

City of Upland, California
Notice Inviting Proposals

City-Wide Telecommunications System

The City of Upland is currently accepting proposals for a new City-Wide Telecommunications System. The City may award the contract to a single contractor for the entire system. Specifications and RFP documents are available on the City's website at <http://www.ci.upland.ca.us/>

If you are interested in providing a proposal for this contract for the City of Upland, we are asking that your sealed proposal be received at the Information Systems Department up to the hour of **4:00pm PST, Monday September 14, 2009**. Proposal must be submitted in a sealed envelope plainly marked on the outside - **"SEALED PROPOSAL FOR CITY-WIDE TELECOMMUNICATIONS SYSTEM" - "DO NOT OPEN WITH REGULAR MAIL."**

The work to be done consists of furnishing all materials, equipment, tools, labor, supervision and incidentals required for the above stated project.

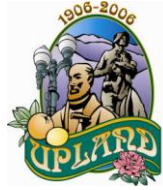
For more information regarding this project, please contact:

Thomas Weiman
ClientFirst Consulting Group, LLC
The City of Upland Telecommunications Consultant
tweiman@clientfirstcg.com

Dated this 28th day of August, 2009

Telecommunication System Request For Proposal

For



The City of Upland, California

The City of Upland, California is seeking a state-of-the-art telecommunications system to serve their facilities located throughout the City.

This document contains the system specifications and the requested format for your proposal. If additional features or equipment are felt to be appropriate for the City's operations, please quote them as options and include supporting justification and cost detail.

The City of Upland reserves the right to accept the Proposal that is, in its judgment, the best and most favorable to the interests of the City; to reject the low price Proposal; to accept any item of any Proposal; to reject any and all Proposals; and to waive irregularities and informalities in any Proposal submitted or in the *Request for Proposal* process.

It is anticipated that the proposals will be opened immediately after the submission time and date. The City reserves the right to award the contract to other than the lowest cost proposal or to reject any or all proposals and to act in the best interests of the City as deemed by the Staff and City Council.

An "Original" proposal document, four (4) complete copies and a copy of the submittal in electronic form must be submitted to:

Mr. Richard Jeganathan, IT Manager
The City of Upland
460 North Euclid Avenue
Upland, CA 91786

Any questions concerning the RFP, must be submitted in writing via e-mail to:

Thomas Weiman
Consulting Services Practice Leader
ClientFirst Consulting Group, LLC
tweiman@clientfirstcg.com

Questions regarding the RFP will be received and responded to until September 9th.

Proposals must be received **by 4:00 PM, PST time, September 14, 2009**, and pricing must be valid for 120 days after that date.

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General Instructions

Written proposals are required by the City for a state-of-the-art telecommunications system as described in the sections below. The proposals should be submitted to the City on or before 4:00pm PST on September 14, 2009. Proposals **MUST** include the General Specifications and Cost Proposal Sheet which is page 47 of this document.

1. Submit to: Mr. Richard Jeganathan, IT Manager
The City of Upland
460 North Euclid Avenue
Upland, CA 91786
2. The proposal, to be awarded in the Sept/Oct timeframe, will be confirmed by a purchase order issued to the successful vendor.
3. The proposal will be awarded based on the overall proposal and in the best interests of the City and prices should be shown for each line item. The City of Upland reserves the right to accept the Proposal that is, in its judgment, the best and most favorable to the interests of the City; to reject the low price Proposal; to accept any item of any Proposal; to reject any and all Proposals; and to waive irregularities and informalities in any Proposal submitted or in the *Request for Proposal* process.
4. Equipment must be new and fully eligible for manufacturer's warranty.
5. F.O.B. inside delivery, The City of Upland, 460 North Euclid Avenue, Upland, CA 91786. Freight should be included in the unit price. Inside delivery to the City.
Pallets must be broken down and boxes disposed of by the selected vendor.
6. The City must comply with the California Freedom of Information Act. The City cannot represent or guarantee that any information submitted in response to the RFP will be confidential. If the City receives a request for any document submitted in response to the RFP, the City's sole responsibility will be to notify respondent of a request for such document to allow the respondent to seek protection from disclosure in a court of competent jurisdiction. No documentation will be provided under FOIA until the contract has been awarded.
7. The proposal shall constitute a binding offer to sell the above-noted product(s) to the City and may not be withdrawn once the City Council of the City has awarded the contract to the successful vendor.
8. The Proposal must be submitted on the City's Proposal Sheet, which is part of this document.
9. Should you have any questions, do not hesitate to e-mail Thomas Weiman at tweiman@clientfirstcg.com.



Instructions to Proposer

- 1.1. **General – The City of Upland, California** (the City) is seeking state-of-the-art, highly reliable telecommunications system that will provide enhanced features and provide the City with superior service at a reasonable cost.
- 1.2. **Background** – The City currently has 6 major locations and 13 separate buildings. All locations are connected together to provide the needed Voice and Data services. The locations are connected together by either dedicated PTP T1's or City owned copper and Fiber Optic Cable.

Today, the primary City locations utilize four (4) Nortel telecommunication systems. The systems are currently located in the City Hall, Police Department Recreation and Animal Shelter. The centralized voicemail system is located in the City Hall. The voice systems use a combination of dedicated copper cable at the City Hall Campus and rented T1's to the remote sites. It is the City's intent to obtain a new telecommunications system that will continue to allow direct connectivity and enhanced communications between all City sites.

The City currently has two building construction projects underway (Animal Shelter and Fire Station 4) that will require additions/changes to provide telecommunications services. Also, the manufacturer of the existing telecommunications system (Nortel) has filed for Chapter 11 Bankruptcy. The City has concerns regarding the continued investment in the Nortel telecommunications system.

The City would like a new telecommunications system that uses VoIP allowing the City to integrate/converge voice and data communications together in the same network. For the purposes of this RFP, the vendors should assume the locations will be connected using rented T1 services for Voice and Data integrated services.

Any proposal for a new telecommunications system must use survivable remote technology for all locations from the primary City telecommunications system.

- 1.3. **System Proposals** - Under this procurement, the City will accept proposals for replacement equipment for the locations mentioned in this document.
- 1.4. **Please list each location separately in your proposal showing proposed equipment and costs.** The City may select certain sites to delay the deployment.
- 1.5. You may propose Voice over Internet Protocol (VoIP) systems. The system is to provide the following high level features and applications:
 - 1.5.1. Capable of supporting ISDN PRI services for inbound and outbound Public Switched Telephone Network (PSTN) services;
 - 1.5.2. Capable of supporting analog PSTN services;
 - 1.5.3. Capable of providing a single centralized voice mail system accessible to serve all users.



- 1.5.4. Capable of providing survivable systems to connect the 6 major locations and the 13 buildings. The systems must function as if they were one.
 - 1.5.5. Capable of providing shared access to local inbound and outbound, and long distance inbound and outbound, services provided by carriers selected by the City.
 - 1.5.6. Capable of providing wireless voice services. Please provide an overview description of the proposed systems' methods of integrating wireless voice services and equipment. Also, please provide a description of the wireless voice technology that you sell that integrates with the proposed system.
 - 1.5.7. Vendors should assume that the City will provide the needed cable infrastructure.
 - 1.5.8. Capable of providing unified messaging services;
 - 1.5.9. Capable of providing analog telephone station, fax, modem, and overhead voice paging connectivity;
 - 1.5.10. Capable of providing auto-attendant and dial-directory functionality for all locations;
 - 1.5.11. Capable of providing Automatic Call Distribution software to provide enhanced call center functionality in the Finance Department;
 - 1.5.12. Capable of providing the hardware and software tools necessary to allow effective management of all communications systems from one location.
- The City is also seeking maintenance and ongoing enhancement and other support services from the selected provider, however the City wishes to manage the day-to-day add, moves and changes internally. The City may wish to manage the system remotely, please describe how this application would work and how you would address security.

1.6. Estimated Time Table

- 1.6.1. The City anticipates the following events in this procurement
 - 1.6.1.1. Vendor selection process and agreement completed October 2009 timeframe.
 - 1.6.1.2. System(s) implementation (Phase 1) completion approximately October 2009.

1.7. Configuration

- 1.7.1. Sections 2 and 3 of this RFP provide further sizing, component, feature and function specifications necessary for the proposer to develop system pricing that must be detailed in Section 6. However, all proposers should note the following:
 - 1.7.1.1. The component quantities detailed in Section 2 and 3 are not necessarily the final quantities the City will purchase. Exact quantities may increase or decrease subsequent to the release of this document.



- 1.7.1.2. While the pricing information provided in response to Section 6 will be used to evaluate the various proposals received, the City will not enter into a contract for those quantities upon contract award, however the detailed component pricing must be valid for 120 days from date of the proposal. Component price decreases are acceptable, but price increases will not be allowed.
- 1.7.1.3. After the contract is awarded by the City to the successful vendor, the selected vendor must conduct a thorough and complete on-site station review. This station review process will identify the following:
 - 1.7.1.3.1. The type and quantity of all telephone stations, by City location, to be installed for City users during the implementation process referred to in Section 1.4.1.
 - 1.7.1.3.2. The telephone station programming, by user, including, but not limited to, telephone numbering, programmed features, call flow, ACD Operation, recordings, detailed automated attendant operation, and voice mail capability.
 - 1.7.1.3.3. Detailed voice system security plan that addresses the liabilities of the proposed system. Each system may require different protection measures; it is our expectation that the selected vendor will provide recommendations regarding protection of this system in the City's environment.
 - 1.7.1.3.4. The PSTN network interface information by customer location to provide for local, long distance, E911, and intra-organization calling.
- 1.7.1.4. The information developed through the station review process will be provided to the City both electronically and in hard copy. The selected vendor will detail the design to the City and gain the City's acceptance before proceeding. Phased implementation will follow.
- 1.7.1.5. The City will not be responsible for any equipment order placed by the vendor prior to the completion and acceptance of the station review process.

1.8. Intent of Request-for-Proposal

The primary intent of this document is to provide the vendor with a reference point to design a complete telecommunications system that will satisfy the objectives of the City. The specifications provided herein are intended to facilitate the communications of the requirements of the City, and are to be considered as the minimum requirements. These system details do not relieve the vendor of any responsibility for providing a technically and operationally workable system.

**1.9. Format of Proposal**

- 1.9.1. The proposal should follow the same outline as this RFP. Thus, each numbered section should have an appropriate response such as **“read and understood and included”** or the pertinent information requested.
- 1.9.2. The proposer should address each point listed in the document directly below the numbered point. In this way, the City will be able to discuss the specific information requested, and review the specific response without a cumbersome matching process. This includes all sections and points in this RFP.

1.10. Vendor Company Information

- 1.10.1. Please provide a description of your company background to include the following:
 - 1.10.1.1. Company financial statements;
 - 1.10.1.2. Age of company;
 - 1.10.1.3. Length of time in the telecom industry;
 - 1.10.1.4. Company ownership;
 - 1.10.1.5. Relationship with the proposed system’s manufacturer;
 - 1.10.1.6. Number of employees;
 - 1.10.1.7. Number of office locations;
 - 1.10.1.8. Addresses of the nearest location to the City;
 - 1.10.1.9. Address of your local office responding to the RFP;
 - 1.10.1.10. Specific company representative assigned to be our contact including name, address, phone, fax and email.

1.11. General Evaluation Criteria

All proposal evaluations will include, but not be limited to, the following criteria:

Table 1.14 – Evaluation Criteria

Criteria
Technical & Call Center Functionality
System Cost
Vendor References
Vendor Background & Experience
Service/Support Record

Costs must be submitted along with your proposal.



2. Data Network Requirements

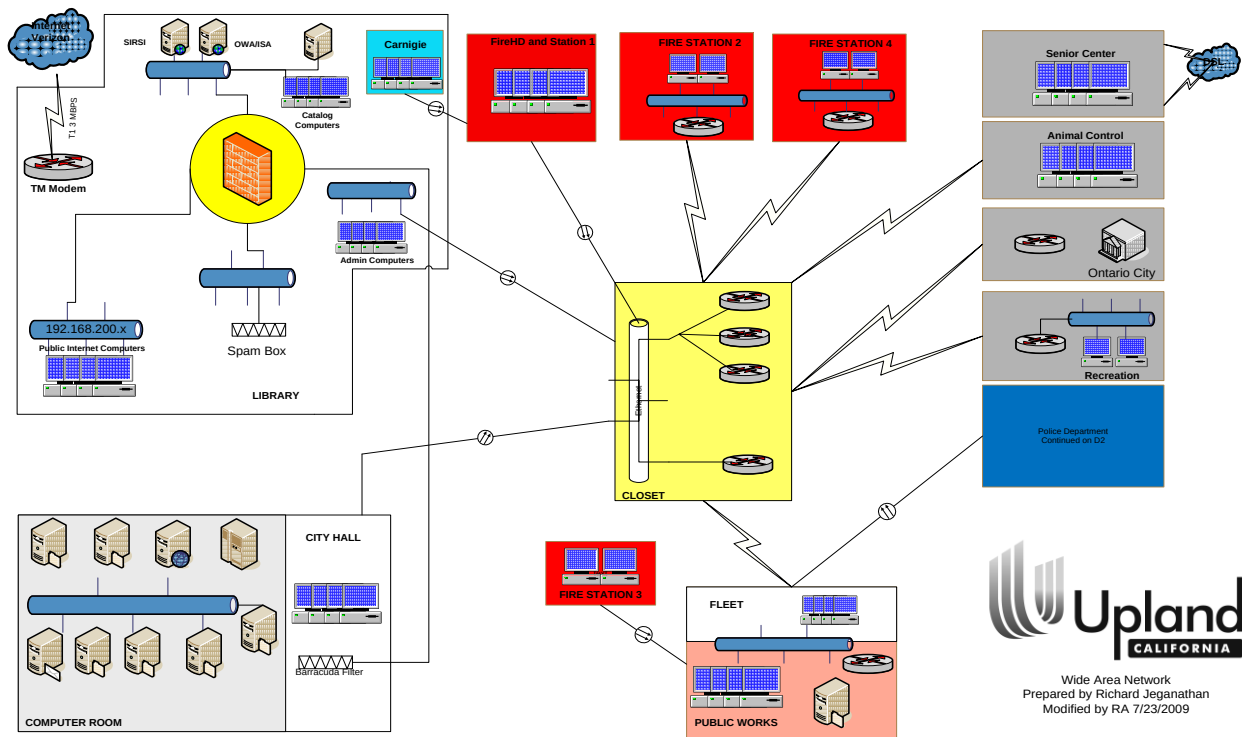
2.1. Overview

The City of Upland wishes to implement VoIP at all 6 major locations and within all 13 buildings. Your proposal must include Power over Ethernet (PoE) switches for all. As a part of this procurement, the vendor will be asked to include pricing for UPS systems for all locations. Each location is to be configured with its own data and voice VLAN. Voice traffic is to be prioritized over the data traffic throughout the City network.

The City of Upland data network generally consists of a mix of 1000Mbps and T1 based WAN connections that interconnects the six (6) locations included in the replacement telecommunications system. The City currently utilizes a mixture of Cisco and Dell 10/100Mb switches at all locations. Replacement switches are to be purchased for all VoIP sites as outlined below. The successful vendor will be responsible for configuration of all replacement data networking equipment to industry standard for VoIP.

We have included a table that summarizes the PoE switch and UPS requirements for the VoIP network infrastructure. We have also outlined the general requirements for each component type below. A separate pricing table is included in the pricing section of the document for the required bill of materials.

The following drawing illustrates the City's existing data network and connectivity (please note the closet shown in the center of the drawing is within the City Hall Building):





2.2. References

- 2.2.1. NEC "National Electric Code, "2002" or revision followed by the authority having jurisdiction at the project location.
- 2.2.2. Local Electrical Codes enforced and followed by the authority having jurisdiction at the project location, City of Upland.
- 2.2.3. NJATC "Configuring and Installing Local Area Networks" Latest Edition.
- 2.2.4. TIA/EIA-568-B.1 "Commercial Building Telecommunications Cabling Standard Part 1: General Requirements" including all current addenda.
- 2.2.5. TIA/EIA-568-B.2 "Commercial Building Telecommunications Cabling Standard Part 2: Balanced Twisted-Pair Cabling Components" including all current addenda.
- 2.2.6. TIA/EIA-568-B.3 "Optical Fiber Cabling Components Standard" including all current addenda.
- 2.2.7. ANSI/TIA/EIA-569-A "Commercial Building Standards for Telecommunications Pathways and Spaces."
- 2.2.8. ANSI/TIA/EIA-606 "The Administration Standard for the Telecommunications Infrastructure of Commercial Buildings."
- 2.2.9. ANSI/TIA/EIA-607 "Commercial Building Grounding and Bonding Requirements for Telecommunications."
- 2.2.10. IEEE Standard 1100-1992 – Recommended Practice for Power and Grounding Sensitive Electronic Equipment in Industrial and Commercial Power Systems (The IEEE Emerald Book).
- 2.2.11. IEEE 802 Committees including:
 - 2.2.11.1. IEEE 802.1 – Higher Layer LAN Protocols
 - 2.2.11.2. IEEE 802.3 – Carrier Sense Multiple Access with Collision Detection (Ethernet)
 - 2.2.11.3. IEEE 802.8 – Fiber Optic Technology
- 2.2.12. BICSI TDMM "Telecommunications Distribution Methods Manual" 9th Edition
- 2.2.13. BICSI "LAN Design Manual" 3rd Edition
- 2.2.14. Cisco's Installation Manuals pertaining to each piece of equipment being installed
- 2.2.15. Federal, state, and local codes, rules, regulations, and ordinances governing the work, are as fully parts of the specifications as if herein repeated or hereto attached. If the contractor should note items in the drawings or the specifications, construction of which would be code violations, promptly call them to the attention of the owner's



representative in writing. Where the requirements of other sections of the specifications are more stringent than applicable codes, rules, regulations, and ordinances, the specifications shall apply.

2.3. Network Equipment - Switches

This Request for Proposal is open to all network equipment suppliers, provided that each supplier and the proposed equipment meet the qualifications outlined in this proposal. All equipment should be 19" rack mountable and hardware for rack mounting should be included in the proposal where required. The proposed switches must meet the following general requirements:

- 2.3.1.1. Separate stacking cables in heights not to exceed one meter.
 - 2.3.1.1.1. Resilient stacking technology preferred but not required.
- 2.3.1.2. A non-blocking architecture for the specified configuration.
- 2.3.1.3. Policy-based QoS with bandwidth management and traffic prioritization.
- 2.3.1.4. TELNET and SSH support for remote switch access and management.
- 2.3.1.5. Layer 3 routing support.
- 2.3.1.6. Multicast support.
- 2.3.1.7. 802.1x edge authentication.
- 2.3.1.8. Boot P/DHCP IP address support.
- 2.3.1.9. The ability to perform access control policies for network control and security at wire speed.
- 2.3.1.10. Link aggregation capabilities and port trunking for Gigabit and 10/100/1000Mb ports.
- 2.3.1.11. IEEE 802.3af compliant on all 10/100/1000Mb TX switch ports.
 - 2.3.1.11.1. All workstation switch ports to be 10/100/1000Mb autosensing.

2.4. Power Requirements

- 2.4.1. 110VAC Power Supplies
- 2.4.2. 110VAC, 60 Hz power supplies with standard electrical cord/plug with NEMA 5-15P or 5-20P specifications, not to exceed 20-amp rating.

2.5. Safety and Emissions Requirements

The proposed equipment must meet the following safety standards and certifications.

- 2.5.1.1. UL1950 3rd Edition, electrical safety certification.
- 2.5.1.2. EN 60950/IEC 950 – ITE Safety
- 2.5.1.3. CSA 950 – ITE Safety
- 2.5.1.4. Compliance with FCC Class A EMI emission standards.



2.6. Interfaces

- 2.6.1.1. Auto-negotiable 10/100/1000 TX ports in the quantity shown in the table below.
- 2.6.1.2. 802.3x flow control on all interfaces.
- 2.6.1.3. Support for 10Base-T / 100Base -TX / 1000Base – TX interface modules.
- 2.6.1.4. Support for 1000Base-X Gigabit interface modules with “pluggable” SFPs.

2.7. Other Features - Layer 2 Features

Spanning Tree

Support for IEEE 802.1d Spanning Tree Protocol (STP).

Support for IEEE 802.1s Multiple Spanning Tree, or Per-VLAN Spanning Tree (PVST), when it is standardized.

2.8. VLAN Support

Support for a minimum of 256 IEEE 802.1q VLANs.

Support for port, protocol, and MAC-based VLANs.

2.9. Link Aggregation - Support for 802.3ad link aggregation to scale bandwidth and protect against link failure.

2.10. Port Mirroring/Spanning - Support for monitoring and troubleshooting of switch ports via port mirroring.

2.11. MAC Addresses - Support for a minimum of 8,000 MAC Addresses.

2.12. Quality of Service (QoS)

The proposed equipment must be capable of supporting delay-sensitive applications such as Voice over IP (VoIP) and streaming media applications. The proposed system must support the following features:

- 2.12.1.1. At least four hardware based priority queues per port.
- 2.12.1.2. Policy-based traffic classification and prioritization based on:
- 2.12.1.3. IEEE 802.1p – Class of Service
- 2.12.1.4. IP Precedence (TOS)
- 2.12.1.5. DiffServ – IP Type of Service
- 2.12.1.6. IP source/destination address or subnet
- 2.12.1.7. TCP/UDP port or socket number
- 2.12.1.8. MAC address
- 2.12.1.9. VLAN membership



- 2.12.1.10. The ability to override the incoming Layer 2 (802.1p) and Layer 3 (IP Precedence/DiffServ) values.

2.13. Security - The proposed equipment must have the ability to:

Support for Secure Shell (SSH) for secure access to the management interface.

Support for RADIUS and TACACS to provide authentication security.

2.14. Device Management - Each device shall capable of being managed by standards based management tools over the WAN, including:

2.14.1. SNMP support.

2.14.2. RMON support.

2.14.3. Port mirroring.

2.15. Standards Compliance - Please provide a comprehensive listing of the standards with which your hardware and software complies.

2.16. UPS Requirements - UPS systems are required in some locations as noted in the required equipment table. The specified UPS systems may be rack mount or floor standing as noted in the table. The proposed UPS systems must meet the following requirements:

2.16.1. A minimum of thirty (30) percent spare capacity.

2.16.2. The ability to power the network equipment a minimum of thirty (30) minutes.

2.16.3. A minimum of four plugs.

2.16.4. A 10/100 TX ethernet management port.

2.16.4.1. SNMP and TELNET.

2.16.4.2. Local or remote (browser-based access).

2.16.4.2.1. Access to electrical levels

2.16.4.2.2. Access to battery alerts and alarms.

2.16.4.3. Network Time Protocol support

2.16.4.4. Access to event logs.

2.16.5. Environment Monitoring.

2.16.5.1. SNMP and TELNET accessible.

2.16.5.2. Ability to monitor temperature and humidity.

2.16.5.3. Ability to alert and alarms based on preset temperature and humidity thresholds.

2.16.6. UPS Management Software

2.16.6.1. The City may determine that purchase of a separate management software package for the UPS systems is necessary.



- 2.16.6.2. Please include literature on any recommended UPS management software in your proposal.
- 2.16.6.3. UPS management software is an **optional** item.

2.17. WAN Components

This Request for Proposal is open to all network equipment suppliers, provided that each supplier and the proposed equipment meet the qualifications outlined in this proposal. The City is most familiar with Cisco products. All equipment should be 19" rack mountable and hardware for rack mounting should be included in the proposal where required. The proposer shall review the current network environment to determine if current equipment is capable of supporting the proposed VoIP telephone system. If the current equipment does not support the proposed solution, the proposer should include the replacement equipment needed at each location. The proposed routers at the remote sites must meet the following general requirements if needed:

- 2.17.1. Capable of a minimum of 2 T1 ports.
 - 2.17.1.1. Auto-negotiating
 - 2.17.1.2. Full or half-duplex
 - 2.17.1.3. Auto-failover and load sharing
 - 2.17.1.4. VLAN – 802.1Q tagging and forwarding
- 2.17.2. Minimum of 2 10/100 TX ethernet ports.
- 2.17.3. VPN acceleration
- 2.17.4. T1 or fractional T1 support.
- 2.17.5. PPP and PPPoE support.
- 2.17.6. Frame Relay traffic shaping and policing.
- 2.17.7. Multi-link support to bond a minimum of 2 T1s together.
- 2.17.8. Layer 3 routing including RIPv1 RIPv2, OSPF, BGP4, static routing, ECMP.
 - 2.17.8.1. ACL, NAT, GRE tunneling,
- 2.17.9. RJ-45 and DB-9 management interfaces.
 - 2.17.9.1. Telnet, FTP, TFTP
 - 2.17.9.2. SNMPv1, SNMPv2c
 - 2.17.9.3. RADIUS, TACACS+
- 2.17.10. Monitoring through SYSLOG, statistics tracking and alarming
- 2.17.11. The proposer will be required to implement Quality of Service (QoS), Priority Queuing and Tagging as appropriate on the City WAN.



- 2.17.12. Please provide power requirements and NEMA plug configurations for all proposed equipment.

2.18. Hardware Racks – Responder to this RFP must include services and equipment for all MDF/IDF's at all locations

- 2.18.1. The City requires that the proposer review all hardware mounting locations during the vendor walk through of facilities.
- 2.18.2. The proposer shall include in their proposal the following items:
- 2.18.2.1. All IDF's must maintain secure and safe housing for network hardware equipment
 - 2.18.2.2. At all locations where network equipment isn't housed in a locked room, please include in the proposal the replacement and mounting of a lockable cabinet.
 - 2.18.2.3. The following locations require locking cabinets:
 - 2.18.2.3.1. FireHD & Station, Fire Station 2, Fire Station 3, Fire Station 4, and Police Department.

2.19. Network Assumptions - Responders to this RFP must provide specific specifications, but can assume The City will provide:

- 2.19.1. Sufficient power and power outlets for all replacement equipment.
- 2.19.2. HVAC for all replacement equipment.
- 2.19.2.1.1. The successful vendor should plan on a four (4) hour routing, QoS and VLAN and QoS design and configuration review session with the City and its consultants.
 - 2.19.2.1.2. The successful vendor will also be responsible for all VLAN and QoS configurations on existing and replacement equipment.

2.20. Equipment Management System – For the purposes of this proposal, please assume that the City does not own a LAN/WAN SNMP management system. The contractor may be asked to provide an equipment management system (EMS) or systems for the City to support the VoIP implementation. The equipment management system will consist of all required software that will manage the configuration of all the City VoIP network components. The City will provide any necessary hardware. Please provide hardware specification data sheet in the response. The EMS will have the following minimum requirements:

- 2.20.1. Scheduled software updates – deploy image and configuration updates to user-specified groups of devices without user intervention.
- 2.20.2. Change control with time stamping for the last configuration change.
- 2.20.2.1. Should the City elect to purchase the EMS, the contractor shall save all final switch and router configurations to the EMS for backup.
- 2.20.3. Ability to log all configuration changes by individual user.



- 2.20.4. Automatic updates to the EMS for any changes to the device configuration data made through command-line or SNMP management processes.
- 2.20.5. Quality of Service configuration of user-specified groups of devices.
- 2.20.6. Status Monitoring – device and component status reporting.
- 2.20.7. Reporting – device, component, and link status and statistics reporting.
Including:
 - 2.20.7.1. Jitter
 - 2.20.7.2. Delay
 - 2.20.7.3. Lost packets
- 2.20.8. Alarm Management – customizable alarm management and error reporting under user-specified conditions with event notification via e-mail, pager, running a script, and audible alerts.
- 2.20.9. Support for multiple users with security that allows users to login to the application and be granted different levels of access to application features.
- 2.20.10. Provide hardware and software support for the EMS system, to include parts, labor, loaner equipment, periodic software updates, and telephone technical support and troubleshooting for a minimum of two years from the delivery date of the system.
- 2.20.11. The contractor shall provide specific details of the hardware and software configuration including metrics for how many switches and VLANs can be supported on a single EMS system and the number of EMS systems that will be required year-to-year.
- 2.20.12. Please include four (4) hours of onsite training the use of the EMS.
- 2.20.13. Should multiple software modules be required to meet the client's requirement for a complete management system, please list all required modules. Also, please list any dependencies between software modules.



3. Voice Requirements

- 3.1. System Locations – Overview** - The City is replacing its existing telephone systems at the locations detailed in Table 3.1. To address the City's needs regarding budget planning, the project has been divided into 2 phases.
- 3.1.1. **Phase 1** – This phase of purchase and deployment includes the City Hall, Library, FD/Station 1, Carnegie House, Animal Shelter and Fire Station 4.
- 3.1.2. **Phase 2** – This Phase includes the balance of the sites listed below.
- 3.1.3. **Phase Pricing Note** - Please develop detailed pricing for each location and grouped in the Phases noted above.
- 3.2. Operational System Integration** – The City will not be replacing the telecommunications system in the Police Department as well as the other locations listed in Phase 2 at the same time as the rest of the City locations. As a result, the City would like to install a telecommunications system that is capable of integrating with the existing Nortel Option 61 providing the ability to integrate a dial plan, integrate call transfer capabilities and potentially integrate a single voicemail solution. Please describe the proposed system's ability to provide these general capabilities. Depending on the implementation at the City Hall Campus, the proposed system should also be capable of integrating in the same manner as described above to the City Hall's Nortel Option 61.
- 3.3.** Under this procurement, the City will accept proposals for a VoIP solution, from any manufacturer capable of meeting both the voice and data communications requirements detailed in this proposal.

Table – 3.1 – The City Locations

Site Group and Phase	Location	Street Address
1 – PH1	City Hall (City Campus)	460 North Euclid
1 – PH1	Library (City Campus)	450 North Euclid
1 – PH1	Fire HD and Station 1 (City Campus)	475 North 2 nd Street
1 – PH1	Carnegie Building (City Campus)	123 East D Street
1 – TBD	Emergency Operations Ctr. (EOC)	123 East D Street
2 – PH2	Fire Station 2	2046 North San Antonio Avenue
3 – PH1	Fire Station 4	790 East 19 th Street
4 – PH1	Animal Shelter	860 East 15 th Street (Current location – this site will be moving)
5 – PH2	Recreation	651 West 15 th Street
6 – PH2	Police Department (*1)	1499 West 13 th Street
6 – PH2	Code Enforcement	130 Mountain Avenue/Suite J
6 – PH2	Public Works	1370 North Benson Avenue
6 – PH2	City Fleet	1360 North Benson Avenue
6 – PH2	Fire Station 3	1350 North Benson Avenue



- 3.4. Major Site Groups** – The City has connected various locations together. Please note the various methods of connectivity as shown on the City’s network drawing.
- 3.5. System Configuration – Current** - Voice communications services today for the facilities are primarily provided through analog and PRI service.
- 3.6. System Configuration – Quantities for Purposes of the RFP**
- 3.6.1. The proposed system must be configured to provide the quantities detailed in Table 3.3.1 below.

The City’s Telecommunications Requirements

	Major Location	Station - Type 1	Station - Type 2	Station - Type 3	Station – Type 4	Ext. Bell	Paging Access	Pay Phone	PRI	Analog Trunks
City Hall (City Campus)	1	6	33	48	4		1	2	1	2
Library (City Campus)	1	2	21	8				1		
Fire HD & Station 1 (City Campus)	1	1	13	6		1	1			
Carnegie Building (City Campus)	1	3	5							
Emergency Ops (EOC) (Carnegie Building)	1	2	30							TBD
Station 2	2		4			1	1			2
Station 4	3		16			1	1			2
Animal Control	4	1	17	1		1				2
Recreation	5	2	6	5				1		2
Police Department	6	6		75	6				1	2
Code Enforcement	6		8	1						
Public Works	6	1	32	14	1	1	1		1	2
City Fleet	6	2	9			1	1			
Station 3	6		4			1	1			
Total	n/a	26	198	158	11	7	7	4	3	14

Table 3.3.1

3.7. Telephone station requirements

- 3.7.1. Type 1 – A single-line analog station ports or instruments. The break-down of their application is as follows:
- 17 Ports will terminate in existing Modems and Fax Machines
 - 2 Ports will be used for Elevator Phones to ring down to the Fire Department Station 1. One will be located in Carnegie Building. One will be in the PD. (This may change if the City is required to provide a separate business line for these stations.)



- 3 Ports will terminate on no-dial stations in HR, Finance, Community Development which will ring down to specific-multiple stations within those departments.
 - 4 Ports will terminate on City Owned Payphones to replace the existing payphones rented from the telephone company. (The City may decide to simply use Type 2 phones for this purpose terminated within each building).
- 3.7.2. Type 2 – A minimum of 2-lines and display plus 8 programmable features, plus fixed or flexible feature keys for message retrieval, conference, forward, transfer and hold capabilities, message waiting notification, headset connectivity, a multi-line display; and a speakerphone.
- 3.7.3. Type 3 – Type 2 - A minimum of 16-lines and/or programmable features, plus the equivalent of a Type 2 set which includes fixed or flexible feature keys for message retrieval, conference, forward, transfer and hold capabilities, message waiting notification, headset connectivity, a multi-line display, and a speakerphone.
- 3.7.4. Type 4 – Conference Room Station. High quality speakerphone designed to provide communication services in conference rooms of various sizes throughout the City locations. Wireless application is preferred.
- 3.7.5. Pay Phone – The City currently pays for pay phones in various locations around the City. The City would like to examine available options regarding the replacement of these rented phones with City owned Pay Phones. Please include in your proposal the cost and description of pay phones to address this need. Other options may also be explored.
- 3.7.6. **One attendant console is also required in the City Hall.** Attendant Console – Please provide a description and optional costs for various alternatives to provide an attendant console.
- 3.7.7. If VoIP telephone sets are proposed, all telephone sets must be provided with a minimum of a 10/100 switch port.
- 3.7.8. State if 10/100/1000 switch port is available and cost of these sets.
- 3.7.9. Section 6 will require pricing on all models of currently available station equipment.
- 3.7.10. Please provide detailed description of the digital displays included with the proposed station hardware. Specifically, we are interested in station sets that provide easily viewable displays with contrasting shades or colors for easy viewing.
- 3.7.11. Wireless Headset Tools – Please provide the operational details and cost for a wireless headset solution to potentially be deployed in various departments in the City. Please describe the headset's functionality as it relates to providing the ability to answer calls, place callers on hold and transfer calls using controls on the headset itself.

3.8. PSTN Trunking Requirements

- 3.8.1. The proposed system must allow both T-1 and ISDN PRI circuits to terminate directly into network equipment. The intent is to utilize PRI as the primary inbound / outbound local service facility; however, T-1 may



play a role in long distance access. The quantities and locations of PRI terminations are detailed in Table 3.3.1.

3.8.2. The systems must be configured to provide analog trunking, as detailed by location in Table 3.3.1. The analog trunks will provide back-up connectivity in the event of a PRI or WAN failure. The analog trunks regardless of their location must be able to work interactively with the PRI services such that the analog facilities are part of the normal inbound/outbound traffic pattern.

3.8.3. Each location as indicated in Table 3.3.1 will have additional analog facilities to provide PSTN access in the event of a PRI, WAN, call processor, router, or any other hardware or software failure of the system. The City is only interested in systems that can provide survivability using these lines.

3.8.4. All DSU/CSU hardware must be included under the itemized costs detailed in Section 6 of this proposal.

3.8.5. In a VoIP environment, please describe the operational impact on the attached PC if any one of the proposed telephone sets would fail.

3.8.5.1. What impact would this have on the network connection through the telephone set to a PC?

3.8.5.2. If the telephone set losses power, would there be an impact on an attached PC?

3.8.5.3. After a telephone set failure, please describe the restart process of telephone set.

3.9. Required Features – The City requires the proposed system to provide the following required features. **For each feature listed, indicate if the feature is “standard” or “optional”.** In a table at the end of Section 3.6.49, please provide a separate, detailed itemization of any feature listed as “optional” and the price to provide the feature. **Also, include any feature indicated as “optional” in the itemized pricing in Section 6, Table 6.1.6.** The feature descriptions are intentionally generic. If the proposed system is incapable of providing a specific functionality as described, provide a detailed explanation on any alternatives available in the proposed system to provide similar functionality.

3.9.1. Abbreviated Dial with Off-Hook Indications - Capability to have a visual indication of the off-hook condition of another station and then automatically dial that station through the depression of an associated key.

3.9.2. Account Codes

3.9.3. Alarm Indication on Attendant Console

3.9.4. Attendant Camp-on



- 3.9.5. Attendant Console Silent button
- 3.9.6. Attendant Console Join key
- 3.9.7. Automatic Attendant Recall – Describe the options available to the City.
- 3.9.8. Automatic Call Back - Describe the trunking application of this service. Will auto-callback queue for a trunk group? Must all callers accessing the trunk group be offered callback queuing?
- 3.9.9. Automatic Hold - On a multi-line telephone, when a called party on an active line answers a second line, the first call is put automatically put on hold, without the called party depressing a hold button.
- 3.9.10. Automatic Route Selection (ARS)
- 3.9.11. Call Accounting System and Call Detail Reporting – Please provide a proposal for a call accounting system. Please provide the following information regarding the proposed Call Accounting System:
 - 3.9.11.1. Describe the specific relationship with the manufacturer.
 - 3.9.11.2. Include the cost of the recommended product in Section 6 of the detailed pricing.
 - 3.9.11.3. Reports for the proposed call accounting system should provide the ability for the City to obtain reports providing calling activities for all stations, allocate calling expenses to various departments, length of calls, frequency of calls to a specific number, internal station-to-station calling, etc. Please describe the functions of both the proposed system(s).
 - 3.9.11.4. The proposed telecommunications system and Call Accounting System should provide the ability for the City to obtain call accounting information for both outgoing and incoming calls. Please provide a description regarding how the system can provide this function.
- 3.9.12. Call Forward-Busy
- 3.9.13. Call Forward-No Answer
- 3.9.14. Call Forward-Variable
- 3.9.15. Call Forward-External Telephone Number - How is this feature activated? Can a remote user deactivate the feature? Can a remote user invoke the feature? Can a remote user program a new external target? Can the system detect a busy/do not answer condition at the external target, and then route to a different, pre-defined, internal or external target?
- 3.9.16. Call Forward-All Calls
- 3.6.12 Call Hold
- 3.6.13 Call Park



- 3.6.14 Call Pickup (Directed and Group) - Please describe any limitations regarding the number of telephones that can be included in a single pick up group. Please describe any limitations on the number of pick up groups the system can provide.
- 3.6.15 Call Routing - Describe in detail the programming sequence for routing busy and unanswered calls. How many destinations or targets (i.e., if A is busy go to B, if B is busy go to C, if C is busy go to D, etc.) can be programmed for external calls? For internal calls? Can the routing be different for external and internal calls? Can different routing sequences be employed dependent on time-of-day? Day-of-week? Can a routing sequence have first an external target, and if that target is busy or does not answer, then look to an internal target?
 - 3.6.15.1 Can routing to voicemail greetings be different for internal and external calls?
- 3.6.16 Call Transfer (Screened and Unscreened) - Specify any limitations on the retention of caller ID, trunk group ID, or DNIS ID information in transferring. That is, will there ever be a loss of caller identification because of multiple transfers of a single call? If so, specify the information that will be lost and after how many transfers will the loss occur.
- 3.6.17 Call Waiting Indication (Visual and Audible)
- 3.6.18 Camp-On (from Other Extensions)
- 3.6.19 Class of Service (COS) - The system should allow a system manager to set access privileges for each extension.
- 3.6.20 Conferencing - What is the total number of callers that can participate in a conference call? How many internal callers? How many external callers? Is there a limit on the number of conferences occurring simultaneously in the proposed system? If so, what is the limit?
- 3.6.21 DNIS Compatibility
- 3.6.22 Distinctive Ringing – Is there a different ring tone for internal vs. external call?
- 3.6.23 Directory - Describe the capability of the proposed digital / IP station sets to provide a name database look-up through the display. Is there a single key depression dialing of a name appearing in the display? Is this functionality transparent between systems?
- 3.6.24 Do Not Disturb
- 3.6.25 Executive Busy Override
- 3.6.26 Incoming Line Identification
- 3.6.27 ISDN Capabilities (BRI & PRI)



- 3.6.27.1 Describe the sequence of events necessary to convert from a T-1 common equipment card to a PRI common card. Does the PRI require additional space on the common equipment shelf? Is additional hardware or software required to make the conversion? If so, please include the price of the required hardware and /or software components.
- 3.6.28 Last Number Redial
- 3.6.29 Line Privacy - When active, this feature should prevent all other parties from breaking into a call.
- 3.6.30 Multiple Ringing Assignment - The system should allow a pilot number to be dialed that will ring a group of telephones simultaneously. Please describe the number of phones that will ring together with this approach.
 - 3.6.30.1 The City has an application in some departments for the system to be able to ring a phone and an external bell at the same time. Please describe the system's ability to provide this capability.
- 3.6.31 Music on Hold - Can Music-on-hold be applied on a station selective basis? The City is evaluating the potential use of a professional marketing firm to develop on-hold message recordings. Please describe how the proposed system would work using these recordings. Please describe the proposed systems' flexibility to allow the City to adjust volume and operation of the pre-recorded on-hold advertising messages.
- 3.6.32 Mute key
- 3.6.33 Night Answer Mode - Explain all available options. The City has an application need to enable the certain departments to have their own night answer operation. Please include the needed equipment and software to allow the City Hall, Fire HD, Library, Recreation, Public Works and Police to have their own night answer arrangement and announcement.
- 3.6.34 Outbound Caller ID – Ability to assign outgoing caller ID individually by station. For example, the customer service group may need to send out the main list number, while the accounting and finance groups may choose to send out their own DID number on outgoing calls.
- 3.6.35 Paging Access – The City has a number of external paging systems in place. The proposed system should provide the ability for these existing systems to be accessed from telephones by dialing an access code for all page and various paging zones. Please include the needed hardware to provide the needed connectivity. City locations with external paging systems include:
 - 3.6.35.1 City Hall
 - 3.6.35.2 Police Department
 - 3.6.35.3 Public Works/Fleet



- 3.6.35.4 Fire 1
- 3.6.35.5 Fire 2
- 3.6.35.6 Fire 3
- 3.6.35.7 Fire 4
- 3.6.36 Priority Queuing
- 3.6.37 Remote Call Forwarding – Ability to invoke or change call forward target from a remote location. That location may be either another phone on the system or at a location not on the system.
- 3.6.38 Remote Diagnostics/Remote Maintenance
- 3.6.39 Save/Repeat Dialing
- 3.6.40 Speed Dialing (System, Group, and Station – specify quantities)
- 3.6.41 Station – to – Station Intercom - Capability to depress a specific key, dial a two-digit code, activate a line associated with a specific key on another station, and on answer establish a talk-path.
- 3.6.42 Station-to-Station Paging – Please describe the options and limitations regarding the proposed system’s ability to provide paging functionality through the speakers on the proposed phones.
- 3.6.43 Station Hunting – Circular - Busy station has a specific station to which calls are routed and hunting sequence is identical each time a call occurs. That is, station A hunts to B, which hunts to C, which hunts to D.
- 3.6.44 Station Hunting – Distributed - Busy station hunts to a group of stations, and the hunting sequence are random. That is, A hunts to B, C, or D based on random selection.
- 3.6.45 Traffic Measurement/Traffic Reports - The proposed system should provide basic traffic information and make this information available through the System Management device provided. This information should be sufficiently detailed so that the proposed administration system can produce traffic reports covering:
 - 3.6.45.1 CCS/hour per trunk
 - 3.6.45.2 Blockage per trunk
 - 3.6.45.3 CCS/hour per trunk group
 - 3.6.45.4 Blockage per trunk group
 - 3.6.45.5 Specific hunt group information
 - 3.6.45.6 Feature utilization
 - 3.6.45.7 Internal station to station calling

For the traffic measurement information listed above, please answer the following questions:



How is this information made available? Can the customer develop customized reports? How long can the system store the information before customer retrieval?

If data storage is limited, can the data be moved to another media type and archived? Please describe the recommended solution to address this need.

What database or software tool format is used for this data?

3.6.46 Transfer Call back to Attendant

3.6.47 Twinning – Please include the ability for the system to provide twinning to interact with the City’s cell phones and PDA’s. The operation should allow City system users, while on a cell phone call, to be able to arrive back at the office, dial a code on the cell (or desk phone) and move the call to/from the desk phone.

3.6.48 Unassigned Numbers - What happens when an internal caller dials an unassigned telephone number? What happens when an external caller dials an unassigned DID number? Please detail all options.

3.6.49 Variable Ring-tones on Telephone Stations- How many ring-tones are available on the proposed digital and/or IP telephones? Can the user change the ring-tones?

3.6.50 Voice Announce Intercom – Ability to dial a one or two digit number and automatically connect to another phone in a hands free mode.

3.6.51 Variable Call Recording – Ideally, the City would like the system to allow internal or external calls to stations be recorded On Demand from any station on the system and allows easy access to retrieving these recordings. Please describe any options for the proposed system to provide various levels of recording capacity vs. recording all calls.

3.6.51.1 Please describe how the proposed system stores the recording, how they are indexed and how the City would retrieve various call recordings.

3.6.52 Interactive Voice Response Unit (IVR) – The City would like to offer its members the ability to “self serve” many of their requests. An example of this may include registration for programs at Recreation, checking water billing balance, etc.

3.7 **Required ACD Features** – the City requires the proposed telephone system to be equipped with the following required ACD features. It is anticipated that this feature will initially be used in the City Hall for the Finance Department. For each feature listed, indicate if the feature is “standard” or “optional”. Include any feature indicated as “optional” in the itemized pricing in Section 6. Due to the wide variety of system features, it is possible that the proposed system might not have all the features listed below. If this is the case, please provide an explanation on any alternatives available in the proposed system to provide similar functionality.



- 3.8.1 ACD Reporting - Include complete feature documentation including the following:
 - 3.8.1.1 LAN compatibility information
 - 3.8.1.2 Archiving capability
 - 3.8.1.3 Average Speed of Answer
 - 3.8.1.4 Report generation capability for a system to support 6 agents
 - 3.8.1.5 Real time agent status
 - 3.8.1.6 "Wrap up" / "Reason" codes
 - 3.8.1.7 Real time abandoned call report
 - 3.8.1.8 Hold time for abandon calls (including short call abandon report)
 - 3.8.1.9 Easy access to historical information
 - 3.8.1.10 Customizable reports (i.e. Crystal Reports, etc)
 - 3.8.1.10.1 Automatic calculation of customized reports. (i.e. agent talk time + total available time added together or any combination (ACW, AUX, Ext call time, on hold time, etc)
 - 3.8.1.11 Real time group objective reports
 - 3.8.1.12 Tracking of overflow calls
 - 3.8.1.13 Report Graphing
 - 3.8.1.14 Describe the proposed systems' ability to provide information regarding the number of calls each agent gets by split
 - 3.8.1.15 Ability to track times when calls were in queue and how many there were and how long they were in queue
 - 3.8.1.16 Status of each agent during times when calls were in queue
 - 3.8.1.17 How many calls each agent receives from each queue type
 - 3.8.1.18 Ability to provide reporting in 15, 30, and 60 minute intervals so the City can review and trend call data during specific times of day
 - 3.8.1.19 Ability to provide reporting over a period of time, not less than 30 days so that the City can review and trend call data during specific days of the month
 - 3.8.1.20 Ability to schedule reports that will run automatically at predefined times, such as daily, weekly, or monthly
 - 3.8.1.21 Call transfer reporting – the ability to report on the number and destination of calls transferred outside of the call center group
 - 3.8.1.22 Ability to provide reporting on inbound and outbound non-DID calls taken or made by ACD agent while logged in



- 3.8.1.23 Ability to prioritize call handling by a call center group based on criteria such as transferring party or DNIS
- 3.8.1.24 Remote Agents – The City may in the future require the ability to have remote telecom users log in and take calls just as if they were in City Hall on one system. These users may have DSL or broadband connectivity to the City network. Please describe the call delivery method for ACD calls using the proposed system and if there is an additional cost for this capability.
- 3.8.1.25 Call taking features, call center functionality, and call center reporting capabilities should be the same for all agents, whether they are in City Hall, or any City locations or a remote agent. Please describe in detail any differences that apply for the three types of agents
- 3.8.1.26 Length of “hold time” for abandoned calls and Short Call Reports
- 3.8.2 ACD Alerts
 - 3.8.2.1 Agent Alerts – The City is interested in allowing the agents to choose between either audible or visual alerts. Alerts should provide the agent with notification of various conditions that exceed certain City definable thresholds. Specifically, the system should provide status of call, current and cumulative group objectives, any queued calls, length in queue, etc.
 - 3.8.2.2 Supervisors Alerts – The City is interested in allowing the supervisors to choose between either audible or visual alerts. Alerts should provide the supervisor with notification of various conditions that exceed certain City definable thresholds.
- 3.8.3 The City is also interested in the optional costs for equipment and/or software necessary to support the following:
 - 3.8.3.1 Wall boards;
 - 3.8.3.2 PC based Wall Board function allowing agents to view their own statistics real time on their PC;
 - 3.8.3.3 Wireless headsets;
 - 3.8.3.4 Pre-recorded agent greeting function – please describe how the proposed system/equipment can provide a short initial greeting prior to the agent handling the call.
 - 3.8.3.5 Agent scheduling/forecasting software (i.e. Blue Pumpkin or equivalent); or other system enhancements to make these vital groups more productive.
- 3.8.4 Agent Licenses – The proposed system should include licenses necessary to provide for agents, groups and supervisors as identified in Table 3.3.1.



- 3.8.5 ACD agents answer calls directed to personal DID while logged in as an agent. A call directed to an agent's personal DID should follow pre-assigned call routing if the agent chooses not to answer. Incoming caller ID information for the next incoming call should be provided to the agent's display while on a call.
- 3.8.6 Dynamic Agent Assignment – Please describe the proposed systems' ability to allow the City to dynamically control agent assignment to various splits.
- 3.8.7 Agents in Multiple Groups
 - 3.8.7.1 Does the proposed system allow agents to be logged in, actively taking calls, in more than one split? If so, does this require multiple log-ins? Multiple lines?
 - 3.8.7.2 Is the agent provided notification prior to answer of which split the call is coming from? If an agent is logged into two splits, does that count as two agents in determining system capacities?
 - 3.8.7.3 Both facilities require the capability to locate agents in various sites – any site that is part of the WAN – and have full ACD functionality including the capability to log into multiple groups. Clearly describe the capability of the proposed system to meet this requirement.
 - 3.8.7.4 The City is interested in having report statistics captured and stored at the agent level providing the capability to identify the agents' call volume by group and skill. Please describe how the proposed system provides this capability.
- 3.8.8 Announcements
 - 3.8.8.1 A single ACD split must be able to answer for multiple customers and multiple applications. The City is interested in supplying customized caller announcements in queue, based on the called number.
 - 3.8.8.2 Each ACD group must be provided with at least three recorded individualized recorded announcements.
- 3.9 **Disaster Recovery Issues**
 - 3.9.1 System Outages
 - 3.9.1.1 When software maintenance is performed on the system, is a restart required?
 - 3.9.1.2 Typically, what will the duration of a system restart be for a system of this size?
 - 3.9.1.3 What, if any manual intervention is required for a restart?
 - 3.9.1.4 In the event of a primary processor failure, is the system configured with a backup processor? If so, describe the processor failover procedure.



3.9.2 Disaster Back-up Service

Please indicate what resources are available to restore service promptly if the equipment is damaged by a disaster such as fire, flood, etc., or after a total system failure.

3.9.3 Software Back-up & Restoration

Describe the process for downloading the system software to a back-up media. What is the recommended media? Do you provide the media? Is the back-up process manual or automatic? Do you provide a remote back up for the telephony programming? The voice mail? Both? Can they be backed-up simultaneously? On the same media? As part of a maintenance contract, will your personnel perform the back up and keep off-site spare?

3.10 Wireless Offerings

3.10.1 The City is interested in reviewing the various unit costs to deploy wireless voice services in various buildings. The vendor should assume the City would provide the needed wiring. Please provide pricing for the following:

- 3.10.1.1 1 - Wireless Handset Cost
- 3.10.1.2 1 - WAP Cost
- 3.10.1.3 1 - Average Installation Cost
- 3.10.1.4 1 - Wireless Headset Equipment

3.10.2 Transmission Characteristics

Provide information on the capabilities and features of wireless technologies associated with the proposed system. Be specific about:

- 3.10.2.1 Frequencies;
- 3.10.2.2 Protocol Supported;
- 3.10.2.3 Security features offered;
- 3.10.2.4 Bandwidth per antenna;
- 3.10.2.5 Signal switching between antennae as users move through a facility;
- 3.10.2.6 Data transmission rates;
- 3.10.2.7 Encryption and frequency security capabilities;
- 3.10.2.8 Quality of Service (QOS) issues;
- 3.10.2.9 Compatible devices such as PDA appliances;
- 3.10.2.10 Any capabilities to use handsets as cellular or PCS stations when outside the range of the wireless system; and,
- 3.10.2.11 All other relevant information.



- 3.10.3 Handset Utilization - Be specific about the functionality of the wireless handset. Can it be used as a freestanding instrument? Can it be used as a “clone” of another hardwired handset? Describe the general limitations of features and functions of the wireless handset as compared to a Type 2 station detailed.

3.11 911 Compatibility

- 3.11.1 Describe how the proposed system will provide street address information to the local Public Safety Answering Point (PSAP). Include any costs - software, equipment and/or telephone utility – required to accomplish this notification in Section 6. It will be the responsibility of the selected vendor to provide for this capability and demonstrate to the customer, through live testing, this capability is operative prior to system cutover.
- 3.11.2 Provide specific documentation indicating your proposed system complies with all 911 regulations of the FCC, the State of California. How can the proposed system provide for 911-location notification by station number? As an option in Section 6, provide the necessary hardware and software to provide this feature. Please include all relevant telephone utility costs.

3.12 System Management - The following System Administration features and capabilities, or functional equivalents, must be provided as part of the proposed system. These features must be available at all locations.

- 3.12.1 Multiple Users - The system must interface to the Local Area Network (LAN) and allow for access and change capability for multiple, simultaneous users.
- 3.12.2 Printing Faceplates – If the proposed telephone sets necessitate face-plate changes to identified programmed changes, the system must provide the necessary software to allow the system to print the faceplate or button designation strips associated with all types of proposed telephone sets.
- 3.12.3 Inventory Information - The system must provide inventory information on the number and type of telephone stations.
- 3.12.4 Trunking Information – the system must provide access to the information required in Table 3.3.1.
- 3.12.5 Alarm Notification – System must provide for an alarm system that notifies both the remote maintenance center described in Section 5.15, and the client, if certain client-programmed system performance thresholds are exceeded.
- 3.12.6 Recent & Past Change History - The proposed system must provide documentation on both recent changes to an element of the system (station, trunks, etc.) and all past changes to an element of the system.

3.13 Handset and Base Cords, and Wall Mount Kits

- 3.13.1 The City may require the use of 25’ handset, 25’ base cords and wall mount kits for a significant number of telephone sets.



- 3.13.2 Please indicate the pricing for these longer cords and wall mount kits in your proposal as an **OPTION**.

3.14 Training

- 3.14.1 Include in your proposal a detailed explanation of the training you will provide for station users, attendant console, as well as the management and system administrators. Please indicate on which functions the system administrator will be trained.
- 3.14.2 The system pricing detailed in Section 6 must include:
- 3.14.2.1 Classroom training, on working telephones, led by vendor provided instructors, for all users, on-site at the City.
 - 3.14.2.2 Train-the-Trainer classes for the City's training staff. (Please note, this is additional training, not a replacement training approach for 3.14.2.1.)
 - 3.14.2.3 System programming, reporting, management and configuration training, led by vendor provided instructors, for 4 management personnel.
 - 3.14.2.4 Please describe additional system administration and technical training that is available. Please include the projected costs for the training classes, where they are held, who provides them and if and what certifications would be provided if the City's staff completes various levels.

- 3.15 **Acceptance** - The City requires an acceptance period of at least 30 days subsequent to the completion of the Cutover. During this 30-day period, the system must perform without interruption of services and in compliance with all representations offered in the vendor's proposal. Should the system or other associated devices fail to perform satisfactorily, the 30-day time frame for acceptance will start over until such time as the system performance is satisfactory for a period of 30 consecutive days. Final payment (including change orders) will be withheld, and the warranty period will not begin, until system acceptance.

- 3.16 **Financial Information** - Detailed pricing information is needed on the system. Provide the following financial data:

- 3.16.1 **The response to Section 6 MUST INCLUDE an itemized schedule of all equipment and software for the proposed system.** The pricing quoted must include **all activities necessary for a complete, turn-key system**, including, but not limited to:
- 3.16.1.1 Complete installation of all system components and software;
 - 3.16.1.2 Complete programming of all system components and software;
 - 3.16.1.3 Complete testing of all system components and software prior to system cutover, including QOS testing;
 - 3.16.1.4 PSTN coordination including



- 3.16.1.4.1 Coordination of PRI and analog trunk installation with the PSTN service provider selected by the City; and,
- 3.16.1.4.2 Coordination of calling plan to allow for 3 or 4-digit dialing between stations;
- 3.16.1.5 On-site station reviews and determination of user requirements;
- 3.16.1.6 Full system configuration documentation provided to the City to include all station features and function, complete trunking configuration information, and complete call flow information by station.
- 3.16.2 Cost detail for any non-standard features and optional items as detailed in the system specifications.
- 3.16.3 Any additional charges, which apply for shipping, and handling. Please specify dollar amounts.
- 3.16.4 A recommended payment schedule must be included. The customer will not consider any proposal with a final payment, due on acceptance of the system, of less than 25%.
- 3.16.5 Add/delete cost schedule for all system components, software, and station equipment - include details on addition or deletion of all network components must be included in Section 6. Include both pre-cut and post-cut prices. Indicate how long the post-cut prices will remain in effect. Pre-cut component pricing must remain in effect through system acceptance.
- 3.16.6 Maintenance costs for the system for Year 1 and for Year 2, as configured. Please show each year separately. Please describe any Parts Labor Warranty included in the proposal. This information should be included in Section 6. Clearly specify the warranty period for all hardware and software components. Maintenance costs should be itemized by component. A specific maintenance cost must be clearly itemized for business day service, on all proposed equipment and software.
- 3.16.7 Equipment Leasing Options – Provide the interest rate and monthly lease rate factor for 3, 5 and 7-year lease options in Section 6.

3.17 References

- 3.17.1 Provide at least 3 references of similar installed systems in the area, using the tables provided below – expanding them as necessary to include all relevant information. The references must be for VoIP system installations, multi-locations customers, with a minimum of 200 telephone stations, and a centralized voice mail system.
- 3.17.2 Provide a listing of all systems for your customers in the Upland area. The City may elect to independently contact any of the organizations listed.



3.17.3 The City may wish to conduct site visits with one or more of the references provided below.

3.17.4 Be advised, references are a major element of the customer's selection criteria.

Reference #1	
Customer Name	
Contact Name	
Contact Address	
Contact Telephone Number	
Contact E-mail	
Installation Date of Comparative System	
Description of Comparative System – please be specific and detailed on # of ACD agents, locations & phones	

Reference #2	
Customer Name	
Contact Name	
Contact Address	
Contact Telephone Number	
Contact E-mail	
Installation Date of Comparative System	
Description of Comparative System – please be specific and detailed on # of ACD agents, locations & phones	

Reference #3	
Customer Name	
Contact Name	
Contact Address	



Contact Telephone Number	
Contact E-mail	
Installation Date of Comparative System	
Description of Comparative System – please be specific and detailed on # of ACD agents, locations & phones	



4. Voice Mail System

The City requires voice mail functionality as part of this procurement. The proposed voice mail system must be compatible and integrate with the system being proposed. The vendor is required to gather configuration information and provide a turn-key installation.

The proposed system should allow the City to define a call coverage-forwarding path depending upon if the call to the station is an internal or external call. It should allow the City to define by Station how the user would like his or her telephone to forward to the coverage point or voicemail. A coverage point is defined as any other phone on the system or the voicemail system. Please explain how the proposed system could deal with this circumstance.

4.1. System Configuration

4.1.1. The City estimates a requirement for 400 initial users of the voice system. Clearly indicate the number of simultaneous calls the system will support as configured, and the overall storage capacity, in hours, as the system is configured. The number of users is greater than the proposed telephone station counts because there are a number of the City employees or departmental functions that require a voicemail box, but do not have a telephone station on the system.

4.1.2. The City requires no less than 12 simultaneous calls.

4.2. Specify the maximum capacity the proposed system provides.

4.3. **Features** - Specifically, the proposed system must have the following features:

4.3.1. Announcement Boxes

4.3.2. Immediately light a message-waiting lamp on the appropriate telephone when a message has been taken.

4.3.3. Automatically turn the message-waiting lamp off when all the messages have been heard and/or delivered.

4.3.4. Provide for automatically forwarding calls from a busy, unanswered, or call forward telephone to the appropriate mailbox without requiring the caller to dial a mailbox number or any additional codes.

4.3.5. If the caller does not wish to leave a message, the proposed system must allow the caller to escape from the voice mail system to a pre-programmed extension number. The system must allow for multiple targets for these "escape" calls. Does the proposed system have any limitation on the number of targets per system? Can the target be a telephone number outside the proposed system?

4.3.6. Allow an external caller to finish a message by simply hanging up. Systems that require the caller to touch a key on the telephone pad to save a message will not be considered.



- 4.3.7. Archive Messages - Describe the options for archiving stored messages and the process to accomplish this function. Clearly define the tasks of both station users and system administrators in the archiving function.
- 4.3.8. Check Receipt of Delivered Messages
- 4.3.9. Capture an optional user-directed playback of caller ID when messages are left in voicemail.
- 4.3.10. Does the proposed voicemail system capture caller ID allowing the user to optionally hear the calling number?
- 4.3.11. Changeable Passwords
 - 4.3.11.1. Can the user change passwords?
 - 4.3.11.2. Can the user be forced to change passwords?
 - 4.3.11.3. If so, can the administrator establish the frequency of the change?
 - 4.3.11.4. If so, by system or by station?
 - 4.3.11.5. What is the minimum password length? Maximum?
 - 4.3.11.6. Will the system provide a "lock-out" after input of invalid passwords?
 - 4.3.11.7. If so, is the number of invalid entries programmable by the user? Or is it system controlled?
 - 4.3.11.8. Can the voice mail password be the same as the user's network password?
- 4.3.12. Forward & Backward while Listening to a Message - Does the proposed system provide the capability to allow a user, when listening to a message, to skip ahead to a later part of the message, or backward to a past part of the message? Please be specific.
- 4.3.13. Guest Mailboxes
- 4.3.14. Group Mailboxes
- 4.3.15. Message Save
- 4.3.16. Message Delete
- 4.3.17. Message Pause
- 4.3.18. Message Privacy
- 4.3.19. Message Replay – explain the options available
- 4.3.20. Message Redirect and Comment
- 4.3.21. Message Respond
- 4.3.22. Message Retrieval Greeting - Explain the available options for the system greeting the caller hears upon retrieving messages. For instance, does the system indicate the number of messages not yet heard?



- 4.3.23. Message Rewind
- 4.3.24. Message Speed - Does the proposed system provide the user the capability to speed up or slow down the replay of the message?
- 4.3.25. Message Undelete
- 4.3.26. Mirrored Mailbox - Does the system provide the capability to store the same message in more than one mailbox?
- 4.3.27. Outbound Notification of Messages - This feature must include notification to a radio paging device, cellular telephone, or other telephony equipment.
- 4.3.28. Priority Notification of messages - This feature must allow a caller to select a priority or urgent status for message notification, and then provide for an alternative notification capability. For instance, a normal message may light a message-waiting lamp, while a priority message will out-call to a radio pager.
- 4.3.29. Priority Queuing of Messages
- 4.3.30. Recent and Past Change History - Describe the capabilities of the proposed system to provide documentation on both recent changes to an element of the system (mailbox, port, etc.) and all past changes to an element of the system.
- 4.3.31. Skip Forward Through Messages
- 4.3.32. Personalized Greetings – Multiple – Provide (at a minimum) the system users with the ability to have a greeting when there is no answer at their phone and another different greeting when they are on the phone, and explain any other options available.
- 4.3.33. Personalized Greetings – Menu - Will the system provide a menu of options in an individual user's greeting? For instance, "If your call is about A, press 1. If your call is personal matter, press 2." If the caller selects 1, the message is recorded simultaneously in two pre-selected mailboxes, or routed to a different mailbox than if the caller selects 2.
- 4.3.34. Scheduled Delivery of Message
- 4.3.35. Speech Recognition - Can the proposed system provide command access through user speech? If so, clearly describe the functionality, features, limitations, and as an option provide pricing for all required system hardware and software components to implement this feature.
- 4.3.36. Message Distribution Lists - Please provide a detailed explanation of the procedure for creating and broadcasting a voice mail message to voice mail users in a distribution list. Clearly define any limitations on the number of distribution lists per user and the number of users per distribution list. Can distribution list be "chained" to effectively increase the number of users per list? Is there a system-wide broadcast capability? If so, how is it controlled and managed for sending and receiving?



4.3.37. Remote Access - The system must allow users to access their mailbox from outside of the system without the assistance of an operator.

4.3.38. System Administrator Reports - Please indicate what types of management reports are available with the proposed equipment. Also, indicate if additional hardware/software is required to generate the management reports.

The City requires these reports to be able to be obtained in both printed and electronic format. Please indicate if this is included and what the electronic format used. If the reports are in a proprietary form, please describe any conversion process.

4.3.39. Variable Settings for Maximum Message Length

4.3.40. Time-of-Day Stamp

4.4. Training

4.4.1. Include in your proposal a detailed explanation of the training you will provide for voice mail users, as well as the system administrators. Please indicate on which functions the system administrator will be trained. At a minimum, these must include station programming and system back-ups.

4.4.2. The system pricing detailed in Section 6 must include:

4.4.2.1. Classroom training, on working telephones, led by vendor provided instructors, for a minimum of 200 users.

4.4.2.2. Train the Trainer Classes for the City's training group. (Please note this is additional training, not an alternative training approach to the Classroom training described in 4.3.2.1).

4.4.2.3. System programming, reporting, management and configuration training, led by vendor provided instructors, for 4 management personnel.

4.4.2.4. Please describe additional system administration and technical training that is available. Please include the projected costs for the training classes, where they are held, who provides them and what certifications would be provided if the City's staff completes various levels.

4.5. Automated Attendant Function – The City will use various Automated Attendant functions for departments throughout the City to handle various types of incoming calls. Direct Inward Dialing will be used in conjunction with this function. The automated attendant should provide functions for the following:

4.5.1. After Hours Announcement and options.

4.5.2. Preprogrammed Alternative for Holidays.

4.5.3. Custom greetings for special events.



- 4.5.3.1. The City's personnel want the ability to prerecord messages and/or greetings for holidays, office closings, etc. and to change from one greeting to another from a remote location, not on the system. Please explain in detail how this would be accomplished.
- 4.5.4. Provide various exits from the Automated Attendant.
- 4.5.5. The system must allow the caller to dial his or her choice at any time during the message.
- 4.5.6. Does the proposed system require callers to end all commands using the # sign? Please describe what the operation is and if there are options regarding this item.

4.6. Message Integration

- 4.6.1. Describe the proposed system's capability to provide for "unified messaging". The City utilizes Microsoft Exchange 2003 messaging system. The City may be migrating to Exchange 2007 in the near future, but vendors should assume 2003. Pricing for unified messaging for all voice mail users must be included in Section 6.
- 4.6.2. Does the proposed unified messaging software integrate directly with Microsoft Exchange? Does it provide direct dialing from the Contact list, if so, please describe how the products integrate.
- 4.6.3. Does the proposed unified messaging software integrate directly with Microsoft Outlook 2003? If so, please describe how the products integrate and what mail protocol options are available.
- 4.6.4. Which electronic mail protocol(s) does the Unified Messaging system support?
 - 4.6.4.1. IMAP, POP3, SMTP, others?
 - 4.6.4.2. Please discuss the pros and cons of each in a Unified Messaging environment with Exchange server & Outlook clients.
- 4.6.5. When a voice message is received in a Unified Messaging environment, will the entire voice message be transmitted to Exchange in addition to header information? If not, what will the user see in Outlook when they have received a voice message?
- 4.6.6. How will the Unified Messaging interface handle roaming profiles (i.e. where a staff member utilizes several PCs to access electronic mail through Outlook)?
- 4.6.7. Storage of the voicemail messages should **not** be on the Exchange server.
- 4.6.8. Will the user be able to listen to voice messages through Outlook Web Access 2007?
- 4.6.9. In the experience of the vendor, on average, how much disk space does an average message consume within Outlook? Are any compression algorithms available to reduce disk utilization?



- 4.7. Financial Information** - Please provide the following financial data:
- 4.7.1. **The response to Section 6 MUST INCLUDE an itemized schedule of all equipment and software for the proposed system.** The pricing quoted must include;
 - 4.7.1.1. Complete installation of all system components and software;
 - 4.7.1.2. Complete programming of all system components and software;
 - 4.7.1.3. Complete testing of all system components and software prior to system cutover, including QOS testing;
 - 4.7.1.4. On-site station reviews and determination of user requirements; and,
 - 4.7.1.5. Full system configuration documentation provided to the City to include all user features and function and complete call flow information by station.
 - 4.7.2. Any additional charges, which apply for shipping and handling. Please specify dollar amount.
 - 4.7.3. A recommended payment schedule must be included. The customer will not consider any proposal with a final payment, due on acceptance of the system, of less than 25%.
 - 4.7.4. Add/delete cost schedule for all system components and software. Include both pre-cut and post-cut prices. Indicate how long the post-cut prices will remain in effect. Pre-cut component pricing must remain in effect through system acceptance.
 - 4.7.5. Maintenance cost for the system, as configured, after the warranty period. Clearly specify the warranty period for all hardware and software components.



5. Maintenance and Warranty

- 5.1. **Warranty** - Provide a copy of the warranty on the proposed system or a narrative description of the provisions of the warranty.
- 5.2. **Factory-Trained Personnel** - Indicate the number of service personnel in the Upland area factory-trained to maintain the proposed system, including the street address of the service location.
- 5.3. **Qualified Personnel** - Indicate the number of service personnel in the Upland area qualified to maintain the proposed system, including the street addresses of the service locations. This should include factory-trained personnel, personnel trained by the vendor and all other individuals who can perform technical services on the system.
- 5.4. **Service Centers** - Provide the locations, and hours of operation, of the service centers to be utilized.
 - 5.4.1. The City may wish to conduct a site visit to the contractors' Service Center.
- 5.5. **Spare Parts** - Provide a general listing of the spare parts available from each of these service centers.
- 5.6. **Maintenance Plans** - Provide details on maintenance service arrangements for the proposed system and the cost for any alternative available including maintenance contracts and per-call maintenance. Provide the monthly maintenance contract price based on the initial equipped configuration including details on how this price is computed. The City is capable of performing some basic maintenance routines. Please provide information on any charges associated with customer provided maintenance.
- 5.7. **Hourly Service Rates** - Indicate the hourly rate the City can expect for service not covered by warranty or service contract for each of the proposed systems.
- 5.8. **Maintenance Cost Escalation** - Provide the rate at which the maintenance contract costs are escalated including any contractual limits in escalation of costs.
- 5.9. **Modification Lead-Time** - Specify the amount of lead-time required for moves, changes, additions, and deletions.
- 5.10. **Repair Response Times** - Describe the expected and guaranteed response time for "regular" and "emergency" services. Indicate what you define to be "regular" and "emergency" service. Guaranteed response times of greater than 4-hours for emergency services, and next business day for regular services, will not be acceptable.
- 5.11. **Service Alternatives** - Indicate the provisions for service and spare parts if your business terminates, is subjected to a strike, or shutdown for any reason.
- 5.12. **Default** - State what recourse is available if the proposed system does not perform as quoted, and the customer is faced with loss or interruption of



service. Be advised that some form of liquidated damages for non-performance and/or system failure will be required in any final agreement.

- 5.13. Number of Installed Systems** - Specify the total number of the proposed system(s) that the proposer has installed in the Upland area.
- 5.14. Performance of Maintenance** - Clearly identify if the proposer or a third party will provide maintenance services. The City will require the right to reject any third parties or sub-contractors under this agreement, and in any event, proposer will be responsible for all maintenance services.
- 5.15. Remote Maintenance**
- 5.15.1. Provide information on the capabilities of the system to interact with the Remote Maintenance Center (RMC) of the proposer.
 - 5.15.2. How does the system notify the RMC of a trouble?
 - 5.15.3. What diagnostic capabilities does the RMC have?
 - 5.15.4. Can the customer communicate directly with RMC personnel?
 - 5.15.5. How frequent is the proposed system polled by the RMC for routine maintenance?



6. Pricing

- 6.1. Pricing** -Expand the following tables as required to provide itemized, component pricing for the proposed system to meet the requirements. The component name should be clear and understandable, not a code or stock number. The Discounted Price must be the actual cost the City will pay for the component, not a list price with a summary discount at the end. Total Price equals the Quantity times the Discounted Price.

Please include any trade in value you can extend to the City for the existing Nortel telecommunications systems and station hardware.

- 6.1.1. Telecommunications system as defined in Section 2, 3 & 4. Include all required components.

Table 6.1.1

Component - Name	Qty	Discounted Unit Price	Total Price	Install Unit Price	Total Install
(List all component parts of the system)					
Phase 1 Locations					
Phase 2 Locations					
EOC Location					
Voicemail System					
Required Telephone Stations					
Unified Messaging					
Call Accounting System					
Nortel System Trade In					
Sub-total – Hardware / Software					
Shipping					
General Install & Training					
Taxes					
Total Purchase Price					

- 6.1.2. Telephone Stations – Provide individual unit and installation costs for all telephone sets available for the proposed system, consoles and soft consoles currently available, if not included in Section 6.1.1.

Table 6.1.2

1.1 Model Number	Unit Price	Install Unit Price	Total Installed Cost



6.1.3. E-911 Station Locator Capability

Table 6.1.3

Component - Name	Qty	Discounted Unit Price	Total Price	Install Unit Price	Total Install
(List all component parts of the system)					
Sub-total – Hardware / Software					
Shipping					
General Install & Training					
Taxes					
Total Purchase Price					

6.1.4. Maintenance Pricing

Table 6.1.4

Component - Name	Qty	First Year Maintenance Costs	Per Unit Monthly Maintenance Cost	Total Annual Second Year Maintenance Cost
(List all component parts of the system)				
Phase 1 Locations				
Phase 2 Locations				
EOC Location				
Total Maintenance Price				

6.1.5.Optional Equipment

Table 6.1.5

Facility	Qty	Discounted Unit Price	Total Price	Install Unit Price	Total Install
(List all component parts of the system)					
Sub-total – Hardware / Software					
Shipping					
General Install & Training					
Taxes					
Total Purchase Price					



- 6.2. Lease Rates** – Complete the following table for a \$1 buy-out municipal lease to finance the hardware/software costs of the proposed system.

Table 6.2 – Lease Rates

Term	Monthly Rate Factor	Effective Interest Rate
36-month term		
60-month term		
84-month term		

- 6.3 Data Network Pricing** – Expand the following tables as required to provide itemized, component pricing for the proposed system to meet the requirements of The City. The component name should be clear and understandable, not a code or stock number. The Discounted Price must be the actual cost The City will pay for the component, not a list price with a summary discount at the end. Total Price equals the Quantity times the Discounted Price.

6.3.1 WAN Equipment – Total Install should include the cost of configuring devices, rack-mounting equipment, connecting cables, validating connectivity and completing test plans.

Table 6.3.1

Component - Name	Qty	Discounted Unit Price	Total Price	Install Unit Price	Total Install
T1 Router – core site	1				
T1 Routers including CSU/DSU	6				
T1 Router including CSU/DSU (spare)	1				
(List all component parts of the system)					
Sub-total – Hardware / Software					
Shipping					
General Install & Training					
Taxes					
Total Purchase Price					



6.3.2 LAN Equipment –

Table 6.3.2

Component – Name	Qty	Discounted Unit Price	Total Price
48 port PoE switches	9		
Interconnect Cables	6		
24 port PoE switches	11		
48 port PoE switch (spare)	1		
24 port PoE switch (spare)	1		
(List all component parts of the system)			
Sub-total – Hardware / Software			
Shipping			
General Install & Training			
Taxes			
Total Purchase Price			

6.3.3 UPS Equipment –

Table 6.3.3

Component – Name	Qty	Discounted Unit Price	Total Price
City Hall	1		
Library	1		
Fire HD and Station 1	1		
Carnegie Building	1		
Fire Station 2	1		
Fire Station 4	1		
Animal Control	1		
Recreation	1		
Police Department	1		
Code Enforcement	1		
Public Works	1		
City Fleet	1		
Fire Station 3	1		
Ethernet Remote Access Interface	13		
Environmental Control Module	13		
UPS Management Software (optional)	1		



(List all component parts of the system)			
Sub-total – Hardware / Software			
Shipping			
General Install & Training			
Taxes			
Total Purchase Price			

6.3.4 Equipment Configuration – Equipment configuration includes all required configuration of VoIP related services for all sites.

Table 6.3.4

Component - Name	Hours	Configuration Unit Price	Total Configuration
Initial configuration and design meeting			
VLAN configuration and testing (all sites)			
WAN QoS configuration and testing			
WAN T1 to wireless failover and testing			
(List all component parts of the system)			
Sub-total – Hardware / Software			
Shipping			
General Install & Training			
Taxes			
Total Purchase Price			



6.3.5 Equipment Installation – Equipment installation includes mounting, basic configuration, testing and conversion to the replacement switches. NOTE: Patch cables to be supplied by The City.

Table 6.3.5

Component - Name	Hours	Configuration Unit Price	Total Configuration
Switch rack installation			
Basic configuration and testing			
Conversion from existing switches to new switches			
Post conversion support (minimum 4 hours)	4		
(List all component parts of the system)			
Sub-total – Hardware / Software			
Shipping			
General Install & Training			
Taxes			
Total Purchase Price			

6.3.6 Communication Equipment Management System –

Table 6.3.6

Component - Name	Qty	Discounted Unit Price	Total Price	Install Unit Price	Total Install
(List all component parts of the system)					
Sub-total – Software					
Shipping					
General Install					
Training (4 hours)	4				
Taxes					
Total Purchase Price					



7. Delivery and Installation

The City anticipates cutover of all locations to be completed in October 2009, and an implementation process as detailed by the vendor in Section 7.1. Please indicate whether this schedule can be met, and identify the tasks including site preparation that the City and the vendor will perform and/or be responsible for in order to accomplish delivery and installation of the system in this time frame. It will be assumed that any task not specifically stated to be our responsibility would be that of the vendor.

- 7.1. Implementation Plan** - Within 5-days of contract award, the vendor must provide a tentative implementation plan with dates necessary to place the system into service. This plan must clearly identify the tasks and resource requirements of the City during the implementation process.
- 7.2. Risk of Loss** - Please state when the customer assumes risk of loss or damage.
- 7.3. System Physical Requirements** - Please indicate the requirements, for each location, for:
 - 7.3.1. Floor Spacing
 - 7.3.2. Floor Loading
 - 7.3.3. Wall Space
 - 7.3.4. Environmental factors such as air condition and ventilation.
 - 7.3.5. Minimum size door opening required for equipment movement.
 - 7.3.6. Specify the electrical and grounding requirements for the proposed system. Indicate what modifications will be needed, if any, at the site to meet those requirements. Unless otherwise stated, the vendor will be responsible for any necessary modifications.
- 7.4. Equipment Reduction** - Explain any penalty or liability charge for reducing equipment or telephone instrument prior to and after installation of the proposed system.
- 7.5. Equipment Delivery** - The vendor will be responsible for making necessary arrangements with the management of the building for delivery of equipment to the premises. The vendor must comply with all building regulations regarding hours, any delivery rigging and method, and location of equipment delivery.
- 7.6. Manuals and Brochures** - Please provide hard copies and electronic versions the following as part of your proposal:
 - 7.6.1. Station user's manual.
 - 7.6.2. Voice mail user's manual.
 - 7.6.3. Any other pertinent reference information.
 - 7.6.4. The City expects the selected vendor to produce a short version of the user guide to be provided to each system user. This guide should be



customized to provide steps to use the features specific to the City's system design and selected feature group.

- 7.7. Manufacturer Relationship** - Please describe your precise relationship with the manufacturer of the proposed system (i.e., dealer, distributor, branch, common parent, etc.). Proposers who do not hold primary full dealership status with the proposed manufacturer and who are dependent on secondary distributor arrangements to obtain product and direct access to manufacturer level engineers are not acceptable.
- 7.8. Manufacturer's Commitment** - The vendor shall make a written commitment to make available maintenance spares, trained personnel, and software support to fully maintain the system for a period of ten years from the date of cutover. **If the vendor is other than the manufacturer, then a letter of similar commitment from the manufacturer must be included in the proposal.**
- 7.9. Warranty** - The Proposer must guarantee all of the installation work to be performed and materials to be furnished under this contract against defects in materials and workmanship for a minimum period of one (1) year from the date of final acceptance of the completed work. The Proposer shall, at their own expense and without cost to the City and within a reasonable time after receiving a written notice thereof, make good any defect in materials and/or workmanship of the installation, which may develop during the guarantee period. Any associated damage to other items and/or finished surfaces caused by the defect shall also be corrected by the Proposer to the satisfaction of the City and at no additional cost.
- 7.10. Software Updates** – Please describe the following regarding available software upgrades:
- 7.10.1. How is the City notified of new software upgrades and tools available for **ALL** the systems proposed?
 - 7.10.2. Does your company require software updates at these intervals or are they included/or optional?
 - 7.10.3. Are software updates included in the maintenance contract?
 - 7.10.4. In the case of VoIP solutions, do you provide recommended/required software updates for all network hardware in addition to the proposed system?
 - 7.10.5. Please provide typical frequency of software updates on an annual basis.
- 7.11. Test Plan** - The Proposer will develop and execute a test plan and final walk through with the owner's project manager in attendance. The test plan and walk through will include:
- 7.11.1. Testing of all connectivity between switches.
 - 7.11.2. Random testing of port connectivity.
 - 7.11.3. Verification of each VLAN.



- 7.11.4. Verification of Internet access.
- 7.11.5. Printed copies of all equipment configurations for the City's project manager review.
- 7.11.6. Conducting a final walk through inspection of the installation with the City's project manager and the preparation of a punch list of items that need attention prior to final acceptance.
- 7.11.7. Completion of the punch list items and the request for a final acceptance walk through with the City's project manager.
- 7.11.8. Final acceptance of the installation.



8. GENERAL SPECIFICATIONS AND COST PROPOSAL SHEET

I offer for your review the following proposal:

Telecommunication System

DESCRIPTION	TOTAL PURCHASE PRICE
Telecommunications System Total Purchase Price (from Table 6.1.1) Please show a total for each Phase of deployment.	
E-911 Station Locator Capability Total Purchase Price (from Table 6.1.3)	
1 st year Telecommunications System Annual Maintenance Hardware and Software Total Price (from Table 6.1.4) (Please show 1 st year Maintenance for each Phase of Deployment)	
Optional Equipment Total Purchase Price (from Table 6.1.5)	
Data Networking WAN Equipment Total Purchase Price (from Table 6.3.1)	
Data Networking LAN Equipment Total Purchase Price (from Table 6.3.2)	
UPS Equipment Total Purchase Price (from Table 6.3.3)	
Data Networking Equipment Configuration Total Purchase Price (from Table 6.3.4)	
Equipment Installation Support - Total Purchase Price (from Table 6.3.5)	
Data Network Communication Equipment Management System Total Purchase Price (from Table 6.3.6)	
GRAND TOTAL	

I understand that, if this offer should be accepted by The City of Upland City Council, this offer and related documentation, and the request for proposal shall become a contract. I agree that negligence on my part in preparing this proposal confers no right to withdraw the offer after it has been accepted by The City of Upland City Council.

Company Name _____

Authorized Signature _____ Date _____

Title _____