

This Earth Month, Let's Rethink What "Infrastructure" Means

By Bill Bold, Chief Strategy Officer, Palomar

After **Earth Day 2021** last week, we look back on a sobering year of natural, public health and economic disaster—but we are grateful, too, for the return of optimism and good health. As the nation's gaze widens from the pandemic, it will focus on an emerging policy debate over a matter that is intimately tied to our goal of a sustainable future. And that's why Earth Month (April) is an appropriate time to discuss infrastructure, or at least the vision of America's infrastructure set forth in the Biden Administration's American Jobs Plan proposal.

A lot has changed since the first Earth Day in April 1970. Most of the world's leaders—including the United States—now acknowledge the growing reality of climate change. Millions of Americans feel the effects of climate change on a regular basis. Last year, 22 major natural disaster events, including a record hurricane season and catastrophic wildfires, caused damages to properties, roads, electrical grids, waterways and other necessary parts of life that will **cost nearly \$100 billion** to remedy.

Climate change is already putting an enormous strain on our country's infrastructure, and we cannot afford for this to become the status quo. It is simply not reasonable to ask Americans to accept lifechanging environmental damage to their homes or businesses (and to ask insurers to bear the risk at an untenable cost). It is unfair to ask them to accept utilities that in some instances utilize dangerously outdated equipment. Fairness aside, the economic consequences of inadequate infrastructure in the event of environmental catastrophe are chilling, and will continue to worsen.

But this doesn't have to be our future. Our leaders should create more roles for more smart and **green technology** tools that aim to mitigate the effects of climate change. If we think holistically about our country's infrastructure, acknowledge the inevitability of climate change and realize the ubiquity of these new technologies in our lives, we can make our infrastructure really work for all of us—and communities can recover more quickly from natural disasters.

Beyond Bridges

The Biden administration's infrastructure plan is incredibly timely. Compared to many other countries, what we traditionally think of as America's infrastructure is not doing well. The American Society of Civil Engineers ("ASCE") gives many of our systems, including our bridges, a dismal "D" grade.

ASCE is on the right track, though, because they treat "infrastructure" as a holistic category including things like the systems controlling our drinking water, aviation and storm levees. The Biden infrastructure plan builds on this approach, acknowledging the blurring of lines between infrastructure, technology and environmental projects.

When you expand your idea of "infrastructure" to include all vital aspects of our lives, it shows how interconnected our public services, buildings, grids and more are, and also highlights just how vulnerable we are to the effects of climate change. As we saw in Texas last winter, one storm can knock out an entire state's power grid, upending and even ending lives.

According to the administration, the plan seeks to strengthen the connections between every aspect of our country's infrastructure while making all of them stronger. For example, right now many American highways and freeways are strewn with sensors that provide cities and law enforcement with valuable information about traffic and other dynamics. If encouraged further, these simple sensors will evolve into a network of interconnected nodes, recording environmental data along with traffic and safety—vital information when planning improvements and preparing for natural disasters.

This is expensive stuff, to be sure, but the time is right to think big and broad about infrastructure. All of these initiatives—road and bridge construction incorporating environmental sensors, utility hardening, electric vehicle infrastructure—will help us build more physically and economically resilient communities.

However, as RAND corporation experts recently pointed out, **technology alone won't create successful**, **thriving communities**. These advancements need to be coupled with policy that focuses on responding to climate change, from mitigation measures before a natural disaster strikes to the recovery in its aftermath. The administration's infrastructure plan moves in this direction, potentially opening a new era of cooperation between private companies in multiple sectors, from insurance to green tech, and government agencies, who together can rethink what "infrastructure" means.

As the president has stated, we cannot simply rebuild the same as before in the face of strengthening natural disasters. We must build back better. We can do this if we remember that infrastructure is no longer just about roads and bridges, but instead all the systems that keep our communities healthy, safe and moving forward into the future—for many Earth Days to come.

Learn more about the Palomar commitment to responsible environmental stewardship and sustainability.

