery are:

- Alignment of facility goals with financial capabilities.
- Alignment of facility needs with congregational needs and involvement.
- Alignment of the facility location with the challenges that the building site presents.

F. W. Dodge, the largest provider of construction analysis and statistics in the

[> continued P.6](#)



Summit Series
Chairs for Worship

ComforTek Seating is a world class manufacturer of seating solutions for all your seating needs. From sanctuary to classroom and every area in between, the Summit Series line of chairs provides churches with a refined elegance unsurpassed in the industry. We at ComforTek Seating provide affordable comfort, and durability for all of your worship seating needs.



www.comfortekseating.com
1.888.678.2060

Making Good Construction Decisions > continued from P.5

United States and Canada, has verified that the average construction project is 30 percent over budget due, primarily, to beginning construction design prior to understanding, or discovering, the vision and mission of the client and the project challenges that would have surfaced during a feasibility study. Good cost and stewardship decisions are made by an integrated project team working through a comprehensive discovery process together.

Facility Decisions: Design & Functional Relevance

A project team dedicated to understanding the church will focus on designing a facility around your ministry by actually connecting the facility design to your church's vision and mission. In a growing United States population, despite significant investment in building and/or improving our places of worship, we are actually reaching less people. **Good construction decisions begin by understanding who the church is**, what the church's long-range goals are, and who is the target of the church's outreach? The Word of God never changes—the way we convey God's Word does. Creating an environment that reaches the first-time visitor and serves the long-time member is critical. Designing relevant facilities where people can relax, can be themselves, can connect with others and can become a part of the “community” is nothing new.

The church can learn, and has been learning, from the retail business industry as coffee bars and bookstores crop up with the same feel as Barnes & Noble and Starbucks' coffee. **When visitors pull up to your facility with more technology on four wheels than you have in the entire facility, there is a relevant disconnect.** The more the church strives to understand the “lost” in their area and then meet them where they are, via good construction decisions, the more effective the church will become in drawing the “lost” into their facilities to hear the Good Word.

A good design build team can guide you through the process of discovering the facility challenges before you, and designing a facility around your ministry. Discovering who the church is and following the Lord's leading will be a critical component for a successful project—long before the “bricks and sticks.”

The 4 Most Important Things In a Building Program

Written by David Batten

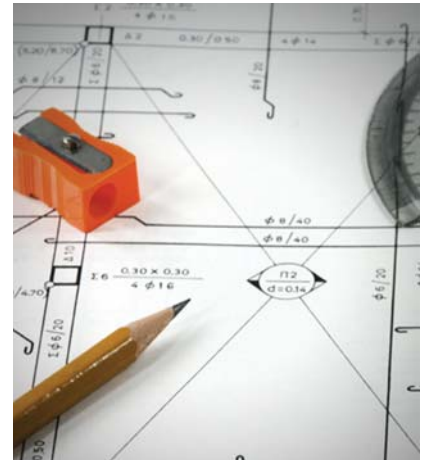
As a Certified Church Consultant, I work with pastors and church leaders as they prepare and plan for their upcoming projects. They are usually excited to see the ground dug up and see buildings where grass used to be. Many don't realize the months of planning that occur before the actual construction. They are ready to jump in with both feet—yet, they have a church family that they are accountable to. If this program isn't successful, if the family doesn't see the value of the building, then they might as well have not built at all. Many times, I hear the dreams of leaders, who by their nature, are visionaries. In many cases, however, there seems to be a big gap between the vision and what I see everyday as reality; therefore, I caution leaders to stop and consider what I believe to be **the Four Most Important Things in a Building Program:**

1. ESTABLISHING THE BUDGET
2. ESTABLISHING THE NEEDS LIST
3. MAKING THEM MEET EACH OTHER
4. THE FAITH PART

How much can you spend?

This is one of the first questions I always ask. Often, they look at me with faces that say, “I can't believe you asked that?” But how can I steer you if I don't know where we're going?

Most of the time church leaders don't answer because they can't. They don't know! The good news is that once we have this piece of honesty on the table, we are ready for our real work. Next we proceed to analyze the church budget and come up with the gross maximum price. Keep in mind, though, at this point there is no floor plan, no rendering, no specifications, nothing but dreams and visions.



Our main goal is to reach people. So, how much can we afford to spend and still have the money to fund our ministries? Hundreds of churches in America have bought into the secular idea that “we must have this” and plunged the church into financial burden. Many have had no choice but to take money from ministry to service debt.

First, ask yourself these questions:

1. How much cash do we have to put toward this project?
2. How much can we effectively raise with a good stewardship firm?
3. How much monthly payment can we make and not have to rob from ministry?

These three simple questions will lead you to a guaranteed maximum price.

The Needs/Wish List

Once the budget is established, it's time to list what you need in the new facility. This part is fun and easy. Vision is usually not in short supply. Be creative. Learn what others are doing to reach people.

One mistake that planning teams make is being short-sighted. They all mean well, but often their only perspective comes from within their own congregation. One trend of growing churches is that they are “seeker friendly.” Consider going outside your organization and learn what your community wants in a church. I'm not suggesting that you change the mes-

sage, but some of your methods may need adjustment.

A good way to get to know your community is with a demographic study. A great source for this is the Percept Group (www.perceptnet.com).

Needs Versus Budget- Make Them Meet

Here is something you just can't do alone. You need a good church architect or design builder to help. You need someone with enough knowledge and church experience to take your realistic budget, analyze your existing facilities, consider your needs and create solutions for you.

You may compromise some on your wish list, but remember, the budget is the main thing. One of the worst experiences a committee can have is to have finished drawings, which cost thousands of dollars, and be too much over budget to build.

The Faith Part

There is one more factor that is impossible to measure. That is the



“Faith” part. Remember, it is still true that “nothing is impossible with God.” This is the part I cannot predict because it’s personal and unpredictable.

My suggestion is that you go through the three steps (Budget, Needs, Bring the Two Together) and see what light that shines on things. Then ask God if He wants you to trust Him for more. Then will come the hardest part—waiting!

Guaranteed Success

Follow these steps
“Budget First, Needs Second,
Marry the Two and add Faith” and
your building program will not
only be successful but, will create
energy in the congregation and be
a pleasant experience.

Welcome

to Church Loans & Investments Trust.

We're in the business of *opening doors*

for churches who have goals and dreams

to serve God with excellence.

Call us. You'll find a friendly voice who

will connect you with one of our Church

Financing Specialists that can guide you

with the tools your church needs.

*From generation to generation,
providing solid church financing.
Since 1959*

Church Loans & Investments Trust®
5305 I-40 West P.O. Box 8203
Amarillo, Texas 79114-8203
800.692.1111

www.churchloans.com



Another Successful Worship Facility
Designed & Delivered by CSD



Warsaw Community Church - Warsaw, IN

Services:

- Sound Reinforcement
- Video Projection
- Theatrical Lighting
- Acoustic Analysis & Treatment
- Pre-Planning, Budget Development
- System Design & Layout
- Conduit Design
- Electrical Specifications
- Professional Installation & Training



888.448.7890

www.csdus.com



“DESIGN BUILD SEEMED SO OBVIOUS TO US...”

-Founding Members



NATIONAL ASSOCIATION
NACDB
OF CHURCH DESIGN BUILDERS

The seven firms that founded the NACDB were committed to assisting growing churches. They were also leaders in the architecture and construction industry. The simple concept of Design Build made so much sense to them, they had to share it with the Church.

And the NACDB was born.

When you hear the way that Design Build saves you time and money, you'll think it's obvious too.



505.268.2626
www.brittonconstructon.com



Together.
817.231.8175
www.glbarron.com



888.424.6722
www.chorbacontracting.com



715.246.2320
www.derrickbuilt.com



JH BATTEN, INC.
GENERAL CONTRACTOR

336.414.8111
www.jhbatten.com



800.933.1121
www.jsconstruction.com



SR CONSTRUCTION

702.877.6111
www.srconstructionlv.com

We're proud to stand behind the NACDB and its endeavors.

WWW.NACDB.COM/CS