

Issue Brief № 59

Infrastructure in Alabama's Black Belt

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"The Connect Alabama Act is a transformational piece of legislation that I am proud to support and sign into law. This landmark new law ensures that Alabama will expand much-needed broadband access and further position Alabama for a robust 21st century economy, education system and health care system."

—Governor Kay Ivey, July 2020¹

From the Tennessee Valley Authority and Rural Electrification Acts of the 1930s that brought electrification to rural Americans left behind, to the Eisenhower Interstate Highway System that connected America in the 1950s and 1960s, expanding infrastructure represents a major achievement for the United States in the 20th century. But decades of neglect and under-investment, as American Society of Civil Engineers reports consistently document, have left our nation's roads, bridges, and other key infrastructure elements in a state of decline.² Alabama's infrastructure has seen similar long-term deterioration. However, since 2019 the state has taken major steps to improve its physical infrastructure, rebuilding roads and bridges through 2019 Rebuild Alabama Act³, and expanding broadband internet access through the 2021 Connect Alabama Act.

Alabama policymakers have put into place entities and structures to maximize the state's already strong fiscal position going into the 2020 pandemic—Alabama was one of just five states not taking education funding cuts in the pandemic. Sound conservative fiscal management

practices and these recent enactments position Alabama to better deploy its share of the \$2.2 billion one-time funding through the March 27, 2020 federal Coronavirus Aid, Relief, and Economic Security Act (CARES)⁴, the \$900 million Consolidated Appropriations Act of 2021 signed into law by President Trump on December 27, 2020⁵, and the \$1.9 trillion American Rescue Plan Act signed into law by President Biden on March 11, 2021.⁶

As a February 2022 feature on rural infrastructure noted, “Funding from the bipartisan infrastructure bill passed by Congress last fall is starting to hit the ground in earnest, and elected officials are coming out of the woodwork to let their constituents know about new spending available for water projects, highways, high speed internet, bridges, and more. The hype train is happening in rural newspapers, radio stations and social media, as opportunities for legislators to cut ribbons and show off are simply too juicy to miss.”⁷ This brief separates fact from hype, by reviewing recent infrastructure investments and noting areas in need of improvement.

Recent Progress on Broadband in the Black Belt

Our *Black Belt 2020* issue brief, *Internet Access Disparities in Alabama & the Black Belt*, concluded that the region “is markedly behind the rest of the state when it comes to internet access.” At the time the issue brief was released in October 2020, Alabama ranked 47th in the country in broadband connectivity, and *all but two of the 25 Black Belt counties were below the statewide average of 86 percent high-speed (100+ mbps) internet coverage, with half below 50 percent coverage*. Perry and Choctaw counties had zero percent coverage of high-speed internet, and Greene had only 2 percent coverage. The problem is decidedly rural: the Federal Communications Commission

found 1.4 million of the 2 million rural Alabamians, or 73%, had fixed broadband access, while 98% of Alabama's 2.8 million urban residents have fixed broadband access.

Jimmy Parnell, President of the Alabama Farmers Federation noted the real-world consequences of these disparities: "Farmers and other rural Alabamians are at a significant disadvantage without high-speed internet access."⁸ Parnell's point was underscored in interviews of Perry and Greene county residents conducted for a March 2022 University of Alabama doctoral dissertation. One would-be remote worker said, "I interviewed to do a work-from-home job, but when they ran the test on the towers in this area, it wasn't sufficient, so I wasn't able to land that job." Another said "I have the opportunity to teach educational classes. But to host, I need an adequate internet connection. To do a virtual class or do one-on-one consultations that I can charge a class fee for, I need high speed internet. But it's impossible for me to do that because the internet is so slow..."⁹

Since publication of the *Black Belt 2020* brief, Alabama has made steady progress in expanding internet access. Broadband and internet access across rural Alabama—and indeed rural America—is now a major public policy priority that enjoys strong bipartisan support.¹⁰ In the midst of the COVID-19 pandemic, Governor Kay Ivey utilized the Alabama Broadband Accessibility Fund to award \$17 million in grants to expand internet access, and later signed the Connect Alabama Act of 2021.¹¹ This act created three entities—the Alabama Digital Expansion Authority, the Alabama Digital Expansion Division within the Alabama Department of Economic and

Community Affairs (ADECA), and the Alabama Digital Expansion Finance Corporation, to advise, develop, and execute a statewide connectivity plan, as well as to administer the Connect Alabama Fund.¹² With the passage of the Connect Alabama Act, the state became the last in the southeast to adopt an official broadband plan.¹³

Prior to the passage of the Connect Alabama Act, the state ranked 47th in broadband connectivity, with an estimated 73% of its population lacking access to an affordable broadband plan. Alabama thus was the last state in the southeast to adopt an official broadband plan.¹⁴ With Connect Alabama in place, Governor Ivey on January 28, 2022 signed House Bill 1, which passed a special legislative session with strong bipartisan and business support, appropriating \$300 of its \$772 million American Rescue Plan Act fund allotment to improve broadband access.¹⁵ Much of the responsibility for administering these funds will fall to the Digital Expansion Division within ADECA created by the 2021 Connect Alabama Act.¹⁶

Taken together, while broadband access has a long way to go, noticeable improvement in the Black Belt of those with access to high-speed internet (100+ mbps) has occurred. Since October 2020, high-speed internet access in Choctaw and Perry counties has expanded from zero percent to 24% and 9%, in each county, respectively.¹⁷ There is still much room for improvement, however, since the Black Belt region's average high-speed coverage is less than 50%—nearly 30 points lower than the rest of the state. While Alabama now ranks 38th overall, the increasing focus of legislators and policymakers to expand broadband, especially in rural areas of the state, could propel Alabama forward in coming years.¹⁸

Water and Sewage Infrastructure

A United Nations (UN) investigation into poverty and inequality in the United States brought Philip Alston, a special rapporteur for the UN on extreme poverty and human rights, to Lowndes and Montgomery County (among several other locations) in December 2017.¹⁹ Lowndes and Montgomery are both majority-minority counties in the Black Belt, and an earlier brief in this *Black Belt 2022* series found that Lowndes experienced the highest rate of COVID-19 deaths in Alabama from 2020 to 2021.²⁰

The UN report to its Human Rights Council exposed the world to the abysmal state of the Black Belt's water and sewage infrastructure. CBS' 60 minutes ran an unflattering feature on Lowndes County in December 2021²¹, where UN officials had found "cesspools of sewage that flowed out of dysfunctional (or nonexistent) septic systems, which has led to a resurgence in diseases that officials believed were eradicated," referring to the corresponding hookworm outbreak.²² Like other parts of Alabama's rural Black Belt, most of Lowndes County is unincorporated and outside of city limits, leaving infrastructure like roads and sewage at the discretion of poorly funded county governments. In most rural areas, this practically means residents are responsible for their own septic maintenance.

In 2021, the U.S. Department of Justice launched an investigation into the Lowndes County Health Department and the Alabama Department of Public Health. They specifically examined the onsite wastewater disposal and infectious disease and outbreaks programs for "environmental justice concerns and their impact on the health, life, and safety of people across

Lowndes County, Alabama.” Despite the absent wastewater infrastructure and backed up septic systems, the Lowndes County Unincorporated Wastewater Program Sewer Boards’ \$2 million grant from the U.S. Department of Agriculture was taken back on account that they could not meet requirement to match 25 percent to the 75 percent federal funding for the project.²³

Unsurprisingly, the American Society of Civil Engineers’ (ASCE) report card on America’s infrastructure found that Alabama’s water systems are severely underfunded with deteriorating conditions, meriting the grade “D” from ASCE.²⁴ Alabama’s wastewater systems—including treatment systems, conveyance networks, and septic tanks, have an estimated \$3 billion in maintenance and expansion needs over the next 15 years.²⁵ The report noted that 25% of the state’s septic tanks are failing, an issue of particular note for the Black Belt and rural Alabama where septic tank systems are more prevalent.²⁶ Swift action is required to address the inadequate water and sewage infrastructure in the Black Belt that undoubtedly contributes to the health problems plaguing the region.

Roads, Bridges, and Highways

The ASCE 2021 infrastructure report card gave Alabama’s roads and bridges grades of C+ for bridges and C- for roads, deeming them “mediocre.”²⁷ There are about 70,000 miles worth of roads spanning rural Alabama, about 60,000 of which are maintained by state’s 67 county governments. Inasmuch as the 25 Black Belt counties account for over half of the rural roads and even more of the state’s rural county roads, it is not surprising that the “mediocre” condition is estimated to cost drivers over

\$500 a year in annual car maintenance.²⁸ There is a vastly different playing field for rural Black Belt residents compared to their urban counterparts.

State policymakers have taken steps to address many of these problems, the most notable being the ever-elusive West Alabama Corridor project. Building a road from Florence to Mobile through the western Black Belt to make the region more accessible to economic development has long been a goal of Alabama leaders dating to James “Big Jim” Folsom’s successful 1948 run for governor. Seventy-three years later, in 2021 as part of Rebuild Alabama, Governor Kay Ivey announced a four-lane highway from Thomasville to Tuscaloosa, to bring connectivity to this most isolated region of Alabama. Despite its good intentions, the project has its critics, including Demopolis Mayor Woody Collins, who called it a “nightmare for Demopolis,” because the highway bypasses his city by nearly seven miles.²⁹

Worker Commutes and Roads

Across the state, about 85% of Alabama’s workforce drives to work alone. These percentages are similar across both the 25 Black Belt and 52 non-Black Belt Alabama counties.³⁰ This underscores how good roads are essential for individuals and Alabama businesses. Among workers who commute in their car alone, 41% in the Black Belt drive more than 30 minutes to work, compared to about 37% of commuters in non-Black Belt counties (a percent difference of roughly 8%).³¹

In 2015, roughly 40% of commuters in the Black Belt were commuting to a workplace outside their county of residence, for a total of over 75,000 commuters.³² For Black Belt commuters staying within the state, the top

commuting destinations are Tuscaloosa (7,851), Montgomery (6,646), Lee (3,661), Mobile (2,677), and Jefferson (2,698).^{33,34} The top feeder counties for each of these destinations are the bordering counties. That Tuscaloosa and Montgomery were top commuting destinations is not surprising since they host Mercedes and Hyundai, respectively, as well as their many suppliers.

There are also large numbers of Black Belt residents commuting to work out-of-state. In 2015, more than 13,000 residents of Russell County alone commuted to bordering Muscogee County, Georgia, home to Georgia's third largest city—Columbus—as well as many insurance, banking, and digital technology firms.^{35,36} We note the Kia Motors' North American plant is in LaGrange, Georgia, just over the state line on I-85.

Long commutes, in addition to increasing the cost of transportation, can have negative consequences for individuals' health. This can include higher blood pressure, less physical activity, greater risk of obesity, and poor mental health.³⁷ Such negative health consequences can contribute to the disparities in health outcomes between Black Belt and Non-Black Belt counties as documented in previous issue briefs in this series.³⁸

Implications and Policy Recommendations

Poor infrastructure costs Alabama citizens time and money, and negatively impacts access to individual educational and corporate business opportunities. It even impacts health outcomes, as the UN report connecting inadequate wastewater infrastructure to poor Black Belt health outcomes, demonstrated. ACSE's 2021 report card identified average Alabama utility rates of just two-thirds the national average—which likely

is inadequate to fund maintenance of current wastewater systems, much less improving them.

Turning to roads, Alabama should continue its ramped-up leadership efforts to improve poor road conditions, which costs drivers over \$500 per year in individual vehicle maintenance. While the state has made strides in road quality since the last ASCE infrastructure report card in 2015, improving from a “D+” to a “C-,” there is still plenty of room for improvement. Continued and consistent investment, particularly in the Black Belt, is needed.³⁹

While many issues already addressed in this *Black Belt 2022* series require comprehensive approaches to tackle problems from multiple angles, infrastructure is that rare issue that can be addressed more simply through increased public sector investment, once good plans have been put into place. While assessing future long-term investment needs lied beyond the capacity of the researchers for this brief, it is abundantly clear that Alabama has dramatically improved its long-term planning process in recent years, especially since 2019.

Beyond the obvious critical role that the Alabama Department of Transportation plays in road construction and maintenance, we note the important leadership role that the Alabama Department of Community Affairs (ADECA) plays, along with the Alabama Department of Commerce, to coordinate state economic and community development initiatives. ADECA coordinates Alabama’s representation on the Appalachian Regional Commission and the Delta Regional Authority, two programs of

special interest to the Black Belt and rural Alabama. ADECA also administers for the State of Alabama the federal Low Income Household Water Assistance Program⁴⁰ that assists low-income households with water and wastewater bills.⁴¹ We also note that ADECA coordinates Alabama's new statewide plan for developing its electric vehicle charging infrastructure that was issued on January 26, 2022.⁴²

This is why ADECA's Broadband Map Connectivity Plan, issued on January 5, 2022, is of special note. This interactive Broadband Map addresses well-known deficiencies in the Federal Communications Commission mapping system, by identifying and evaluating census blocks that are only partially served with broadband. Because Alabama has already worked with its Internet Service Providers (ISPs) to map the state, the state is in an enviable position when additional federal funds come down the pike, as occurred with CARES and ARPA. It also means that state broadband grants awarded—90 of which have been issued by ADECA since 2018 through the Alabama Broadband Connectivity Fund—are more likely to fill identified holes in access.

The FCC, the federal agency charged with developing the nation's broadband map, expects to issue a major update on September 1, 2022.⁴³ That Alabama has already worked with its Internet Service Providers (ISPs) to map the state puts the state in an enviable position when additional federal funds come down the pike, as occurred with CARES and ARPA under national administrations of both political parties. It also means that state broadband grants awarded—90 of which have been issued by ADECA

since 2018—through the Alabama Broadband Connectivity Fund—are more likely to fill identified holes in access.

Good state-level administration means that when one-time funds come available, they can be more efficiently, effectively, quickly deployed—and that those plans are likely to include the Black Belt. In March 2022, ADECA announced \$11 million in one-time grant funds through its LIHWAP program, to households below the 150 percent threshold of federal poverty.⁴⁴

In recent years, Alabama statewide infrastructure policy has moved from a reactive approach to an initiative-taking approach. Continued good state-level administrative leadership is essential to improve the Black Belt's critical physical infrastructure investments in wastewater systems, highways, and broadband access. This is especially important given the region's small county and city governments, which often lack specialized staff to monitor these critical issues. Moving forward, wastewater and road improvement investments clearly should be paired with continued expansion of high-speed broadband throughout the Black Belt to extend new opportunities and connectivity to the region. Improving infrastructure can create new jobs, promote commerce, and facilitate economic growth and development.⁴⁵ But it takes commitment and investment from policymakers—investment that long has been neglected in the Black Belt.

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