



# Smart tech helps cities plan for the future

By William Gloster

**T**he use of smart city technology is an emerging trend that will help Arkansas cities and towns remain competitive through the 21st century. Intelligent city infrastructure has the potential to elevate the economic resiliency and sustainability of communities in the state. How can your community utilize the new benefits of big data to hone a more informed and responsive system that connects citizens and optimizes resources?

## What is smart city technology?

Smart technologies embody a variety of products and services that are designed to perform efficiently, quickly and conveniently. Modern consumers expect businesses to keep up with technological trends. This market pressure is evident in the plethora of items that have been transformed and labeled as “smart” since the turn of the century—cell phones, tablets, watches, air-conditioning units and refrigerators to name a few. With such a drive toward automation in society, it should come as no surprise that urban planners are experimenting with the idea of smart cities. By utilizing

electronic and digital devices with existing municipal infrastructure, cities may gather large amounts of data that show how people and machines interact across a multitude of locations.

## Is smart city technology right for Arkansas?

The implementation of smart technology in municipalities is a difficult and expensive undertaking. Cities must purchase and obtain software necessary for collecting large sets of data as well as position and maintain sensors in targeted locations. Then, city officials must consult analysts who will help determine data trends that lead to significant improvements in the overall welfare of the community. Metropolitan clusters of finance, infrastructure and labor are well-equipped for the task; urban areas in Arkansas will likely become pioneers in the shift toward smart city technology. Nevertheless, as smart technology becomes more commonplace and inexpensive, smaller rural communities in the state will be able to follow suit.

## Smart city technology's applications and benefits

With numerous applications, there are vast benefits from harnessing smart city technology. The data collected from its use will help optimize efficiency and communication across civic resources and services. For example, the town of South Bend, Indiana, implemented smart sewer systems that gauge water flow to prevent floods. Furthermore, the collection of this data can alter the way that citizens navigate their everyday lives.

Traffic sensors installed on roadways monitor driving patterns and adjust signals to make travel more efficient. In 2019, Conway began using adaptive traffic signals on two of its busiest streets: Dave Ward Drive and Oak Street. Motorists now enjoy shortened daily commutes through town.

Fort Smith and West Memphis are in the process of implementing smart city pilot programs. Fort Smith aims to improve its municipal solid waste, recycling and yard waste practices. City officials hope that this

program will help them make more effective and knowledgeable decisions about waste management and sustainability. These are just a few examples of the many practical uses for smart city technology that will have a tremendous impact on resource management and quality of life for Arkansans.

The 2020s offer far-reaching potential to utilize technology in support of community and economic development in Arkansas. Therefore, it is vital that city and town leaders planning for the future recognize and give serious consideration to the smart city model.



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