

# SUSTAINABLE TIMES

YOUR GUIDE TO THE GREEN SCENE



## SUSTAINABILITY DEFINED

Sustainability can be defined as the practice of meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. It is an approach to development that emphasizes responsible and efficient use of natural resources, social progress, and economic growth.

These three responsibilities make up the pillars of sustainability:

- **ENVIRONMENT** – Management of air, water, land, waste, plants, animals, and pollution. Focus on reduction of carbon footprint.
- **SOCIAL** – Standard of living, education, community, workers' rights, and fair trade, Focus on human rights and equal opportunity.
- **ECONOMICS** – Profit margins, cost savings, economic growth, research, and development. Focus on institutionalizing sustainability through economic strength

## WHAT'S NEW

### SUSTAINABILITY DEFINED

What are the three pillars of sustainability?

### STEWARDS OF THE ENVIRONMENT

The relationship of the designer and the environment.

### CLEANING THE STREETS

Earth day activities for UDP.

## STEWARDS OF THE ENVIRONMENT

Civil Engineers, Landscape Architects, and Urban Planners find themselves at the forefront of implementing sustainability. This makes for an excellent opportunity to lead by design. Examples include developing water management systems that conserve resources, designing transportation systems that reduce carbon and methane emissions, and creating buildings and communities that are energy efficient and adaptable to changing climate conditions. It is incumbent to stay well-informed about the frequent updates to green policies by jurisdictions. From the coastal plains to the mountains, each jurisdiction will present a distinct chance to implement sustainable design measures. A county in the coastal plains would benefit largely from solar implementation, whereas in the mountains, wind turbines would be the most advantageous.

The swift progress in technology, including big data and artificial intelligence, offers the opportunity to utilize these resources for creating solutions that are both efficient and effective in curbing environmental impact and promoting sustainability. With the help of Artificial Intelligence, mitigation and adaptation can be used as the framework to combat climate change. Techniques such as hazard forecasting, and regional weather modeling can be introduced to better understand the effect we have on our environment.

Be innovative. Be adaptable.



## CLEANING THE STREETS WITH UDP



On April 21st, 2023, Urban Design Partners will be participating in the North Carolina Dept. of Transportation's Litter Sweep.

The Department of Transportation's roadside litter removal happens once every two years. This program is statewide and residents are encouraged to participate in local efforts to help clean up North Carolina's roadways.

Facts that are **TRASH**

- U.S. roadways accumulate over 51 billion pieces of litter per year
- On average, there are 152 pieces of litter for every U.S. resident
- 207 million items of PPE masks and gloves were found across America's roads and waterways in 2020
- Plastic waste comprises 38.6% of all litter
- In a single-day global cleanup initiative in 2018, 1.9 million grocery bags were collected

## NEXT ISSUE:

- What can we learn from the chemical spill in East Palestine, Ohio?
- UDP Featured Team Member
- NCDOT Litter Pickup Statistics