

Resilient & Disaster Ready

For hundreds of years, concrete pipe has proven itself to be one of the most resilient, durable, and long-lasting pieces of our infrastructure. With the ability to withstand almost any disaster, concrete pipe and box culverts are hands down the most resilient product in its class.

What does it mean to be resilient?

The American Association for State Highway & Transportation Officials (AASHTO), the association that represents the organizations who support our national transportation systems, defines resilient as “the ability to prepare and plan for, absorb, recover from, or more successfully adapt to adverse events.” So what does that mean? When it comes to stormwater management, it means that concrete pipe and box culverts are the best choice for choosing a reliable, long-lasting, and durable solution.



CONCRETE PIPES & BOX CULVERTS

Reinforced concrete's inherent strength and resistance to adverse events allows it to withstand extreme weather events including fire, flooding, hurricanes, and extreme temperature change.

With a service life that is designed to exceed a 100 years and proven to do more, this lowers its life cycle cost saving tax payers money.

\$1=\$6

For every \$1
spent on hazard
mitigation,
taxpayers save \$6.



An Engineer's Right to Choose

The ACPA supports the engineer's freedom to use whichever pipe is best for the project. Using their judgement and leveraging their credentials, the engineer should decide the appropriate pipe for the project--whether it is concrete, plastic, or metal. Opponents of an engineer's right to choose position their argument "open competition," but that is a misnomer from what they are pushing.

The "open competition" argument actually undermines the ability of engineers, local communities, and public works professionals to design infrastructure projects that best serve their communities' needs.

As advocates for engineers, we maintain a position that is not preferential to our industry. Our goal is to make it fair to all industries and to allow the engineering community to make decisions on what pipe materials to use for federally funded projects. The engineering community and many DOTs across the country have joined us in support of this position as we collectively believe that the specifying of infrastructure materials specified by legislatures instead of engineers puts both people and property at risk especially during the time of need.

Evacuation Routes

THE PROBLEM: More Frequent and Intense Extreme Weather Events

Increasing extreme weather events and natural disasters have a profound impact on all citizens—threatening public health and safety, the environment and natural resources, and the economic well-being of the nation—and the impact to our infrastructure continues to climb. *The failure to initially design and build resilient infrastructure, has resulted in taxpayers paying twice: once for the initial construction and again for the fix. This calls for immediate action to protect lives and property and to reduce taxpayer exposure through fiscally responsible planning.*

2nd

2021 had the **2nd highest number** of costly weather events ever recorded in a single year

20

weather-related events occurred in the U.S. during 2021; each causing more than **\$1 billion in damage**

\$145B

total cost to taxpayers for the damage caused by 2021's major weather events

688

people lost their lives; the most disaster-related fatalities in the U.S. since 2011

Source: National Oceanic and Atmospheric Administration (NOAA)

During extreme events when people and families are most vulnerable and forced to evacuate the area, **there is an expectation that roadways and evacuation routes will lead people to safety**, but evacuation routes have not always performed as expected. The failure of critical routes during emergencies can leave residents stranded and desperate to find alternative escape routes to protect themselves and their families.

MATERIAL SELECTION MAKES A DIFFERENCE



SUSTAINABILITY



RESILIENCE



STRENGTH



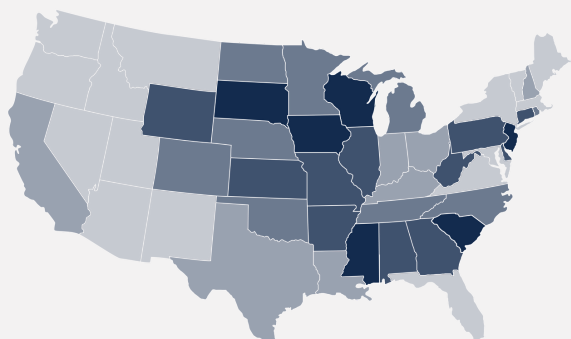
LONGEVITY



DISASTER-RESISTANT

The performance and reliability of concrete pipe and box culverts play a vital role in building a **resilient, modern, and sustainable infrastructure system**.

STATES MEETING THE ISSUE HEAD-ON



RESTRICTIONS ON LESS-RESILIENT PIPE MATERIAL

COMPREHENSIVE

SUBSTANTIAL

MODERATE

PARTIAL

NONE

