

An aerial photograph of the Charlotte skyline at sunset. The sky is filled with soft, golden clouds, and the sun is low on the horizon, casting a warm glow over the city. In the foreground, there are several large, modern buildings, including a prominent one with a blue glass facade. A green rectangular box is overlaid on the upper left portion of the image, containing white text.

CHARLOTTE 2030: A SUSTAINABLE VISION FOR OUR REGION

TEN KEY ASPECTS OF URBAN SUSTAINABILITY

- | | |
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| 01 AIR | 06 PARKS AND GREEN SPACE |
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= **CHARLOTTE 2030:
A SUSTAINABLE VISION
FOR OUR REGION**

WHY A SUSTAINABLE VISION

In our modern society, meeting our day-to-day needs and fulfilling our responsibilities seems to require an ever-increasing amount of our time. This is especially true during this period of slowed economic growth. But in times like these we are also given the opportunity to re-evaluate where we are headed; to look beyond today and think about the future we want for ourselves; the future we want for our children. And while envisioning the future we want is only a first step, knowing where we want to go is half the journey.

In this spirit, we have asked over 100 community leaders and citizens one simple question: "Twenty years from now, what do you envision for the Charlotte region?" Their answers to this question can be found in these pages.

As you can see above, their answers are organized into ten categories, reflecting ten key aspects of urban sustainability: Air, Buildings and Homes, Economy, Energy, Food, Parks and Green Space, Waste, Social Equity, Transportation and Water. Each of these is important because together they determine the quality of our lives.

And together, we have the power to shape them. The decisions we make about the type of homes we build and where we build them, the amount

of land we set aside for recreation, how we move about, where we locate our grocery stores, how we make energy, what businesses we create, how much water we use, and how we treat one another – to name just a few examples – all shape our ability to meet our needs not only today, but well into the future. In short, these decisions determine the sustainability of our region. The sustainability of the place we call home.

So this vision before you serves two purposes. One is to provide an inspiring glimpse of what we can become – a glimpse of the destination that we can begin heading for today. The other is to invite you to join us in working together as a community to map the route that will get us there. Because like embarking on any great journey, not all paths lead to where you want to go. And, as in our case, sometimes the destination is a place no one has yet been, and so a new path must be blazed.

Let's go.

Shannon Binns
Executive Director, Sustain Charlotte



A low-angle photograph of a skyscraper and a large, reflective, mosaic sculpture of a dog against a blue sky with clouds. The skyscraper is on the left, and the dog sculpture is on the right. A green banner with white text is overlaid across the middle of the image.

“A VISION IS NOT JUST A PICTURE OF WHAT COULD BE;
IT IS AN APPEAL TO OUR BETTER SELVES, A CALL
TO BECOME SOMETHING MORE.”

- ROSABETH MOSS KANTER



AIR

A SUSTAINABLE VISION BECAUSE

The American Lung Association ranked Charlotte the 10th smoggiest city in 2010, the only city east of the Mississippi to make the top ten list.

Source: American Lung Association

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > Our air quality meets or surpasses all federal standards.
- > Bikeways, buses, rail and greenways are abundant so we are less dependent on cars to reach our destinations.
- > Participation in ride-sharing and other alternatives to using single occupancy vehicles to get to and from work has increased dramatically.
- > Bus routes are expanded to include a transportation grid in addition to lines that radiate from center city.
- > Transit-oriented development is adopted and supported.
- > An integrated regional transportation planning authority addresses the relationship between land use, transportation and air quality.
- > Diesel engine pollution is reduced by replacing or retrofitting older engines, resulting in a greener fleet with newer equipment meeting tighter standards.
- > Air quality education and marketing programs are enhanced and expanded.
- > Municipalities across the region share air quality goals and dedicated funding is provided to support regional initiatives to reduce air pollution.
- > Impact on air quality is a consideration for all new developments.
- > Organizations and individuals have adopted daily practices and habits that preserve and enhance air quality.



BUILDINGS AND HOMES

A SUSTAINABLE VISION BECAUSE

More than 25% of our total carbon footprint is due to the energy used in buildings and homes. Yet, they can be designed to use less than half the energy they use today, making greener buildings a tremendous opportunity to reduce our carbon footprint.

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > New development takes place near existing development or on previously developed sites (re-development).
- > Existing infrastructure is used more efficiently and existing buildings are repurposed.
- > Designers, developers and builders integrate green building practices and incentives are available to encourage these practices.
- > Green roofs are the norm, not the exception.
- > Buildings are designed with deconstruction in mind by using materials that are reusable and recyclable.
- > Healthy indoor air quality is the norm.
- > Buildings are designed for reconfiguration to accommodate changing needs.
- > Measures have been taken in existing homes and buildings to maximize energy efficiency.
- > New and existing homes and buildings incorporate renewable energy technologies such as solar photovoltaics to generate electricity on site.
- > New homes and buildings are designed to minimize energy needs by maximizing natural ventilation, passive heating and cooling and the efficient use of energy.
- > Mixed income and green housing is available in every neighborhood.



ECONOMY

A SUSTAINABLE VISION BECAUSE

Central Piedmont Community College is the first college in North Carolina to offer a degree in Sustainable Technologies, helping position our region as a leader in the transition to a low-carbon economy.

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > Our businesses intuitively follow sustainable business practices and embrace the triple bottom line: planet, people, profit.
- > The region is a national leader for clean energy and green jobs, which include research, design and manufacturing of innovative technologies.
- > Our financial industry leads the nation in providing innovative financing options to encourage projects and practices that promote sustainability.
- > All economic development plans promote sustainability.
- > Regional high schools, colleges and universities provide insight and training for green collar professionals and all students have a profound understanding of the relationship between our economy, our environment and our quality of life.
- > Economic growth is not viewed as dependent on infrastructure expansion.
- > Visitors, businesses and new residents gravitate to our region because of our healthy and beautiful natural environment, vibrant economy and social equity.



ENERGY

A SUSTAINABLE VISION BECAUSE

84% of the Mecklenburg County government's carbon footprint was due to their transportation fuel, natural gas and electricity consumption in 2009.

Source: Mecklenburg County

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > The region is known as a clean energy capital.
- > A better, smarter electricity grid exists that helps us use energy more efficiently.
- > Electric vehicles and recharging stations are widely available.
- > Low carbon transportation fuels are produced and used locally.
- > Carbon-free renewable energy sources provide at least 25% of our energy.
- > Our greenhouse gas emissions are reduced in line with current scientific understanding to mitigate our impact on the climate.
- > Each home is able to produce its own energy and sell what it does not use.
- > Citizens are knowledgeable about their energy consumption and actively participate in energy conservation.
- > New buildings are designed and built to minimize energy consumption.
- > Measures have been taken in existing homes and buildings to maximize energy efficiency.
- > Energy usage per person is reduced by at least 20% – or 1% per year.



FOOD

A SUSTAINABLE VISION BECAUSE

Sixty neighborhoods in Mecklenburg County have no full-service grocery stores selling a combination of fresh dairy, fresh eggs and fresh meats.

Source: Mecklenburg County Community Food Assessment, 2010

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > Locally produced, nutritious food, especially fresh fruits and vegetables, is available in all neighborhoods and affordable for all citizens.
- > Our economy has been positively impacted by our citizens' ability and willingness to purchase local food.
- > Our schools serve healthy and affordable food.
- > All stores that participate in the Supplemental Nutrition Assistance Program (SNAP) carry a broad selection of fresh fruits, vegetables and meats.
- > SNAP benefits have been modified to encourage the purchase of fresh and nutritious food.
- > Plans for new neighborhoods and re-developing neighborhoods ensure healthy food sources.
- > Our health has improved because eating habits have changed.
- > Charlotte has returned to its roots and is the trade center for healthy food for the Southeast.



PARKS AND GREEN SPACE

A SUSTAINABLE VISION BECAUSE

Mecklenburg County lost 33% of its tree canopy and 3% of its open space between 1985 and 2008 and has only half the parkland per person compared to the national average.

Source: Urban Ecosystem Analysis Mecklenburg County and the City of Charlotte, 2010; Mecklenburg County Parks and Recreation Department.

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > Citizens and their elected leaders understand the connection between a healthy environment, land use decisions and quality of life.
- > Stronger, more comprehensive land use plans exist with the goals of social equity and environmental protection in addition to economic growth.
- > Citizens and their elected leaders fully value parks, trees, greenways and nature preserves within their communities and are actively involved in caring for and preserving them.
- > A system of parks, greenways and trails exists that connect neighborhoods, provide recreation and an alternative mode of travel, protect environmentally sensitive areas and preserve water quality.
- > Acres of parkland per person meets or exceeds the national average.
- > 5,000 acres of wildlife habitat, 10,000 acres of productive farmland and 15,000 acres of natural buffer lands along priority waterways have been conserved.
- > 1,000 miles of the Carolina Thread Trail have been established on 10,000 acres of connected parklands, buffers and nature preserves.
- > Our tree canopy exceeds 50% of the land cover and tree ordinances exist that require tree canopy in all types of public and private development, prevent further tree canopy loss and maintain tree health.
- > Open/green space will be well distributed throughout the region so that it can be easily accessed by all residents.



WASTE

A SUSTAINABLE VISION BECAUSE

On average, each resident of Mecklenburg County throws away roughly three pounds of solid “waste” per day. Combined with waste from businesses and construction, 1.5 million tons of materials went to the landfill in 2008 at a cost of over \$37 million in tipping fees alone.

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > All municipalities in the region have achieved or nearly achieved Zero Waste; substantially reducing the need for waste disposal.
- > The region is recognized nationally and internationally for its Zero Waste practices and policies.
- > Citizens understand the importance and have the means to easily reduce, reuse and recycle what they currently throw away.
- > Citizens are educated about the hazards of electronic and other types of hazardous waste currently being discarded in landfills and safely recycling them is as convenient as throwing them away.
- > All event waste is recycled or composted rather than disposed.
- > All organic waste is recycled either by separate collection or home/on-site composting.
- > Community gardens are present in every neighborhood providing a local use for compost made from household and restaurant organic discards.
- > Extended producer responsibility (EPR) is widely adopted to help reduce the burden of waste management on residents and municipalities.



SOCIAL EQUITY

A SUSTAINABLE VISION BECAUSE

Access to community involvement is related to education and income. Citizens with a high school education or less and an annual income of under \$30K reported that childcare, transportation, feelings of being unwelcome, safety concerns and lack of information were obstacles to community involvement.

Source: Crossroads Charlotte, 2008 Social Capital Benchmark Community Survey

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > All interested members of the community are included in discussions and policymaking affecting the public commons, without limitation as to standing, affiliation, citizenship and/or civil or legal status.
- > Public and private interests follow the “triple bottom line” principle, in recognition of the inherent mutuality and interconnectedness of environment, society and economy.
- > Formal and informal education and training in sustainability is actively promoted at every level within area school systems, public institutions and throughout the private sector.
- > Grassroots democratic participation is integrated into all public and private institutions as a safeguard against undue dominance by any particular interest group.
- > The creation of sustainable initiatives is supported across the social spectrum, with a focus on reducing social, political and economic inequality locally and globally.
- > We have moved beyond acceptance of diversity (with its focus on differences) to embracing plurality and the equal value of all members of an interrelated community
- > The privatization of certain resources that are fundamental to life and human survival has been rejected.
- > The eradication of poverty has been prioritized, we have adopted a social health index based on equitable access and attainment of the common good and comprehensive yet flexible policies have been adopted to achieve this goal.



TRANSPORTATION

A SUSTAINABLE VISION BECAUSE

In our region, we drive almost 20 miles per person every day, on average. In 1982 we drove less than 11 miles per day – nearly half as much. The resulting increased congestion costs us \$525 million per year in wasted fuel and lost time, or \$876 per person annually.

Source: Texas Transportation Institute

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > Residents can engage in their daily activities within close proximity to their homes or place of work.
- > More children ride the school bus, walk or bike to school than are driven in cars.
- > Rideshare, carshare and other programs are incentivized to reduce the number of cars on the road.
- > Residents can walk or bike to their destination.
- > Regionally connected mass transit is available to all towns and connects to surrounding counties.
- > The region is connected by high-speed rail to Raleigh and other regional centers.
- > Downtown Charlotte has a new 'Union Station' that serves as a hub for all forms of public transportation.
- > A system of temporary use bicycles and motorized vehicles is widely available, convenient and affordable to reduce the need for privately owned transportation.
- > The transportation network keeps pace with the region's projected growth.



WATER

A SUSTAINABLE VISION BECAUSE

In 2008, citing water quantity and quality concerns related to current development practices, the Catawba River – our source of drinking water – was named America’s Most Endangered River.

Source: American Rivers

TWENTY YEARS FROM NOW, WE ENVISION A REGION IN WHICH...

- > Water is used more efficiently to conserve our limited supply of this vital resource.
- > Impervious surface areas have decreased to reduce stormwater runoff and increase infiltration and aquifer recharge.
- > Water reuse has increased by educating citizens on rainwater harvesting, working with the water utility to provide reclaimed water for irrigation and by implementing graywater use in new construction.
- > Citizens and community leaders are more aware of the threats to our water quality and quantity challenges and are actively involved in addressing them.
- > Water use planning and allocation ensures the protection of water resources for both ecological flows and human use.
- > Land use planning at the regional, neighborhood and home levels are integrated with the intent of protecting and improving water resources.
- > Water resources are improved and flash flooding threats are reduced through municipal codes that facilitate the restoration of abandoned building complexes and parking lots to natural landscapes that reconnect rainwater with groundwater storage.
- > Community and housing organizations discourage the establishment of non-native, irrigation-dependent grassy lawns and encourage drought tolerant, native landscapes.
- > Municipal codes have changed to require best practices for water management such as rain gardens, bio-retention areas, swales, “smart” irrigation practices and riparian buffers.
- > Stream corridors have been restored to provide recreational opportunities for residents, habitat for wildlife and improved water quality.

ABOUT SUSTAIN CHARLOTTE

OUR MISSION

Sustain Charlotte is a nonprofit organization dedicated to inspiring, informing and advancing sustainability across the Charlotte region. We do this by promoting and facilitating cross-sector collaboration among the public, business, nonprofit and academic communities in Charlotte and by providing information and opportunities for greater public engagement in the decisions that shape Charlotte's future. We recognize and promote that truly sustainable development gives equal consideration to social equity, economic growth and environmental protection.

OUR VISION

Sustain Charlotte recognizes that long-term economic, environmental and social stability are interdependent: the health of one determines the health of all. A strong economy depends on the sustainable use of natural resources. The sustainable use of natural resources depends on a strong social fabric of informed and empowered citizens, businesses and government leaders. And a vibrant society depends on a strong economy. Ultimately then, all efforts to lessen impacts to the natural environment and ensure a robust economy are efforts to secure a high quality of life for the community - that is, the people of the Charlotte region.

Recognizing this, sustainable development policies and practices are becoming increasingly important for local governments, businesses and citizens to understand. Conserving energy, reducing carbon emissions, protecting natural resources such as air and water and balancing economic and social opportunities, while meeting needs of the entire community, requires vision, leadership and collaboration. Sustain Charlotte will work to ensure that these requirements are met by crafting a vision, calling for leadership and facilitating the collaboration needed to achieve this vision. Sustain Charlotte will also engage local citizens, businesses and community leaders and help them better understand what they can do to help our region achieve sustainability.

OUR DEFINITION OF SUSTAINABILITY

Sustainability means meeting the needs of the present without compromising the ability of future generations to meet their own.

WWW.SUSTAINCHARLOTTE.ORG

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**“VISION WITHOUT ACTION IS MERELY A DREAM.
ACTION WITHOUT VISION JUST PASSES THE TIME.
VISION WITH ACTION CAN CHANGE THE WORLD.”**

- JOEL ARTHUR BARKER

TAKE ACTION NOW

Please send an email to info@sustaincharlotte.org
that says "I want to help".



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