



CITY OF LODI

COUNCIL COMMUNICATION

AGENDA TITLE: Request for Proposal to Investigate Various Communication Business Opportunities
 MEETING DATE: February 5, 1997
 SUBMITTED BY: Electric Utility Director

RECOMMENDED ACTION: That the City Council approve the request for proposal (RFP) for services to investigate various communication business opportunities.

BACKGROUND: Due to the rising interest in communications, as well as future City and community communications needs, the Lodi City Council has directed the Electric Utility Department (EUD) to prepare a report addressing the opportunities, costs and benefits of the communications market in Lodi. This RFP has been prepared to select a firm to assist the EUD in meeting this request.

Upon Council approval, the EUD will request proposals from qualified consultants, organizations, and individuals with expertise in broadband communication systems to perform strategic research and develop a business plan.

This RFP is intended to be used to select a firm to prepare baseline information to assist the City in preparing improvements to its communication system as well as evaluating the possibilities for added revenue. The work will encompass preparation of a series of reports addressing options with regard to the City's level of involvement in the development of a communication system, market evaluations, and identification of revenues, costs, benefits, risks and opportunities associated with entering into the communication business. This study will prepare the City in strategic decision-making with regards to entering the communication market with a clear understanding of the associated risks and opportunities.


 Alan N. Vallow
 Electric Utility Director

FUNDING: The funding will be allocated from the City's Contingency Fund.

Prepared by Mel Grandi, Manager, Electric Services

ANV/MG/pn

cc: City Attorney

APPROVED


 H. Dixon Flynn
 CITY MANAGER

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

Technical Specifications

TS.1 PURPOSE

The City of Lodi, Electric Utility Department (EUD) is requesting proposals from qualified consultants, organizations, or individuals with expertise in broadband communication systems to perform strategic research and develop a business plan to address the options, benefits, risks and cost estimates for various roles the EUD could play in the development of a City-owned communication infrastructure to serve the citizens of Lodi. This study should prepare the City in strategic decision-making with regards to entering the communication market with a clear understanding of the associated risks and opportunities.

This RFP is intended to be used to select a firm to prepare baseline information to assist the City in preparing improvements to its communication system as well as evaluating the possibilities for added revenue. The work will encompass the preparation of a series of reports addressing options with regard to the City's level of involvement in the development of a communication system, market evaluations, identifying revenues, costs, benefits, risks and opportunities associated with entering into the communication business. The work will include a discussion of the various options that the City may consider to prepare itself for future communication services that may benefit the citizens of Lodi.

TS.2 BACKGROUND

Due to the rising interest in communications, as well as future City and community communications needs, the Lodi City Council has directed the Electric Utility Department (EUD) to prepare a report addressing the opportunities, costs and benefits of the communications market in Lodi. This RFP has been prepared to select a firm to assist the EUD in meeting this request.

TS.3 EXISTING FACILITIES

Electric Facilities - The City owns and operates an electric system, which under the jurisdiction of the Lodi City Council, provides electrical service to 22,500 customers throughout its ± ten square miles of service territory. The service territory includes approximately 12 miles of (60 kV) transmission lines, 134 miles of overhead and 117 miles of underground distribution lines. Transmission line and street right-of-ways (ROW) may provide routing for long-haul needs of alternate access carriers, complementing the City's own future communication requirements. The overhead electrical distribution system holds the potential for fiber-optic routing throughout the service area to the City's remaining industrial, commercial and residential customers. The areas served by underground electrical distribution may also provide the basis for a complementary fiber-based communication system.

City Facilities - Various City-owned and operated facilities and systems, such as water wells, wastewater liftstations and treatment facilities, storm pumps, parks, police and fire stations, traffic signals, library and government buildings, all have or need various forms of communication facilities.

In the course of normal business, the City is a large user of telecommunications in the normal conduct of business such as mobile radio, cellular radio, substation protection, Supervisory Control and Data Acquisition (SCADA), business telephone and data transfer. New and emerging needs of utility and public safety telecommunications

CITY OF LODI, CALIFORNIA ELECTRIC UTILITY DEPARTMENT

include mobile data, distribution automation (DA), demand side management (DSM), automated meter reading (AMR), control or monitoring of generation, load monitoring and video transmission.

Other Public and Private Facilities - Lodi Unified School District operates various school sites plus their educational support and district offices within the City limits. In addition, a number of commercial and industrial businesses operate multiple facilities within the City limits.

TS.4 **CITY VISION**

The telephone and cable television companies are rebuilding their infrastructures to provide broadband telecommunications. Cellular and Personal Communications Service (PCS) providers are building new wireless voice and data transmission systems. Competitive Access Providers (CAPs) are building fiber-optic broadband systems to consolidate high-volume telephone, data and video services for the benefit of some businesses.

The City is interested in using the proposed communications facilities and services to enhance utility and City government operations. This might include the capability for interactive, two-way connections for delivering government information, government and education services and the possibility of establishing a public network that would connect schools, the hospital, various governmental agencies and other public institutions into a public enterprise network.

The City envisions several telecommunication business opportunities in which Electric Utility could participate. These would include:

- Remote utility meter reading (AMR), turn on and off and automated bill paying.
- Energy management services (customer load control, time-of-use metering).
- Local dial tone (telephone services).
- Video and other home entertainment services (cable TV, video-on-demand, interactive games, etc.).
- Home monitoring/security services.
- Information services (Internet access, etc.).
- Multi-media applications such as personal video, teleconferencing, telecommuting, remote classrooms, etc.
- Emergency broadcast information.
- Local public information.
- Citizen-to-citizen data communications.
- "Virtual" library, museums and universities.
- PCS, cellular and paging links.

CITY OF LODI, CALIFORNIA ELECTRIC UTILITY DEPARTMENT

The City's goal is to maximize utilization of its facilities, reduce operating costs and stimulate the creation of competitive, state-of-the-art communication network.

The City envisions many different ways in which these goals can be obtained, some of which are:

- Leasing vaults, conduits or other infrastructure (minimal involvement).
- Leasing dark fiber or bandwidth (backbone level).
- Joint venture and sharing of costs through joint agreements (mid-level involvement).
- Providing specific services; e.g., local exchange services including long distance access, video, dialtone, electronic bulletin boards, electronic mail, video-teleconferencing, etc. to the City or to the residents and businesses (upper mid-level involvement).
- Developing state-of-the-art, City-owned communication system with services to existing and new customers (upper level involvement).

Ultimately, the City envisions that two-way voice, data and video communication capabilities will be available to all residents, businesses and institutions, with open access to all service providers and users. The City's Request for Proposal (RFP) is intended to explore the range of possibilities and opportunities to achieve these goals.

The City is interested in determining the level of its future commitment to providing communication systems services. The firm selected will be required to prepare a clear and concise evaluation of the rapidly evolving communications marketplace, an evaluation of existing systems, a description of at least five options for City commitment to communication service, and detailed background information and projections to assist the City to decide on implementing one of the options in Lodi.

TS.5 GUIDING PRINCIPLES

The City, through its Electric Utility Department (EUD), has adopted the following principles to guide the development and expansion of communication services within the City. The guiding principles are designed to maximize benefits and minimize undesirable consequences. The City seeks a communications infrastructure that will:

- Minimize disruption to public property and ensure efficient use of the City's streets.
- Ensure reliable communications services at the lowest cost to the City, its residents and businesses.
- Ensure universal access and interconnectivity.
- Ensure maximum number and variety of communications services.
- Enhance the City's economic development programs.
- Receive fair compensation for the use of public property and for City participation.

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

TS.6 SCHEDULE

Work specified under this request for proposal shall begin after a contract has been signed by the selected consultant and a notice to proceed has been issued by the Project Manager.

TS.7 GENERAL QUALIFICATIONS

Proposals submitted shall provide sufficient information to enable the City to evaluate the qualifications of the respondent. The City requires information that demonstrates the technical capabilities and experience of proposers to undertake this project, including: experience of the firm(s) as well as the principals of the firm(s) and key staff member who will do the work; experience with other projects of similar size and complexity; experience in areas such as fiber-optic and/or coaxial cable distribution systems, wireless communications systems, home intelligence systems, cable television, switching technology, remote alarm systems, any other related technologies; and experience in managing networks. If the respondent is a partnership or joint venture, then the experience of all parties involved is relevant. In order to be considered, proposals shall provide the following information:

- 7.1 Brief statement describing the firm's background.
- 7.2 Executive summary demonstrating grasp of RFP and summarizing the proposal.
- 7.3 Description of services to be performed, including an overall understanding of the nature of the project.
- 7.4 Detailed description of the proposed approach for each task.
- 7.5 List of similar analyses and specific experience in the planning and evaluation of communication systems with an emphasis on the use of fiber-optics for communication purposes. For each listed project, provide a customer contact name and phone number.
- 7.6 List of outstanding proposals for communication system activities describing the proposal status and the project involved. For each listed project, provide a customer contact name and phone number.
- 7.7 Corporate organization chart to the level of key personnel proposed for the work. This is to include names of specific individuals of both consultant and subconsultants proposed for this project.
- 7.8 Resumes of each key person to be used for this study, including all subcontracted personnel. The resume shall cover, as a minimum: education, work history/experience, and describe the person's expertise.
- 7.9 List of the portion of the work to be subcontracted and relative experience of any subcontractors.
- 7.10 Five references including contact name, address and telephone number.
- 7.11 Estimate of person hours, dollar costs and approximate schedule for completing the work. The proposals shall include a detailed breakdown of costs by phase and hourly rate of the consultant and any subconsultant. (Respondents are hereby requested to use the City's proposal form.)

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

TS.8 SCOPE OF SERVICES

8.1 Upon direction by the Project Manager, the selected consultant will be expected to provide the City with all services required to determine the best level of involvement for the City in the communication services market and to prepare the City to perform that role. By the end of the project, the City expects to have a clear understanding of the risks and opportunities associated with this enterprise.

An overview of the services to be provided by the selected consultant is presented in the following table. The tasks involved in this project are staged in multiple phases that will be completed sequentially. As shown in the following table, key decision points separate selected phases. After each phase with a decision point, the City will decide whether or not the consultant will move on to subsequent phases. A more detailed description of the required tasks follows the table.

OVERVIEW OF CONSULTANT SERVICES TO BE PROVIDED			
PHASE	TASK	DELIVERABLE	DECISION POINT
1 - Situation Analysis	A - Evaluate Current System B - Assess Others' Experiences C - Technology Assessment	Report, Map(s) Report Report	No
2 - Market Analysis	A - Market Segmentation B - Identify Service Needs C - Analysis of Competition	Report, Map(s) Report, Map(s) Report	Yes
3 - Assess Alternative Levels of City Involvement	A - Define Alternatives B - City Review/Consultant Refinement of Alternatives C - Characterize Alternatives	Memo Report Report	Yes
4 - Comparative Analysis of Alternatives	A - Define Analytical Approach/ Evaluation Criteria B - City Review/Consultant Refinement of Analytical Approach C - Analyze Alternatives D - City Review/Consultant Refinement of Analysis E - Prepare Summary Report/City Selects Best Alternative	Memo Memo Memo Draft Report Final Report	Yes
5 - Business Plan	Write Business Plan	Report	Project Complete

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

8.2 PHASE 1 - SITUATION ANALYSIS

Evaluate the current position of the City in the market to provide communication services and assess similar communication experiences of other cities.

TASK A: EVALUATION OF EXISTING SYSTEMS

Prepare a report with supplementary map(s) that address the following:

1. Analysis of the suitability of the City's existing power system facilities, such as overhead poles and underground ducts, to accommodate the installation of a communication system. This effort is intended to identify opportunities and constraints associated with installing fiber-optic systems on overhead and/or underground facilities.
2. Evaluation of the local cable provider's existing cable system and the local telephone provider's existing system. The consultant will determine how these systems could be used to meet the City's communication system goals. As a part of this process, the consultant will map the locations of these systems. The consultant will also assess the City's legal rights regarding access to the local cable and phone provider's systems.
3. Evaluation of the compatibility of a new fiber-optic system with existing communication systems. In performing this phase of the study, the consultant will coordinate with the City in reviewing existing standard designs, right-of-way, overhead and underground circuits, terminal points and so on.

TASK B: COMMUNICATION SYSTEM EXPERIENCES AND PLANS IN OTHER CITIES

Provide a report on what other cities (within California) are doing in this area.

1. Include plans and current activities of municipal utilities with regard to communication services.
2. Include trends with regard to development of communication services by municipalities.
3. Survey latest information regarding legal and regulatory issues related to the development and implementation of such communication systems and identify how they may effect the City's potential activities in this area.

TASK C: TECHNOLOGY ASSESSMENT

Provide a report summarizing the state-of-the-art in communications technologies that may be appropriate for a communication system in Lodi.

1. Review current communication technologies and trends in their development. Consider the means for integrating different technologies (i.e., coaxial cable, fiber-optics and wireless technologies) into a single network.
2. Identify risks of changes in technologies and technology standards.

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

8.3 PHASE 2: MARKET ANALYSIS

Conduct a preliminary analysis of the communication services market in Lodi. Prepare a report with supplementary map(s) to communicate the results of the analysis.

TASK A: SEGMENTATION ANALYSIS

Identify key segmentation variables and define market segments to which the proposed communication services are to be targeted. Markets may be segmented by customer type (i.e., City Utilities, other City facilities, industrial, commercial, residential, institutional, etc.) and/or customer size (i.e., small, medium, large). The segments should be selected in a manner that will best facilitate this analysis.

TASK B: IDENTIFY SERVICE REQUIREMENTS

For each market segment, estimate the size of the markets for telecommunications services that are currently provided, and for those that are likely to be demanded in the future. Services may include computer data transmission, cable television, telephone and video conferencing services, among others. Growth rates and the intensity of competition within each segment shall be analyzed. Key success factors for each of the segments will also be described.

TASK C: ANALYSIS OF COMPETITION

Identify the likely competitors for communication services in each market segment. Where services are already being provided, the consultant will describe the services provided, the costs of the service, and the amount of market share they have captured. The consultant will also provide an evaluation of their plans.

8.4 PHASE 3: ASSESS ALTERNATIVE LEVELS OF CITY INVOLVMENT

Upon direction by the Project Manager, the consultant will work with the City to define potential roles the City could play in providing communication services to the businesses and citizens of Lodi.

TASK A: DEFINE LEVELS OF CITY COMMUNICATION SERVICES

Evaluate a minimum of five (5) communication system options for the City's use in preparing plans for future communication services. The City has outlined five (5) basic options for purposes of this RFP; however, the consultant may create additional option or make minor modifications to the existing options as deemed appropriate by the consultant. The options defined by the City are:

1. Minimal Level: This option involves only leasing space to outside parties on the City's existing overhead and/or underground electric distribution facilities.
2. Backbone Level: This level of service involves the installation of fiber-optic transmission facilities along existing power system rights-of-way which would, in turn, be leased to users to transmit data from one point to another within the City's service territory.
3. Mid-Level Involvement: This option would involve possible joint ventures and sharing of costs between utilities.

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

4. Upper Mid-Level: This option would include providing high capacity communications services to City facilities and major industrial and commercial customers. The study would address the specific fiber-optic circuits between end points.
5. Upper Level: This option represents the development of a City-owned, state-of-the-art communication system with services to existing and new customers. Such services may include, but are not limited to, computer data transmission, cable television, telephone and/or video conferencing services.

TASK B: CITY REVIEW/CONSULTANT REFINEMENT OF ALTERNATIVES

The City will review the alternatives defined by the consultant. The consultant will work with City officials and refine the alternatives as needed.

TASK C: CHARACTERIZE ALTERNATIVES

Prepare a report addressing costs, benefits, constraints, risks, market penetration, projections, cash flows and opportunities for the City associated with each market segment under each alternative. This report should identify the market(s) targeted by each alternative.

8.5 PHASE 4: COMPARATIVE ANALYSIS OF ALTERNATIVES

Upon direction by the Project Manager, the consultant will conduct a comparative analysis of all the alternatives defined in Phase 3.

TASK A: DEFINE ANALYTICAL APPROACH AND EVALUATION CRITERIA

Lay out a proposed approach for analyzing the alternatives. This approach will define the evaluation criteria that will be used to determine which alternative is best.

TASK B: CITY REVIEW/CONSULTANT REFINEMENT OF ANALYTICAL APPROACH

The City will review the analytical approach defined by the consultant. The consultant will work with the City officials and refine the approach as needed.

TASK C: ANALYZE ALTERNATIVES

Provide City staff with evaluations and support to assist in recommending a course of action with regard to a level of communication system involvement. These services shall include, but not be limited to, the following:

1. Preparation of cost/benefit reports for the options developed in Phase 3.
2. Evaluation of the marketability of communications services to the market segments defined in Phase 2.
3. Evaluation of the compatibility of existing communication systems.

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

4. Evaluation of potential opportunities to coordinate system improvements with the presently operating publicly owned cable television and phone networks.
5. Assessment of impacts with regard to maintaining and/or expanding existing information systems, including a new Internet node and the City's library, hospital and educational systems.
6. Identification of the potential competitors and an evaluation of the plans of other communication providers in the area, including cable television companies, local telephone companies and private fiber-optic companies.
7. Identification of potential opportunities to partner with other organizations, including potential competitors.

TASK D: CITY REVIEW/CONSULTANT REFINEMENT OF ANALYSIS

The City will review the analysis. The consultant will work with the City officials to refine the analysis as necessary.

TASK E: PREPARE SUMMARY REPORT/CITY SELECTS BEST ALTERNATIVE

Provide a final report summarizing the risks, opportunities, constraints, costs and benefits associated with each level of City involvement in providing communication services to the businesses and citizens of Lodi. This effort shall include, but not necessarily be limited to, the following:

1. Preparation of a final summary report to tie together all previous reports.
2. Summary analysis of various options and levels to support conclusions.
3. Recommended level of involvement by the City.

Using the consultant's summary report as a guide, the City will then determine the level of involvement it will pursue.

8.6 PHASE 5: BUSINESS PLAN

Upon direction by the Project Manager, the consultant will prepare a business plan that outlines the steps necessary for the City to carry out its selected role in the provision of communication services in Lodi.

TS.9 RFP RESPONSE REQUIREMENTS

- 9.1 A response to this RFP shall address three specific areas:
 - A. General Qualifications (as listed in TS.7).
 - B. Tasks to be Performed, including:
 - (i) major milestones
 - (ii) durations
 - (iii) deliverables.

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

C. Cost Proposal by Phase and Task, including:

- (i) schedule of hourly rates
 - (ii) distinct estimates of direct salary costs and other reimbursable expenses not included in hourly fees
 - (iii) a "not to exceed" estimate of man-hours by task required to implement the effort, with a "not to exceed" cost for each task and a total "not to exceed" project.
- 9.2 The proposal shall be bound in a single volume and preferably will be no more than 30 pages. Supplementary information, brochures and so on, may be submitted if desired, but should be provided in a separate package.
- 9.3 The City will interview the most qualified respondents at the City's offices at a date and time to be determined later.

TS.10 EVALUATION CRITERIA

The City will consider the following criteria when evaluating each company's proposal:

- 10.1 Ability of consultant to perform the specific tasks outlined in the request for proposals.
- 10.2 The specific method and techniques to be employed by the consultant on the project. Special attention will be paid to additional communication system options and market segmentation schemes included in the proposal.
- 10.3 Qualifications of the specific individuals who will be assigned to this project.
- 10.4 The quality of, and the amount of time spent by, key personnel who will be working on their respective portions of the project.
- 10.5 Demonstrated record of success performed previously by the consultant on similar work.
- 10.6 Reasonableness of the overall cost and the cost of each phase requested to complete this work within the approved schedule.
- 10.7 Willingness and ability to comply with all of the insurance requirements.

TS.11 CITY PARTICIPATION

The City will:

- furnish Auto CAD files of City streets, parcels, utilities (City owned) and major facilities for the consultant's use.
- existing communications facilities and associated invoices.

The proposal shall clearly indicate any other data the consultant expects the City to provide.

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

PROPOSAL

Description of Item

Phase	Task	Consultant	Consultant Hours	Estimated Total Task Cost	Not-to-Exceed Total Task Cost	Not-to-Exceed Project Cost
1 - Situation Analysis	A - Evaluate Current System Internal Analysis					
	B - Assess Others					Phase Total: \$ _____
	C - Technology					
2 - Market Analysis	A - Segmentation Market					
	B - Identify Service Needs					Phase Total: \$ _____
	C - Analysis of Competition					
3 - Assess Alternative Levels of City Involvement	A - Define Alternatives					
	B - City/Review					Phase Total: \$ _____
	C - Characterize Alternatives					

**CITY OF LODI, CALIFORNIA
ELECTRIC UTILITY DEPARTMENT**

Phase	Task	Consultant	Consultant Hours	Estimated Total Task Cost	Not-to-Exceed Total Task Cost	Not-to-Exceed Project Cost
4 - Comparative Analysis of Alternatives	A - Define Analytical Approach/ Evaluation Criteria					
	B - City/Review Consultant Refinement of Analytical Approach					
	C - Analyze Alternatives					
	D - City/Review Consultant Refinement of Analysis					
	E - Prepare Summary Report/City Selects Best Alternative					Phase Total: \$ _____
5 - Business Plan	Write Business Plan					