

**CUSTOMER SUCCESS STORY**

# A “CONNECTED COMMUNITY,” KANE COUNTY, ILLINOIS IMPROVES PUBLIC SAFETY, DELIVERS SERVICES MORE EFFECTIVELY, AND STIMULATES ECONOMIC DEVELOPMENT

## EXECUTIVE SUMMARY

### CUSTOMER

- Kane County, IL
- Adjacent to metropolitan Chicago
  - 450,000 residents; adding 16,000 to 20,000 annually
  - 1,400 employees

### INDUSTRY

Public Sector

### BUSINESS CHALLENGE

- Maintain public safety
- Improve services to constituents
- Direct more taxpayer funds to economic development by reducing operational costs
- Support educational excellence

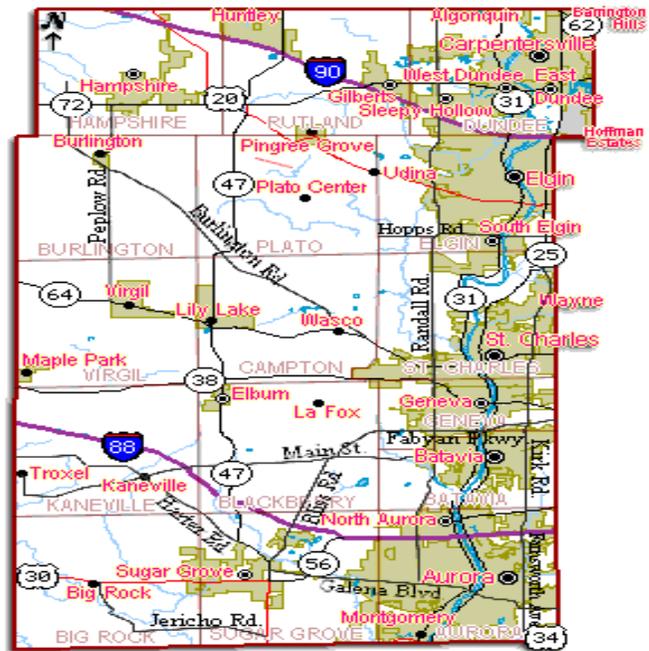
### NETWORK SOLUTION

Kane County created a connected community in two phases. First it built a Cisco foundation infrastructure, including wireless access for a remote building. Next it added Cisco IP Communications, which improves customer service, enables citizen self-service, and significantly reduces recurring costs.

### BUSINESS VALUE

- Improved public safety by establishing a standing emergency conference line and offering enhanced 9-1-1 services
- Increased service effectiveness with automated call routing and interactive voice response
- Freed funds to invest in the economy by reducing phone and conferencing bills by more than \$186,000 annually
- Enhanced educational programs by providing high-speed Internet access for schools

With a new network that supports both voice and data, Kane County, Illinois, has transformed its business processes for delivering services to constituents. Safety has improved because the county can instantly connect decision-makers in various locations during emergencies. Service effectiveness has increased because the county call center can handle more citizen calls, even while saving US\$186,000 annually. These savings and others free taxpayer funds for investment in the county economy.



Map of Kane County, IL

Located in a fast-growing portion of the Chicago metropolitan area, the Kane County government serves a population of more than 443,000

people with a staff of 1,400 employees. Originally a prairie community, Kane County today is a thriving agricultural-industrial area and the fifth most populous county in the state. “The residents of Kane County are a sophisticated group of people who have high demands of their public officials and departments,” says Roger Fahnestock, the county’s director of Information Technology.

County government focuses on four goals, according to Karen McConnaughay, Kane County board chair. “Our priorities are an overall improvement in public service, public safety, economic development, and education.”

## **BUSINESS CHALLENGE**

Until 2002, Kane County relied on a mainframe system on a Token Ring network. The county’s voice service provider delivered a Centrex service, which was expensive and lacked newer telephony features that would help employees become more productive and responsive. As the county began renovating aging buildings, the IT group decided to investigate ways that network technologies such as IP telephony and wireless communications could enable process change and reduce recurring costs. “Technology has become a critical component to every type of service that government offers,” McConnaughay says.

## **NETWORK SOLUTION**

Kane County improved its business processes for citizen services and public safety using network solutions from Cisco Systems®. As the first step in a two-phase migration, Kane County rewired its buildings for Ethernet, installing Cisco switches on the backbone and in each building. “Compared to Token Ring, a Cisco foundation infrastructure delivers better overall network performance, reduces costs, and is easier to manage,” says Dave Siles, chief security officer. To connect the Aurora County Health Department, located 14 miles from the county seat, Kane County used a Cisco wireless solution, which is far more economical than installing 14 miles of fiber cable.

With the foundation infrastructure in place, Kane County prepared for the next phase of its upgrade: adding IP telephony. The county engaged Maron Structure Technologies, a Cisco Gold Certified Partner, to deploy a Cisco IP Communications solution. A pilot with 100 users in the Health Department confirmed that a Cisco IP Communications solution significantly reduced recurring telephone costs and that Kane County could support a county-wide solution without adding staff. Maron Structure set to work, introducing IP Communications to the employees in one department or building each week.

Cisco IP phones provide conveniences that increase service effectiveness and employee productivity, such as caller ID, voice mail, a phone top directory, and five-digit dialing. “With our old phone system employees couldn’t transfer callers to other departments and had to look up phone numbers in paper directories, which quickly became outdated,” says Siles. “Now they can transfer citizens to any department necessary and dial from an online directory displayed on the built-in screen of their Cisco IP phones.”

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— Dave Siles, Chief Security Officer, Kane County

Cisco wireless networking solutions are also improving the county’s service in its criminal justice offices. Attorneys, staff, and defense attorneys can access the Internet and the county’s electronic case management system from wireless-enabled laptops and PDAs. For security, visitors and county employees who use the wireless network connect through virtual LANs (VLANs), with visitor access restricted to the Internet. Several county employees in other departments use the same network to place and receive calls with their wireless Cisco IP phones.

Kane County is committed to securing its network, both to protect sensitive citizen and government information, and to ensure that vital services are not interrupted as a result of computer viruses or network attacks. Cisco security solutions for state and local government meet both needs. For example, wireless communications are protected through encryption. And Cisco Security Agent on the county’s Cisco CallManager voice servers constantly looks for anomalous behavior that could signal a network intrusion or attack, and automatically stops these actions.

## BUSINESS VALUE

Cisco solutions have helped Kane County meet its top-level business goals, according to Siles: “Cisco technology has made Kane County a ‘connected community’ that can protect public safety, deliver effective services, spur economic development, and enhance our educational programs.”

### Improved Safety

The Cisco solution has improved public safety in Kane County by facilitating communications among emergency responder agencies, the health department, and the Office of Emergency Management. “Citizens rely on us to provide them with the safest environment, and our Cisco solution helps us provide effective prevention and response,” says McConnaughay. For example, the Kane County Office of Emergency Management and Office of Emergency Communications set up a standing conference call with ten lines, available 24 hours a day throughout the year for use in the event of crisis. “All our county public safety agencies are capable in their own right,” says Fahnestock. “By providing them with communications tools to coordinate their services, the Cisco solution helps make the community even safer.”

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Employee safety has improved, as well, the result of the county’s ability to comply with Illinois state regulations for enhanced 9-1-1 (E9-1-1) services, an emergency response system that allows emergency personnel to identify the telephone number and location of a call placed to 9-1-1. In the past, if an employee moved to a different zone, an IT staffer would need to physically update the phone carrier’s database. Now all telephone moves, adds, and changes are registered automatically so first responders can quickly and accurately determine a caller’s location. “This not only improves employee safety, it also insulates the county from the potential liability that might ensue if a database update was not made,” Siles says.

### Increased Service Effectiveness

Kane County now provides more and better services to its citizens. Previously, the Circuit Clerk of Courts could handle only 16 simultaneous callers. Additional callers received a busy signal. Now the county can handle exponentially more callers because callers are placed in a queue for their call topic—civil matters, traffic violations, or child support—and are routed to the next available operator. In addition, interactive voice response (IVR) allows callers to obtain automated information on child support payments and upcoming court dates, without human assistance. “We handle about 1,300 calls a day and our volume continues to grow,” says Karin Herwick, chief deputy circuit clerk. “With Cisco CallManager and Cisco IP Contact Center Express, we’re providing better service without adding staff.”

The flurry of calls preceding the presidential election of 2004 highlighted the value of IP Communications for improving service. “We handled around 8,000 telephone calls from citizens, compared to 5,000 in previous years, thanks to Cisco CallManager,” says Fahnestock. “With our previous Centrex service, half of those callers would have received a busy signal.” Citizens notice the difference. Not only is it easier to get through to the county offices, but staff members are more responsive because they now have voicemail and e-mail.

Interagency collaboration has also become more convenient and cost-effective. The Health Department, for example, sometimes has 20 participants in conference calls to discuss county health issues. Previously, the county used a managed conferencing service, paying \$2 to set up a call, 25 cents per line, and long-distance charges if applicable. Monthly conferencing costs ranged from \$3,000 to \$4,000. Now county employees can schedule conference calls themselves using the Web-based interface of Cisco Conference Connection, which integrates with Cisco CallManager. “Cisco Conference Connection gives us the same functionality we had with the managed conferencing service at almost no cost,” says Siles.

## Economic Development

According to McConnaughay, all governments today face the challenge of trying to provide better service with limited funds. “We always remember that we operate with taxpayers’ money,” she says, “and we have a responsibility to be efficient and effective with the tax dollars that we invest.

Migrating from a Centrex managed service to Cisco IP Communications saved Kane County approximately \$150,000 yearly to be invested in the local economy. Savings came from eliminating the \$36-per-line phone charges and toll charges for calls made to other county locations. For example, in the past, calls from the Health Department to its satellite offices incurred long-distance charges. Now all in-county calls travel over the county LAN and WAN at no cost. More savings result from eliminating conference call fees.

“To stimulate the local economy, it is important local governments recognize the importance of technology advancements,” says McConnaughay. “We have done that in Kane County and have found that it has been a tremendous economic benefit.”

## Educational Excellence

Kane County is known for its excellent schools. The county government supports that reputation by providing high-speed Internet access to schools as part of the Illinois Century Network, a state service that provides Internet connectivity for education, government, and health organizations. Kane County also provides Internet access to the regional Office of Education.

## NEXT STEPS

With its Cisco foundation infrastructure, Cisco IP Communications, and Cisco wireless networking solutions, Kane County can relatively easily add new network services for its citizens and employees. As one example, the county will soon enable citizens to securely make child support payments by phone. “We have also developed a working prototype for providing information about tax payments, last payment date, and making a payment through the IVR system,” says Siles.

In addition, the Sheriff’s Department plans to provide high-bandwidth wireless connections to squad cars. Officers will be able to access data such as warrant information and mug shots without returning to the office, increasing their presence in the community and improving public safety.

Kane County also plans to deliver simple applications over employees’ Cisco IP phones, such as providing access to county databases, to increase responsiveness to citizen inquiries and reduce the need for PCs.

“Cisco solutions for state and local government help us keep our budget flat and even as we improve services to citizens and employees,” says Siles. “We’re saving money, doing ‘more with less,’ and providing more and better services to our citizens than ever. Our county politicians deserve kudos for giving us the opportunity to show them the results.”

McConnaughay concludes, “Citizens in any community expect their elected officials to make decisions that protect the quality of life—keeping them and their families safe. We believe that our decision to invest in Cisco technology has allowed us to live up to that promise for our community.”

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