

CACHE COUNTY
CORPORATION

M. LYNN LEMON

COUNTY EXECUTIVE/SURVEYOR

120 NORTH 100 WEST
LOGAN, UTAH 84321
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COUNTY COUNCIL

DARREL L. GIBBONS

CHAIRMAN

LAYNE M. BECK

V. CHAIRMAN

H. CRAIG PETERSEN

C. LARRY ANHDER

CORY YEATES

JOHN A. HANSEN

KATHY ROBISON

JILL N. ZOLLINGER

CLERK

MEMORANDUM

TO: Jill N. Zollinger
County Clerk

FROM: M. Lynn Lemon
Cache County Executive/Surveyor

SUBJECT: FILING CONTRACT OR AGREEMENT



The attached 02-49-01 is herewith submitted for filing.

Please complete and return execution checklist to my office. Certified copies of this document are to be forward to:

1. County Auditor
2. County Attorney
3. County Executive
4. John Peterson
5. none
6. none
7. none

MLL:pwpp

In Dec has copy -

Clerk - Please put 02-39-01 in agreement 02-39-01 - we will not be filing an agreement under that number - Thank You -

TERMINATION AGREEMENT

This TERMINATION AGREEMENT (this "*Agreement*") is made as of 9/18, 2002, by and among InGeo Systems, Inc., a Delaware corporation (the "*Company*") and the Cache County Corporation, a political subdivision within the State of Utah (the "*County*").

A. The Company and the County are parties to a certain Agreement Regarding Software and Technical Services (the "*Strategic Agreement*") attached as Exhibit A to this Agreement.

B. The parties, having mutually agreed as of January 4, 2002, to work toward the conclusion and termination of the Strategic Agreement, now wish to terminate the Strategic Agreement and to release each other from any liability or claim arising from the Strategic Agreement, except as expressly set forth in this Agreement.

NOW, THEREFORE, for good and adequate consideration, the receipt whereof is hereby acknowledged, the parties hereto, intending to be legally bound, agree as follows:

1. Termination of Strategic Agreement. The Strategic Agreement is hereby terminated, cancelled, and extinguished and is made of no further force or effect. Without limiting the foregoing sentence, each of the parties agrees, understands and acknowledges that it will have no further rights and be subject to no further obligations set forth in the Agreement, including without limitation rights or obligations of maintenance, service, improvements and upgrades, technical support, installation and customization, and source code. Each of the parties for itself and its respective directors, officers, shareholders, officials, employees and agents hereby releases the other party and its respective directors, officers, shareholders, officials, employees and agents from all obligations, covenants, conditions, representations and liabilities, any and all demands, causes of action and claims, of every type, kind, nature or character, direct or indirect, known or unknown, absolute or contingent, determined or speculative, at law, in equity or otherwise which relate to, or arise out of the Strategic Agreement.

2. Mutual Indemnification. Each of the parties for itself and its respective directors, officers, shareholders, officials, employees and agents (the "*Indemnifying Parties*") hereby indemnifies and holds harmless the other party and its respective directors, officers, shareholders, officials, employees and agents (the "*Indemnified Parties*") from (a) any misrepresentation or breach of warranty on the part of, or from the nonfulfillment of any covenant or agreement to be performed by, the parties hereto in any way relating to the Strategic Agreement, and (b) any and all demands, causes of action, claims, proceedings, investigations, audits, demands, assessments, fines, judgments, costs and other expenses (including without limitation, reasonable attorneys' fees and expenses) incident to any such misrepresentation, breach or nonfulfillment.

3. Ownership of Materials; Limited License. Each of the parties understands, agrees, and acknowledges that as between the Company and the County, notwithstanding any provision of the Strategic Agreement to the contrary, any and all of the joint ownership rights, title and interest in and to the System, as such term is defined in the Strategic Agreement, together with (i) any and all of modifications, upgrades, enhancements, and customizations

thereto existing as of the date of this Agreement, and (ii) any source code, database schema, and database reports existing as of the date of this Agreement, shall be separately owned by each of the parties. Each party shall have the nonexclusive right to market, sell, copy, sublicense, distribute, disclose, transfer, assign, disassemble, decompile, reproduce, modify, alter, translate, or create derivative works based on (collectively, "Use") the System. A party's Use of the System shall not give right to any right or obligation of such party to the other party of any kind or nature whatsoever. Neither party shall have any obligation to maintain, service, improve and upgrade, provide technical support for, install, or customize the System. Each party accepts the System "as is." Neither party makes any representation or warranty regarding the System, including without limitation warranties of merchantability, fitness for a particular purpose, and infringement. Neither party shall make any representation or warranty in its sales and marketing effects for on behalf of the other party, whether express or implied, of any kind whatsoever. Neither party shall be responsible for damages of any kind, nature or amount relating to the Use of the System except as set forth in this Section. Each party (the "indemnifying party") shall the indemnify and hold harmless the other party and its directors, officers, shareholders employees and agents (the "indemnified parties") for any loss of any kind whatsoever arising out of relating to (x) a breach of the indemnifying party's obligations set forth in this Agreement, or (y) the indemnifying party's Use of the System. Concurrent with the execution of this Agreement, the Company shall deliver to the County the current version of the source code for the System.

4. Communications. Any communication relating to this Agreement must be in writing and must be either personally delivered, mailed by first class mail (postage prepaid and return receipt requested), sent by reputable overnight courier service (charges prepaid), or faxed (with hard copy to follow) to the recipient at the address or fax number indicated below:

Communications to Company:

TODD HOUGAARD
INGED SYSTEMS INC.
1300 N 200 E #104 LOGAN UT 84341
Fax:

Communications to County:

M. LYNN LEMON, COUNTY EXECUTIVE
120 N. 100 W.
LOGAN, UTAH 84321
Fax: (435) 716-7172

or such other address or to the attention of such other person as the recipient party will have specified by prior written communication to the sending party. Any communication under this Agreement sent by fax or by overnight courier will be deemed to have been given when sent or, if mailed, three business days after deposit in the U.S. mail.

5. General Provisions.

(a) Amendment and Waiver. The provisions of this Agreement may be amended and waived only with the prior written consent of each of the parties.

(b) Attorneys Fees. In the event of a dispute hereunder, the prevailing party's reasonable attorney's fees and costs shall be promptly reimbursed by the other party or parties to such dispute.

(c) Choice of Law. This Agreement shall be governed by and construed in accordance with the domestic laws of the State of Utah, without giving effect to any choice of law or conflict of law provision or rule (whether of the State of Utah or any other jurisdiction) that would cause the application of the laws of any jurisdiction other than the State of Utah.

(d) Complete Agreement. This Agreement, those documents expressly referred to herein and any other documents between the parties of even date herewith embody the complete agreement and understanding among the parties and supersede and preempt any prior understandings, agreements or representations by or among the parties, written or oral, which may have related to the subject matter hereof in any way.

(e) Counterparts. This Agreement may be executed in separate counterparts, each of which is deemed to be an original and all of which taken together constitute one and the same agreement.

(f) Headings. Captions and headings are for convenience only and will not affect the construction or interpretation of any provisions of this Agreement.

(g) No Strict Construction. The language used in this Agreement is the language chosen mutually by the parties hereto and no doctrine of construction shall be applied for or against any party.

(h) Severability. Whenever possible, each provision of this Agreement will be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement is held to be invalid, illegal or unenforceable in any respect under any applicable law or rule in any jurisdiction, such invalidity, illegality or unenforceability will not affect any other provision or any other jurisdiction, but this Agreement will be reformed, construed and enforced in such jurisdiction as if such invalid, illegal or unenforceable provision had never been contained herein.

(i) Successors and Assigns. This Agreement shall be binding upon and inure to the benefit of the parties and their successors and assigns.

[Remainder of page left intentionally blank]

IN WITNESS WHEREOF, the parties hereto have executed this Termination Agreement as of the date first written above.

THE COMPANY:

INGEO SYSTEMS, INC., a Delaware corporation

By: Todd R. Hougaard
Its: President & CEO

THE COUNTY:

By: M. Lynn Lemon
Its: COUNTY EXECUTIVE

EXHIBITS:

Exhibit A -- Strategic Agreement

AGREEMENT REGARDING SOFTWARE AND TECHNICAL SERVICES

This Agreement is entered into by and between the Cache County Corporation, a political subdivision within the State of Utah (hereinafter "County"), and Smart Map Systems, L.L.C., a Utah limited liability company with principal offices in North Logan, Utah (hereinafter "SMS").

WHEREAS, the County has developed and is using an electronic property tax roll system (hereinafter the "Tax Roll System"); and

WHEREAS, the County is interested in developing for its use the following three additional subsystems (1) an electronic Property Card System that will be linked to the Marshall and Swift building cost tables; (2) a Computer Assisted Mass Appraisal System; and (3) a Geographic Information System (all three of which subsystems, together with the Tax Roll System, shall collectively be referred to as the "System"); and,

WHEREAS, SMS is engaged in the business of computer assisted mapping applications and the development and maintenance of software applications such as those described herein, and has submitted to the County its proposal for the development, maintenance and integration thereof, in the form of the "Proposal for Developing an Integrated Geographic Information System and Computer-Assisted Mass Appraisal System for Cache County", a copy of which is attached as Exhibit "A" hereto and incorporated by this reference as though fully set forth herein (hereinafter referred to as the "Proposal"); and,

WHEREAS, although the County wishes to assure its continued use of the Tax Roll System and other subsystems referred to herein, as they are developed, it does not wish to work alone toward its further development or improvement, nor does it wish to maintain and support the Systems on its own, but instead wishes to obtain the services of SMS to develop the new systems and continue to make all of the Systems available to the County, to maintain the Systems, and work toward certain improvements or upgrades thereto on in cooperation with the County, and SMS is willing to do so pursuant to the terms of the Proposal, augmented by this agreement; and

WHEREAS, the parties hereto acknowledge that SMS intends to develop, revise and modify the Systems and the programming in connection with them in order to accomplish further improvements and upgrades to the Systems, for which it will require certain elements of the Systems' present programming and configuration, and the parties hereto wish to allow all future development and application of the System, including the ownership of the System as it now exists, to accrue to the benefit of SMS and the County, in exchange for its services and other consideration called for herein;

IT IS THEREFORE AGREED AS FOLLOWS:

1. Acceptance of Proposal; Payment Requirements; and Commencement. The County hereby accepts the Proposal and the County and SMS agree to the terms and conditions of the Proposal, subject to the terms and conditions set forth in this agreement. If there is any conflict between the Proposal and this Agreement, this Agreement shall be deemed as containing the controlling terms and conditions. SMS agrees to perform its obligations as set forth in this agreement and the Proposal in all due diligence and shall use its best efforts to complete the System within one year of the date of the execution of this Agreement. For the work to be performed hereunder by SMS, the County shall pay to SMS the sum of TWO HUNDRED FIFTY-NINE THOUSAND SIX HUNDRED TEN DOLLARS (\$259,610.00). SMS will initially be paid FORTY THOUSAND DOLLARS (\$40,000.00) by the County at the time of signing this agreement, for startup costs for the project and incurred costs thus far. SMS will invoice the County for the remaining budget on a monthly basis, by task, as work is performed. The County shall remit payment within fifteen days of invoice date. Payment will consist of the invoiced amount less a Five Percent (5%) retainage of the invoiced amount, which said 5% shall be retained by the County until satisfactory completion of the project by SMS. Upon the County's approval as to a satisfactory completion of the project by SMS, which approval shall not be unreasonably withheld, SMS will bill the County for the said retainage from the project. Upon such notice, the County shall remit the said retainage within fifteen days. Work on the project by SMS shall commence upon execution hereof, and the parties hereto anticipate that the billings, by task, shall be allocated as set forth in Exhibit "B" attached hereto and incorporated herein by this reference. In addition, the County shall be responsible for all acquisition costs and maintenance of all hardware and third party software required for its use in connection with the System.

2. Term for Relationship of Parties. Subject to the parties' respective perpetual ownership rights in the System as set forth herein, and except as otherwise specifically provided herein, all terms and conditions of this Agreement will continue in full force and effect for a period of six (6) years from the date of the execution of this Agreement.

3. Continuing Maintenance and Support of the System. During the six year term of this Agreement, the parties shall jointly maintain and support the System (with the County's primary responsibility being to maintain and support the Tax Roll System,) with no additional charge for such maintenance and support. The County shall assure the continuing availability of trained personnel, sufficiently familiar with, and trained with respect to the Tax Roll System, to provide the ongoing required input and expertise on such system, in order to accommodate the initial System development and the ongoing periodic upgrade, improvement, and maintenance of the System.

4. Upgrades and Improvements. Any additional application, upgrade or software support that extends beyond the scope anticipated by the Proposal, or specifically provided for in this Agreement, shall be provided to the County at an additional cost to be agreed upon by the parties at the times the requests for such improvements or upgrades are given by the County to SMS. The cooperative relationship that is created by this Agreement will continue beyond the completion of the System throughout the term hereof. SMS will continue to work toward the

improvement of the System, as such improvements become practical and desirable. The County agrees to cooperate and assist SMS in any reasonable manner in the further development of any such improvement or upgrade, including the suggestion of possible upgrades or additional applications of the System or its components.

5. System Ownership. The County owns the Tax Roll System described above, and hereby conveys a 50% ownership interest in the Tax Roll System to SMS, subject to the completion of the System and its availability for implementation as set forth herein. The rest of the System's various components are to be mutually owned by the County and SMS in equal shares (50/50,) as developed; provided, however, that SMS retains and is given exclusive rights to distribute, sell, or otherwise license the System or any component part thereof for use by third parties. If, for any reason, any legal challenge is brought alleging the County does not own the Tax Roll System, the County agrees to defend such action, and indemnify and hold SMS entirely harmless.

6. Marketing Agreement. Subject to the County's rights after termination, as set forth in Paragraph 7 below, the County hereby confirms and grants to SMS the perpetual right (which right shall be exclusive except to the extent that the County shall have concurrent rights after termination hereof, as set forth herein) to distribute, sell or otherwise license the System or any component part for use by any other party. The County agrees to assist in a limited and reasonable manner with SMS's marketing efforts where the County is entitled to a share of the proceeds. SMS agrees to keep complete and accurate financial records relative to the sales and collections of sales of the System, and shall make such records available to the County at any reasonable time for inspection. The parties agree throughout the six year term hereof that 11% of the gross sales proceeds (not profits) collected from sales to Counties situated within the State of Utah will be paid by SMS to the County. SMS will pay such sums owed to the County by July 1 and January 1 for the preceding 6 month periods, and shall include a full accounting of applicable System sales and collections for such period. The parties agree and acknowledge that SMS will establish the price for any distribution, sale or licensing of the System or any of the component parts, and that the price can reasonably vary based on the size of the purchaser or licensee, but that SMS will operate in good faith so as not to distribute the System or its component parts for less than a fair market value in an attempt to undercut the County by reducing the distribution proceeds and gaining on the maintenance proceeds. In order to better enable smaller counties to purchase the System, the County may choose, on a case by case basis, to waive all or any portion of the 11% of sales proceeds for sales to such counties.

7. Continuation and Termination of Agreement. At the conclusion of the initial term of six years, this Agreement will be automatically renewed for successive terms of one year each, up to a maximum total term of ten years. If either party desires to terminate this Agreement, they must do so by providing written notice to the other party by certified mail, return receipt requested, at least six months prior to the end of the then current term. Upon termination of this Agreement a complete copy of the source code shall be provided to both parties; however, the County will be restricted from distributing or disclosing in any form (including any sale, license,

donation, sharing, trading, or any other form of transfer,) the System or any part thereof (including source code and any documentation thereof,) to any person or party not employed, retained by, or otherwise associated with the County, for a period of ten years. In the event, however, that SMS shall terminate this Agreement without good cause, then the County shall only be so restricted for a period of four (4) years. Any County employees, consultants, or associates who have access to the source code for the System or any part thereof, during such period of time when the County is so restricted, and during the term of this Agreement, will be required to agree in writing to comply with the same terms of non-disclosure, distribution or competition, as set forth in this Paragraph 7.

8. **Items Not Included.** The system does not include GIS viewing and editing software products, including but not limited to, ARC/INFO™, ArcView™, SmartMapView™, SmartView™, or MapInfo™. Some of these products will be required for end user viewing, data editing, data update and overall use of the System, but they are separately licensed software products and therefore are not included in this agreement, nor is the support required for these products included. The parties acknowledge that some of these products will be required for the maintenance and use of the System and will need to be separately purchased by the County.

9. **GIS Area of Focus.** The Geographic Information System (GIS) efforts by SMS shall be to develop the databases and GIS programs required to construct and maintain databases that support the valuation of land (i.e., not buildings/structures) for the Computer Assisted Mass Appraisal system (CAMA). These GIS databases that result from this effort will be derived from existing Land Parcel data now available from Logan City.

10. **Third Party Sales, Technical Support, Installation, Customization.** SMS shall be entitled to all proceeds, profits, and fees paid by third parties for System setup, data conversion, System installation, training, maintenance or any other revenues associated with selling, supporting, customizing, modifying, or maintaining the System to or for third parties. The parties acknowledge that although it is intended that the System be sold as a single system, (on the database and computer platform developed, such as the database being Microsoft SQL Server and the server operating system being Microsoft Windows NT Server, with end-user applications running on Windows 95 computers,) many clients will require modification to meet their specific needs and existing systems, and clients outside of Utah may require a completely different tax-roll component of the system.

11. **Coordination of Source Code.** A single version of the source code for the System shall be maintained by SMS in one location and the updating or changing of any part of the System would be coordinated by and only under the direction of SMS; provided, however, that the County shall be free to modify source code for its own applications, and at its own risk and expense, so long as such source code modifications do not interfere with the use of the source code otherwise developed for the System. This coordination would be documented by the use of a standard source code coordination system. An example of this type of source code protection and coordination software is Microsoft's Visual SourceSafe program. This program allows

version control of software source code being accessed and used by multiple programmers and protection of individual parts of the software. This provides a further level of maintaining security and enforces coordination. This centralization will help streamline system documentation, simplify the testing process, provide a framework for "bug" tracking and resolution, coordination of enhancements and simplify upgrades and changes. Inasmuch as the system is owned on a 50/50 ownership basis, both parties will contribute to the further development and enhancement of the System to the mutual benefit of both Cache County and SMS.

12. Miscellaneous Provisions.

(a) **Relationship of Parties.** The services to be provided hereunder by SMS on behalf of the County shall be provided as an Independent Contractor/Consultant, and SMS shall be responsible in all respects for its employees, which employees shall not be regarded as employees of the County. Similarly, the County shall be responsible for its employees or other consultants.

(b) **Access to Facilities and Records.** The County shall provide to SMS and its employees reasonable access to such public and private lands and buildings as may be required by SMS to perform its services hereunder; and, the County shall make available to SMS such records and information as shall be reasonably required to perform such services.

(c) **Entire Agreement; Modification; Waiver.** This agreement constitutes the entire agreement between the parties pertaining to the subject matter contained in it and supersedes all prior and contemporaneous agreements, representations, and understandings of the parties. No supplement, modification, or amendment of this agreement shall be binding unless executed in writing by all the parties. No waiver of any of the provisions of this agreement shall be deemed, or shall constitute, a waiver of any other provision, whether or not similar, nor shall any waiver constitute a continuing waiver. No waiver shall be binding unless executed in writing by the party making the waiver.

(d) **Counterparts.** This agreement may be executed simultaneously in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(e) **Parties in Interest.** Nothing in this agreement, whether express or implied, is intended to confer any rights or remedies under or by reason of this agreement on any persons other than the parties to it and their respective successors and assigns, nor is anything in this agreement intended to relieve or discharge the obligation or liability of any third persons to any party to this agreement, nor shall any provisions give any third persons any right of subrogation or action over against any party to this agreement.

(f) **Assignment:** This agreement shall be binding on, and shall inure to the benefit of, the parties to it and their respective heirs, legal representatives, successors, and assigns; provided, however, that neither party hereto may assign any of its rights, or delegate any of its duties, hereunder without the prior written consent of the other party.

(g) **Specific Performance:** Each party's obligation under this agreement is unique. If any party should default in its obligations under this agreement, the parties each acknowledge that it would be extremely impracticable to measure the resulting damages; accordingly, the nondefaulting party, in addition to any other available rights or remedies, may sue in equity for specific performance or injunctive relief, and the parties each expressly waive the defense that a remedy in damages will be adequate.

(h) **Recovery of Litigation Costs:** If any legal action or any arbitration or other proceeding is brought for the enforcement of this agreement, or because of an alleged dispute, breach, default, or misrepresentation in connection with any of the provisions of this agreement, the successful or prevailing party or parties shall be entitled to recover reasonable attorney's fees and other costs incurred in that action or proceeding, in addition to any other relief to which it or they may be entitled.

(i) **Notices:** All notices and demands under this agreement shall be in writing and shall be deemed to have been duly given on the date of service if served personally on the party to whom notice is to be given, or on the second day after mailing if mailed to the party to whom notice is to be given, by first class mail, registered or certified, postage prepaid, and properly addresses as follows:

To the County at:

Lynn Lemon
Cache County Executive
120 North 100 West
Logan, Utah 84321

To SMS at:

Smart Map Systems, L.L.C.
Todd Hougaard
1770 North Research Parkway, Suite 140
Logan, Utah 84341

Any party may change its address for purposes of this paragraph by giving the other parties written notice of the new address in the manner set forth above.

(j) **Governing Law:** This agreement shall be construed in accordance with, and governed by, the laws of the State of Utah.

(k) **Authorization.** The individuals executing this agreement, and the parties for whom they sign, hereby represent that they are and have been duly authorized to do so on behalf of the party for whom they are signing, and that the execution hereof does not constitute a violation of any applicable law, ordinance, or regulation affecting such party or its conduct, and further does not constitute a breach of any contract with any third party or infringe upon the legitimate contract or ownership rights of any third party with respect to the subject matter hereof.

(l) **Ambiguities.** This Agreement was drafted jointly with the assistance of each of the parties' attorneys and therefore any ambiguities are not to be construed against any one party. Any ambiguity should be construed in favor of the apparent intent of the parties hereto.

IN WITNESS WHEREOF, the parties hereto have set their hands, effective the date and year first set forth above.

CACHE COUNTY:

SMART MAP SYSTEMS, L.L.C:

By: M. Lynn Lemon
Lynn Lemon, County Executive

By: Todd Hougaard
Todd Hougaard, Managing Member

EXHIBIT "A"
(Proposal)

A Proposal For

Developing an Integrated Geographic
Information System and Computer-Assisted
Mass Appraisal System

for
Cache County, Utah

Prepared for:

Cache County, Utah
179 North Main
Logan, Utah 84320

Prepared by:

Smart Map Systems
1770 North Research Park Way, Suite 140
North Logan, Utah 84341
Phone (801) 755-9837

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Executive Summary

Smart Map Systems LLC, proposes to assist Cache County in upgrading their tax-roll system and to develop three additional computer systems. These three systems are: first, a geographic information system (GIS), second, an electronic property card system, and third, a computer assisted mass appraisal (CAMA) system. All three of these additional systems will be integrated with the tax-roll system to create one complete system. The project entails the following tasks:

- Documentation of existing systems
- Construction and maintenance of a geographic (GIS) database
- Development of a property card database that links to building cost tables from Marshall and Swift
- Development of a CAMA system that integrates the tax-roll, GIS, and property card system
- Training of staff to use the new system

This integrated system will increase the efficiency of the County staff by:

- Eliminating the existing manual property card system
- Computerize most County mapping functions
- Provide data and tools to perform county-wide mass property appraisal
- Centralize the management of all the information systems in the data processing department.

The GIS would be developed to include all thirteen tasks outlined in the County's GIS implementation plan. The emphasis of the GIS would be to develop the parcels database and the land classification maps to support mass appraisal functions.

All new systems would be completely tested, documented, and have user manuals. The system would initially be installed in the Assessors and Recorders offices where staff would be trained to use the new system. Installing the system in these two offices would provide the most rapid return on the County's investment.

Smart Map Systems specializes in integrating GIS with other information systems and delivering easy to use end-user applications to use those systems. Smart Map Systems would work closely with County staff and officials to design and develop the systems to meet their specific needs.

This project, which would take one year to complete, would cost \$89,970 for the GIS portion of the project. The development of the property card and CAMA systems and integrating these systems with the GIS and tax-roll would cost \$169,640. The new system would be designed and fully tested to insure compatibility with existing systems and to meet the needs of County officials and county staff.

Introduction

The Cache County tax-roll system needs to be updated in the next 23 months to properly handle information for the year 2000. Recent reviews by the Cache County data processing department has found this looming problem and preparations are being made to modify and update the system. The County Assessors Office also has the need for a geographic information system or GIS, a computerized property card system, and a computer assisted mass appraisal or CAMA system. The required upgrades to the tax-roll provides a unique opportunity to not only develop these additional systems, but also to integrate them directly with the tax-roll.

Smart Map Systems proposes to develop and integrate three information systems; a GIS, an electronic property records system, and a CAMA system. These three new systems would be directly integrated with the County tax-roll system to create one Cache County information system. Integrating these individual systems into one system will not only eliminate several manual systems and thereby increase productivity, but will also increase County tax revenues through more current property appraisals.

Developing an integrated tax-roll, GIS, property card, and CAMA system is a significant undertaking that will require the resources and expertise of staff outside of the County data processing department. Smart Map Systems will provide the additional expertise and work closely with the data processing staff to develop a completely integrated system. The data processing staff would be primarily responsible for upgrading the tax-roll and the Smart Map Systems staff would develop the following programs:

1. Develop and maintain the Cache County GIS with the Records and Assessors offices
2. Develop an electronic property card system
3. Develop a CAMA system that links the property card, GIS, and tax-roll systems

Integrating the tax-roll, GIS, and property card system will not only provide a more complete, unified, and easier to maintain system, but will also provide many other benefits that would otherwise not be possible. Foremost among these benefits is the opportunity to develop the CAMA system. A CAMA system will allow the assessors office to more frequently and accurately appraise and value all properties in the county thereby resulting in increased revenues. Additional benefits of the new and integrated systems include the following:

- Upgrade the tax-roll system to make year 2000 compliant
- Automate manual mapping tasks
- Provide electronic map, tax-roll and other information to other county offices

- Eliminate redundancies in the county databases
- Eliminate tedious, manual, and paper-based property record keeping in the assessors office
- Integrate most key information systems within the county
- Centralize the management and maintenance of county information systems
- Increase service to citizens by increased access to county map information
- Increase tax revenues by more frequently updating property values
- Allow the appraisers in the Assessors office to be more efficient and productive in locating and valuing properties

The purpose of this proposal is to describe the approach and methods for developing an integrated tax-roll, GIS, property card, and CAMA system for Cache County.

Proposed Project Scope

The proposed scope of work for this project can be divided into five tasks:

- Upgrading the Cache County Tax-roll System
- Developing the Cache County GIS
- Development of the Property Card system
- Development of the CAMA System
- Integrating the Cache County Information Systems

The work required to complete these five tasks will require a cooperative effort between the Cache County Data Processing Department and Smart Map Systems staff. These two groups would meet together frequently to set standards, coordinate activities, and collaborate on specific tasks for the overall system development. The tax-roll system would primarily be the responsibility of the data processing staff. The GIS, property card, and CAMA systems would be the primary responsibility of Smart Map Systems. The overall integration of the systems would be designed from the beginning and maintained throughout the project.

Upgrading the Cache County Tax-roll System

The details of the required upgrades to the tax-roll system are not included in this proposal. This work is already underway and alternatives are being developed by the data processing staff. Some preliminary discussions of recommended software and hardware configurations have already taken place.

Developing the Cache County GIS

Cache County has not yet developed a geographic information system (GIS). A GIS implementation plan was developed for the County in 1996 that outlined the tasks to be completed and those tasks' priorities. The GIS to be developed by Smart Map Systems will address all thirteen of the tasks outlined in the implementation plan (listed in Appendix 1). However, the primary focus of the GIS is to develop specific databases that support and work with the property card, tax-roll, and CAMA systems. Because the databases to support these systems do not yet exist in the County, and developing the complete databases for the County would take too long and cost too much, Logan City and the surrounding area would be the primary areas developed in the GIS.

Because the determination of land values by the Assessors office is primarily a mapping question, the GIS system will be developed to directly support the property card and CAMA systems. An integrated GIS and CAMA system will allow the County Assessor and appraisers to quickly and

easily determine value on virtually any property in the County. This valuation will do more than any known CAMA system because it will include a determination of land values and be linked to the building valuation in the property card system.

The requirements for geographic data will be defined with the assistance of staff in the Assessors office. Each of these data sets can be thought of as information that can be mapped or factors that affect the value of land. It is anticipated that this information may change but some of the data that are known to be required include the following:

- Parcels
- Building footprints
- Green belt
- Land classification
- Data from outside sources including soils, geology, irrigated lands, etc.
- Land "guidelines"
 - Cities
 - Zoning
 - Districts
 - Neighborhoods
 - Subdivisions
 - Commercial areas
 - Others as required

Development of the Property Card System

The Assessors office presently maintains a manual property card records system. Each individual property card stores information from five different sources. These sources are: land values (based upon several land guidelines), building cost values that are calculated by the appraisers using Marshall and Swift software, an Apex building sketch program to calculate building square footage, photographs of the building(s), and property descriptions from the tax-roll. The Assessors office has determined that they can significantly increase their productivity by integrating all five of these data sources and methods into one property card system.

The new property card system will contain all of the information that is necessary to establish building values and to analyze building values on a county-wide basis.

The new property card system will contain the following:

- General building information (type of use, classification, year built, # of bedrooms etc.)
- Building sketch (also will provide input of building footprints into the GIS)
- Building photographs (imaging system to replace paper photographs)
- Integration with Marshall and Swift building cost tables

- Integration with the tax-roll system

Development of the CAMA System

The CAMA system will contain both query and analysis functions. Because the CAMA is integrated with the GIS, many of the query and visualization functions will be geographic rather than simply plain text queries. The currently know functions include:

- Links to property sale information (either in-house system or data from other existing systems such as the Cache-Rich Multiple Listing Service)
- Comparable sales search and analysis tools
- Mass appraisal tools or "models" for both land and buildings (cost approach, market approach, income approach, estimated adaptive or feedback approach)
- Statistics, graphing, and map-based visualization tools
- Complete integration with tax-roll database including value listing and legal description retrieval
- Complete integration with GIS database, geographic analysis, and geographic visualization functions
- Reporting and printing functions

Integrating the Cache County Information Systems

The integration of the various systems (tax-roll, GIS, property card, CAMA) will be defined at project onset and be built into every aspect of the system. Our approach to accomplishing this integration is fully described in the project work plan.

Project Work Plan and Schedule

The project work plan is divided into two parts, first, the GIS work plan, and second, the property card, CAMA systems, and tax-roll system workplan.

GIS Work Plan

The GIS will work will consist of developing and maintaining several sets of data for the project area. Because many of the data sets required for this project have been developed by Logan City, the project area will consist of primarily Logan City. The data sets to be developed include:

- Parcels
- Land guidelines (Cities, Zoning, Districts, Neighborhoods etc.)
- Green belt
- Land classification
- Building footprints
- Streets

Parcels

Smart Map Systems will function as the county GIS department during the project and coordinate all GIS efforts with county staff. However, the County Records office is legally charged with keeping the parcel records, yet because of their existing work load Smart Map Systems will focus on developing the GIS parcels map for this project. This approach will require regular (weekly) coordination of the parcels data development work with the County Records office.

Presently a GIS parcels map for Cache County does not exist. However, Logan City's GIS department has developed a parcels map for their own in-house purposes that covers Logan City and much of the surrounding area. Initial contacts with Logan City have indicated that they are willing to share their data if a formal request for the data is made and a good faith agreement for data sharing and cooperation can be reached.

The parcels database maintained by Logan City is of approximately one foot accuracy and should be of sufficient accuracy for County purposes. It could cost the County in excess of \$200,000 to reproduce a parcels map of this accuracy (see appendix 2). After the data is acquired from Logan City, Smart Map Systems staff would work with the Records office to verify that the parcels map is accurate and properly attributed with County tax-id numbers. This check would insure that the data are of sufficient quality to be used for County purposes.

The coordination of the GIS implementation and parcels database work will also be performed through weekly coordination meetings. If the need arises, these meetings will be held more frequently. The parcels data would be jointly maintained throughout the project to keep the database current. Training will be an on-going task so that at the end of the project the recorders office should be sufficiently trained to continue the maintenance of the parcels in the GIS.

Land guidelines (Cities, Zoning, Districts, Neighborhoods etc.)

The development of land guidelines will be based upon the requirements of the Assessors office. This process is presently performed by hand on an annual basis. This process of developing land guidelines will be converted to the GIS and be organized to support the CAMA process.

Green belt

The existing Green Belt maps will be converted to the GIS. The existing maps will be registered to the Digital Orthophotoquad maps that have recently become available for Cache County. This will improve the overall quality of the maps and make them more accessible. The Green Belt maps are also key to the determination of property values.

Land classification

The existing land classification maps will be converted to the GIS. These existing maps will also be registered to the Digital Orthophotoquad maps. However, the USDA Natural Resources Conservation Service (formerly the Soil Conservation Service) recently completed a detailed soil survey of Cache County that likely could be used for the refinement of the land classification. This will be investigated and a recommendation made. If approved by the County Assessor the new soil survey will be the basis for the land classification data mapped in the GIS.

Building footprints

Building footprints data will be acquired from Logan City and extracted from information available from Mountain Fuel. This information is likely not accurate enough for building sketches in the property card but will provide a temporary link between the GIS and property card system. The building footprints that will be a part of the overall GIS and property cards will be developed as part of the property card building sketch system.

Streets

Street centerline information will be generated from existing address-coded data and will be adjusted to the digital orthophotoquad maps. This will

provide a rapid method to develop a streets map in the GIS that contains considerable information.

Property Card System, CAMA System, and Integration with Tax-roll System Work Plan

The work plan for developing the property card system, CAMA system, and the integration with the GIS and tax-roll system is divided into the following seven phases:

- Phase 1. Requirements analysis
- Phase 2. System design and prototype development
- Phase 3. Software coding
- Phase 4. System testing and documentation
- Phase 5. Data Conversion
- Phase 6. Parallel testing and training
- Phase 7. Final system Installation

Phase 1. Requirements analysis

The requirements analysis phase is where the existing systems, databases, and applications are identified and documented. The requirements analysis will also require input from the system users and careful documentation of user needs. This phase will be performed jointly by both Smart Map Systems and data processing staff.

Documentation of existing applications and methods

- Document the detailed functions of the existing manual and computerized systems such as the tax-roll, property card, and other systems
- Review and document the required GIS functions as defined in the GIS implementation plan and by the Assessors office
- Document the programs and functions in the existing systems that must be converted from the existing system to the new system

Documentation of data sources/databases

- Tax-roll data tables
- Land guidelines and mapping requirements for land appraisal (property class, greenbelt, etc.)
- Property card system
- Any other data used to support appraisal or other decision making

Software requirements specification

- Wanted or needed modifications to existing applications or functions
- Upgrades to existing systems to make them easier to use
- Define what the system must specifically do to help officials

At the completion of this requirements analysis phase a detailed written specification of all identified requirements will be written. This specification will become the guiding document for the remaining phases. Because this document will more completely define the project scope, it will need to be agreed to in writing by the County.

Phase 2. System design and prototype development

Following the requirements analysis and documentation, the entire system will be designed and a prototype will be developed. The general approach to designing the system will be to assemble all of the existing information and the needed information that is documented in the requirements analysis and to "normalize" the entire database. This normalization process eliminates having the same data stored or referenced in more than one location within the databases. For example, the city that a property is located in is important to the tax-roll, the GIS, and the property card system. The data field that references the city should only be stored and managed from one system. Failure to properly normalize the database can lead to high maintenance costs and database inaccuracies.

Once the database has been normalized, each individual database item such as city, special service district, building description, ownership, legal description etc. will be assigned to the appropriate system. For example, the legal description will be referenced in the tax-roll, the property card, and the GIS system but should only be generated and stored in one of the systems.

After the system and database have been designed, a prototype system and sample screens will be developed and tested for basic functions. The prototype will be used to identify any required design changes and to show staff the prototype interfaces. This will allow the staff to critique the interface and usability of the system prior to actually writing the final software programs.

Phase 3. Software coding

After the completion of the design and prototyping, the physical programming of the computer programs, databases, and end-user software programs will be performed.

Phase 4. System testing and documentation

Once the system has been programmed, it will be tested to see if the individual programs meet the original requirements and have satisfactory performance. Individual users applications will be tested by the intended end-users to see if the interface is comfortable to work with and provides the desired results. This testing will be performed using actual County data but will be separate from the existing system so that errors cannot be introduced into the County database.

During system testing the user manuals and reference documentation will be written. The user manuals will include both a quick reference that can be kept near each computer, and a complete set of manuals that can be accessed from on-line help or from a hard copy printout. The reference documentation will detail all work flows, database designs, data relationships, and the actual programs used to make the systems operate.

Phase 5. Data Conversion

Once the system has been completely coded and tested, the system will be installed and made ready for operation. The existing computer systems and data will then be converted to the new system. This process will be automated to the extent possible. Existing property card information will be entered by the county staff.

Phase 6. Parallel testing and training

Once the system is installed and everything is operational, a parallel testing period will be implemented. This parallel testing will require that both systems be kept operational for a period of time to test all functions in the work environment. This is a cautious approach but will be necessary to insure that the new system is reliable and usable by County staff.

During this parallel testing period, the training of staff will be conducted. Training of staff on the new system should not be underestimated. With any new system there should be satisfactory training and support to help staff become accustomed to the new system. A system that is difficult to use or intimidating will rapidly become obsolete simply because the staff will not to use it.

Phase 7. Final System Installation

The final installation will be the actual removal of the old systems and allowing the new system to fully function as the Cache County Information System.

Schedule

The estimated time to complete this project is one year. The development of the GIS and the Property Card, CAMA, and tax-roll systems integration will occur concurrently.

Smart Map Systems will dedicate one full-time GIS analyst to the Cache County GIS and support this individual with additional staff as needed. The development of the other systems will have a full-time database programmer and several supporting programmers assigned to developing the system.

The project will proceed according to the following schedule with several items taking place concurrently:

| | |
|---|----------|
| Requirements analysis: | 3 months |
| System design, prototype development: | 4 months |
| Software coding, application development: | 3 months |
| Testing and documentation: | 3 months |
| Training: | 2 months |

Total project time from start to finish is twelve months.

Qualifications

Smart Map Systems is uniquely qualified to assist Cache County in the development and implementation of their integrated information systems. Smart Map Systems specializes in integrating GIS and other information systems. Our experience integrating GIS with other information systems ranges from integrating simple planning records to completely integrated engineering, records management, permit tracking, inspections, and routine maintenance systems for utilities.

In our experience, the GIS is the least understood element of an integrated information system. With our extensive background and experience with implementing and integrating GIS technology with multiple systems, we are uniquely capable of providing an information system solution that will meet Cache County's needs. As an Authorized ESRI business partner and application developer (ESRI is the worlds leading GIS software company), we are able to provide leading technology solutions for our customers. Some additional advantages for Cache County working with Smart Map Systems include:

- Integrated geographic and other information systems experts
- Experienced software engineers
- Experience with complex projects
- Established rapport with County data processing staff and elected officials
- Experience working with Cache County on their GIS implementation plan
- Local firm (North Logan) allowing easy access and ability to coordinate frequently

Facilities and equipment

Because we are in the computer software/database development business, our computer equipment and software are the lifeblood of our business. Smart Map Systems therefore has and will continue to have state-of-the-art equipment to be able to provide our clients with the best possible support. For running PC-based applications, Pentium and Pentium-Pro PCs are used. Window NT Pentium-Pro computers are used for most GIS and CAD applications. Computers are linked via a Windows NT network using 10baseT cabling. We primarily use Windows-based software instead of MS-DOS software for conducting our business. The PCs operate with Windows for Workgroups 3.11, Windows 95, or Windows NT workstation 3.51 or 4.0. Specific software that we use internally or have direct access to for supporting the needs of our clients is shown below.

GIS/CAD

Spatial Database Engine for
Microsoft SQL Server 2.1
ARC/INFO 7.1 (SUN)
ARC/INFO 7.1 (Windows NT)
ArcView 2.1, 3.0 & Avenue (PC)
MapObjects
AutoCAD 12 & 13
AutoCAD Map
VisualCADD 2.0

Word Processing

Microsoft Word

Database

Microsoft Access 7.0

Spreadsheet

Microsoft Excel for Windows 95

Graphics/Presentation

Microsoft Power point 4.0

Programming

Microsoft Visual Basic 4.0 (Enterprise edition)
Microsoft Visual C++
Microsoft Windows Software Development Kit
Microsoft Office Development Kit

Other

U.S. EPA EPANET 1.1 (Water system analysis)
Urban Systems, Inc. HYDRA (Storm/sanitary
sewer analysis)
U.S. Dept. of Transportation Road Surface
Management System (Pavement management)
U.S. Dept. of Transportation Sign Management
System 3.4 (Sign management and
maintenance)
and many other miscellaneous packages

Software available for meeting project/client needs

Hardware available either in-house or directly available for
meeting project needs includes:

- SUN SPARC Station 20 Model 51, with 64 megabytes of ram, CD-ROM drive, 3½" floppy drive, 8 mm tape drive, and 6.1 gigabytes of hard disk storage.
- Pentium and Pentium-Pro PCs operating at 133 to 200 MHz, containing 16-64 megabytes of ram, and variously having CD-ROM drives, 4 mm or 8 mm tape backup, floppy disk drives, and disk storage from 1.2 to 4.2 gigabytes. Machines are equipped with either 15" or 17" super VGA monitors.
- HP-750C color ink jet plotter
- HP-855Cxi color printer
- Various digitizing tables, tablets and printers

Project Personnel

Key staff who will direct and manage components of this project, are
presented below.

Todd R. Hougaard of Smart Map Systems will function as project manager, and will have overall responsibility for the project. Todd will direct the collection and conversion of all data. Additionally, Todd will conduct or direct project components where ARC/INFO software will be utilized. Todd is also the director of GIS application development at Smart Map Systems, and will be in charge of coordinating the design and supervision of end user application programming using ArcView, MapObjects or ARC/INFO.

Todd is the founder, general manager, and senior GIS scientist at Smart Map Systems. He specializes in GIS database design and management for urban and municipal utilities/facilities management; utility system and facility analysis; land records management; data conversion and integration; and natural resource management and planning. He has designed and developed databases and conducted analysis and modeling using GIS for private, municipal, state and federal organizations.

Todd is also the senior GIS analyst and database design engineer at Smart Map Systems. He writes customized AML (the ARC/INFO Macro programming Language) programs for modeling, data conversion and database management. Todd specializes in designing databases for clients viewing and analysis of their GIS and non-GIS data. He also specializes in conversion of existing data to GIS format. He has recently designed ARC/INFO databases for linking water and power utility system inventories to PC-based engineering models. He has also designed a multi-accuracy land records database that tracks not only parcels, easements and ROW's but also tracks the accuracy of each line used to build the database. This design allows users to phase into GIS using existing records and then improving their database over time.

Todd has over 9 years of GIS and image processing project experience using ARC/INFO and ERDAS image processing software. As either project manager or as a team participant Todd has worked on over 18 major GIS projects and many small GIS projects.

Paul Morgan is the Senior GIS Technician at Smart Map Systems and will be the lead GIS technician for data collection and conversion. Paul graduated from Brigham Young University in 1994 with a Bachelor of Science degree in Geography with an emphasis in City and Regional Planning. He is currently working on a Master of Science degree at Utah State University with an expected completion in the Spring of 1997. His experience includes working in a planning office in West Valley City, UT. He was also responsible for developing a training manual for a company that specialized in local government computer applications.

Since 1995, Paul has been working for the City of Logan in the development of a land database system. This included the creation of a property map for the City from digitizing existing plat maps/legal descriptions, using Coordinate Geometry and converting existing survey

data to create a city-wide parcel map. He was also involved in linking the city parcel map to the County Tax Assessor's database. Other responsibilities have included the design of GIS applications in ArcView and using AML for various departments in the City. Such applications include the development of a parcel based zoning map and property locator program for the Planning Department; a network analysis model for the Sanitation Department and a School District redistricting and busing model.

Roy N. Brazell is the Senior Database Engineer at Smart Map Systems. His experience includes over 27 years of software engineering with significant experience programming databases. Roy recently completed a Masters of Science degree in Computer Science from Utah State University. Roy will serve as the lead database programmer and be the project supervisor for the database and systems integration.

Richard Andrus is the Application Research, Testing Specialist and manager of application research and development. His experience includes 4 years of software testing, interface development, and localization experience. Being involved in the release of over 25 international software products at WordPerfect Inc., Novell Inc. and Corel Inc., he contributes valuable experience in Software Testing, Project Management, Interface design, and ensures overall software quality and functionality.

Burk Royer is a Software Engineer at Smart Map Systems. Burk is currently a student at Utah State University working toward a degree in Computer Science. He will receive his Bachelor of Science degree in the Spring of 1997. His experience includes over a year of GIS application development including time in the GIS/Remote Sensing Lab in the Geography and Earth Resources Department at Utah State University. He has extensive experience in GIS programming especially with Avenue and MapObjects.

Steven Schimmelpfennig is a Software Engineer with Smart Map Systems. He is completing a degree in Computer Science at Utah State with an expected completion in Spring 1997. Steve's experience centers around front-end graphical user interface development and database programming. He also has experience in GIS applications programming. Additional database programmers, system administrators, network specialists and Internet/Intranet developers will be assigned on an as needed basis.

Project references can be provided upon request.

Budget

The budget for this project is divided into two sections. First is the budget for the GIS tasks and the second is for the property card, CAMA, and tax-roll integration.

GIS Tasks

- Parcels
- Land guidelines (Cities, Zoning, Districts, Neighborhoods etc.)
- Green belt
- Land classification
- Building footprints
- Streets
- Software
- Project management
- Completion of tasks in implementation plan

Cost: \$89,970

Property Card, CAMA, and Tax-roll Integration

- Phase 1. Requirements Analysis
- Phase 2. Design & Prototype
- Phase 3. Software Coding
- Phase 4: Testing and Documentation
- Phase 5: Data Conversion
- Phase 6: Testing & Training
- Phase 7: Installation
- Project management
- Materials and supplies

Cost: \$169,640

Total Project Cost: \$259,610

Appendix 1 GIS Implementation Plan Tasks

The following list contains the tasks that were identified in the Cache County Geographic Information System Needs Assessment and Implementation Plan.

- Task 1. Education of both local officials and County staff
- Task 2. Cache County GIS Workgroup participation
- Task 3. Cache County Survey Control Network development
- Task 4. Survey ordinance drafted
- Task 5. Staffing
- Task 6. GIS hardware purchases
- Task 7. GIS software purchases
- Task 8. Collect existing GIS data and convert to proper coordinates
- Task 9. Develop Cache County parcels database
- Task 10. Link GIS to tax-roll
- Task 11. Determine how to distribute data throughout county
- Task 12. Acquisition and conversion of DOQ imagery
- Task 13. Develop a County roads database

Appendix 2 Parcels Conversion Costs

Estimates for contract digitizing of the Cache County parcels. Estimates were provided by Cambric Graphics of Salt Lake City. Cambric Graphics is a firm that specializes in GIS data conversion.

- a.) Least expensive option is to simply digitize as rapidly as possible the existing plat maps. This is only the capture of the parcel lines and no associated text nor edge-matching of individual map sheets. Cost estimates range from \$.80-\$2.00/parcel.
- b.) Plat map conversion using bearings and distances when shown. This option also would not have edge-matching but would capture text for those lines that show a recorded distance and bearing. Estimated cost \$4.00-\$5.00/parcel.
- c.) Plat map conversion with bearings and distances and edge-matching (proper polygon closure of all parcels). Estimated cost \$5.50-\$7.50/parcel
- d.) Option c with additional alignment of centerlines to orthophotos (digital orthophotoquads). \$10.00-\$15.00/parcel

Weber County is presently going through a conversion process to capture their plat maps into an electronic format. Their conversion standards are:

- Plat map conversion into AutoCAD (not GIS)
- Capture and redraw using bearing and distance when shown
- Capture borders and all text shown on plat maps
- No edge-matching between plat maps

Cost is averaging approximately \$4.50/parcel. Additional GIS work to get into true GIS format is approximately \$1.75/parcel. It should be noted that Weber County has an established survey coordinate system to use for the placement of the plat maps into correct geographic space.

EXHIBIT "B"
(Billing Allocations by Task)

Exhibit "B"
(billing allocations by phase)
Payment Schedule

| | Total | Labor Retainage 5% | Overall Retainage 5% |
|-------------------------|--------------|-----------------------|-------------------------|
| UpFront | \$ 40,000.00 | | |
| Phase 1 | \$ 22,300.00 | \$ 531.00 | \$ 1,115.00 |
| Phase 2 | \$ 35,340.00 | \$ 1,617.00 | \$ 1,767.00 |
| Phase 3 | \$ 61,160.00 | \$ 2,858.00 | \$ 3,058.00 |
| Phase 4 | \$ 33,480.00 | \$ 1,674.00 | \$ 1,674.00 |
| Phase 5 | \$ 2,300.00 | \$ 115.00 | \$ 115.00 |
| Phase 6 | \$ 24,840.00 | \$ 1,242.00 | \$ 1,242.00 |
| Phase 7 | \$ 2,300.00 | \$ 115.00 | \$ 115.00 |
| GIS/Land Value Tasks | \$ 77,890.00 | \$ 3,119.50 | \$ 3,894.50 |
| | \$259,610.00 | \$11,271.50 | \$12,980.50 |

Part 1. Non-GIS Tasks

Phase 1. Requirements analysis

Documentation of existing applications and methods

- Document functions of existing manual process / computerized system
- Review and document GIS functions as defined in GIS Work Plan
- Document functions that must be converted to new system

Documentation of data sources / databases

- Tax Roll database
- Property Card system
- Land Appraisal
- Other data used for support appraisal or other decision making

Software requirements specification

- Current requirements and specifications
- Wanted or needed modifications to existing system
- Modifications needed / required to improve easy of use
- Define specific system requirements to help officials

System Specification Document

- Identified requirements
- Define the project scope

Phase 2. System design and prototype development

Design

- Re-engineer Tax Roll database
- Design database for Property Card
- Design database for Land Appraisal
- Integrate database designs with GIS related data
- Normalize all databases - remove any duplication of data

Prototype

- Tax Roll system and screens
- Property Card system and screens
- Land Appraisal system and screens

Evaluation

- Usability of system
- Meet requirement specifications

Phase 3. Software coding

- Tax Roll system and screens
- Property Card system and screens
- Land Appraisal system and screens

Phase 4. System testing and documentation

Testing

- Meet original system requirements
- Evaluation of operation and performance
- End user evaluation

Documentation

- System manuals
- Quick reference guides
- On-line Help

Phase 5. Data conversion

- Installation of new system
- Conversion of current data to new system
- Entry of manual data into new system

Phase 6. Parallel testing and training

- Both systems will operate in parallel
- Verification of new system related to current system
- Training of end users and staff members

Phase 7. Final system installation

New system becomes Cache County Information System
Removal of old system

Part 2. GIS and Land Value Tasks

Cache County Survey Control Network

Review status of County Surveyor monuments
Develop draft of Survey Ordinance

Digital Ortho-Photography

Acquire existing digital ortho-photography
Convert formats and register to survey control network

Parcels

Acquire data from Logan City
Validate and update Logan City Data
Establish maintenance system to keep data current

Land Guidelines

Create coverages of:
City boundaries
Zoning
Districts
Neighborhoods
Subdivisions
Commercial areas
Others required for Land Valuation

Green Belt boundaries

Review existing Green Belt maps and records
Digitize or otherwise create Green Belt Coverage

Land Classification

Review existing Land Classification maps and records
Digitize or otherwise create Land Classification Coverage

Building Footprints

Acquire data from Logan City
Validate and update data from Logan City using digital ortho-photographs
Link property card building sketch program with GIS

Streets

Acquire existing street files

Convert and adjust street files
Compare existing street data with digital ortho-photographs

Other Misc. GIS Data

Acquire other existing GIS data and format as required

- Neighborhoods
- Integrated GIS
- Greenbelt, including greenbelt eligibility, maintenance, and rollback taxes
- Personal Property (available September of 1999)
- Sales Tracking (available August of 1999)

Other key advantages of the Assessor module include a separation of data collection from the actual appraisal -- allows staff without specific knowledge of the appraisal process, or the appraiser to collect appraisal data. Once data collection is complete, a trained staff member can execute the appraisal. This appraisal is stored as an Electronic Property Card, eliminating the need for storing and tracking property on paper.

Aside from the appraisal process and offering electronic property cards, the Assessor module also embeds APEX sketch, Marshall & Swift building cost table data, and document imaging into a single environment. This allows the appraiser to manage all aspects of data collection and property tracking without exiting the ACT system.

In summary, this module will assist you in tracking, identifying and valuing property. These tasks are accomplished through an integrated GIS environment that allows you to visualize property locations and their corresponding values.

Auditor Module

The Auditor module provides a simple interface to manage tax districts and entities, adjustments and abatements with ease. As part of the ACT system, this module is integrated with all county offices -- when a district is updated in the Auditor's office, the change is immediately applied to all parcels, and seen by the other county offices, ensuring that data remain current.

The Auditor module expedites the tasks of creating and managing tax districts and entities, applying abatements, generating detailed reports, tracking centrally assessed properties and recording tax adjustments. Through this module you can also track tax appeals through Board of Equalization and then record any decisions made by the Board. In addition to the complete list of required State of Utah reports that are provided, custom reports can be created using the industry leading Seagate Crystal Reports program. The reports provided with the ACT system can also be modified using this program.