

# City of Portland Manages Its Own Telecom Services with Lucent's Help

Cuts monthly costs by a Third, improves key services.

## Professional Services Success Story

*"The bottom line for us was that Lucent had superior product and superior support. And we knew that support would be critical to our success. If you know you can always call and get good people to work out the problems that are going to arise during such a transition, that's a big benefit."*

– Jerry Bentley, Acting Operations Manager, City of Portland

## Summary

### The City

The City of Portland, Oregon governs and provides services to some 550,000 people with a staff of 5,500 personnel, including the mayor's office, city administration, police, fire and rescue, and services.

### The Challenge

Under budget pressure and because it had access to its own fiber for broadband, the city decided to try and reduce its bill for phone and DSL services—which was about \$350,000 per month.

### The Solution

Working through Graybar, a Lucent partner, the city acquired its own Lucent 5ESS® VCDX switch. In addition, Lucent Worldwide Services (LWS) provided full support to the city to plan, design, engineer, install and integrate a 24 location, 6,500 line service together with a Lucent AnyMedia® Network providing special services to remote locations.

### Why Lucent

Lucent provided "superior product and superior support." In particular

- The Lucent 5ESS® switch is dependable and easy to configure
- The Lucent AnyMedia® platform provides special services such as ISDN to remote locations, which can be managed from a single terminal
- LWS "was always there for us," providing "excellent" service and support to make sure the transfer of service happened on schedule

### The Benefits

- Reduced monthly phone costs by \$115,000, or about 33%
- Improved the ability to provide new or changed services on a faster, prioritized timetable
- Met each concern raised by the existing local exchange carrier during the transition
- Met the city's public and firm commitment to transfer service to the new system by a firm date
- Virtually eliminated fiber optic maintenance problems, due to the city's use of its own shorter-loop fiber system



*“My experience working with Lucent services people has been excellent. I’ve found that they’re always there for us – which is vital in a project of this scope. The bottom line for us was that Lucent had superior product and superior support. And we knew that support would be critical to our success. If you know you can always call and get good people to work out the problems that are going to arise, that’s a big benefit.”*

Jerry Bentley  
Acting Operations Manager  
City of Portland

## The city

Named “Best Big City” by CNN/*Money* magazine in 2000—the city of Portland is well known for thoughtful civic planning and a vibrant urban environment. With a population of about 550,000 (1.8 million in the metropolitan area), Portland has attracted 1,200 technology employers including Intel, Hewlett Packard, NEC, Epson and scores of software firms. The city is run by a city council (mayor and four commissioners), supported by some 5,500 city personnel providing services such as administration, police, fire fighting and rescue, and environmental protection.

## The challenge

Jerry Bentley, the city’s Acting Operations Manager, sums up the challenge Portland wanted to address: “Our monthly bill for telecom services had gotten enormous,” he says. “It was averaging about \$350,000 per month for basic phone service, phone features and DSL service for the city’s employees.”

In a period of tightening government budgets, Bentley and his team felt this was an area where they could cut costs. The city had access to fiber optic cable throughout the area due to its control of lines operated by the local cable television provider. “Also, we could get access to more fiber, which we did by forming a consortium with the Oregon as well as Portland Departments of Transportation. They had their own fiber for monitoring traffic.

“We began to think, could we establish our *own* telecommunications service that would drive down our costs and possibly provide better service?” recalls Bentley. They concluded that they could, but getting there would not be easy because of existing local carrier business concerns.

## Lucent solutions

Working through Graybar, a Lucent Sales Business Partner that distributes telecom, networking and electrical equipment, the city acquired its own Lucent 5ESS® VCDX switch. In addition, Lucent Worldwide Services (LWS) provided full support to the city to plan, design, engineer, install and integrate a 24 location, 6,500 line service together with a Lucent AnyMedia Network providing special services to remote locations.

With this infrastructure and services provided by LWS, and with a group of six additional support staff, the city now runs its own telecommunications system.

## Why Lucent

Bentley, a veteran of the telecom industry, explains why the city chose Lucent. “First, I knew from previous experience that the Lucent 5ESS® switch is very good. It’s dependable and the software forms that you use to customize your system are always the same. I always know where to look for each feature that I want to change. Anyone using the 5ESS® would find it easy to put their own signature on it.”

In addition, Bentley and his team liked the Lucent AnyMedia® platform. They integrated more than 30 instances of the platform into a network to provide special services to the city's remote locations, such as ISDN (integrated services digital network, used for sending voice, video, and data over digital telephone lines or normal telephone wires). "The technology allows us to integrate all these into one terminal," says Bentley, "which makes it easy to manage."

Bentley was particularly delighted with Lucent Worldwide Services. "My experience working with the Atlanta software center\* has been excellent. I've found that they're always there for you—which is vital in a project of this scope. The bottom line for us was that Lucent had superior product and superior support. And we knew that support would be critical to our success. If you know you can always call and get good people to work out the problems that are going to arise, that's a big benefit."

## Results and Business Benefits

### Monthly savings of about 33% or \$115,000

The most dramatic impact on the city of managing its own telecom service was to reduce its monthly costs by about one-third. "Our monthly bill is now around \$165,000," says Bentley, "as opposed to the \$350,000 we were paying." These savings more than cover the six additional staffers hired by the city for tasks ordinarily provided by the local carrier, including a customer service technician, a switch technician, and a Cisco router administrator. The total cost of the additional staff amounts to \$48,842 per month, resulting in a net monthly savings to the city of around \$115,000—for an annual saving of about \$1.4 million.

The ROI was dramatic. "I'll put it this way," says Bentley. "We saved enough in our first year to pay for the switch."

### Improved service in certain key areas

Bentley points to a number of key areas in which service has improved in ways that meet the city's particular needs. Two of the most important were establishing service standards and priorities and reducing maintenance issues with broadband service.

*Better service response:* When the city tried to get new or modified services under the previous system, the local exchange carrier had no way to establish priorities for the city based on need. The city was on the same timetable as everyone else. By operating its own service, the city can now set its own timetable. "If we need to prioritize certain activities such as modifying service for the mayor's office, or establishing new services for the police, we can do that," says Bentley. "We can customize service levels to meet our needs, which wasn't possible with the local carrier."

*Fewer maintenance problems with the fiber optic cable:* "By using our own fiber, the longest loop is about 600 feet," notes Bentley. "The local phone company's longest loop can be up to five miles, which means more frequent service problems and outages. Our system never needs maintenance."

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## Great flexibility in meeting issues that inevitably arose during the transition

While such rewards as those described above may be tempting to any municipality, university or other organization with a large, contiguous population of telecom users, it's important to consider the challenges that will inevitably arise during such a conversion. "We certainly had to deal with a number of problems that arose," says Bentley. "Lucent was there to work them through each time, which made all the difference for us."

Perhaps the most critical overall challenge was the deadline established by the city for switching services—a commitment made to all city bureaus, departments and services. "There were political considerations here, as you might imagine," says Bentley. The effort to take over its own telecom service had been, understandably, carefully scrutinized by the local carrier and various other interested parties. "Had we not met the deadline, it would have created serious problems politically and from a public relations standpoint," says Bentley. "People reasonably wondered whether the city could really pull this off. With Lucent's help, the city made the deadline, overcoming a number of obstacles along the way.

"For example, we'd expected to complete the software translations for the new 5ESS switch when we got the images from the old switch," says Bentley. "However, the carrier had concerns about providing these. So the services people at Lucent simply adjusted to the fact, and figured out a way to rebuild the old image as they went along. That's the sort of service you can't always be assured of getting."

In addition, the city also needed access to the public network in order to give employee users access to phones outside the system—whether to other phones within the area code, the immediate metropolitan area, or for long distance. "Otherwise," as one LWS engineer puts it, "all the city has is one big intercom system."

Lucent helped in a number of ways throughout the transition process. "They put in a lot of work to make this happen, because we had to develop an entirely new design," says Bentley. For example, the local exchange carrier was concerned that the city would access its state-of-the-art SS7 signaling technology. "But Lucent worked around that, too, by devising a different signaling solution through AT&T that was acceptable to the local carrier."

- \* Convergence Network Software Delivery Center, which is part of LWS Professional Services.

## Lucent Worldwide Services Advantage

Lucent Worldwide Services has more than 10,000 experienced and highly skilled technical professionals dedicated to developing, deploying, optimizing, operating, maintaining and managing global, multivendor networks. Our proven track record of successful network engagements puts Bell Labs innovations to work with our end-to-end, comprehensive portfolio of professional, deployment, maintenance and managed services. Our unsurpassed suite of solutions can help reduce operating expense, optimize capital expense and grow revenue – helping you make your network more reliable, secure and efficient.

To learn more about Lucent Professional Services, please contact your Lucent Technologies Sales Representative or visit our web site at [www.lucent.com](http://www.lucent.com).

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