

BUSINESS BENEFITS STUDY

ENFIELD CASE STUDY

CUSTOMER PROFILE

Client: Town of Enfield
Website: www.enfield-ct.gov
Industry: Public Sector
Location: Suburb of Hartford, CT
Population: ~45,000



HIGHLIGHTS

Challenge

Facing rising operational costs and growing demand for newer technologies, the Town of Enfield needed to reduce operational costs, improve scalability, and add unified communications features to its voice network, which relied on inefficient Centrex technology.

Solution

Enfield implemented an open, SIP-based, unified communications solution from Siemens Enterprise Communications. The deployment included OpenScape Voice running on an OpenScape UC Server to serve the Town of Enfield's workforce, government offices, public safety departments and the school system. The project replaced more than 750 ports with SIP phones at over 30 locations, provided enhanced messaging, caller ID, and system-administration capabilities.

Result

Enfield is now on track to realize benefits over five years totaling more than \$1.43M from its investment in OpenScape Voice and UC. The savings include lower costs for the telephony infrastructure, tolls and voice messaging, and streamlined phone-number administration. The town is expected to earn a 106% return on its investment of \$695K providing a payback in six months.

TOWN OF ENFIELD MOVES TO SIP-BASED UNIFIED COMMUNICATIONS SOLUTION TO REDUCE COSTS AND BOOST SERVICE; 5-YEAR BENEFITS OF \$1.4M PROJECTED WITH A 6-MONTH PAYBACK

BACKGROUND

Located 18 miles north of Hartford, CT, the Town of Enfield was founded in 1749 and today has a population of about 48,000. The annual municipal budget for Enfield is about \$118M, funding everything from police and fire protection and waste disposal services to public schools and libraries.

Reliable communications are essential to keeping the town's operations running smoothly. But Enfield's telecommunications system was hampered by an outmoded Centrex-based voice service¹ that was both costly and lacking in useful features like one-number call routing, voice messages

that can be accessed via email, and interoperability with mobile phone services.

In 2009, led by the town's chief technology officer, Enfield began searching for a new communications solution that would help reduce costs while also improving productivity and service levels at more than 30 municipal offices and agencies, including two emergency facilities and 12 public schools. The town also hoped to keep new capital outlays to a minimum by leveraging its existing network infrastructure built by Enterasys Networks, a Siemens Enterprise Communications company.

¹ Invented in the 1960s, Centrex is a PBX-like service providing switching at the central office instead of at the customer's premises. Typically, the telephone company owns and manages all the communications equipment and software necessary to implement the Centrex service and then sells various services to the customer.

SIEMENS ENTERPRISE COMMUNICATIONS OPENScape SOLUTION

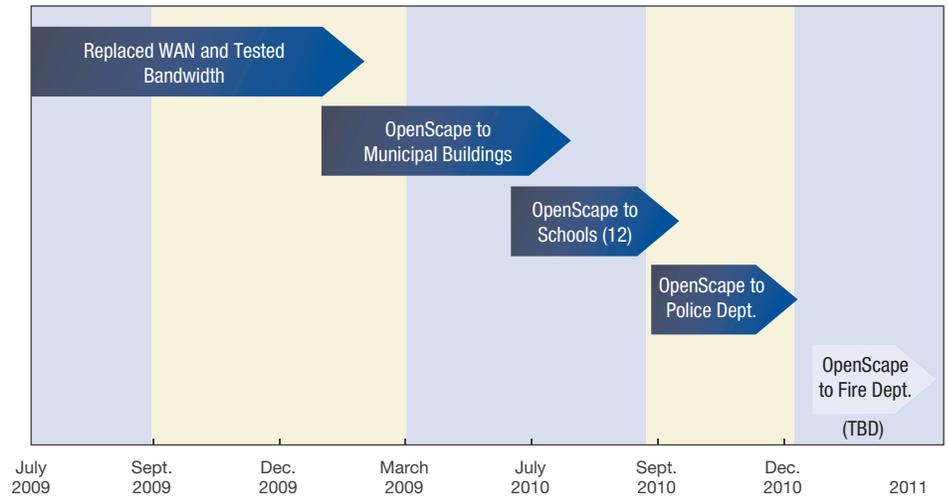
After a comprehensive review, Enfield chose to replace its legacy Centrex system with a carrier-grade, open, native SIP-based unified communications application from Siemens Enterprise Communications. This enabled the Town of Enfield to fully exploit Session Initiation Protocol (SIP) capabilities in its network. SIP is a signaling protocol, widely used for controlling multimedia communication sessions such as voice and video calls over Internet Protocol (IP).

Implemented in a phased rollout in just over 12 months, the new system consolidated more than 30 municipal agencies on a single IP system and replaced more than 750 communications ports with a smaller, optimized number of SIP phones. The applications deployed include OpenScape Voice, OpenScape UC Application, OpenScape Contact Center, OpenScape Xpressions and OpenScale Managed Services.

Moving to a software-based communications model enabled Enfield to deploy and manage its voice network in a data-center environment like other business-critical applications. The open platform also allows easy interoperability with mobile phone services and is more easily administered and maintained than conventional Centrex (or PBX) phone systems. The cost of the new platform, including software, hardware and services, totaled approximately \$695K.²

Figure 1

Town of Enfield's OpenScape Voice Project Timeline



BUSINESS BENEFITS

An assessment by Mainstay Partners has projected approximately \$1.4 million in five year net benefits and savings from the Town of Enfield's OpenScape investment. The key sources of savings, summarized below, include reduced telephony and voice messaging costs, lower local and long-distance tolls, and more economical administration of phone-number setups and changes. The town also realized a host of related benefits, including higher office productivity and service levels, and more efficient inter-office and inter-agency communications.

75% Reduction in Annual Voice Infrastructure Costs

By replacing its leased telephony infrastructure with OpenScape, the town is saving more than \$142K annually in voice-related platform costs, a 75% reduction. As part of the move to IP, the town also optimized its voice network architecture, enabling a 33% decrease in direct inward dialing (DID). (See Figure 2.)

92% Reduction in Annual Voice Messaging Costs

By replacing their legacy voicemail from Octel to OpenScape Xpressions, Enfield was able to lower its voice messaging costs by 92% and save nearly \$40K annually. (See Figure 3.)

²Five-year discounted figure using a 5% weighted average cost of capital (WACC).

Figure 2

Savings from Consolidated VoIP Telephony Platform

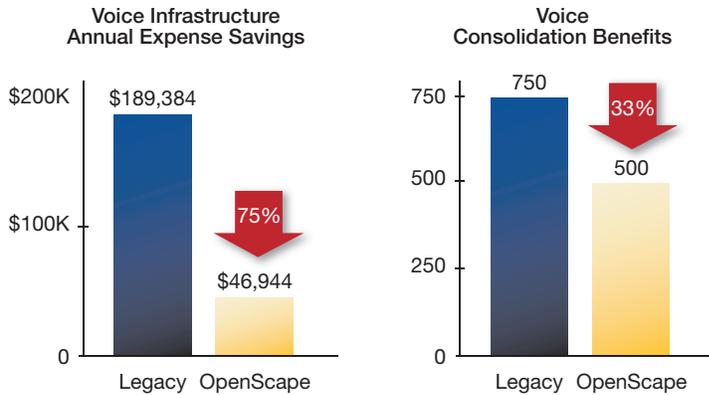
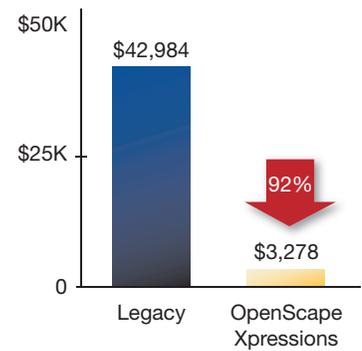


Figure 3

Annual Voice Messaging Savings

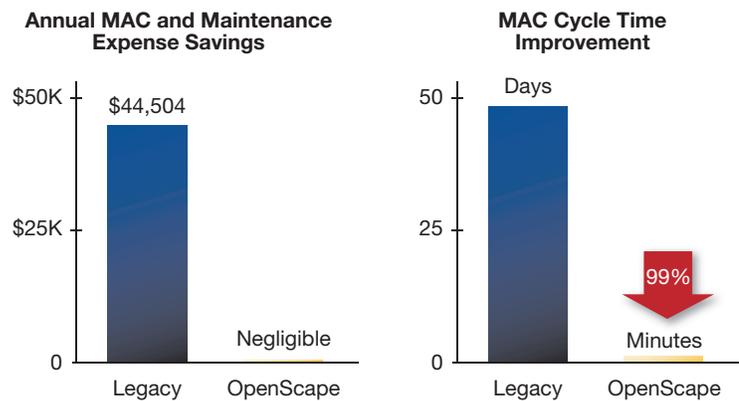


Eliminated Annual Move-Add-Change (MAC) Expenses

With Enfield’s previous Centrex system, the process for moving, adding, or changing phone numbers required the involvement of the town’s facilities staff and could take days to complete. Now, with OpenScape, the process is simple, fast (just minutes), and virtually cost-free. Since the switch to IP, the town is on track to save about \$45K per year on MAC and related maintenance costs. Staffing needs in this area have declined from 2.5-3 FTEs to about 2 FTEs today.

Figure 4

Faster, Less Costly Phone-Number Management



\$54K Annual Reduction in Toll and Mobile Charges

The SIP based, unified communications system means that all local calls are managed over the same network, all but eliminating inter-agency toll charges and lowering long distance expenses. OpenScape UC also allows mobile phone users to connect to the network, which is lowering annual mobile expenses.

Productivity and Service Quality Benefits

The assessment identified a number of productivity and quality-of-service benefits resulting from the switch to OpenScape. These include:

- **Streamlined Interagency Communications.** The integrated system facilitates easier and faster communications between the local school security staff and the Enfield police department.
- **Detailed Reporting.** Built-in reporting tools will help the town track system usage and further control communications expenses.
- **New Voice Messaging Options.** The integrated communications network allows users, including public school teachers, to receive phone messages via email as well as a voice portal.
- **Enhanced Police Communications.** The town deployed the new voice solution to approximately 100 officers, who now have access to voice messaging in their patrol cars. The system’s built-in caller ID feature helps officers help verify who’s calling in.
- **Improved Auditing and Collaboration.** The town clerk now has better call-

“Replacing our old Centrex phone system with a SIP-based communications platform has really paid off for the Town of Enfield. The new OpenScape solution significantly reduced our telephony costs while giving us a host of new communications capabilities.

– Paul Russell, Chief Technology Officer

tracking and auditing capabilities, while the system’s conferencing feature supports better collaboration among staff. In addition, the new auto-attendant solution helps route calls from citizens to the right audience in a streamlined fashion.

- **Improved Infrastructure Preparedness for the Next Generation 911 Initiative.** By moving to a SIP-based communication system, the Town of Enfield laid the groundwork for complying with the Next Generation 911 Initiative, a federally sponsored project to define a new IP-based foundation for the delivery of multimedia 911 calls.

ROI ANALYSIS

According to Mainstay’s assessment, the Town of Enfield is on track to save approximately \$1.43M (five-year net present value) as a result of the move to OpenScape. Factoring in its five-year lease investment of \$695K on OpenScape software, equipment and services, Enfield is projected to realize a return on investment of 106%, providing a payback in approximately 6 months.

Figure 6 summarizes the total costs and benefits of Enfield’s investment, discounted to today’s dollars. Figure 7 provides year-by-year financial details used in the ROI calculation.

Figure 5

Savings on Local Toll and Mobile Charges

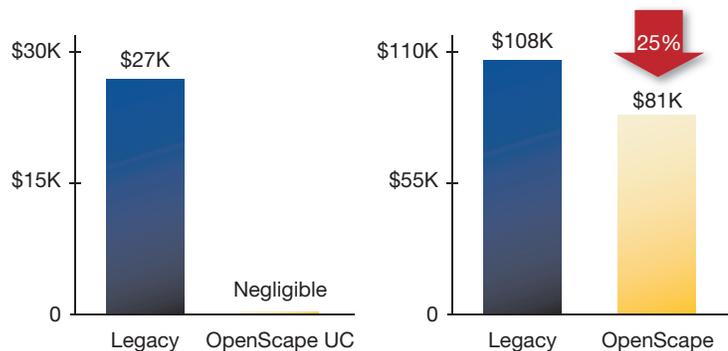


Figure 6

Net Present Value Analysis

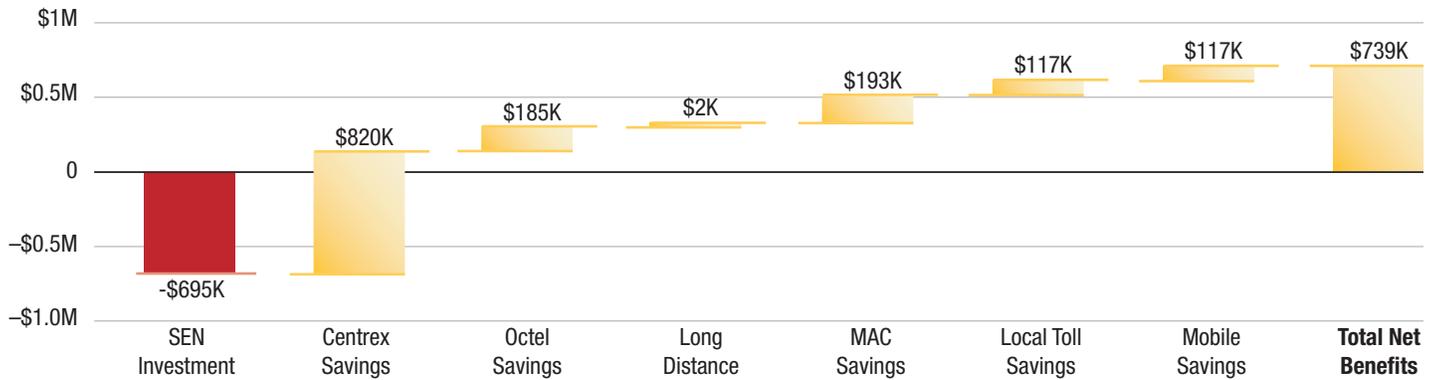


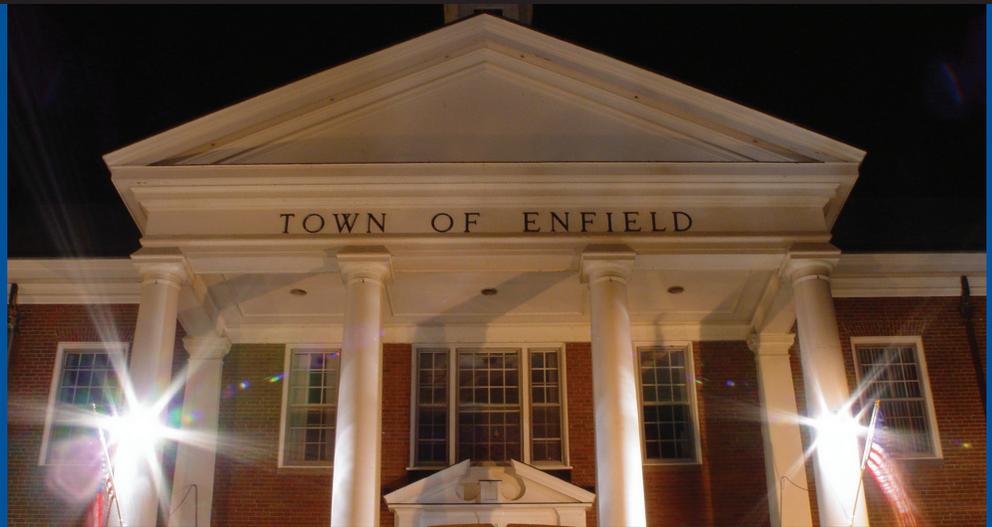
Figure 7

ROI Model

	Initial Investment					
	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Town of Enfield Municipal SEN Investment	\$0	\$68,523	\$68,523	\$68,523	\$68,523	\$68,523
Enfield Public Schools SEN Investment	\$0	\$54,508	\$54,508	\$54,508	\$54,508	\$54,508
Enleasys Powerover Ethernet	\$0	\$37,498	\$37,498	\$37,498	\$37,498	\$37,498
Total Investment	\$0	\$160,529	\$160,529	\$160,529	\$160,529	\$160,529
Centrex	\$0	\$189,384	\$189,384	\$189,384	\$189,384	\$189,384
Monthly Octel (VM) Maintenance Costs	\$0	\$42,984	\$42,984	\$42,984	\$42,984	\$42,984
Long Distance Savings	\$0	\$420	\$420	\$420	\$420	\$420
MAC/Maintenance Savings	\$0	\$44,504	\$44,504	\$44,504	\$44,504	\$44,504
Local Toll Changes	\$0	\$27,000	\$27,000	\$27,000	\$27,000	\$27,000
Mobile Phone Convergence	\$0	\$27,000	\$27,000	\$27,000	\$27,000	\$27,000
Total Benefits	\$0	\$331,292	\$331,292	\$331,292	\$331,292	\$331,292

Summary

Total Investments*	\$695,007
Total Benefits*	\$1,434,321
Net Present Value (NPV)	\$739,314
ROI	106%
Payback	6 months



ABOUT THIS CASE STUDY

Research and analysis for this study was conducted by Mainstay Partners, an independent consulting firm, drawing from interviews with DCI employees, review of planning documents and searches of industry literature. ROI calculations use industry-standard assumptions regarding the time value of money.

Mainstay Partners is the leading provider of independent value assessment and IT strategy services. Our clients include Motorola, Honeywell, Oracle, SAP, Lexmark International, Microsoft, EDS and Hyperion. For more information, please visit www.mainstaypartners.net.

Information contained in this business impact study has been obtained from sources considered reliable but is not warranted by Mainstay Partners.

