

Issue: FL – Infrastructure

## Infrastructure in Disarray Acting Now for Florida's Future

### Summary

“Infrastructure” is a more encompassing term than we might think. Of course, it includes bridges, roads, and public transit, but there are other vital areas of infrastructure such as drinking water, the energy grid, schools, and coastal areas. Unfortunately, in virtually all areas, Florida’s infrastructure is inadequate and fails to meet the needs of a fast-growing population. As rising temperatures and sea levels, increasingly intense storms, and financial inequality and instability have come to define life for many of Florida’s citizens, the government must address the state’s failing infrastructure.

Current Republican leadership touts its funding of infrastructure and environmental projects. However, this funding, falls short of the amounts experts and advocates state is required, and pales in comparison to what a Democratic-held state house and governor’s mansion provided previously. State leadership needs to act in order to stop the irreparable damage that is being done to Florida’s families, communities, and businesses.

### Failing Infrastructure

A recent study found that inefficiencies and inconveniences stemming from inadequate infrastructure take \$9 out of American families’ pockets each day, and in Orlando and Miami, drivers waste more than \$1000 annually on congestion alone. The problem is not getting easier to address—the current population growth rate of 1% per year is equivalent to adding a new city the size of Jacksonville every five years.

The Florida Section of the American Society of Civil Engineers, representing nearly 15,000 civil engineers who are experts at designing, building, and solving the problems of Florida’s infrastructure, call infrastructure the backbone of the Florida economy. In their 2016 infrastructure report card, they rank 11 areas of Florida’s infrastructure: aviation, bridges, coastal areas, drinking water, energy, ports, roads, schools, storm water, transit, wastewater. The Report Card was created to share the current condition of Florida’s infrastructure and find solutions that can raise the grades – none of these 11 areas score above a B, and the total average is a C.

Among the worst rated, are:

#### **Coastal Areas: D+**

It comes as no surprise that Florida’s economy relies heavily on its 825 miles of sandy beaches—the number of Florida beachgoers yearly is more than double the number of visitors to all U.S. parks combined. But that coastline also acts as the state’s “invisible” coastal infrastructure, protecting Florida’s communities from storm damage. Unfortunately, nearly 61% of Florida’s sandy beaches (503.8 miles) are eroding. Beaches and inlets require ongoing maintenance to counter erosion, but over the last 10 years, the average difference between requested and state appropriated funds exceeded \$40 million per year.

#### **Schools: D+**

Florida’s 67 school districts have 2,999 schools, with an average age of 29 years, over 3.2 million students, and an average annual student population growth rate of 3.91% over the last 25 years. The capital funding for classrooms apportioned in the 1997 SMART Schools Act has since lapsed and other funds have been curtailed. It remains unclear as to how lowered county impact fees, total new construction allocations and deferred maintenance costs will impact Florida’s K-12 schools. Furthermore, only 42% of the state’s schools are designated hurricane shelters; the rest do not meet the structural requirements.

**Roads: C**

Since 1984, the number of miles in the highway system has increased by 25%, while the number of miles travelled daily by vehicle has increased by 84%. The Florida Department of Transportation has fallen behind the curve, as have counties and cities, some of which have only been spending about 10% of what would be required for a good pavement maintenance program.

## Mounting Environmental Problems

The deterioration of Florida's infrastructure is being exacerbated by sea level rise, more extreme weather, and rapid population growth. These environmental threats only add to the woes of the already aging energy, transportation, and water systems. Unless a massive investment effort is made to Florida's infrastructure, prosperity and quality of life for Floridians are in serious jeopardy.

## Extreme Weather on the Rise

The devastation natural disasters can bring to families and communities is fresh in our minds. In the wake of Hurricane Michael, several smaller towns on Florida's panhandle lie in near-total devastation. Four hundred thousand residents were without power in the days after the storm, and in counties such as Leon and Franklin, nearly every electricity customer faced blackouts. From homes to supermarkets to roads, the infrastructure has been reduced to rubble.

Floridians have long lived with the fear that all it takes is one storm to uproot their families' lives. But what happens if disaster were to strike more than once, year after year? That unthinkable situation threatens to become a reality for many Florida families. The majority of Floridians don't have the financial stability to get by when wages drop, floods prevent them from getting to work, or when electric, medical, or repair bills rise in the wake of extreme weather.

## Rising Seas

Florida's coastal cities are especially susceptible to sea level rise. From 1995 to 2016, flooding from high tides in Miami Beach increased by 400 percent. Rates of global sea level rise have tripled in the past ten years, currently standing at four inches or more per decade. If trends hold, Florida's sea level will rise 13 inches in 30 years and six feet by the end of the century.

Along with the damage and danger that flooding poses, it also leads to deadly power outages. In the wake of Hurricane Irma, 3.8 million customers lost power. When factoring in the Florida heat, these outages can be deadly, as seen when 14 South Florida nursing home residents died after caretakers left them for 62 hours in rooms that reached 99 degrees after a loss of power due to flooding.

## Rising Temperatures

Floridians also face climbing temperatures and heat waves, increasing the cost for homes and businesses that will have to install air conditioning. By as early as 2041, Florida is expected to see an additional 75 days per year of temperatures greater than 95 degrees. Fifty percent of low-income households in major Florida cities have, on average, an energy burden of up to three times the national average. This is largely the result of impoverished families being forced to inhabit homes that are dilapidated, energy-inefficient, and in need of substantial repairs.

## Economic Challenges

Along with environmental threats Florida's pervasive economic instability has a negative impact on the state's prosperity. Despite a strong and growing economy, Florida has the fifth-highest income inequality in the nation. Fifty-seven percent of its citizens do not have savings for an emergency—the largest such population in the nation. In the wake of an extreme weather disaster, 60% of Floridians would be unable to pay for food, health services, housing, or home repairs without going into debt. Given the recent environmental disasters, and the fact that Florida is the state that perhaps stands to lose the most from climate issues in the coming years, this situation must be addressed.

## Poor Transportation Planning

Insufficient transportation planning is another significant factor contributing to a lower quality of life and higher cost of living for many Floridians. For example, traffic congestion and delays cost each commuter in Miami and Orlando at least \$1,000 annually. While modern and efficient public transit can substantially reduce congestion and pollution, 98% of commuters in Florida do not use public transit because they lack access to reliable, linked, and safe transit services.

Along with being a challenge to everyday life, such a lack of mobility options can be a safety issue when extreme storms strike, as rural communities located far from first responders become dangerously isolated. Moreover, due to legacies of disinvestment and segregation, communities of color in both rural and urban areas can face even greater difficulties in evacuating.

State leaders can reduce the public health and economic threats of more extreme weather and sea level rise by expanding investment in future-ready energy and transportation systems, flood protections, and other neighborhood improvements.

## Future-Adverse Leadership

Despite all the rhetoric coming out of the Republican State House and Governor's Mansion, it remains quite clear that the future of Florida and its environment are not priorities for Republicans.

The state has taken a few small first steps. In 2017, state leaders approved a spending package with \$4 billion devoted to protecting Florida's beaches, parks, springs, and the Everglades. However, of that \$4 billion, only \$3.6 million was set aside for coastal resilience programs meant to assist local governments in combating sea level rise. An additional \$58 million was set aside for beach restoration. With 113 million tourists in 2016 spending nearly \$109 billion, it is no surprise that \$4 billion has been devoted to beaches and parks. What is surprising, given the state's mounting environmental crises, is that so little attention and money have been given to proactive measures.

While some conservation advocates praise GOP leaders in the legislature for making a significant commitment to land conservation by funding groups such as Florida Forever, they also point out that the \$101 million apportioned is woefully inadequate and only a third of what the program used to receive.

Others feel the praise is undeserved. The Sierra Club is suing the state, claiming that state leaders have not complied with a 2014 constitutional amendment (approved by voters with a 75 percent majority) which requires 33 percent of tax revenue from real estate transactions—more than \$800 million this year—go toward conservation efforts. While environmental advocates do not contend all the money earmarked by the amendment must go to Florida Forever, they argue that much of the money is going to pay for inappropriate expenses, such as salaries of forest service workers.

## The Florida Future Fund: A Possible Roadmap out of the Crisis

It is clear that Florida lacks both suitable infrastructure and the investment to meet the demand. In the absence of an effective federal infrastructure plan, Florida legislators will need to lead the way in organizing investments to provide for clean energy, transportation, flood protection, and community improvements.

Economists and policy experts at the Center for American Progress and the CLEO Institute have advocated and outlined a plan they call the “Florida Future Fund” to make up for this gap in vital funding. Representing one approach to solving the infrastructure crisis, this state fund would serve many vital needs through public-private investment and a variety of financing products. The Fund seeks to modernize the critical infrastructure needed to support the state’s economy, and help communities prepare for the future as extreme weather risks increase and the sea rises.

The primary outcome of the Fund would be to support innovative transportation and energy infrastructure projects as well as flood protection in the most impacted areas. Projects include improvements in energy efficiency, regional transport, solar projects, electric vehicle charging, parks, and flood protections.

## Conclusion

Given Florida’s increasingly precarious economic and environmental conditions, it is essential that the legislature act now to restore and rebuild the state’s infrastructure and meet the immediate and future needs of its citizens. Such actions would help to create jobs, reduce the costs of energy and flood damage to homes and businesses, and improve the quality of life for all Floridians.

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