



Challenge

- Improve cost structure and speed of service for telecommunications and related maintenance across all City facilities
- Provide continuity of operations in the face of severe weather and other emergencies
- Establish reliable connectivity across 11 remote sites
- Deliver enhanced municipal services to citizens

Solution

Avaya IP Office 500, IP Office Preferred Edition; IP Office Receptionist; IP Office Teleworker; Avaya 5610 and 5621 IP telephones and 3616 wireless phones.

Value Created

- Cost savings of over \$84,000/year
- Return on investment in less than 24 months
- Highly reliable and resilient communications to help ensure business continuity
- Ease of management, enabling cost-effective in-house system administration
- Improved productivity and enhanced citizen services

An Illinois municipality achieves business continuity, cost savings, and outstanding citizen services with Avaya IP Office

Galesburg, Illinois—As a city that is rich in both history and modern cultural and recreational resources, Galesburg offers a wide range of citizen services—well beyond what most people think of as “the usual.” Along with the necessary provisions for public safety, streets, water, recycling, and waste collection, City government also manages an airport, cemetery, community center, golf course, indoor swimming pool, water park, campground, and other recreational facilities.

The Mayor and City Council of Galesburg are committed to providing excellent services to citizens while remaining fiscally responsible. According to Dane Bragg, City Manager, “When we decided to consider future telecommunications for the government of Galesburg and its many facilities, cost considerations were extremely important, because we didn’t feel we were getting good value from the hosted Centrex system that we had in place at that time. But reliability and access were equally important, since we always want to make sure that citizens can reach us at all times, both on a normal daily basis and in times of emergency such as wind storms, lightning strikes, snow, and even the possibility of tornadoes or bombings.”

Preliminary research by an independent consulting group indicated that by switching to an in-house, self-managed VoIP platform, the city could expect to save as much as \$70,000-\$80,000 per year, with a full return on investment in as little as 24 months. At the same time, the city could gain numerous advanced features for enhancing productivity and the capability to maintain business continuity even during emergencies. Encouraged by this research, City Council authorized the IT team to begin planning for the acquisition of a new system that leverages VoIP technology.

The criteria upon which the city based its evaluations of various VoIP systems on the market included:

- **Maintaining business continuity.** According to Orlee Lucero, Information System Supervisor, extending reliable service for both telephone and data to the remote sites was extremely important. With the city's existing system, the nine remote

sites were connected only by wireless or DSL. *"We were very concerned about maintaining contact with the remote sites because they were subject to outages from weather problems such as windstorms or lightning strikes, which are common in our area. We need these sites to maintain their telephone functionality at all times."*

Of particular importance were City Hall and the Public Safety building. These were to be established as the main sites, with one backing up the other (with full redundancy) in case of emergency.

- **Leveraging advanced telephony features.** *"Beyond these core concerns, we knew that moving to a VoIP platform could provide many other benefits for the city, its employees, and the citizens,"* Lucero commented. *"We wanted better conferencing capabilities, improved voicemail, and mobility. And above all, we wanted the ability to administer our*

system in-house, without incurring the delays and costs involved in calling for service to handle every change or minor troubleshooting situation."

- **Achieving the projected cost savings and ROI.** The independent research analysis demonstrated that significant cost savings could be achieved by establishing a VoIP platform to serve all the city facilities. Galesburg's IT team was committed to achieving the most beneficial cost structure for the City while at the same time gaining the ability to deploy advanced features, with an open platform for future expansion.

After researching available systems, the City of Galesburg selected a member of the Avaya Connect channel partner program to supply a telecommunications solution using Avaya IP Office. Bragg commented, *"We chose Avaya because it offered the best options for integrating with our data systems, for providing the reliability and business continuity we require, and for delivering the cost savings and return on investment we want to achieve. Our Avaya channel partner was very proactive in providing us with demos and site visits that helped us see for ourselves how Avaya IP Office could help us achieve all our objectives."*

The solution includes Avaya IP Office 500 communications servers, with resilient multi-site networking across City Hall and the Public Safety building, and extended to the nine other locations in the City. Two T1/PRI's are channelized at City Hall and the Public Safety building for voice and data traffic. The remaining locations each have an IP Office 500 to provide an integrated dial plan and enable employees to "hot desk" (i.e., log in at any station in the network and/

“ Being able to build such a robust business continuity system has made this phone system for all intents and purposes more reliable than the Centrex service we had previously. We now have a comprehensive communications solution that will enable all our sites to maintain their telephone service during virtually any emergency. We no longer need to worry that we will be unable to communicate with a service site such as the Streets Division, which is critical to managing weather-related emergencies, or that citizens will not be able to reach us during a disaster. ”

— Dane Bragg,
City Manager,
City of Galesburg



Left, above: Standish Park Arboretum, City of Galesburg **Right, above:** The Pavilion at Lake Storey Beach, featuring a lake-view events venue

or at specific stations supplied for mobile workers) when necessary. IP Office Preferred Edition acts as a centralized voicemail system for the entire network.

The system uses a mix of Avaya 5610 and 5621 IP telephones, plus eleven 3616 wireless phones for onsite mobility. The IP Office Receptionist solution provides the operator staff with GUI-based call control functionality in addition to traditional call management via their physical telephones. Since the IT staff must be reachable at all times should an issue arise, IP Office Mobile Worker is used to keep the Supervisor and tech support person readily accessible as they frequently travel between the City's different locations. (The City plans to deploy IP Office TeleWorker solutions for selected staff members in the future.)

This solution was implemented over three months, following a new structured cable project that provided a Cat-6 infrastructure. The City of Galesburg had also implemented a new data network with integrated POE in 2008.

Business continuity achieved through resilient multi-site networking

Achieving uninterrupted communications at all the facilities during inclement weather or emergencies was a key driver for deployment of the new system.

Avaya IP Office enables organizations to network systems across multiple locations. Using IP links, the organization can operate a network of branch offices with an integrated dial plan and full feature transparency, yielding a consistent set of communications and services across all locations. The organization can centralize the system's services (such as an operator or a voicemail server) and administration to reduce costs.

The City of Galesburg networked all its locations, and has ensured government business continuity by leveraging this resiliency capability.

How multi-site networking works: Even though IP Office systems are extremely reliable because

there are no moving parts (such as fans or hard drives) to fail, business continuity can be further ensured by networking locations. During the installation, one or more "backup" locations are established within the network. (Backups share common information with other locations, including user data, hunt groups, extension numbers, personal contacts, and user licenses). If an IP Office switch in one location goes down, the phones that are assigned to that disabled location will re-register automatically to the IP Office system in the backup location. In this way the disabled location remains fully functional, with no disruption to business operation. As a cost-saving strategy, this eliminates the more expensive approach of deploying redundant equipment at each location.

Cost savings of more than \$84,000 per year

With its previous Centrex system, the City of Galesburg incurred costs of more than \$10,000 per month. This included approximately \$7,000 per month for individual phone lines and maintenance,

and approximately \$3,000 per month in long distance charges.

After the installation of Avaya IP Office, the city's current costs are estimated to be approximately \$3,000 per month, comprised of:

- \$1600 for two T1 PRIs (City Hall and Public Safety)
- \$840 for 1FB lines at each site
- \$50 for 200 DIDs
- \$300 for long distance (estimated)
- plus taxes and minimal maintenance expenses

This represents a **70% savings** totaling over **\$84,000 per year**. In a formal ROI calculation, additional "soft" savings can be factored in based on efficiencies gained through using Mobile Worker, centralized Preferred Edition voicemail, and other advanced features of the solution. A full return on investment will be realized in less than 24 months.

Ease of management and productivity

increases: IT personnel have been very comfortable with the in-house administration of their phone system, and they find it much more cost-efficient and convenient to be

able to perform most functions themselves rather than call and wait for service. Being well-trained on the system by their Avaya channel partner, they can envision an ongoing process of testing and deploying additional features inherent to the solution.

According to Network Administrator Kerzi Peterson, one of the IT department's goals is to conduct ongoing trainings for staff so that they will become very comfortable with the telephone system's features. *"We plan to work with individuals in all City departments to help them not only become comfortable with the phone system, but to go beyond that to develop ideas for using the phone system to do their jobs well and to enhance productivity,"* Peterson stated.

Conclusion: Lucero commented, *"We believe the City of Galesburg is now receiving all the benefits that we anticipated with our new phone system, including significant cost savings, a robust business continuity/emergency management plan, and a comprehensive array of advanced telephony features that can enhance the productivity of City employees."*

"Unlike other vendors we spoke with, our Avaya channel partner has a depth of experience in VoIP installations for the

APPLICATIONS, SYSTEMS, AND SERVICES

- IP Office R 5.0 – Preferred Edition
- IP Office Receptionist
- IP Office Teleworker
- IP Office Mobile Worker
- 5610 and 5621 IP telephones
- 3616 wireless phones
- Full Service Maintenance by Avaya channel partner

small- to medium-sized organization, and they have been willing to train us thoroughly so that we can be relatively self-sufficient in managing our communications."

Learn More

For more information on how Avaya can take your enterprise from where it is to where it needs to be, contact your Avaya Account Manager or a member of the Avaya Connect channel partner program, or access other collaterals by clicking on **Resource Library** at www.avaya.com.

All statements in this Case Study were made by Dane Bragg, City Manager; Orlee Lucero, Information System Supervisor; and Kerzi Peterson, Network Administrator.

ABOUT GALESBURG

The City of Galesburg is located in Northwest Illinois, approximately 50 miles east of the Mississippi River. Incorporated in 1857, the City is the birthplace of Carl Sandburg, and it was the site of a famous Lincoln-Douglas debate in 1858. Since the mid-19th century it has been the shipping center of the territory, and its railroad history is celebrated annually each June during "Railroad Days." Galesburg is the county seat of Knox County, with a population of over 32,000 people and two colleges within its city limits. For more information, visit www.ci.galesburg.il.us.

ABOUT AVAYA

Avaya is a global provider of business collaboration and communications solutions, providing unified communications, contact centers, data solutions and related services to companies of all sizes around the world. For more information please visit www.avaya.com.