Design-Build in Times of Crisis

Design-Build Delivers Timely, Cost-Effective, Resilient Recovery

Whether it's building emergency medical facilities during a pandemic, or rebuilding after devastating hurricanes, wildfires, floods or other disasters, design-build has helped communities recover more quickly and cost-effectively by delivering efficient and innovative projects on-time and budget. Design-build delivered:

- 100's of COVID-19 emergency response
- Infrastructure reconstruction after hurricanesKatrina & Michael (Gulf Coast), Florence(Carolinas), Sandy (NY/NJ) and Irene NY/NJ)
- Emergency rebuild after Minneapolis 1-35 Bridge Collapse
- Post 9/11 Pentagon reconstruction

…and many more.

MINIMIZES OWNER RISK

LOWERS COST

SPEEDS UP COMPLETION

What Is Design-Build?

Design-build is an **integrated approach** that delivers design and construction services under **one contract with a single point of responsibility.**

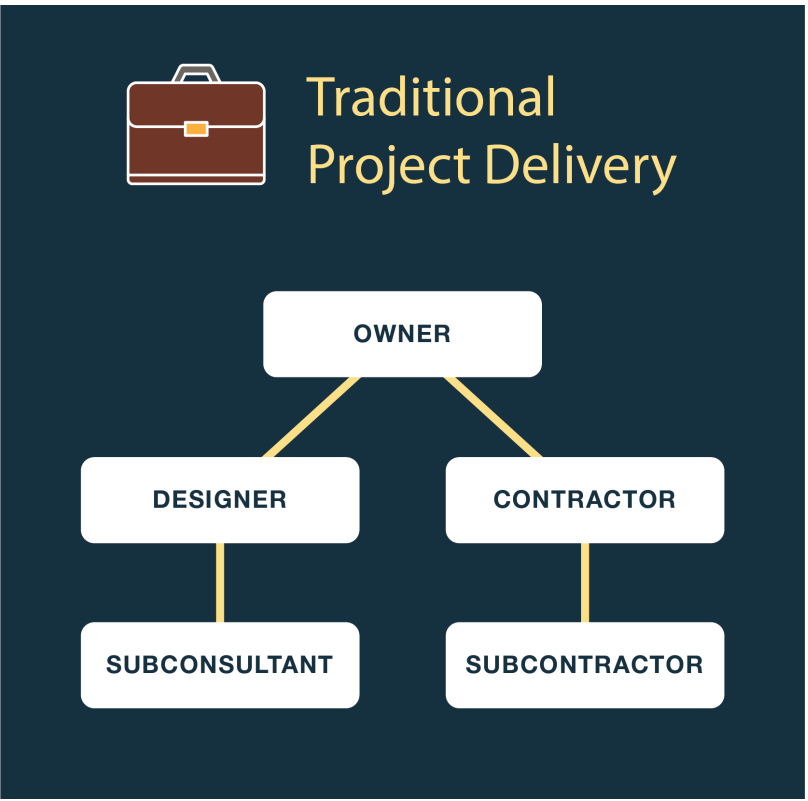
It's the **fastest growing** and **most popular** method used to deliver construction projects in America.

Design-build **out-performs** other delivery systems in cost, schedule, growth measures, construction and delivery speed.

Design-build saves time and money by encouraging **innovation** and **collaboration.**

Owners select design-build to achieve **best value** while meeting **schedule, cost and quality goals.**

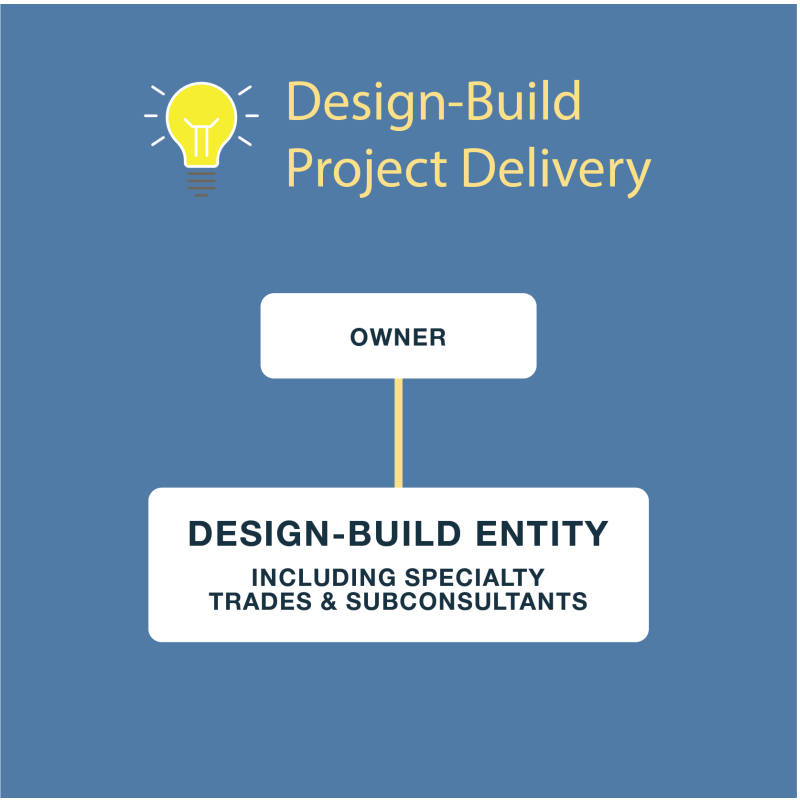
Silos and Conflict



TRADITIONAL DESIGN-BID-BUILD
Limits collaboration and the innovation that comes from an integrated team needed to solve challenges on tight schedules and budgets.

- Cost competition begins after project planning and design.
- Risk associated with errors and omissions in design is assumed by the Owner.
- Competition solely on cost.

Collaboration and Innovation



DESIGN-BUILD

By harnessing the power of collaboration to innovate, teams in times of crisis can create cost and time effective solutions while building in resiliency for the future.

- Competition begins earlier in the conceptual stages of the project.
- Design-builder assumes risk associated with errors and omissions in design.
- Construction can begin sooner.

Advantages of Design-Build

Design-build out-performs other delivery systems in cost, schedule, growth measures, construction and delivery speed.

FASTER DELIVERY
Research has found design-build is consistently faster at delivering projects.

LOWER COST
Design-build projects have fewer change orders, reduced litigation and longer life cycles than traditionally delivered projects.

HIGHER QUALITY
Designed with the owner in mind, design-build projects deliver resiliency and triple bottom-line results for communities.

COLLABORATION DRIVES INNOVATION
Design-build is the most popular delivery method in the nation in large part because team collaboration is proven to fuel innovation.

Design-Build Is a Better Way to Build

Design-build is the best-performing delivery system for both schedule and cost.

102%

FASTER DELIVERY

From design through completion, design-build projects are delivered **102% faster** than traditional design-bid-build and **61% faster** than construction manager at risk (CMR).

3.8%

LESS COST GROWTH

Research shows design-build projects average **3.8% less cost growth** than design-bid-build and **2.4% less** than construction manager at risk.

76%

OWNER SATISFACTION

Design-build was **rated highest across all project delivery methods,** with 76% reporting very good and excellent results.

Success on Projects of All Sizes

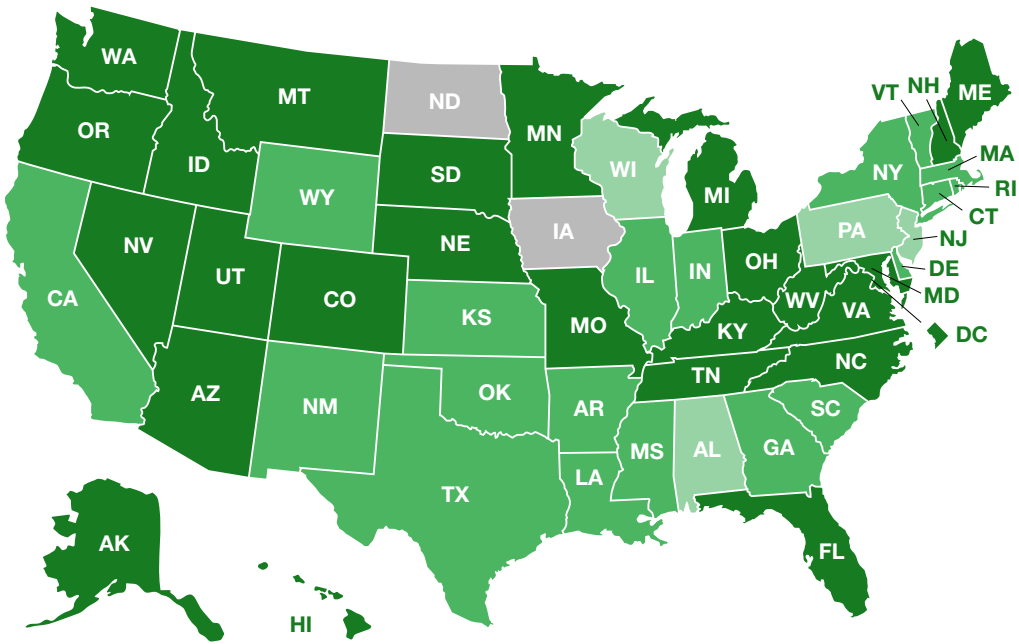
WHAT ABOUT SMALL PROJECTS?

Design-build has proven effective on projects of all sizes, in every sector. Whether rebuilding massive infrastructure projects like highways and bridges or small office buildings and classrooms, design-build's collaboration and innovation delivers successful projects of all types. In fact, research shows there are no "cost or schedule performance" advantages to delivering small projects (under $20 million) with traditional design-bid-build versus design-build.

This is why we are opposed to project thresholds and believe design-build should be available on any size project across all sectors. Especially in times of crisis, limited authority creates unnecessary roadblocks for communities which need to rebuild quickly. These communities ultimately pay the price when forced to use traditional design-bid-build rather than delivery methods better suited for tight budgets, quicker starts and shorter delivery times.

> "Implementing [best] practices on any type of design-build project increases the probability of a successful project that meets the expectations of all stakeholders."
>
> *—Design-Build Done Right® Universal Best Practices*

Design-Build State Authorization
2020



Design-build is limited to one political subdivision, agency or project

Design-build is a limited option

Design-build is widely permitted

Design-build is permitted by all agencies for all types of design and construction

As of January 2020

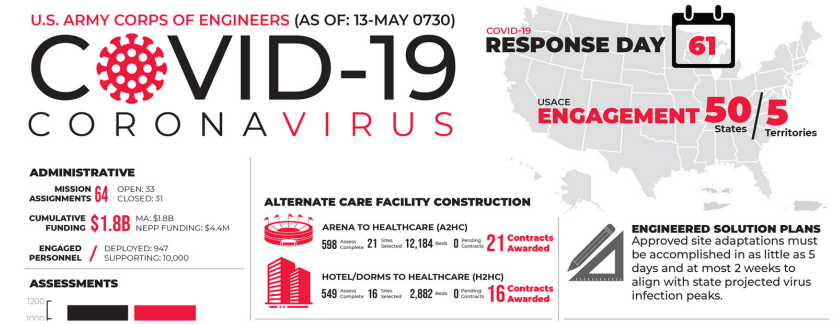
Design-Build Delivers in Times of

COVID-19 Alternative Care Facilities

50 STATES + 5 TERRITORIES

America's design-build teams were mobilized nationwide by the U.S. Army Corps of Engineers to build emergency medical facilities for states battling the coronavirus pandemic. The projects created more than 15,000 beds in convention centers, arenas, hotels, dorms, and other spaces in a rapid response mobilization empowered by design-build's collaborative approach and speed-to-market delivery.

McCormick Place, Chicago
Stantec



Blue Island, IL
Clark Construction

Speeding Infrastructure Work in Florida

STATEWIDE

During the COVID-19 lockdown, the state of Florida expedited $2.1 billion in road and bridge work to provide a boost to the suffering economy while maximizing the less populated roads. Design-build teams for the $802 million downtown Miami I-395/SR 836/I-95 and Tampa Bay's $864 million Howard Frankland Bridge projects will accelerate delivery by nearly a month, helping to speed Florida's COVID-19 recovery.

Miami's Signature Bridge
HDR

Passing New Authority to Boost Recovery

Legislators in Kansas wasted no time in granting the first full design-build authority for the state's transportation department as the COVID-19 crisis began. Lawmakers see the much-needed, $10 billion stimulus package as vital to the state's recovery. Design-build collaboration will now allow the state to maximize its infrastructure dollars to deliver innovative projects saving both project time and taxpayer dollars.

Tyndall Air Force Base

FLORIDA

When Hurricane Michael struck Tyndall Air Force Base last October, the damage left every single one of Tyndall's nearly 1,200 facilities needing some level of repair. An expected $3 billion over the next five years will be invested to not only rebuild Tyndall, but to make it an "installation of the future," including the addition of multi-use, smart facilities able to withstand severe weather, an expanded flight line to support F-35 operations by 2023 and walkable campus areas that provide consolidated facilities for the base community. What was originally a catastrophic blow to the service may actually provide a unique opportunity.

Camp Lejeune

NORTH CAROLINA

Yet another natural disaster left devastation in its wake when Hurricane Florence hit North Carolina's Camp Lejeune in September 2018. More than 900 buildings were damaged and an estimated $1.7 billion will be needed to rebuild. The Naval Facilities Engineering Command faces an enormous challenge that design-build will help to address. From new construction and renovation of buildings to rebuilding systems and infrastructure, the multi-year rebuild at Camp Lejeune is immense.

Long Island Railroad & Metro North MTA

NEW YORK

Hurricane Sandy left $634 million in damage to the Long Island Railroad and Metro North rail in 2012. Not only was design-build vital to MTA's immediate repairs it's now being used to deliver resiliency projects to better protect the system in the future. Resiliency projects include drainage improvements and the construction of deployable and permanent walls to defend against flood surges.

Construction Timeline: October 2012 – today

Total project cost: $634 million

State Route 42

GREENE COUNTY, NY

Six miles and two bridges of the roadway had been closed as a result of the severe damage caused by Hurricane Irene and Tropical storm Lee in 2011. The emergency reconstruction of State Route 42 in Greene County was completed ahead of schedule and approximately 10 percent under budget using design-build.

Governor Andrew Cuomo used emergency authority to quickly rebuild after the double storms ravaged the area.

Construction Timeline: Sept. 2011 – Feb. 2012

Total project cost: $14.1 million

I-35W (St. Anthony Falls) Bridge

MINNEAPOLIS, MN

On Aug. 1, 2007, the I-35W bridge over the Mississippi River collapsed. MnDOT **expedited an emergency design-build contract** to replace the collapsed structure by the end of 2008.

The project included reconstruction of I-35W from Washington Ave. to 4th Street, approximately 3/4 of a mile in length. The river crossing included a 10-lane freeway (five lanes in each direction) with accommodations for future Light Rail Transit.

And, in spite of a treacherous Minnesota winter, the project still came in two months ahead of schedule!

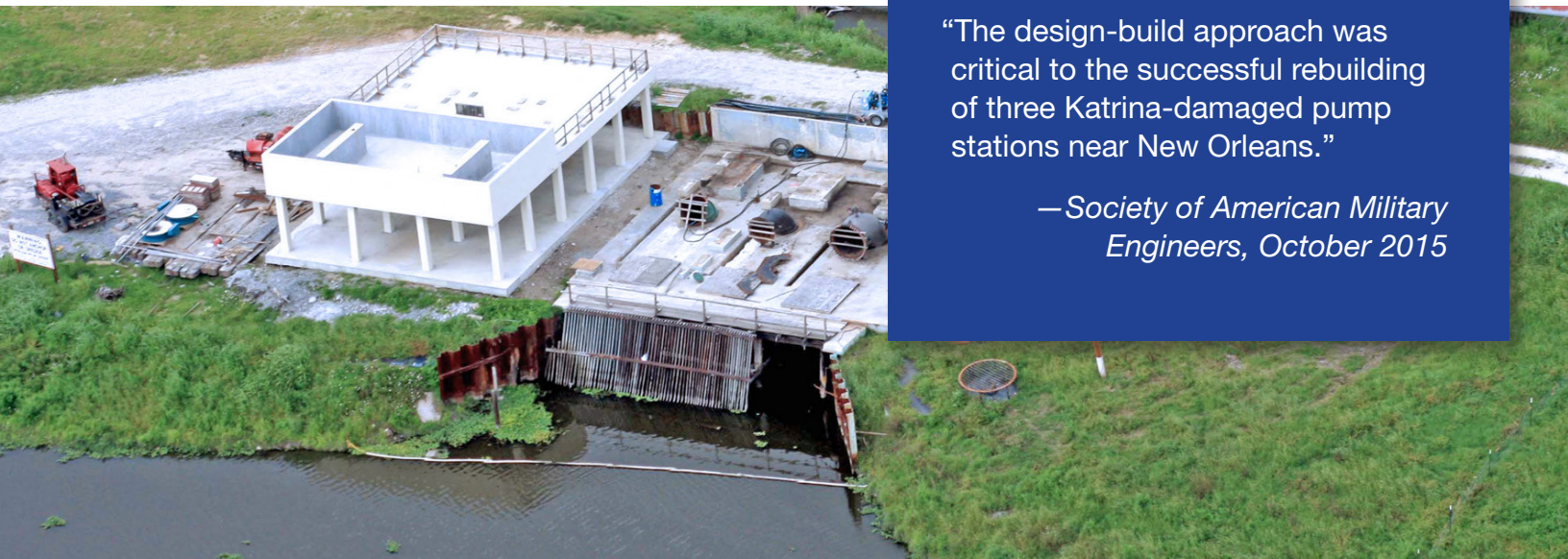
Construction Timeline: Oct. 2007 – Sept. 2008

Total project cost: $265 million

St. Bernard Parish Pump Stations

NEW ORLEANS, LA

Racing the clock before the next hurricane season, this vital $20-million post-Katrina recovery project was delivered on budget in just 18 months, a full year faster than using traditional design-bid-build delivery.



"The design-build approach was critical to the successful rebuilding of three Katrina-damaged pump stations near New Orleans."

—Society of American Military Engineers, October 2015

U.S. 90 Bridge

ST. LOUIS BAY, MS

In August 2005, Hurricane Katrina devastated the Gulf Coast of Mississippi causing catastrophic damage to the U.S. 90 Bridge across St. Louis Bay, disconnecting communities and turning a 5-minute trip into a nearly one-hour detour. Each day without the bridge caused an estimated $100,000 in economic loss to the region.

Delivery of a project this size would typically take four to five years. Using design-build, the U.S. 90 bridge construction, including design, was completed in just two years.

Project Timeline:	Jan. 2006 – Feb. 2008
Total project cost:	$283 million

Chevron Headquarters

COVINGTON, LA

After Katrina's devastation in 2005, Chevron made a business decision to relocate their regional headquarters from New Orleans to Covington, on the north side of Lake Pontchartrain.

Chevron was determined to build resiliency into this $80-million project, still located in a hurricane zone. In spite of post-Katrina labor shortages, 60 days lost to weather and a fast-tracked deadline, the project's first phase was delivered one month early and the entire project on schedule.

Construction Duration: 14 months

Total project cost: $79.8 million

Pentagon Reconstruction

ARLINGTON, VA

The project team was formed the very day of the 9/11 attack and an ultra-fast track schedule was created to complete the project within one year. Many didn't think it was possible; however, design-build enabled design and construction to operate together under a single contract, saving time and reducing potential conflicts. Motivation was high and additional financial incentives enabled the project to be completed nearly a month ahead of schedule.

Delivered 28 days ahead of schedule and $194 million under budget.

Construction Timeline: Oct. 2001 – Sept. 2002

Total project cost: $501 million

Design-Build Delivers Each and Every Day

Design-build's success in delivering innovative, resilient, time- and cost-efficient projects isn't limited to times of crisis. As the nation's fastest growing and most popular delivery method, design-build will deliver nearly half of all projects.

DESIGN-BUILD...

- Saves time and money
- Delivers high-quality projects
- Provides more collaborative and innovative solutions

See more design-build projects at projects.dbia.org.


Carlsbad Desalination Plant
Carlsbad, CA


Denver Union Station
Denver, CO


UC Irvine
Irvine, CA


US 60 Rogersville Freeway
Rogersville, MO

About DBIA

WE'RE ALL ABOUT COLLABORATION-DRIVEN SUCCESS.

The **Design-Build Institute of America** is the only association representing the entire spectrum of design and construction professionals. As the authority on Design-Build Done Right®, we're an organization where excellence is built, taught and shared. By offering industry certification, education and access to recognized experts across a multi-disciplined membership, we foster the collaboration that powers industry transformation.

We push the boundaries of possibility for project design and construction, providing advocacy and support to further the cause. By attracting professionals who harness change, we inspire innovative design-build thinking and create long-lasting industry impact that builds our communities and nation.

Design-Build Institute of America
1331 Pennsylvania Ave. NW, 4th Floor
Washington, DC 20004

(202) 454-7516
dbia.org

RICHARD THOMAS
State/Local Legislative Affairs Director
rthomas@dbia.org

BRYAN WALSH
State/Local Legislative Affairs Manager
bwalsh@dbia.org