

ADAPTATION & SUSTAINABILITY

WHAT'S NEXT FOR NASHVILLE?

DID YOU KNOW?

Sustainability means meeting the needs of the present without compromising the needs of future generations.

Nashville is already taking steps to become more sustainable. Many of these will also make our community more resilient and adaptable to future changes.

- » Preserving and enhancing natural infrastructure through the Open Space Master Plan.
- » Increasing transportation options through the development of rapid bus lines and bike-sharing programs.
- » Improving natural infrastructure in urban areas through Metro Water's Green Infrastructure Master Plan.



Deaderick Street is Tennessee's first green street, incorporating rain gardens, pervious pavement, solar parking meters, and street trees.

- » Improving the health of Nashville's population through initiatives such as NashVitality.
- » Reducing peak energy loads through Nashville Energy Works and private firms such as E3 Innovate Conservation Energy Services.



Weird weather ...

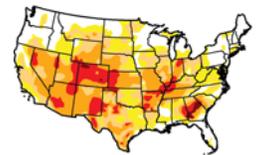
From 2010 to 2012, Nashville experienced many extreme weather events, including:

\$2
billion

in damages from 17 inches of rain in the 2010 flood

109°

Nashville's hottest day in recorded history, June 29, 2012



The 2012 drought reached 80% of the contiguous U.S. on July 3, 2012

... or the new normal?

It's impossible to know now how much more frequent these recent weather patterns will be in the future. Will weather of this severity continue to be rare, or will it increasingly become the new normal?

Warming Nashville

Observed, 1950—2011 Projected, 2011—2100

+0.5 °F

increase in daytime temperatures

+5.0 °F

(low estimate)

Adaptation

taking prudent steps to fit a changed environment.

New weather patterns stress key systems and resources in Nashville:

- Streams, rivers, and water sources
- Energy supply
- Transportation
- Trees and vegetation

NASHVILLENEXT.NET

This background report is one of several developed to provide input to the NashvilleNext planning process and provide a starting point for broader community discussion. Any final policies and recommendations endorsed by the NashvilleNext Steering Committee for the consideration of the Metropolitan Planning Commission will be the result of the entire planning process and upcoming community engagement and discussion. This is a brief summary of the Adaptation & Sustainability background report. The reader is encouraged to read the entire report at www.nashvillenext.net



nashvillenext

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Facing Changing Climate and Growing Sustainably

This background report outlines a holistic approach to hazard adaptation, including using sustainability tools to better prepare for future risks. Inherent to sustainability is the concept of adding value and resiliency to a community. This requires a continuous improvement process focused on the quality of life in Davidson County that integrates: (1) equity (the shared needs and interests of people), (2) economy (value in jobs, profit making, and broader prosperity) and, (3) the environment (inherent resilience provided by natural systems).

This report emphasizes using risk management as a primary tool of adaptation due to a variety of weather-related threats that may compromise Nashville's future quality of life. The background report outlines a compelling case for the city and its people to hasten prudent steps to adapt to growing hazards through a comprehensive approach using the concepts and practices of sustainability and adaptation to successfully meet future challenges.

The NashvilleNext plan will incorporate previous plans or studies pertaining to adaptation and sustainability into one cohesive vision, paving a clear path forward. Therefore, the information provided by this background report is offered as a guide to the community to:

1. Minimize all foreseeable risks;
2. Maximum value, and
3. To establish reasonable expectations for individual and community investments.

Characteristics of a sustainable and adaptable community

1. Rural Natural Infrastructure
2. Urban Natural Infrastructure
3. Native Landscapes
4. Sustainable Building Design
5. Diverse Transportation Choices
6. Net-zero Energy
7. Local Food
8. Healthy Neighborhoods
9. Diversity and Equity
10. Freedom to innovate in business, lifestyle and learning

Sources on warming trends from the front page

- *Observed warming in Nashville:* NOAA National Climatic Data Center; Global Historical Climatology Network.
- *Anticipated warming in Tennessee:* National Research Council (2011), America's Climate Choices.

