



Making Nashville a More Livable and Sustainable City for All

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Nashville, Tennessee, Mayor Megan Barry wants to give Music City a new title: “[G]reenest city in the Southeast.”¹ In February, Mayor Barry, who was elected in September 2015 to be mayor of the Metropolitan Government of Nashville and Davidson County, released the Livable Nashville draft plan, which recommends actions to make the metro area a healthier, cleaner, and more vibrant place to live. The plan aims to do so by increasing access to clean air and water and conserving natural areas while curbing climate change and preserving Nashville’s authentic character. Mayor Barry’s plan helps meet the city’s commitment to cut carbon pollution under the Global Covenant of Mayors for Climate and Energy.² The plan also lays the groundwork for Nashville to set and meet its goals as a 2016 awardee of the 100 Resilient Cities program, which aims to help cities prosper in the face of climate change and social and economic challenges.³

The mayor’s vision for a more livable Nashville includes sustainable, well-managed growth. This goal is driven equally by the desire to improve lives in Nashville-Davidson and by pure necessity, as more jobs and people move to the area. After the collapse of the housing market in 2008, many people moved to Nashville for its low cost of living and job opportunities. Driven by Tennessee’s friendly business environment and higher education accessibility programs, in time, Nashville’s already diverse economy became the nationwide leader in advanced industries hiring, including tech and scientific consulting and auto manufacturing.⁴ Since Nashville’s housing market rebounded in 2010, Nashville-Davidson grew 8.5 percent to house more than 654,000 people; over the same period, Nashville’s gross regional product outpaced other metro areas by almost 14 percent, making it the third-fastest-growing metro area in the United States.⁵ By 2035, the 10-county Cumberland region is projected to grow 33 percent—reaching 2.2 million people.⁶ The metro’s explosive growth has added thousands of jobs, but with a poverty level that has grown 6 percent since 2000 to close to 19 percent of county residents in 2015, the new prosperity is not reaching all communities.⁷

In June 2015, the Nashville-Davidson Metropolitan Planning Commission formally adopted the NashvilleNext strategic plan, which aims to address the region's recent growth. The plan provides the foundation for Livable Nashville, which recommends an array of sensible strategies and goals to improve Nashville's environment and livability, from lowering energy costs through energy efficiency improvements to expanding mobility with more public transportation. These strategies will no doubt improve the overall environmental quality in Nashville. Nonetheless, the plan must strengthen its commitment to ensuring that these initiatives benefit all residents of the city—regardless of their race, ethnicity, or socioeconomic status. Without a specific aim to tackle existing poverty and historic inequities that continue to plague Nashville-Davidson, the plan's recommended improvements may disproportionately benefit the wealthiest communities without supporting those who have been disadvantaged by past public policies and actions and thus require the most targeted help.

Rapid growth and stratified opportunity

Nashville's history is rife with problems of environmental injustice; for decades, its transit, economic, and public health policies have primarily benefited the city's majority white middle- and higher-income communities. Structural inequalities have stratified the city and left low-income white neighborhoods and communities of color behind.⁸

Many of the metro government's past and present efforts to shape policy and jumpstart investment targeted to moving more jobs and extending prosperity into historically neglected communities have been pre-empted by the conservative Tennessee General Assembly.⁹ Mayor Barry has stated that conservatives in control at the state level, coupled with the historic political divide between urban and rural areas of the state, often inhibits Nashville's ability to pursue its priorities—despite its status as the most important economic driver in the state.¹⁰

The impact of inequitable policies and treatment of people in low-income communities—particularly in predominately black North Nashville—is apparent in poor housing, limited job opportunities, and dirty air in neighborhoods split by major traffic corridors.¹¹ These communities experience disproportionate levels of respiratory and cardiac diseases and disorders linked to poor nutrition, pollution, and limited options for recreation.¹² Among black or African American and Hispanic populations, which make up 40 percent of Nashville's population, poverty rates hover at nearly 29 percent and 36 percent, respectively.¹³ The median wage of black and Latino residents is \$11 and \$16 per hour compared with white residents at \$20 per hour.¹⁴ While white and Latino unemployment and car access is on par, black unemployment and lack of car access soars at almost 11 percent and 15 percent, respectively.¹⁵ For those with jobs, public transit commutes for black residents take an average six minutes longer than for white residents.¹⁶

When historically disadvantaged communities are not intentionally considered during city or state planning, the consequences are costly. In her analysis of Nashville-Davidson's civil rights history, Mariah Cole of Meharry Medical College concludes that, "All of the policies and practices of the city that have occurred over time with little thought to their impact on communities of color, especially in North Nashville, have worked to make health outcomes in these areas substantially worse than others."¹⁷

During her short tenure to date, Mayor Barry has put an emphasis on community engagement and diversity by creating new roles within the mayor's office; holding community dialogues on racial justice; and organizing Metro Night Out events, which promote access to metro officials and resources for community members.¹⁸ These efforts have not gone unnoticed by community members. According to Dr. Paulette Coleman of the equity, criminal justice, and affordable housing coalition Nashville Organized for Action and Hope, or NOAH, "While there can always be more engagement, there is more intentionality toward inclusion. The composition of her team is a better reflection of Nashville. Now we have an Office of Innovation and a chief diversity officer. There are many things that were not there in the past."¹⁹

While breaking down historic barriers takes time, Nashville's recent population and economic boom has worsened the equity gap between wealthy and low-income residents. According to the 2016 Brookings Metro Monitor report on economic success among U.S. cities, the Nashville-Davidson region rose from being the 21st to the 10th most prosperous metro area when comparing 2004 to 2014 data with 2009 to 2014 data.²⁰ However, when making the same comparison for economic inclusion, Nashville drops from 54th place to 73rd place.²¹

This economic disparity means that some people are forced to move out of their neighborhoods as the cost of living rises around them.²² For many homeowners, the only way for them to take part in the prosperity is to take advantage of increased property values and sell their homes, many of which have been in their family for decades.²³ Others have even fewer options, according to Jason Freeman of NOAH. "Anyone who is renting is concerned about being displaced," Freeman said. "Just yesterday, my colleague was notified that her rent had gone up \$850 per month."²⁴ In 2015, Nashville's homeless population increased by 5 percent.²⁵

Josef Kaul at Hands On Nashville, an organization that works to coordinate and meet the city's volunteer needs, sees the need for equity to be at the center of city policymaking: "The quality of life in the urban core is going up tremendously. We have an opportunity and a responsibility as a community to make sure that holds true for all Nashvillians."²⁶

Climate change exacerbates social disparities

In 2010, a rainstorm dropped more than 13 inches of rain in a 36-hour period, causing devastating flooding of the Cumberland River, which cuts through Nashville.²⁷ The flooding killed 26 people and swamped 11,000 properties.²⁸ Hands On Nashville mobilized more than 140,000 volunteers in emergency response and recovery to help repair the homes of the nearly 10,000 people displaced by the flood.²⁹ In some quarters, though, the devastation was long lasting. The flood hit at the same time that Nashville began to rebound from the housing market crisis. Between quickly rising prices driven by both economic recovery and post-flood development, low-income residents who had homes substantially damaged by the flood discovered minimal affordable options in the housing market.³⁰ Many were forced out of their communities.

Scientists overwhelmingly conclude that such extreme weather events are increasing in numbers and intensity with climate change. Nashville's central location makes it a target for extreme weather threats emerging from other regions.³¹

Although storms and floods caused severe damage in the Nashville area, nevertheless it suffered a continuous drought for much of the past year. In 2016, the average high summer temperature in Nashville was above 91 degrees—almost 3.5 degrees hotter than normal.³² By 2041, scientists predict that Nashville will experience an additional 45 days per year that are hotter than 95 degrees compared with its historic climate.³³

This more volatile climate is causing economic problems for Tennessee as a whole. In addition to causing more than \$2 billion in private property damage in the Nashville area, one year after the 2010 flood, up to 400 businesses remained closed and more than 1,500 jobs were unlikely to return.³⁴ More recently, in 2016, Tennessee was hit by six extreme weather systems that cost at least \$1 billion each in damage.³⁵ A Risky Business analysis of Tennessee predicts that, by midcentury, the state's economy will likely lose up to \$1.3 billion each year in labor productivity due solely to extreme heat.³⁶

Stronger and more frequent extreme weather disasters driven by climate change also exacerbate existing challenges in low-income communities, including health problems; financial instability; and access to healthy food, clean air and water, and quality and affordable housing.³⁷ Some people never fully regain their footing in the wake of a disaster. Extreme weather events have a well-documented pattern of pushing families into poverty as they struggle to manage the financial hardships of costly home and business repairs, medical bills, or lost wages.³⁸ Despite a recognized absence of available data, the 2011 Nashville "Community Needs Evaluation" nevertheless stated that in Davidson county, "It is likely that the [2010] flood had some detrimental effect on the rate of poverty."³⁹

More than 40 business, nonprofit, and academic professionals worked with Nashville-Davidson officials to formulate the Livable Nashville plan, which seeks to alleviate climate change threats to Nashville residents. Given Nashville's long history of inequitable policymaking, metro officials must embed principals of equity and inclusivity into the plan. At present, the plan lacks an equity analysis and clear guidance on how to best implement its goals so that all Nashvillians can benefit from a cleaner, livable city. By integrating the following social justice actions into the final plan and by working closely with leaders and residents of historically marginalized communities, Mayor Barry and local officials can ensure a healthy and prosperous future for all Nashvillians.

Energy efficiency

Among the recommendations outlined in Livable Nashville, expanding and incentivizing energy efficiency is a critical solution for meeting the mayor's vision. Improving energy efficiency has many multifaceted benefits, including reducing greenhouse gas emissions to mitigate climate change and retrofitting homes and businesses to weather heat and cold snaps, which reduces risk of heat stroke and hypothermia. During extreme weather events, more energy efficient homes and buildings also reduce the burden on the energy grid and chances of blackouts.⁴⁰

Improving energy efficiency in affordable and workforce housing is one of the only strategies in the plan that explicitly aims to benefit low-income residents. Not only can this efficiency plan improve air quality and living conditions, it can also lower energy bills for the 21 percent of Nashville residents who struggle to pay for utilities.⁴¹ This is exemplified through a volunteer-based program run by Hands On Nashville that installs energy efficiency solutions in low-income homes.⁴² "With the energy efficiency program, we are able to save people up to \$390 per year on their electric bills. If we can save homeowners money on their bills, then our thesis is we can make it easier for them to stay in their home," said Kaul. "Nashville is in great need of new affordable housing, but there also needs to be a greater focus on keeping people in their homes. Energy efficiency helps with that."⁴³

Livable Nashville also outlines incentives and resources for commercial property and housing owners and developers, but most of this assistance is targeted to large property and business owners. Nashville can curb carbon pollution and help to protect its business district and housing stock from extreme weather threats by working with large property owners. Nonetheless, the city should also target education, resources, and financing to small and minority-owned businesses in order to ensure that the benefits of energy efficiency reach economic drivers in all corners of the city—not just downtown.

The plan also includes recommendations to use educational campaigns, outreach, awards, and recognitions to improve energy efficiency through individual actions, with a primary focus on builders and businesses. These excellent plans should be extended and broadcasted to community and faith groups; neighborhood and homeowners' associations; different size classes of businesses and buildings; and to individuals, including renters, through municipal facilities that provide daily services. Recognition could be given to these groups for energy savings on their utility bill as well as to community groups—such as through the mayor's Excellence in Volunteer Engagement award—that are working to further energy efficiency or other sustainability solutions and promote a culture of climate resilience leadership across Nashville, as St. Paul, Minnesota, has done.⁴⁴

Green infrastructure

Nashville could also benefit from incorporating green infrastructure solutions—including trees, rain gardens, parkland, native flora, and pervious pavements—throughout the city. In 2016, the mayor signed an executive order creating a “Complete and Green Streets” policy to focus on green infrastructure implementation to help improve pedestrian and transit corridors.⁴⁵ Indeed, Livable Nashville builds on that policy by outlining large green infrastructure demonstration projects, retrofitting sidewalks and parking lots with green infrastructure, and encouraging businesses to adopt these solutions in their designs.

One popular method of expanding green infrastructure is growing the city's tree canopy. This infrastructure cools hot streets and roofs, which radiate extra heat on hot days and absorb carbon pollution. In its plan, Nashville set a goal to increase the city's tree canopy by 500,000 trees by 2050. Meeting this goal would not only alleviate heat islands, but it also would improve air quality, especially for communities with disproportionately high levels of air pollution. Impoverished communities in Nashville have worse air quality than communities above the poverty line. And, disconcertingly, communities of color above and below the poverty line experience more air pollution than white communities. Cleaner air would reduce public health risks, such as asthma, heart disease, and heat stroke that are exacerbated by rising temperatures.⁴⁶

As heavy downpours increase, green infrastructure can play an important role in reducing flood risks in heavily developed areas near streams and in cleaning water as it flows to the Cumberland River. After the 2010 flood, analysis by local and federal planners showed the great extent to which houses were located within the floodplain.⁴⁷ Adding to the issue, shortly after the flood, new houses and trailer homes began to be put back up in the same spots where homes had been destroyed by flooding a few months earlier.⁴⁸ While the city is in the process of updating housing safeguards to prevent further floodplain development, green infrastructure investments in middle- and low-income neighborhoods can help reduce flood risks to existing housing next to streams, as Toledo, Ohio, has done.⁴⁹

Green infrastructure can also meet critical needs specific to low-income communities, such as hunger and nutrition. As of 2016, more than 17 percent of Davidson County residents do not have access to affordable, healthy food.⁵⁰

After the 2010 flood, with assistance from the federal government, Nashville used a buyout program to purchase land that had repeatedly flooded from 247 homeowners who volunteered to find new housing in other communities.⁵¹ Some of this land was converted into parks as well as farms to be run by local community groups in order to supply produce to local food pantries.⁵²

While food deserts are an issue in the metro area, access to land that can be converted to community gardens in those areas can be difficult to come by.⁵³ Additionally, for many low-income households, access to grocery stores still does not mean access to affordable, healthy food.⁵⁴ According to the Nashville Food Project, community gardens are key to promoting “food sovereignty” and strengthening the social fabric of Nashville in a way that is sensitive to the environment.⁵⁵

By championing urban agriculture strategies, such as the conversion of buyouts and green spaces into community gardens, the metro government can better meet climate, flood mitigation, public safety, and food production goals outlined in *Livable Nashville*. Nashville should scale up urban gardening operations and work closely with community groups and residents to assist in capacity building to help make new and expanded farming operations and green infrastructure installations a long-term success.⁵⁶

Transit and mobility

The plan includes a set of recommendations to expand mobility for city residents while easing Nashville’s mounting traffic congestion and air pollution. For example, it recommends expanding access to public transportation and improving the safety of pedestrian and bicycle pathways. Through these strategies, officials aim to increase the number of residents who commute by transit, walking, and biking to 7 percent of the population by 2020 and to 30 percent by 2050. Not only will these mobility strategies improve access to job opportunities and services as well as cut down on commuting time, but they will also provide residents with alternative means to get to safety in the event of extreme weather. According to a U.S. and Tennessee Departments of Transportation pilot study completed in 2015, Nashville is one of the two least climate resilient metro areas in the state.⁵⁷

Improving and expanding public transportation options would be especially beneficial for low-income communities and communities of color. However, the city should take steps to ensure that, by linking more communities to the public transit system, it does not inadvertently foster displacement. Despite the many benefits of increasing mobility options, expanding public transit to low-income communities often draws higher income people to the neighborhood and drives up housing, food, child care, and other costs for existing residents.

Nashville should take similar steps and shape its transit policies by using equity analysis tools—such as those available from King County, Washington, and the University of California, Los Angeles—in conjunction with community listening sessions in order to ensure that current residents are able to reap the benefits of new public transit access.⁵⁸ To reach low-income residents, metro officials should work closely with community leaders and provide meals, child care, or stipends as needed to secure adequate participation in community listening sessions—such as Baltimore and St. Paul, Minnesota, have done. Some cities, including Seattle, have found that fusing transportation strategies with targeted steps to expand economic opportunities and access to affordable housing, child care, and other services for existing neighborhood residents can mitigate displacement risks.⁵⁹

Conclusion

By taking the above actions, Mayor Barry, local elected officials, and regional planners can combat climate change; build resilience to extreme weather and other climate impacts; and make progress on addressing the metro area's affordable housing, health, and income equity challenges for all Nashvillians. Shaping energy efficiency, green infrastructure, and mobility policies to be more inclusive of low-income residents, communities of color, and small-business owners will help realize the mayor's vision for a more livable Nashville while helping more residents enjoy the prosperity of the quickly growing city. With economic equity and inclusion as core to the vision of the final Livable Nashville plan, Mayor Barry and local stakeholders can improve the quality of life and reduce climate and economic shocks for all who live in Nashville-Davidson and across the state of Tennessee.

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