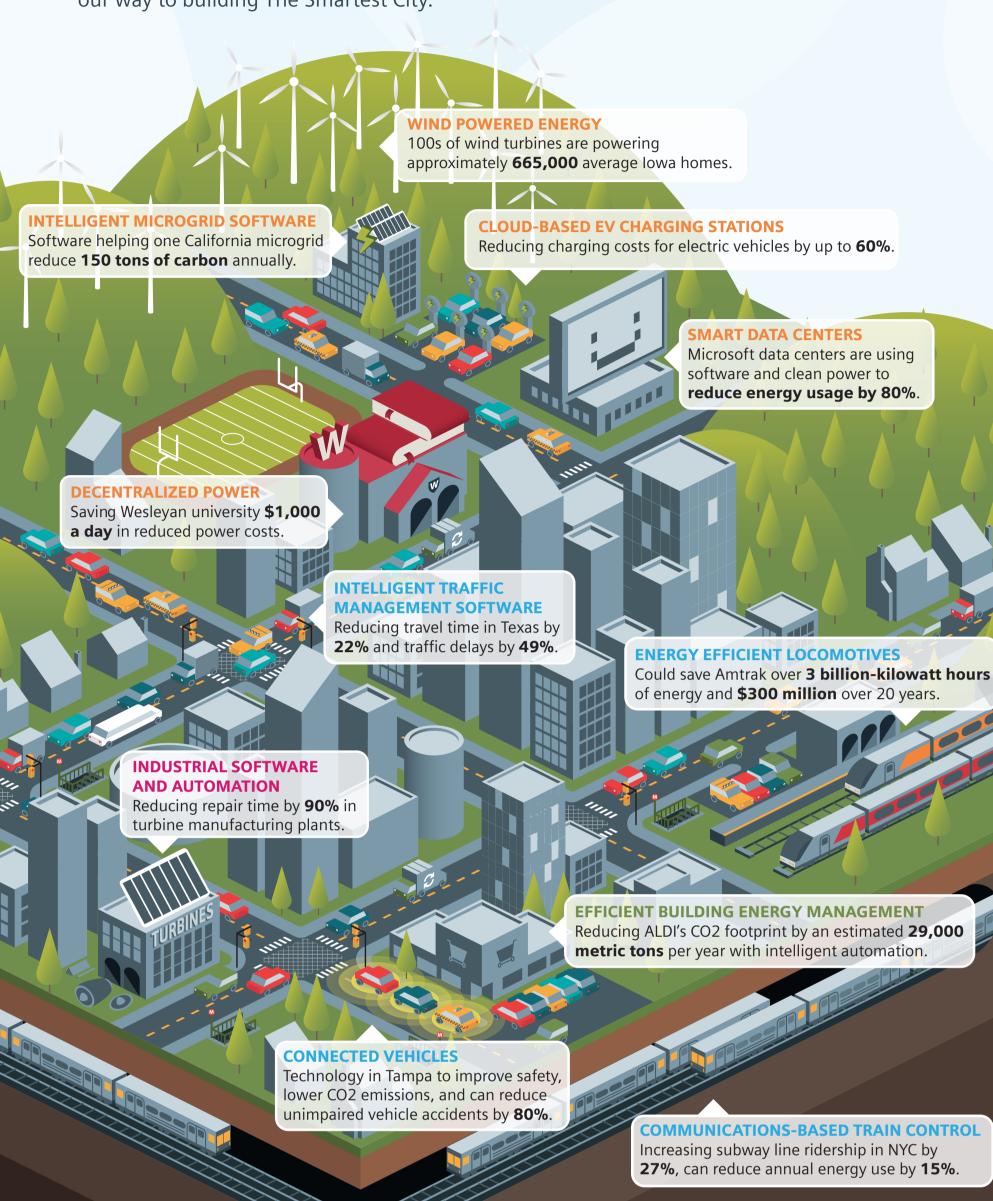


# Building the Smartest City.

By 2050, two-thirds of the world's population will live in cities. With current U.S. infrastructure earning a D+ grade by The American Society of Civil Engineers, we need to improve our infrastructure with smart solutions to ensure the economic success and longevity of cities across America. The answer is building smarter infrastructure. Siemens has developed new, intelligent technology and software that improves and modernizes U.S. infrastructure to support a growing population. With these technologies, we're on our way to building The Smartest City.



#### **ENERGY**



#### **CLOUD-BASED EV**

**CHARGING STATIONS** Bi-directional stations interact with the power grid and can control charging via the cloud.



#### **DECENTRALIZED POWER**

Wesleyan University uses an innovative combined heat and power system that provides heating for the athletic facilities.



## WIND POWERED ENERGY

Wind power can deliver clean energy to millions of homes and businesses.



#### **INTELLIGENT MICROGRID SOFTWARE**

#### Microgrid management software manages renewable power sources

and can operate on or off the grid to keep electricity flowing during extreme weather.



#### **SMART DATA CENTERS**

Data centers use 2% of the world's total energy, but the power monitoring and intelligent software usage is being reduced. In Cheyenne, WY, intelligent software is powering the first zero-carbon data center for Microsoft entirely independent from the grid.

#### **MANUFACTURING**



Software is revolutionizing U.S. manufacturing by reimagining how products are designed, produced, distributed and serviced.





#### **COMMUNICATIONS-BASED**

TRAIN CONTROL

Using communication technology on regional subway systems in NYC allows for increased efficiency.



**INTELLIGENT TRAFFIC** 

**MANAGEMENT SOFTWARE** 

and improving quality of life.

Software can gather traffic data

to control intersections and flow

in real-time, reducing congestion



#### **BUILDINGS**



#### **EFFICIENT BUILDING ENERGY**

**MANAGEMENT** 

Buildings consume 40% of energy and produce 21% of CO2 emissions worldwide. But with smart, cloudbased software that monitors and controls energy usage, buildings are reducing their CO2 footprint and achieving greater energy efficiency.



#### **ENERGY EFFICIENT LOCOMOTIVES**

New electric and diesel-electric locomotives have advanced microprocessor systems and regenerative braking, which are feeding power back into the grid.



### **CONNECTED VEHICLES**

Software-based infrastructure is revolutionizing driving. Driverless cars are an innovative idea for the future, but connected vehicles are helping to eliminate crashes and manage traffic more effectively now.