



TELIN®



CASE STUDY

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The City of Humble, Texas, was struggling with outdated phone systems, fragmented communications infrastructure across departments, and escalating telecom costs that placed unnecessary strain on the municipal budget. Multiple legacy systems created operational inefficiencies, made support difficult, and prevented the city from leveraging modern communication capabilities that could improve service delivery to residents.



**TELEPHONICS
UNLIMITED INC.**

By partnering with Telephonics Unlimited Inc. and leveraging TELIN's comprehensive SIP trunking, cloud hosting, and 3CX solutions, the City of Humble successfully modernized its communications infrastructure while dramatically reducing telecom expenses. The deployment transformed the city's approach to internal communications, providing standardized equipment across all departments, enhanced security features for first responders, and a foundation for future operational improvements.

KEY

POINTS

- △ Modernized communications infrastructure to support advanced voice and data services.
- △ Enhanced reliability and scalability through a unified, cloud-based architecture.
- △ Streamlined operations and management across multiple locations and platforms.
- △ Achieved significant cost savings while improving overall system performance and uptime.

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Project Overview

1 System

Unified across all departments

Phased

Migration with zero downtime

Measurable

Immediate cost savings

Enterprise-Grade

Reliability & redundancy

Project Details

Organization: City of Humble | **Location:** Humble, Texas | **Sector:** City Government |

Implementation Partner: Telephonics Unlimited Inc.

As a growing Texas municipality, the City of Humble faced the challenge of managing multiple aging telecom systems across various departments. Animal Control, Wastewater Treatment, the Courthouse, Police, and administrative offices each relied on different phone systems and equipment. This created operational silos, inconsistent features, and complex support needs. Over time, maintenance costs increased significantly, adding strain to the municipal budget and making it difficult to maintain unified security and compliance standards.



City of Humble - Municipal government serving the Texas community

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The Challenge

The City of Humble's telecommunications infrastructure presented a complex set of challenges that demanded a carefully planned solution. The primary concern was the high cost of existing telecom services—the city's monthly bills had become increasingly difficult to justify, particularly when compared to the functionality provided. Many services were outdated, legacy systems that lacked the features modern government operations require.

Beyond cost, the city needed to replace aging equipment that was becoming unreliable and difficult to maintain. Different departments operated independently with incompatible systems, making it impossible to implement city-wide policies, security protocols, or standardized procedures. The Courthouse, Police Department, Animal Control, and Wastewater Treatment facilities each had unique setups with different phones, different vendors, and different support arrangements. This lack of standardization meant that staff couldn't easily move between departments, training was duplicated, and the city had to manage multiple vendor relationships and support contracts.

The Police Department presented a particularly sensitive requirement. Officers needed to communicate professionally through the city's phone system, but they also needed privacy—personal cell phone numbers had to remain confidential. The city required a solution that would enable secure, recorded communications for compliance and audit purposes, while ensuring officer safety and privacy.

Adding to the complexity, the city needed to maintain operational continuity throughout the transition. A "big bang" migration approach was risky—if something went wrong, city services could be disrupted. The solution had to allow for a phased, careful migration that could be reversed if necessary. This meant the new infrastructure had to coexist with legacy systems temporarily, creating network integration challenges.

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The Solution

Telephonics Unlimited Inc., working in close partnership with TELIN, designed and deployed a comprehensive communications modernization solution that addressed every aspect of the city's challenge. The solution centered on TELIN's proven 3CX platform combined with enterprise-grade infrastructure and support services that could be tailored to government requirements.

Core Infrastructure

The foundation of the solution was TELIN's Hosting and SIP Trunking services, which provided a reliable, secure backend infrastructure specifically designed for critical operations. Unlike consumer-grade solutions, this enterprise infrastructure was built to handle the demands of government operations with redundancy, failover protection, and service level agreements that guarantee availability. TELIN's 3CX PBX platform was deployed as the central hub, allowing the City of Humble to consolidate all communications through a single, manageable system. This approach eliminated the fragmentation that had plagued the city's previous setup and created a unified platform for all departments to connect through.

To ensure consistent experience across the city, Telephonics standardized hardware on Yealink enterprise IP phones. These professional-grade endpoints provided intuitive interfaces, excellent audio quality, and advanced features that staff appreciated. By standardizing on Yealink across all locations—from the Police Department to Animal Control to the Courthouse—the city simplified procurement, support, and training.

Specialized Police Department Solution

The Police Department received a customized implementation that addressed their unique security and privacy requirements. 3CX's Mobile App was deployed to enable officers to conduct professional business through the city phone system without revealing personal cell phone numbers. This solution allowed officers to make and receive calls, check voicemail, and

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use all system features while maintaining the privacy and security that law enforcement demands. Tailored voicemail extensions with dedicated Direct Inward Dialing (DIDs) were configured to ensure privacy and enable complete call recording and audit trail integration. This comprehensive approach addressed the Police Department's compliance requirements while protecting officer safety.

Network Integration & Security

To securely integrate multiple city locations and ensure reliable connectivity, Telephonics deployed Peplink VPN alongside VPN, STUN, and SBC configurations. This sophisticated networking approach allowed the city's various departments and locations to communicate securely through the centralized 3CX system while maintaining network security and compliance. The architecture was designed to handle the temporary coexistence of new and legacy systems during the migration phase, ensuring no disruption to city services.

Billing & Management Platform

Recognizing that municipalities require detailed visibility into costs and usage, Telephonics leveraged TELIN's white-label billing platform to streamline service management and reporting for the City of Humble. This platform provided transparent, itemized billing that helped the city understand where their telecom dollars were going and identify additional opportunities for optimization.

Implementation Approach

The successful deployment of modern communications infrastructure to the City of Humble required careful planning, coordination, and execution. Telephonics Unlimited Inc. managed the project with input and support from TELIN's expert team, while the city's IT department and department managers provided critical local knowledge and coordination.

Network Assessment & Planning

The project began with a comprehensive assessment of the city's existing network infrastructure, communication requirements across departments, and technical constraints. Telephonics worked with the city's IT team to understand the complex network policies that

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governed how city systems connected, the security requirements for different departments, and the technical limitations that had to be accommodated. This planning phase was critical because it identified potential integration challenges early and allowed the team to design a solution that would work within the city's existing constraints.

Phased Migration Strategy

Rather than attempting a risky "big bang" cutover, Telephonics designed a phased migration approach that allowed the new 3CX system to be deployed alongside legacy systems temporarily. This meant that if any issues arose, the city could continue operating on legacy systems until the new system was fully tested and validated. During this transition period, Telephonics handled full configuration of the 3CX PBX including users, call routing, security settings, and departmental setup. Hardware procurement was managed centrally, and installation occurred in coordinated phases rather than all at once.

Once the new infrastructure was stable and all departments had been trained, Telephonics executed the seamless migration to the new system. This approach transformed a risky undertaking into a controlled, manageable process with minimal disruption to city services.

Specialized Police Department Deployment

The Police Department received particular attention during implementation. Telephonics configured tailored voicemail extensions with dedicated DIDs to ensure privacy compliance and enable full call recording integration. Officers were trained on the 3CX Mobile App, and their personal phone numbers were kept confidential from the public phone system. The implementation included audit trail capabilities to ensure compliance with law enforcement recording and retention policies.

Roles & Responsibilities

The successful implementation was a true three-party collaboration. TELIN provided presales engineering expertise to help Telephonics understand the technical requirements and design the optimal solution. Throughout implementation, TELIN delivered Tier 2 and 3 technical support, ensuring that any complex issues were rapidly resolved by experienced engineers. TELIN also provided taxation assistance and train-the-trainer enablement, ensuring that

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Telephonics and city staff had the knowledge to support the system independently going forward.

Telephonics Unlimited Inc. managed all aspects of 3CX configuration, hardware procurement, and installation, and overall project implementation planning. The company served as the primary point of contact for the city, coordinating all activities and ensuring that the deployment stayed on schedule and within scope.

The City of Humble IT team managed internal network configurations, physical device deployment at each location, and staff data coordination to ensure accurate system setup. Their knowledge of city infrastructure and operations was invaluable in ensuring the solution worked within the city's existing environment.

Impact & Results

The implementation of the modernized communications infrastructure delivered substantial improvements across operational, financial, and strategic dimensions.

Standardized Infrastructure	Cost Reduction	Enhanced Features
Equipment and systems were unified across all city departments, simplifying management, reducing maintenance costs, and enabling consistent training and support.	Elimination of inefficient legacy telecom expenditures delivered immediate and measurable savings to the municipal budget, freeing resources for other city priorities.	Modern communication capabilities, including voicemail-to-email, call recording, advanced call routing, and departmental features, improved operational efficiency and staff productivity.

Improved Reporting	Police Department Security	Operational Reliability
Comprehensive administrative and usage reporting capabilities provided transparency into communications patterns, enabling further optimization and informed decision-making.	Secure, recorded communications with officer privacy protection and full audit trails ensured compliance with law enforcement requirements while safeguarding officer safety.	Enterprise-grade infrastructure with redundancy and failover protection ensures the continuous availability of critical government communications.



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Strategic Impact: By modernizing its communications infrastructure, the City of Humble not only achieved immediate cost savings but also positioned itself for future innovation. The unified 3CX platform provides a foundation for automation, enhanced citizen services, and further operational optimization. The success of this deployment demonstrates that government entities can achieve enterprise-grade communications reliability while reducing costs—a combination that benefits both the organization and the taxpayers it serves.

Partner Impact & Business Growth

For Telephonics Unlimited Inc., the City of Humble project represented a significant milestone in its growth trajectory as a 3CX MSP. By successfully delivering a complex government deployment with multiple departments and specialized requirements, Telephonics gained valuable experience and demonstrated capabilities that opened doors to new market opportunities.

Working with TELIN proved instrumental to this success. TELIN's competitive pricing models allowed Telephonics to offer the city a compelling value proposition without sacrificing margins. The strategic support provided by TELIN—including presales expertise, backend technical support, and train-the-trainer enablement—ensured that Telephonics could deliver an exceptional solution despite the project's complexity. This support model enabled Telephonics to confidently expand its service offerings beyond basic phone system installation into comprehensive managed services.

The white-label billing platform that TELIN provided became a key component of Telephonics' service offering. By leveraging this platform, Telephonics could present a professional, branded billing and reporting solution to the City of Humble while focusing internal efforts on service delivery. This ability to offer a complete package—hardware, software, services, and billing—enhanced Telephonics' positioning in the market and enabled the company to optimize recurring revenue streams.

The successful City of Humble deployment has become a reference point for Telephonics as the company pursues other government and enterprise clients. The combination of technical excellence, competitive pricing, and comprehensive support from TELIN allows Telephonics to compete effectively in the 3CX MSP space and build a sustainable, profitable business model.

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Future Opportunities

The City of Humble views this modern communications foundation as the beginning of a broader transformation in how it serves residents and manages operations. Looking ahead, the city plans to integrate automation solutions into its telephony infrastructure to further streamline operations and optimize departmental workflows. These automation capabilities could include intelligent call routing that directs citizens to the appropriate department based on their inquiry, voice-enabled services for common citizen requests, and integration with the city's customer relationship management systems to provide better service continuity.

Additionally, the unified platform provides opportunities to enhance citizen service delivery efficiency. As the city grows and citizen expectations continue to evolve, having a modern, flexible communications platform positions the city to respond quickly to emerging needs and implement new services. The foundation is now in place for the City of Humble to become a model for how municipal governments can leverage modern technology to improve operations while reducing costs.

"This deployment was complex, but TELIN's support ensured every challenge was addressed. Their presales and backend assistance allowed us to deliver an exceptional solution to the City of Humble and position ourselves strongly in the 3CX MSP market."

— Don Rhodes, Telephonics Unlimited Inc.

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About the Parties



**TELEPHONICS
UNLIMITED INC.**

Telephonics Unlimited Inc. is a trusted telecommunications integrator based in Texas, serving wgovernment, healthcare, and business sectors across the region. The company specializes in designing and deploying modern solutions tailored to the unique requirements of organizations in the public and private sectors. Telephonics offers comprehensive solutions encompassing phone system installations, structured cabling, networking infrastructure, and ongoing technical support. By combining technical expertise with a commitment to customer success, Telephonics empowers organizations with reliable communications infrastructure that enables them to operate more efficiently and serve their stakeholders better.



TELIN is a leading telecom distributor and solutions provider operating across the USA, Canada, and Australia. TELIN has spent nearly three decades building expertise in telecommunications infrastructure and hosted services. As a premier 3CX distributor, TELIN specializes in providing partners with advanced SIP trunking, cloud hosting, VoIP hardware, white-label billing solutions, and comprehensive presales, implementation, and post-sales support. TELIN's mission is to empower MSPs, resellers, and integration partners to scale profitably by providing complete solutions that eliminate complexity and accelerate time-to-market. The company's deep technical expertise, competitive pricing models, and commitment to partner success make TELIN a trusted technology partner for organizations looking to modernize their communications infrastructure.

Ready to Modernize Your Communications?

Discover how TELIN's comprehensive solutions can help your organization improve operations, reduce costs, and enhance service delivery.

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