

# NEVADA COUNTY ASSESSOR'S OFFICE

## REASON FOR INVESTIGATION

The Grand Jury issued an interim report on the Assessor's Office on February 17, 2000. A review of the Assessor's response to this report revealed a need for additional information.

## PROCEDURE FOLLOWED

The Grand Jury re-evaluated earlier sworn testimony and obtained additional documentation.

## FINDINGS

1. The Assessor, in sworn testimony before the Grand Jury, stated that he had been a business partner of the temporary male employee (as identified in the Interim Report). In his public response to the Grand Jury report he stated that "the male worker was never a 'business partner' nor did the Assessor state that he was." Clearly, the Assessor has given conflicting statements. The Grand Jury has a copy of the fictitious business name statement filed with the County Recorder by the Assessor, stating that the Assessor and the male employee were indeed partners.
2. The Grand Jury Interim Report on the Assessor's Office recommended that before any more funds are spent on the computer system the Assessor provide the County Information Systems Department with documentation of his proposed system. To date this has not occurred.
3. In his response to the Grand Jury Interim report the Assessor stated that since he "took office in November 1998, less than \$200,000 has been spent for computer equipment and application programs in the Assessor's Office." The Grand Jury examined all payroll records and invoices paid for computer hardware, studies, software, and computer related expenses. Between November 15, 1998, and December 31, 1999, the following amounts were spent:

Paid to temporary employees	\$ 139,210
Employers share of FICA (7.65%)	10,650
Total employee cost	\$ 149,860
Paid to outside vendors	\$ 195,119
<b>TOTAL COMPUTER EXPENSE</b>	<b>\$ 344,979</b>

# COUNTY OF NEVADA

## STATE OF CALIFORNIA

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### BOARD OF SUPERVISORS



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Clerk of the Board

September 27, 2000

The Honorable Carl Bryan  
Presiding Judge of the Nevada County Courts  
Nevada County Court House  
Nevada City CA 95959

**Subject: Board of Supervisors Responses to the 1999-2000 Nevada County Civil Grand Jury Interim Report No. 5, dated May 31, 2000, regarding Employee/Independent Contractors; and Grand Jury Interim Report No. 6, dated June 5, 2000, regarding the Nevada County Assessor's Office.**

Dear Judge Bryan:

The attached responses by the Board of Supervisors to the 1999-2000 Nevada County Civil Grand Jury Interim Report No. 5, dated May 31, 2000, and Interim Report No. 6, dated June 5, 2000, are submitted as required by California Penal Code §933.

These responses to the Grand Jury's findings and recommendations were approved by the Board of Supervisors at their regular meeting on September 26, 2000. They are based on either personal knowledge, examination of official county records, review of the response by the Assessor, or testimony from the Auditor-Controller, Board Chairman, or county staff members.

This submission completes the Board of Supervisors reply to the 1999-2000 Nevada County Civil Grand Jury Final Report, including all Interim Reports.

The Board of Supervisors would like to thank the members of the 1999-2000 Grand Jury for their participation and effort in preparing this year's report.

Sincerely,

**Bruce Conklin**  
Chairman of the Board

Attachment

bc:pb

cc:  Foreman, Grand Jury  
Ted Gaebler, County Administrator  
County Counsel

NEVADA COUNTY BOARD OF SUPERVISORS RESPONSES TO  
1999-2000 CIVIL GRAND JURY INTERIM REPORT NO. 6

DATED JUNE 5, 2000 *Final Report*

RE: NEVADA COUNTY ASSESSOR'S OFFICE  
FINDINGS & RECOMMENDATIONS

*Responses to findings and recommendations are based on either personal knowledge, examination of official county records, review of the response by the Assessor, or testimony from the board chairman or county staff members.*

I. GRAND JURY INVESTIGATION:

Nevada County Assessor's Office

A. RESPONSE TO FINDINGS & RECOMMENDATIONS:

Findings:

1. The Assessor, in sworn testimony before the Grand Jury, stated that he had been a business partner of the temporary male employee (as identified in the Interim Report). In his public response to the Grand Jury report he stated that "the male worker was never a 'business partner' not did the Assessor state that he was". Clearly, the Assessor has given conflicting statements. The Grand Jury has a copy of the fictitious business name statement files with the County Recorder by the Assessor, stating that the Assessor and the male employee were indeed partners.

Neither agree nor disagree with the first three sentences. The Board has no knowledge of the Assessor's testimony to the Grand Jury.

Partially agree with the fourth sentence. According to the Assessor, he did have a prior business relationship with the temporary male employee referenced in the report, but the fictitious business name statement referenced by the Grand Jury identifying this business relationship as a partnership was never published. The Assessor also responded to the Grand Jury that a subsequent statement was published identifying the business as a sole proprietorship.

2. The Grand Jury Interim Report on the Assessor's Office recommends that before any more funds are spent on the computer system the Assessor provide the County Information Systems Department with documentation of his proposed system. To date this has not occurred.

Agree.

The county Information Systems Department has no record of receiving any documentation from the Assessor regarding his proposed new computer system.

The Assessor indicated in his response to this Finding that he previously provided extant documentation of the proposed system. In his May 24, 2000 response to the Grand Jury, he indicates he will comply, but that it is "inappropriate and unnecessary" since the proposed computer system is a rewrite of the current computer system and the county Information Systems Department already has "complete documentation".

The *Assessment of Software Development in the Assessors Office* report, dated August 30, 2000, prepared at Board direction by Carrera-Maximus, indicated in 2.2 Project Management Methodology, Finding 5, that "...the Project Management methodology used by the Assessor was much more informal than we would reasonably expect to find on a project of this type". Finding 6 indicated: "We found no formal documentation of a project plan associated with this project".

The Carrera-Maximus report also indicates that little system software documentation exists due to a system development process being used by the Assessor called "Rapid Prototyping" or "Iterative Development". This has resulted in little or no documentation of the new software being produced to date.

The County Administrator supported these findings by Carrera-Maximus in his introductory report accompanying the assessment report presented to the Board on September 12, 2000.

3. **In his response to the Grand Jury Interim Report the Assessor stated that since he "took office in November 1998, less than \$200,000 has been spent for computer equipment and application programs in the Assessor's Office." The Grand Jury examined all payroll records and invoices paid for computer hardware, studies, software, and computer related expenses. Between November 15, 1998, and December 31, 1999, the following amount were spent:**

<b>Paid to temporary employees</b>	<b>\$139,210</b>
<b>Employees share of FICA (7.65%)</b>	<b>10,650</b>
<b>Total employee cost</b>	<b>\$149,860</b>
<b>Paid to outside vendors</b>	<b>\$195,119</b>
<b>TOTAL COMPUTER EXPENSE</b>	<b>\$344,979</b>

Partially agree. The Board has no independent knowledge of the results of the Grand Jury's review of payroll records and invoices.

The Board does agree with the Grand Jury that at least \$300,000 has been spent to date on the development of the Assessor's computer system. Although the exact amount actually spent towards developing the computer system can not be determined due to financial accounting system limitations, the County Administrator, in the introduction to the Carrera-Maximus report, estimates that the project has cost at least \$300,000.

4. **There is a question as to who will own the Assessor's proposed computer system upon its completion. There is no formal County procedure regarding ownership of intellectual property.**

Disagree with the first sentence. The Board believes that all intellectual property developed to date in conjunction with the Assessor's new computer system, as well as other related systems and components either developed by the Assessor, contract employees of the Assessor, or Assessor Department employees, is the property of Nevada County. Any future system development of the Assessor's proposed computer system, either done by staff or by professional service contract, will specifically provide for legal protection of county intellectual property.

Partially agree with the second sentence. Clause Twenty One in the Miscellaneous section of the county standard professional services contract form clearly specifies that all intellectual property concerning or relating to contracted work projects or services are owned by the county without exception.

The Board also hereby directs the County Administrator and County Counsel to develop a formal policy regarding ownership of intellectual property by county employees and provide a recommendation to the Board by January 31, 2001 (See response to Recommendation No. 2).

5. **The Assessor's response to the Interim Grand Jury Report, filed April 17, 2000, failed to meet the requirements of California's Penal Code Section §933.05.**

Agree.

The Assessor, in his April 17, 2000 response to the Grand Jury did not specifically indicate if he agreed, disagreed, or partially agreed with each Finding. A reading of his responses to each Finding however seems to indicate he generally either disagreed with each Finding or agreed with the Finding but found it to be misleading. The Assessor also did not answer the three recommendations in the report requiring his response.

The Assessor submitted a subsequent response to Grand Jury Interim Report No.2 on May 24, 2000. In this response, the Assessor responded to the three recommendations and clarified his position regarding the Findings in the report.

## RECOMMENDATIONS

1. **The Grand Jury strongly recommends that the Board of Supervisors order a software evaluation of the Assessor's proposed system from an unbiased major consulting firm prior to spending any further taxpayer funds.**

The recommendation has been implemented.

On June 13, 2000, the Board of Supervisors directed the County Administrator to proceed with a professional services contract for a technical evaluation of the Assessor's proposed property tax system. Staff was also directed to provide additional information and recommendations to the Board along with the completed report regarding project history, management, and funding.

The report, prepared by Carrera-Maximus, was presented to the Board on September 12, 2000. Discussion of the report and action regarding staff recommendations was continued to a future meeting. The Assessor was also requested to provide a written response to the report and the County Administrator's recommendations concerning the future of the project.

2. **The County needs to develop a formal policy on the ownership of computer source code and the legal ramifications of intellectual property developed by County employees and elected officials on County time and at County expense.**

The recommendation will be implemented by January 31, 2001.

The County's interests regarding ownership of intellectual property for contracted services are protected by provisions included in all professional services contracts. There are presently no specific provisions in the Personnel Code or in other County policies addressing the ownership of intellectual property by prospective, current, or past County employees.

The Board hereby directs the County Administrator and County Counsel to evaluate present and future needs for county policies and procedures regarding ownership of intellectual property by County employees, contractors, and independent elected officials. They will be directed to provide a recommended formal policy to the Board by January 31, 2001 on what is needed to ensure County intellectual property interests are protected.

The Board supports and encourages entrepreneurial innovation and initiative by County employees and elected officials. We also recognize that adequate policies and procedures must be in place to protect County interests as new intellectual property is developed by our employees and elected officials in conjunction with their official responsibilities.

### **B. OTHER RESPONSES REQUIRED:**

Art Green, Assessor – August 31, 2000.

# COUNTY OF NEVADA

**BRUCE A. BIELEFELT**

Auditor-Controller

Eric Rood Administrative Building

950 Maidu Avenue

Nevada City, CA 95959

(530) 265-1244

(530) 265-1568, FAX

# DRAFT

9/15/00

**DATE:** September 15, 2000

**TO:** All Departments

**FROM:** Dave Felthousen  
Assistant Auditor-Controller

**SUBJECT:** EDD Reporting Requirement for Independent Contractors

## **EDD Reporting Requirement**

Effective January 1, 2001, any California business or government entity that is required to file a Federal Form 1099-MISC for services performed by an independent contractor has a new reporting requirement with the California Employment Development Department (EDD). The County will be required to report specific information such as name, Social Security Number, start date of contract or date payments equal \$600 or more, amount of contract and contract expiration date to EDD within twenty (20) days of EITHER making payments totaling \$600 or more OR entering into a contract for \$600 or more with an independent contractor in any calendar year, whichever is earlier. In order to meet this requirement and not pay penalties associated with failing to report correctly, the Auditor's office is requesting information from you regarding current agreements with independent contractors. The Auditor's office is also implementing several procedure changes that will enable us to gather necessary data for reporting new contracts with independent contractors. In addition, this memo includes information to help you identify independent contractors. We are planning to report every vendor who is identified as a sole proprietorship and who receives a 1099 as an independent contractor.

## **Current Independent Contractor Vendors**

Each department needs to provide us with a list of all their current independent contractors noting vendor number, Social Security Number and purchase order or blanket order number. Please provide this list by *December 1, 2000*.

## **Encumbrance/Contract Requirement**

In order to track reportable information (start date of contract, amount of contract and contract expiration date) **all** agreements with independent contractors **will** need to be encumbered. Encumbrance (purchase order or blanket order) **must** be supported by a signed service agreement covering the complete terms of the contracted service. There will be no County direct pay independent contractors.

## **New Vendor Number Procedure**

The Auditor's office will be using the vendor file to flag the vendor as an independent contractor. This will be used in conjunction with the encumbrance to provide information for EDD reporting. In order to accomplish this we will need to implement a procedure change regarding ALL vendors. Effective November 1, 2000, a vendor will not be set up on the accounting system vendor file without a Federal W-9 or the County version of this form signed by the vendor and a completed vendor request form. A purchase order cannot be issued without a vendor number and therefore payment cannot be made without this information. As noted above we are implementing this procedure for all vendors, not just 1099 reportable or independent contractors. We feel we need to be consistent with all vendors. We cannot always tell the vendors reporting status from the vendor's name. If the vendor is already in the vendor file, it is not necessary to submit a new W-9 unless there is a name change, ownership change, etc. Independent contractors need to be listed as noted above under **Current Independent Contractor Vendors**.

I recommend that you provide the vendor with the County's W-9 form as soon as you enter into an agreement with the vendor. This form and the Vendor Request Form will be available on the 'I' drive or from the Auditor's office. It will include a field for you to note independent contractor. Copies of the forms are attached to this memo. Photocopies are acceptable. Although Email requests are no longer appropriate, we will continue to accept a fax of these forms.

## **Independent Contractors**

This new reporting requirement brings up the whole issue of independent contractors. The County is at considerable financial risk if independent contractors are treated more like employees than true independent contractors. The IRS could require a reclassification of these independent contractors to employees and require payment of all taxes by the County plus penalties.

The IRS is eliminating the infamous "20-factor test" for determining a worker's status. It is being replaced with three factors that count toward this determination:

- Behavioral control
- Financial control
- The employer-worker relationship



Five of the most important factors in the "20-factor test" are embodied in the "new" criteria.

1. **Continuing relationship.** The relationship with the independent contractor should not go on and on. This is more of an employer-employee relationship. Be sure the contract has a completion date. [Corresponding new criteria: Employer-worker relationship.]
2. **Set hours of work.** Independent contractors need to be able to come and go as they please. If you have much control over when they work, they need to be treated as an employee. [Corresponding new criteria: Behavioral control.]
3. **Working with more than one firm.** Exclusivity can be a real problem. The individual receiving a 1099 should also be working for others. [Corresponding new criteria: Employer-worker relationship.]
4. **Full-time work requirement.** In addition to not being too strict on when an independent contractor works, you should not require the person to work for you full-time. The worker needs to have time to work for someone else. [Corresponding new criteria: Behavioral control.]
5. **Payment by the hour, week or month.** If you pay an independent contractor this way, it looks like a salary. It is best to base payment on percentage of the job completed. [Corresponding new criteria: Financial control.]

The IRS is in the process of revising SS-8, Determination of Employee Work Status for Purposes of Federal Employment Taxes and Income Tax Withholding. I have attached a copy of the old version of this form since it provides good guidance on determining if your worker is an independent contractor or an employee. The revised SS-8 is scheduled to be out this fall and will be available through the IRS web page ([www.irs.ustreas.gov](http://www.irs.ustreas.gov)). Please do not file the return with the IRS, use it as a tool for making your determination. EDD also has a good handout regarding independent contractors. I have attached a copy for your information.

Please feel free to call me at 265-1251 if you have any questions regarding this new procedure or independent contractors in general.

# COUNTY OF NEVADA

## COUNTY ADMINISTRATOR

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RECEIVED

SEP 12 2000

NEVADA COUNTY  
BOARD OF SUPERVISORS

September 12, 2000

Honorable Board of Supervisors  
Eric Rood Administrative Center  
950 Maidu Avenue  
Nevada City, CA 95959

**SUBJECT:** Comprehensive Report and Independent Technical Evaluation of Assessor's Software Development Project

**RECOMMENDATIONS:** Request cooperation from the Assessor to proceed with alternative "B" in the "Staff Recommendations" section beginning on page 12 of this report, which: 1) outlines the steps for attempting to complete the rewrite of the Comparative Sales System subject to the Assessor's cooperation in Board policies, and 2) directs staff to proactively pursue opportunities for influencing future funding of the State's Property Tax Administration Program.

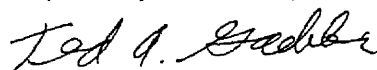
**FUNDING:** No additional funding required at this time.

**BACKGROUND:** On June 13, 2000, staff was directed by the Board to proceed with a professional services contract for a technical evaluation of the Assessor's proposed property tax system. At that time, the Board also directed staff to offer additional information along with the consultant's report to include the history and authorization for project work to date, as well as recommendations about where the County should go with this new information. In response to the Board's direction, Attachment A and the accompanying 27-page report from the firm of Carrera-MAXIMUS form the most comprehensive public documentation to date of this software development project envisioned and started by the Assessor more than 5 years ago.

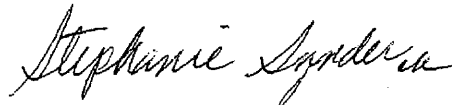
The entire report lays the foundation for the importance of finding a satisfactory resolution to outstanding issues on this subject by addressing the relationship of the Assessor's systems to the rest of the County. It presents historical information and gives the perspectives of an outside technical evaluation team as well as the advice of in-house experts in the Information Systems Department. It methodically explains what we now know to be the Assessor's software development project and attempts to answer the wide range of public questions and concerns that have been raised about this project over the past year.

This report has resulted from a very professional process of cooperation and represents enormous efforts from all parties to understand and communicate. The process has been a catalyst for movement towards answers and solutions. Along the way, the County also benefited from an unplanned outside review of our in-house capabilities and direction. Continued success to the benefit of the Assessor, the County and ultimately the taxpayers is highly desirable. Based on the information presented in this report, it can only be achieved by working together.

Respectfully submitted,



Ted A. Gaebler  
County Administrator



Stephanie Snyder  
Senior Administrative Analyst

## ASSESSOR'S SOFTWARE DEVELOPMENT PROJECT

### Overview of the County's System Architecture and Its Relationship to the Assessor's Data Systems

There are two key points underlying the importance of the *relationship* between the Assessor's database and the rest of the County systems:

1. According to the County's Chief Information Officer (CIO), approximately 80% of the County's data is geographically based or has a geographic component
2. The Assessor is the creator and keeper of parcel data which is used for the County's geographic information

Therefore, understanding this relationship is desirable as a foundation to making sense of the issues described in this report. It is also critical to drawing reasonable conclusions and providing a basis for decision-making. To that end, the following diagram has been produced to illustrate the relationship.

### Relationship of Assessor's Data Systems to County's System Architecture

**General Public and Business to Business (B2B) interfaces - examples:**  
Internet - Title Companies

**All other County departments and systems, financial accounting system, and misc. data interfaces. Security, virus protection, network and desktop administration, data backup and disaster recovery**

**Property based activity departments - examples: GIS, CDA**

**Property Tax System Offices - Assessor + Auditor + Tax Collector - Share common system and workflow (PTS)**

#### Assessor's Office

**1** Comparative Sales System (CSS)

- "prototype" in use.
- Rewrite ~90% complete - not in use.
- Includes database design for Property Tax System - not in use.

**2**

Property Tax System (PTS)  
(Assessor's portion only)

- "X1" legacy version in use.
- Rewrite ~0% complete

**3**

Merged "rewrite"  
of both systems

- Not in use.
- Overall Development ~60% complete

The diagram demonstrates simplistically that the Assessor's current database is comprised of the County's mainframe (X1) and the relatively new software called the Comparative Sales System (CSS). Although the CSS is currently in use, the Assessor states that the task of rewriting this software to a different and more efficient database is about 90% complete. It shows that the Assessor's current systems (seen as #1 and #2) are used together to assess property values and create the tax rolls. It also notes (#1) that some preliminary work on the database design towards eventually rewriting the Assessor's portion of the entire Property Tax System (PTS) has been done. As noted in #3, no work has begun on actually "merging" the X1 and the CSS that would comprise the rewrite of this part of the PTS. (The estimate that the overall design is about 60% complete is a composite.) The PTS uses the Assessor's data for the Auditor-Controller (to take assessed value data and calculate the tax) and the Treasurer-Tax Collector's Office (to send the tax bills out and collect the taxes).

The diagram also shows that the Assessor's data is needed by a number of other County departments, such as Geographic Information Systems (GIS), Planning, Building, Environmental Health, etc. These departments rely on accurate parcel data for critically important services such as ensuring that public safety providers can find us. Wrapping around these needs is the much larger group of systems impacting *all* County departments and offices. Examples of these systems are the financial accounting system, security and virus protection, time accounting, major system architecture (X1), and human resources systems (payroll, position control, benefits, etc.) The last illustration is the interface with the public such as services to title companies or general information made available through the County's web sites.

The illustration of the Assessor's systems (the smallest block on the diagram) is the subject of the independent technical evaluation and will be discussed further on in this report. It is hoped that many other issues discussed in this report will be more easily addressed and understood with this visual picture of how the County benefits when the Assessor's data is accurate, timely, as defensible as possible and easily transmitted between County departments.

The report assumes that current systems allow fulfillment of the Assessor's statutory duties. Instead, it focuses on validating what currently exists in the Assessor's database, addressing what was planned by the Assessor to change, and providing advice on how to use best business practices for making decisions which will enhance the County's overall revenues, resources, products and services using the Assessor's database.

#### History and Authorization for Assessor's Software Project Work to Date

This information is included in response to the Board's request at the June 13<sup>th</sup> meeting. The discussion of the history of the "project" will *not* focus on the County's current legacy (X1 mainframe) system that has supported the Assessor's Office automation needs since the mid-1970's and is still an integral part of the Property Tax System. Instead, the discussion will focus on the software development path the current Assessor began to explore in his role as the Programmer Analyst for the Assessor's Office. Precisely when the Assessor conceived of the all-encompassing plan is not known but he states that work on the CSS was started in the mid-1990's. The consultants have noted little or no documentation that could pin point the actual beginning of work. In summary, it is clear that County staff knew the work was being done on the Assessor's project within budgeted appropriations. It is not known when or at what points the Board was formally apprised. However, it appears that 1998 was the last documented opportunity where this development work was officially reported to the Board before recent developments raised the questions being addressed today.

On October 20, 1998, the Board of Supervisors was presented with the "Three Year Plan for Automation and Status Report (1998-98 through 2000-01)" by the Data Processing Division of General Services. The report included the following reference to the Assessor's project on page 14:

"The Assessor's office has had its own programmer/analyst since 1982. This person maintains the property tax system on the X1 and supports a PC network within the Assessor's office. The PC network provides many supporting functions to the Assessors staff related to property appraisal such as electronic square footage calculations, digital camera input, and sales comparison routines. *Currently, there is an effort underway to rewrite the Assessor portion of the property tax system to make it suitable for access through a browser interface, such as is used with the Internet.*" (Emphasis added.)

Board minutes show no discussion of the software project and direction to staff to return with modifications to the Plan did not impact the Assessor's system. There is also no evidence that special attention was brought to this project at the Board level during the budget or resource allocation processes of the years since the mid-1990's, except during informal Budget Subcommittee discussions over the past two fiscal years. By the time of the recent hearings for the FY 2000-01 budget in June, questions had arisen about the authority for this work. Board discussion and action on the Assessor's budget at that time included specific mention that the intent to approve appropriations in the amount of \$1,786,736 "did not approve the property tax rewrite."

As evidenced by the "Three Year Plan" comment, funding for the work was basically included as a work product of the Assessor's formally approved appropriations over the years without any special attention. The previous Assessor had an already-approved position for his Programmer Analyst and official budget records show that the Assessor's Office did not exceed *total* appropriations. (One exception was FY 1998-99 when an over expenditure was caused by administrative error and a late booking of revenue. The corrections were resolved in FY 1999-00.) County CAO staff accepted the validity of the Programmer Analyst's reasons for proceeding with the rewrite work until such time as expenditure issues surfaced once he was elected to the Assessor's post in November 1998.

The project work done by the Programmer Analyst was also augmented when the previous Assessor approved the hiring of two temporary employees in May and November of 1997, presumably to work on the rewrite of the CSS and design of the platform database (two of the project's five components). That decision was made within the authority delegated to department heads in the Personnel Code that limits service to 1,000 hours in a fiscal year without approval of the County Administrator. The current Assessor had been advising the County Administrator (at least since the beginning of 1999) that he intended to formally ask the Board for a contract to continue this work and would no longer need to utilize temporary employees for the project.

In the spring of 1999, the County Administrator's Office encouraged the new Assessor to bring his plan and contract for changing the PTS to the Board's attention in a comprehensive report. The CAO was given to believe that the Assessor was close to completing that portion of work in his Office and would soon reach a place where: 1) the project would impact the system used by the Auditor-Controller and the Treasurer-Tax Collector, and 2) he would no longer be able to work on the project within his budgeted appropriations. The contract did not come forward to the Board of Supervisors until December 14, 1999 following CAO notification to the Assessor that the two temporary employees would not be given another extension of time for FY 1999-00. The presentation of the Assessor's proposed contract for continued software development at that time was a major issue in eventually triggering the independent technical evaluation being discussed today.

### What Has Changed on the County's Horizon Since the Board Last Visited The Contract Issue?

Since December 1999, the following changes have taken place which significantly influence the choices in front of the Board and the Assessor today, and staff's recommendations on how to proceed:

- The Assessor requested CAO approval to contract for ongoing maintenance services instead of using County Information Systems' (IS) staff. His request was based on the statement that technical expertise was not present in-house (presumably because of his system's reliance on Microsoft products.)
- IS was given Board direction to develop a Strategic Plan for technology, including the establishment of an internal governance system (Nevada County Technology Partnership-NCTP) which organizes County departments into appropriate Communities of Interest (COI) for purposes of helping to ensure system compatibility, integrity and resource allocation.
- The 1999-00 Civil Grand Jury issued several Interim Reports calling for public accountability of the proposed software development project, among other issues.
- The Board approved \$150,000 in the FY 2000-01 budget to upgrade the X1 mainframe computer system that will allow greater flexibility for County data use until such time as an acceptable replacement system can be purchased.
- The FY 2000-01 budget included a fund of \$500,000 for top-priority technology projects after approval of the IS Strategic Plan and review through the NCTP.
- IS staff resources have been increased and now include an experienced Applications Manager whose role is to act as a resource and project manager to County departments, overseeing software development projects and installation.
- The Assessor's Programmer Analyst position, which had been vacant since the end of 1998, was filled in IS with staff dedicated solely to the Assessor's Office and providing customized services as ½ staff year of a Programmer Analyst and ½ staff year as a Computer Services Technician who is a certified Microsoft engineer.
- The Board authorized \$14,600 for an independent technical evaluation of the Assessor's software development project in order to facilitate discussion and decision-making on issues of concern to the public.

### Findings and Recommendations of the Independent Technical Evaluation

To address the need for an independent look at this software development project, the County retained the services of the firm of Carrera-MAXIMUS in June 2000. At issue was the public description and verification of what actually exists, how it was derived, what value it is to the taxpayers (now and/or in the future), who owns it and how the County should proceed once all this information is known. The result of the firm's work is the attached 27- page report entitled "Assessment of Software Development in the County Assessor's Office." This section will be presented and discussed by Stephen Ferguson and Kris Warren of Carrera-MAXIMUS.

## Staff Comments on the Consultants' Report

During the course of the technical evaluation, meetings between the Assessor, CAO and CIO were held to ensure accuracy of information presented in the report. Eventually, County staff from departments who are impacted by the Assessor's database and the larger PTS were invited to participate in a workshop to learn first hand about the consultants' findings and recommendations. During the workshop and further discussions with staff, questions or issues arose that were not necessarily reflected in the consultants' final report. Because of the independent nature of the report, this section provides a place to acknowledge County staff concerns which might not have been heard otherwise. This discussion is limited to comments falling within the consultants' approved scope of work.

In the best professional judgement of County staff, the Board should be aware of the following issues or concerns which are *not* presented in priority order:

1. **Total Project Completion Decisions:** The Carrera-MAXIMUS report concludes that a fair estimate of the project's overall completeness is 60%, which may be a key factor for consideration by a decision-maker regarding what to do now. This number can be misleading and making any decision to go forward with completing the entire project using this assumption does not appear to be a good business decision. The consultants advise that the validity of the 60% rests on the Assessor's projection and is based on his extensive experience. However, his vision to complete the project includes a user-friendly, Internet "browser-based" system that is the wave of the future and, therefore, requires new skills as noted in the Carrera-MAXIMUS report. With all due respect to the Assessor's long-time experience and recognition of his intimate familiarity with the Office's systems, his projections stem from a background with older, text-based systems. A safer and more accurate approach to evaluating *when* to move to the larger project of rewriting the X1 applications is to use an assumption that nothing has been done to date on this part of the project. It is a large technological undertaking and could be considered monumental when tied to the bigger issues of where the County will go with replacing the X1. Those issues should be cautiously approached for planning and costing.
2. **Total Cost of Ownership (TCO):** TCO on a software development project must include costs for ongoing maintenance over an expected life of 3 to 5 years. Improper planning for the long-term costs can result in exceeding the up-front costs. Even though prudent cost projections and controls were not used on this project from the beginning, it would be important to ensure that ongoing maintenance needs are addressed in proposals to complete *any part* of the project.
3. **Possible Funding Sources:** The report discusses the possibility of using State Loan Program (SLP) monies for funding completion of the project (or any part). However it leaves out a *critical* fact that current legislation ends the funding with this fiscal year. Instead, the consultants' recommendations focus on immediately approaching the State Department of Finance to start discussions about funding to support completing this project for the Assessor's portion. It is staff's position that a wiser use of time and resources is to focus efforts on the larger issue of replacement legislation.

At the present time, the Assessor reports there have been numerous attempts at new legislation that have not been successful. We are now at the end of the line for the current funding cycle. Staff research concurs with the Assessor that there is currently no reliable information about what form continued support may take although it is commonly accepted that some funding will

continue. *This should be a serious concern for the County and can be viewed as an opportunity to become actively involved in trying to influence the outcome.*

For more than five years, the County's General Fund cost of providing the Assessor's services (over \$1.5M a year) has been defrayed by the \$234,000 loan, which has been "forgiven" each year when specific work items were accomplished. Any funding less than that amount in FY 2001-02 and beyond is likely to require an increase of General Fund dollars to maintain current service levels. On the other hand, a *higher* level of funding when new legislation is enacted may not only safeguard dipping into the General Fund but could also possibly provide funding for the larger Property Tax System replacement which will eventually be needed for the Assessor, Auditor-Controller, and Treasurer-Tax Collector. Not only does the County need to take action to protect the General Fund, we may possibly gain resources to address the larger and related needs of the PTS.

4. Implementation of the County's Data-Sharing Policy: There are serious unresolved issues surrounding the Assessor's position on sharing data (and the format of data shared) that impact other County departments. All staff participating in this discussion at the workshop agreed that there are issues of policy rather than technology. The forum for addressing the issues can be the NCTP structure or it can be any mechanism that resolves the differences. Lack of resolution translates into additional County staff time and expense to duplicate data, fix errors and resolve less than optimal customer service issues.
5. Timing and Alternatives to In-House Development: Staff agrees with the consultants that commercial off-the-shelf (COTS) products tailored to meet the unusual needs of California counties have not had much market appeal in the past. However, it appears that the trend *might* be changing along with rapidly changing technology. One example is that the same large firm with whom the County is dialoguing about a new financial accounting system is planning to soon have an integrated PTS available. While staff would not recommend moving quickly into uncharted territory, making incremental decisions that allow the County as much flexibility as possible with regard to changing the entire PTS seems to reflect good business sense.

Although the market opportunities for COTS products (which *may* be more cost-effective) could be changing, IS staff has gotten feedback from other California counties which are also looking for a better PTS. When their experiences have been unsuccessful and costly, there are lessons for us. For example, Sacramento County reports that the County would be wise to appreciate the expenditure of time and money required to support a new system, note that it **MUST** interface well with the financial accounting system and, above all, must have excellent project management. We would not suggest ruling out future COTS products and we would note the importance of integration, project management and long-term support independent of how the project is developed.

6. Recommendation for a Service Level Agreement: Staff agrees that service level agreements are prudent when contracting for outside professional support services. However, the County's standard arrangement for IS support to departments requiring enhanced maintenance and support services is to provide dedicated staff which take daily task direction from the departments. In exchange, the department executes a Memorandum of Understanding (MOU) with IS. This arrangement provides more flexibility and support to departments than a service level agreement. The IS Department currently has executed MOU's with other departments and offices, including those headed by elected officials.



### Moving the Discussion to the Higher County "Picture"

This section includes staff reflections on issues *outside* the scope of the consultants' work, which nonetheless are related to decisions about what to do now. They include:

1. A Practical, Self-Governing Process-- The NCTP is currently in place and actively working with departments through a consensus-building process. Even in this early stage, and before the IS Strategic Plan has been completed, the Community Development Agency has successfully moved a Request for Information (RFI) through the COIs and Steering Board of the NCTP and onto the streets. The Assessor contributed to the subcommittee process for that RFI and has begun participating in the COI work for the IS Strategic Plan. The structure is working and the Assessor's contributions are valued and considered important for his Office and the County family.
2. Beyond the PTS-- The Assessor has determined that his Office should use a system architecture for hardware and software based entirely on Microsoft products, a decision which is not opposed by IS. However, it *technically* gives the Office the ability to set up their own systems such as e-mail, security, virus control, desktop management, etc. As noted in the earlier diagram on page 1, these systems are regarded as important on a *Countywide* basis and have been given by Board policy (attached), as a responsibility to IS to maintain. Three other departments (GIS, Probation and the Sheriff's Office) also have the same technical capability by virtue of using or planning the same architecture, but conform to the Board policy. Since the issue is still unresolved in the Assessor's Office, his staff has not had County Internet capability and has not met the County's security requirements for a number of months. Conformance with Board directed policy is critical to the larger organizational goal of providing "consistent and cost-effective information processing and data availability" while "maintaining data and system integrity."

### How Much Money Has Been Spent on the Project?

Good business practice dictates that the entire cost of a project be considered either before entering into it, or at specified points along the way in order to reevaluate whether the end product will be worth the ultimate expense. That clearly would be the underlying reason for being able to determine the eventual total cost of this project. The consultant's report confirms that this information is unfortunately not available because of the methods used to pursue the vision of the Assessor's software development project. However, in an attempt to determine any range, a few clearly defined factors were examined.

The report confirms that the progress we see today occurred over a number of years using in-house and temporary County staff. The primary staff person was the current Assessor who was then the in-house Programmer Analyst and the software project was not his first priority because of the daily system programming and maintenance needs. It is not possible to estimate how much of the salary and benefit cost of the Programmer Analyst was dedicated to this project since the mid-1990's. The temporary staff members were employed over a period of approximately two to two and half years. Actual records from the Auditor-Controller's Office show a total of \$239,668.63 was spent for the two temporary employees whose service was terminated in late December 1999.

This is only one reflection of cost and it's difficult to sort how much of that amount was actually spent on the development of the CSS and the database design, which were the only software development components receiving attention. As noted in the consultants' report, the temporary employee(s) were also given other duties. The \$240,000 includes only staff costs. It is impossible to separate out of

the Assessor's annual budget (over \$1.6M), how much was spent in services, supplies and equipment for this project, i.e. hardware, software, training, etc.

Other sources reviewed were reports made to the State as justification of the SLP. They typically reported salaries for certain staff members whose work completed the workload requirements. Some were temporary employees and some were permanent staff. The reports also called out specific expenditures for vehicles, mileage, and equipment. The SLP contract for FY 1998/99 was amended to show an expenditure of \$99,228 specifically labeled for "Property Tax System Software Rewrite." That amount includes some temporary employees' salaries so it would *still* be less than accurate to state that we know the work on this project has cost at least \$338,897 (\$239,669 plus \$99,228).

However, given the solid nature of these two pieces of information, it is not unreasonable to project that the cost to date has clearly been *more than \$300,000* when factoring in the unknown amounts of the salary contributions for the current Assessor (as Programmer Analyst) through the years, the cost of staff time for other staff whose work was interrupted in the process of "rapid prototyping" (see Section 2.4 on page 10 of the Carrera-MAXIMUS report), and related hardware, software and other expenses.

#### What Will It Cost to Complete?

Again, because of the manner in which this project was approached, it is not possible to know at this time how much it will cost to complete the project *or any portion of it*. It is noteworthy that even the experienced consultants conducting the evaluation were unable to feel comfortable estimating a completion cost. As stated in the Carrera-MAXIMUS report, there has been considerable confusion surrounding the entire project. This confusion on the cost to complete was fueled in part by a lack of understanding of precisely *what* was to be planned for completion—the CSS rewrite, the Assessor's portion of the PTS, or the rewrite of the entire PTS.

The magnitude of *possible* expenditures historically quoted demonstrates how difficult it is to make a reliable estimate with current information. For example, Administration staff received an estimate from the Assessor in March 1999 that it would cost \$620,000 over a five-year period of time to complete *just the Assessor's portion* of the PTS rewrite with offsetting revenue of \$932,500 from Internet sales of certain information. The Assessor's December 1999 contract request to the Board indicated an amount for \$210,000 over 18 months to presumably finish the same work at that particular point in its development. However, this amount is also an unreliable guide since it included on-going maintenance and support of the Assessor's Office systems rather than just the new software development.

Because of the independent technical evaluation done by Carrera-MAXIMUS, we now have a more concrete understanding of the five components comprising the Assessor's original vision and their various stages of completion. *The Assessor's assistance would be needed* in working with IS staff so that a project plan could be developed which would provide crucial missing information for starting to determine the realistic cost to complete any component (or the entire project.) With a project plan, cost information would flow from developing a Professional Services Agreement to be determined *either* through negotiation with a particular contractor or after following a Request for Proposals (RFP) process.

## In Review

The following statements summarize staff's findings and conclusions. They have been derived from all the sources of information previously mentioned: the consultants' report, staff discussion and interaction throughout the process, and research:

1. According to the consultants, some products do exist even though there is little or no documentation. The Assessor envisioned and began work on a software development project with five components that are now in various stages of completion ranging from -0% to 100% and in use.
2. The one component currently completed and being used by staff is the CSS prototype, a tool for appraisers that results in better and more defensible determinations of valuations. Therefore, the taxpayers have received value for the investment.
3. Additionally, it is difficult to determine the corresponding revenue increase as a result of better and more defensible valuations (through the CSS) because increased revenue also results from the economy's better market conditions and turnover of real estate. However, the concept of having a tool to enhance the comparative sales analysis and make better appraisals appears sound. It also has the potential for increased productivity by giving appraisers better data to work from in the office and reducing the amount of time required to drive around the County to gather data. That increased productivity, if documented and actually realized, could result in the cost savings of staff reductions in the future. This plan for future staff reductions was brought forward by the Assessor in his five-year idea for completing the rewrite as presented to Administration in March 1999.
4. The consultants, the Assessor and the County's CIO all agree that the plan to *rewrite* the CSS using a different database is important for efficiencies. The Assessor reports that the *rewrite* work on this portion is 90% complete. It is impossible to determine actual total cost, but it is clearly more than \$300,000. Those costs should be considered "sunk costs" as they cannot be accurately determined and used in making future decisions based on TCO.
5. The Assessor has reported that he envisioned his project at least 5 years ago as a necessary rewrite of the entire PTS because of the expected decline of the County's X1 mainframe computer. The X1 supports the PTS used by the Assessor, Auditor-Controller and Treasurer-Tax Collector. The former Assessor agreed to allow his Programmer Analyst (the current Assessor) to use County resources from within the appropriated budget. Although talked about as a "Property Tax Rewrite Project," it appears more accurate to state that the *main* product of the County's investment over multiple years was the development of the CSS.
6. The County is well served to approach the resumption of *any* work on this project in an incremental fashion. Decisions to eventually complete the project should be left until there is success with one part and current circumstances are considered before proceeding, i.e. evaluation of results, funding opportunities, alternatives, etc.
7. The lack of a business-like approach (no project planning, documentation, cost accounting, etc.) in the past is not acceptable for future work on this project. There are resources available in the County to help meet this need.
8. The support and maintenance of the Assessor's Office systems (LAN, X1, PC network, etc.) can and are being serviced by the County's IS Department. The servicing of these systems should remain completely separate from any development of the software project. The County's method for

handling this service is codified in a standard MOU which should be executed between IS and the user department or office. The Assessor has not yet signed an MOU.

9. Significant changes in the County's leadership, planning and funding of IS resources since the Assessor began his project are available. If entered into as a willing partnership, these resources can provide immediate and long-term benefits for both the Assessor's Office and the County. Cooperatively working with other County departments and in conformance with Board-directed policy will benefit the Assessor and his staff and the County "family" as a whole. In turn, a relationship of mutual respect, communication and collaboration benefits the taxpayers.

10. Near-term funding opportunities to address finishing the 10% of the CSS rewrite *may* be realistic enough to accomplish without additional General Fund support once a project plan and costs are determined. Examples of possible funding scenarios include getting State approval for redirection of some SLP funds and/or use of unspent current year appropriations in the Assessor's approved budget. Clearly more information on costs is necessary before definitively allowing a funding recommendation based on the range of possibilities.

11. The County has a responsibility and an opportunity to help influence long-term funding for the Property Tax Administration Program. Devotion of resources to this effort could synergistically benefit much more than the Assessor's Office and its software development project.

12. Although there is no written policy on this issue, it is generally assumed that the law protects County ownership of all intellectual property developed by regular and temporary employees using County resources. In the future, the consultants recommend that the County contractually cement intellectual property rights about ownership of the software (code) or any other products developed under this project if/when there is a decision to continue work on this project. At the workshop, additional concepts such as "derivative works" and protection from licensing fees were introduced. It is noted that the County's standard Professional Services Agreement does include a general clause pertaining to County ownership of intellectual property. However, given the industry, closer attention and expansion of that clause may be prudent for software development agreements executed by the County in the future.

13. There may be entrepreneurial opportunities for the County as a result of completing the CSS and/or participating in further development on this project. However, these opportunities should be addressed as "value added" and separate business decisions requiring information, analysis and a reasoned approach, in contrast to having them drive decisions to move forward.

14. The issue of the former temporary employee(s) and any future role in the project must be addressed. It was raised to a high level of public visibility and controversy by the documented concerns of Assessor's Office staff, questions from the Board during the December 14, 1999 meeting, and the Grand Jury's Interim and Final Reports. The employee is also described in the consultants' report as the "original developer." Given the lack of documentation and project plans, the consultants' recommendation that the County first determine whether the original developer is interested in completing future work is *not* unreasonable from a business perspective. There is no guarantee that future work with the original developer will take less time and will therefore cost less in the long run, but it is a logical step.

However, it may not be politically feasible *unless* the project is assured of strong and independent project management (also critical from a perspective of performance and compensation) and specific parameters for the contractor with regard to offsite development and staff interaction. According to

County Counsel, a well-defined scope of work in a Professional Services Agreement will also address the Board's previous concerns about the appropriateness of shifting work from a temporary employee to a contract. Finally, any contract with the original developer that *may* appear before the Board in the future to provide for work on this project will be completely different than the contract presented in December 1999. The County clearly has the plan for what would be needed to contractually proceed with this project.

#### Staff Recommendations-- General

Based on the discussions in this comprehensive report, it appears to be in the County's best interest to try to move ahead with completion of the CSS rewrite as recommended by the consultants (page 22 of the Carrera-MAXIMUS report) *with these important exceptions:*

1. **Completing the Entire Project:** The consultants state that an incremental approach starting with completing the CSS rewrite is recommended. They then recommend that if the CSS portion is considered successful, the County consider proceeding on towards completing the entire project (rewriting the Assessor's portion of the PTS, involving the X1 mainframe support). *Although the same incremental approach is recommended by staff,* it is important to note serious staff concerns about continuing on without adequate recognition of the magnitude of the work, the impact on the rest of the County system and the cost. There should be no expectation or implication that the County will necessarily go down this path. Having said that, this same cautionary approach *could* be viewed as most advantageous for the Assessor. It will allow proven products and concepts to shine, and could move new plans into the County's larger planning horizon thereby providing a different arena and additional opportunities to fund the significant costs of project completion.
2. **Project Plan:** The NCTP (through the COI structure) must approve the project plan before moving to the next step. In addition, a cost estimate at that point is unnecessary and probably not feasible using the recommended process.
3. **State Funding Approach:** To make this effort worthwhile, there should be some reason to anticipate the Assessor *may* be able to substitute certain workload commitments and therefore redirect a small amount of currently budgeted monies to this project in FY 2000-01. Focussing efforts at the State Department of Finance *may* be practical and useful for securing funds to finish the rewrite portion of the CSS. However, assuming that current funding could (or should) fund the entire rewrite of the Assessor's portion, even incrementally, appears to be an impractical and narrow recommendation. On the other hand, it *is* recommended that County staff and the Assessor, with full support from the Board, develop a vigorous campaign to monitor and influence replacement legislation for the State Loan Program to the extent possible.
4. **Using the Original Developer:** If the original developer is interested in entering into a Professional Services Agreement under the terms discussed in the consultants' report and this report, it *may* be a better business decision for the County to finish the work in this way than to go to the expense and cost of developing an RFP. This recommendation is based on the assumptions that: 1) the amount of work left to complete the CSS rewrite is accurately estimated at 10%, 2) the cost estimate received is considered reasonable, and 3) all contractual safeguards are put in place in order to protect the County and the staff.

All additional recommendations listed by the consultant on pages 23 and 24 are supported by staff. It is assumed that the County's Professional Services Agreement for continued work on this software

development project would include specific language regarding performance guarantees and remedies for failure to perform.

#### Staff Recommendations—Specific

The most critical first step is recognized as one that is entirely outside the control of the Board of Supervisors. Clearly, the County cannot go down the path being recommended by staff without the Assessor's approval and cooperation. That recognition points to two alternatives:

##### A. No Change

Without continued communication, collaboration and cooperation from the Assessor, it is recommended that staff be directed to:

1. Monitor developments on replacement legislation for the Property Tax Administration Loan Program, devise an active campaign in an attempt to influence new legislation, and include progress reports to the Board during FY 2000-01 quarterly fiscal reports
2. Make no administrative approval on resources for the Assessor that would continue work on any portion of the software development project, i.e. personnel, budget, fixed assets, etc.

##### B. Moving Forward Together

With continued communication, collaboration and cooperation from the Assessor, in an atmosphere of mutual respect that will hopefully lead to rebuilding trust, it is recommended that the Board request that the Assessor contact the original developer to determine if a Professional Services Agreement to complete the remaining 10% rewrite of the CSS is desired. That work would include documentation of work already done, well-defined deliverables and testing as outlined in the Carrera-MAXIMUS report.

*Based on the response*, it is recommended that the Board direct staff to work with the Assessor in taking the following steps:

#### **If work is to be done by the original developer:**

1. The Assessor works with the IS Applications Manager to define a project plan for completing the remaining 10% rewrite of the CSS.
2. The project plan is submitted for COI approval before being used as the basis of negotiations for a Professional Services Agreement.
3. Proposed terms of the Agreement are developed by the Assessor and County staff (including but not necessarily limited to IS, County Counsel, and Administration).
4. The negotiated price received from the developer is reviewed and deemed reasonable by the NCTP through the COIs.
5. A recommended Professional Services Agreement with funding information is brought to the Board of Supervisors for approval.

6. If approved by the Board, the COI sets up a Business Solutions Team (to include the Assessor) that will be responsible for assuring independent project management and approving payments based on deliverables.

**If work is not to be done by the original developer:**

1. The Assessor works with the IS Applications Manager in defining a *detailed* project plan and RFP for completing the remaining 10% rewrite of the CSS, including documentation of work already done.
2. The project plan and RFP are submitted for COI approval before being issued.
3. Proposed terms of the Agreement are developed by the Assessor and County staff (including but not necessarily limited to IS, County Counsel, and Administration).
4. The COI sets up a proposal review team to evaluate viability of cost estimates and select contractor.
5. A recommended Professional Services Agreement with funding information is brought to the Board of Supervisors for approval.
6. If approved by the Board, the COI sets up a Business Solutions Team (to include the Assessor) that will be responsible for assuring independent project management and approve payments based on deliverables.

**These actions are contingent upon the Assessor's cooperation in:**

1. Complying with Board policy and County IS security requirements, as well as technical policies and procedures.
2. Signing an MOU for IS staff to provide maintenance and support of the LAN, PCs, and legacy software system.
3. Providing data sharing access and formats to assist County staff and avoid duplication where possible.

**Additionally, staff is directed to:**

1. Work with the Assessor to pursue research on the status of "windows of opportunity" with the Legislature to influence future funding of the State Property Tax Administration Program.
2. Return to the Board with updates during quarterly reports and/or at any time where Board assistance is deemed important to achieving the County's goals.

County of Nevada  
Policy Statements  
1999/00

COUNTY OF NEVADA BUDGET POLICY – B99-02

*Goal: To provide consistent and cost-effective information processing and data availability to Nevada County employees to achieve County goals, while maintaining data and system integrity*

***Background:***

The Information System (IS) department has recently been recognized for the vital role it plays in County activities. It now operates as an independent department, and has directed its focus to high level customer service, and maximizing county resources. Due to fiscal constraints, and the newly organized department, it is imperative to consolidate information resources, and set consistent standards that encourage long term planning, as well as cost effective application of resources.

There is an active movement in both the private and the public sectors of “concurrent centralization and decentralization.” Information systems staff and equipment are being highly centralized to reduce costs, provide a higher level of staff and therefore services, and provide more opportunity for long range planning. Within this environment, IS controls and maintains the system hardware and software. IS sets consistent guidelines surrounding the purchase and configuration of the any items intended to be attached to that system. This maximizes interoperability among County information resources. This also insures compatibility and transferability of data and skills across multiple applications.

The second aspect of this trend is the decentralization of data to user departments. This provides vast opportunity for user departments to customize unique as well as shared information for departmental needs. Shared information can only be successful in meeting many department needs if the format is transferable due to a consistent set of guidelines outlined by the IS department. In the foreseeable future, data that may be input several times currently can have one single point of entry, and provide the database for several user departments. This also furthers strategic planning as we move to a modular environment where a repository of information exists, and a user workstation can access any legitimate and authorized file on the County network.

It is the intent of the IS department to centralize staff and equipment to reduce redundant resources, and capitalize on pooled resources. In conjunction with this, it is also the intent of IS to decentralize data that resides on these systems. This approach is expected to increase flexibility of user departments to access and use data, while insuring county networks and systems are maintained and operating efficiently.



To this end, IS has established the following goals and objectives:

- Establish tactical and strategic plans for the development and deployment of data processing and telecommunications services and facilities for Nevada County.
- To set and encourage long range plans and systems capabilities. Promoting the use of technology to cost effectively improve County operations and services.
- Establish standards and guidelines for the acquisition, installation, and use of Personal Computers, Local Area networks, Telecommunications and related software.
- Insuring the integrity, availability, and security of all information and data residing on County owned systems.
- To promote data sharing by integrating new and existing departmental/office applications into the Countywide network.
- To empower departments/offices with the ability and authority to create, maintain, and manipulate their own data.
- To achieve economies of scale through consolidating "core" services such as Email, document imaging, server management/administration, programming, telecommunications, help desk, technical services, and other services in the IS department.

***Policy:***

IS is responsible to maintain SECURITY for County owned networks and data depositories.

***Procedure and Responsibilities:***

- IS is responsible for network security. Including all user access permissions and centralized authentication's, for both internal and external access to/from the County network.
- IS is responsible for the security, backup, disaster recovery, and confidentiality of all information residing on County owned servers and data depositories.
- IS approval and involvement is required to install dial-in-software, or any type of "remote access"
- IS approval and involvement is required to alter or extend the County network
- IS is responsible for installing and supporting all County data and voice communications networks and equipment. This includes all services contracted with third party communication providers.
- Each department/office is responsible for the security and confidentiality of information stored on their PC's, stand-alone servers and/or computer systems.

***Policy:***

IS is responsible to insure that County owned data/voice systems are INTEROPERABLE.

***Procedure and Responsibilities:***

- IS is responsible to identify and support specific network protocols and operating systems. Departments/offices should not purchase equipment without approval from IS for compatibility/interoperability.
- The County IS staff and network can not absorb additional workload/capacity without the provision of additional resources. Therefore, all new systems proposed would be assessed to determine infrastructure, communications, software, installation, and on-going maintenance cost. Only those projects that fully fund these one-time and on-going costs will be considered for approval by IS, ITAC and the Administration Office.

***Policy:***

IS is responsible to insure and promote DATA SHARING CAPABILITIES between all County data depositories.

***Procedure and Responsibilities:***

- Information residing on County owned hardware belongs to the County. Management of the respective departments has complete access to this data.
- Where security considerations permit and operational efficiency can be enhanced, the departments/offices with primary responsibility for a system will allow other County departments/offices and local agencies access to their systems as long as the requests are fully funded
- New and existing applications and data depositories must be compatible with IS set standards/methodologies for enterprise data exchange. Any system that is not a standard supported by IS must fully fund the data exchange between other compliant systems for the life of the system. IS, ITAC, and Administration Office must approve all new non-supported systems.
- When ever security and ability allows, Departments/offices are to be empowered with the ability to create, manage, and manipulate their data at will, removing IS as a potential bottle neck to this process.

***Policy:***

IS is responsible to promote, develop, and manage all county information systems staff positions.

***Procedure and Responsibilities:***

- To promote economies of scale through following consistent standards, developing comprehensive training and establishing common objectives.
- To share costly resources such as training materials, technical libraries, tools, and diagnostic equipment.

Assessment of Software Development  
in the  
County Assessor's Office



**Nevada County, California**

**August 30, 2000**

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## 1 Project Description and Scope

### 1.1 Project Description

The project/system *Carrera-MAXIMUS* was asked to review consisted of software being designed and developed to help handle the statutory duties of the County Assessor. The project/system was being designed and developed by the Assessor's Office to replace a legacy system for property assessment. The legacy system was first used by the Assessor's Office in the mid-1970's and has been maintained and updated on an on-going basis since then. A brief discussion of the existing system and its history will enhance understanding the software development project that began a number of years ago and is the subject of this assessment.

The old system runs on the County's X1 central computer and is supported by the Information Systems Department. That system has gone through several evolutionary changes during its lifetime. The current Assessor, Mr. Green, assumed his office in late 1998, following more than 25 years as a County employee. While a County employee, he played a major role in the development, maintenance and enhancement of the old system. This work included at least three migrations of the software system to new computer platforms.

In addition to this system (legacy X1), there is a simple PC (personal computer) based system for comparative sales analysis. This system was originally developed in the mid-1990's and has recently been upgraded to incorporate and store digital photos.

The Assessor described to us future plans to merge into a final product:

- the PC based system containing the digital photos
- parcel maps,
- plot plans,
- the business functionality of the X1 legacy system, and
- a public interface to Assessor information via the Internet.

We have included a diagram in this report (Appendix A) titled "*Nevada County Evolution of Assessor's System.*" The diagram shows what we understand to be the three primary stages of this partially completed development effort and its relationship to the County's legacy system.

## 1.2 Scope

Carrera-MAXIMUS consultants conducted an on-site assessment of the software development project. The requested scope of work focused on evaluating the following subject areas:

- **Project Management Methodology** - Project Management Methodology involves a reasoned and structured approach to assure that the project is delivering expected results within time and cost constraints. There are many variations in project management methodology in use today. The formality of the methodology used generally varies depending upon the complexity of the project and the size of the development team.
- **Project Plan and Planning Methodology** - Project planning methodology is the process by which the project is estimated and documented. It is directly tied to the project management methodology and effects the format of the project plan. The project plan is normally a written document, which describes the tasks and milestones for a project. This document also divides the work into tasks and should reflect the methods by which the project was estimated.
- **Code Development Methodology** - Code development methodology includes the processes and procedures to assure that the computer software (code) being developed meets the desired objectives and implements the business rules by which the organization operates. The more complex the project (or the more programmers on the team), the more structured the methodology must become to avoid serious problems.
- **Change Management Policies and Practices** - Change management is needed to assure that work proceeds on an orderly and predictable basis and to assure the stability of the production system. In other words, change management practices are needed to keep programmers from compromising each other's work and/or the production system.
- **Information Technology Infrastructure** - This included a review of the software development/test/production environment being used by the project developer in the Assessor's office. We also received information on general plans for upgrading the County's general IT infrastructure from the IS Director.

- **Any other issues** relevant to the assessment identified while on-site.

Our assessment project started on June 19<sup>th</sup>, 2000. On July 5<sup>th</sup> and 6<sup>th</sup>, we met with the Assessor to conduct the bulk of the assessment at the Nevada County Administrative Offices. Additional discussion and visits to clarify information occurred with the Assessor and County staff between July 6<sup>th</sup> and August 14<sup>th</sup>. We also reviewed historical documentation supplied by County staff and the Assessor for background. We used a combination of personal interviews and direct observation to conduct this assessment.

The report which follows presents findings in the above subject areas. Each statement of finding (in *Italics*) is immediately followed by a more detailed explanation. The report concludes with a series of recommendations for further actions.

## **2 Analysis of Assessor's Project and Methods - Findings and Conclusions**

### **2.1 Project Background**

It is within the context of the following responsibilities that the current Assessor originally approached the concept of this software development. The Office of the Assessor is responsible for determining the assessed value of all taxable Real and Personal Property located within Nevada County. Under the California Constitution and the Revenue and Taxation Code, the Assessor has four primary duties:

- 1) Locate all taxable property within Nevada County
- 2) Identify the owner of all taxable property
- 3) Establish the assessed value of all taxable property in accordance with the law
- 4) Publish both annual and supplemental assessment rolls

Within the State of California, the Assessor's duties are complicated by the application of certain unique state property tax law (primarily Proposition 13 and Proposition 8). These propositions established special rules by which all properties must be assessed for tax purposes. Assessed property values are limited to a maximum 2% annual increase between sales. When the property is sold, the sales price generally becomes the assessed value. The assessed value can never be more than the current market value.

If the general market value of properties in an area declines, then the assessed value of all comparable properties must also be reduced to the lower market value. This requires the Assessor to rely heavily on "sales price" data to establish initial value and "market price" data to set future assessed value. The Assessor uses analysis of comparative sales to establish the market price.

If and when the local real estate market recovers and prices rise, market price is set through comparative sales data. The Assessor may return the property assessed value to Proposition 13 levels. This is limited to where the assessed value would have been had annual 2% increases been applied since the last sale. The quality of the Assessor's comparative sales data becomes very important during times of economic recovery as property tax assessments can jump suddenly. If property values have been depressed for a while, long-time homeowners will be surprised to find 10%, 15%, or even more increases in their assessed values. While these increases are allowed under the law, the new assessed value may still be below Proposition 13 guidelines and subject to further increases based upon comparable sales.

In an effort to use technology to improve the County's effectiveness in the performance of these duties, the current Assessor started down a path of software development that is sometimes part of the existing system and sometimes adjunct to it. Specifically, we were able to determine software development in a number of areas and offer the following observations and findings.

*Finding 1: We found that there are five parts to the system/project. Each part is complete to various degrees. Some parts are in productive use today. When viewed as a whole, the effort to replace and enhance the property tax assessment system was approximately 60% complete when work was stopped.*

The five parts and their completion status are as follows:

- 1) **Legacy X1 System - Complete and in production** – The County's production legacy system (X1) for Property Appraisal, Billing and Tax Collection. This system incorporates all the business rules and workflow that support the activities for processing of Secured and Unsecured tax rolls of the Offices of the Assessor, Treasurer-Tax Collector and Auditor-Controller. The basic screen design of the existing system was to be used as the basis in the next stage of development of the system described in #4-5 below. We reviewed the design of the legacy system during our assessment. It is a menu driven character-based system that the Assessor's staff uses in conducting the day to day business of the office. The Assessor and the Assessor's office manager convinced us that the business processes as designed in the legacy system were adequate and efficient for the Assessor's function. The replacement efforts were focused only on the Assessor's part of the application (i.e. not the Billing, and Tax Collection portions).
- 2) **Comparative Sales System - Complete and in production** - There is a PC based system using a Microsoft (MS) Access database that supports a comparative sales analysis data base and stores digital photographs of each parcel. We observed this system in use in the Assessor's office during our assessment.
- 3) **Data Base Design - Complete** - There is a database design for a complete countywide Property Tax system. The design we reviewed supports all aspects of the Property Tax assessment function and appears to meet standards for a



normalized relational database. This database design forms the basis for a new system design for a replacement system. The database design is documented in a technical diagram called an Entity-Relationship-Diagram (ERD).

- 4) **Replacement Comparative Sales System - Partially complete (~90%)** - There is a system that is intended to replace the MS Access comparative sales system described in #3 above. The system incorporates the digital photograph elements from the MS Access System and adds digitized plot plans and parcel maps to the data base. The system is written in Visual Basic (VB) and is designed to run on an MS SQL database using an Internet browser to view parcel data. A considerable amount of design and development work has been completed on the replacement system. We were able to view a prototype version of the new system in the Assessors office. This portion of the overall project is approximately 90% complete. While it is intended to complement the business functions presently provided by the X1 system, it has value by itself as a more powerful Comparative Sales application. The technology used for this application is intended to function in the same way as the Internet using an Internet browser such as Netscape or Internet Explorer. Outstanding tasks include the creation of system documentation and final testing/debugging.
- 5) **Replacement of Existing X1 Assessor System - Minimally complete (~0%)** - The Assessor's plan was to re-program the screens and database (from the X1) into the new VB/MS SQL software platform (from item #4 above) and normalized database (from item #3 above). This would result in all of the Assessors applications being combined and using the same "Browser" technology. Included in the Assessor's design was consideration for the support of other County departments. The current system includes a database that is an extract of the Assessor's production database (on the X1) which other departments access for their own use. The Assessor's design included an interface that would continue to provide the extracted Assessor database on the X1 for other departments to use in exactly the same manner as the existing system. Creating new interfaces to any new systems introduced by other departments would be much easier with the new relational database design.

As a follow-on effort to the replacement of the X1 system, the Assessor described future plans to offer access to limited amounts of property data to the public via the Internet. Public access through the Internet was not part of this project, however the development and design work that was in progress is an essential element in order to complete the public access piece sometime in the future.

*Finding 2: The conceptual design and features of the Assessor's new system are better than those found in any commercial off-the-shelf California Property Tax system available in the market today.*

There are presently very few commercial off-the-shelf (COTS) products for Property Tax Assessment in California. A few vendors have claimed to have development efforts underway for new products, but to our knowledge, none of them has signed contracts

with a county at this time. The Assessor confirmed, and we agree, that the existing system contains features and functions not present in the few COTS systems available. In addition, none of those products includes support for digital photographs and area plots as envisioned by the Assessor's design.

*Finding 3: We found that the Assessor had valid reasons for originally proceeding with this project.*

The Assessor described to us the reasons that he believes that this development project was necessary. First, the legacy Property Tax system is based on data base management software called "UniVerse". While this data base management system has served the County well, the current release level is outdated. Furthermore, the legacy property tax database design is outdated and makes the integration and sharing of data difficult.

Second, the County's computer system (the X1) is outdated. The hardware is experiencing capacity problems and is difficult and relatively expensive to maintain compared to newer equipment. At the time that the Assessor embarked on the path to replace the Property Tax application, no plans were in place to replace this hardware.

Third, the legacy system on the X1 uses a product for screen design and presentation management named Total On-line Applications Development System (TOADS). The version of TOADS in use at the County is several releases behind and does not support modern development tools and systems features such as a graphical user interface (GUI). While there are known advantages and disadvantages to a GUI interface, it is generally accepted that the advantages, e.g. ease of use and reduced training, outweigh the disadvantages, e.g. intense data entry efficiency. In other words, applications that require intense data entry are most efficient in a character-based mode.

*Finding 4: There are changes in hardware and software planned in the County that should be considered in conjunction with continuing development of the Property Tax system.*

The County's IS Director has described plans to upgrade the County's X1 system. The planned system, a Data General Aviiion server is a state of the art mid-range computer that will place the county in a position to take advantage of current software technology. The new Data General system is scheduled for installation by spring of 2001.

The County also plans to upgrade the UniVerse database software. The new version of UniVerse supports a wide range of current development tools and software languages (including Visual Basic or VB). According to the documentation on the new version of UniVerse, it will support any normalized database design. With this new functionality in the UniVerse product, the normalized database designed by the Assessor to run on an MS SQL Server database might work equally well in the new UniVerse, as might the new software written in VB. This means that completing the Assessor's project as

begun would not be in conflict with future direction currently planned by the County and could even be merged at some future date if desired. Also, completing the Assessor's project would create an opportunity for the Tax Collector and Auditor to migrate their legacy systems to the same platform, if this was deemed desirable after reviewing the effectiveness of the Assessor's new system.

The County's future plans for the TOADS screen management system are unclear at this time. Given the legacy Property Tax system's reliance on TOADS, clear direction in this area is needed. It is important to note that TOADS and UniVerse are critical components in many other County systems. These include: Financial Accounting, Fixed Assets, Budgeting, Fleet Management, Planning, Building Inspection, Criminal Justice Case Management, Jail Management, Computer Aided Dispatch, Collections, Board of Supervisor's Document Indexing, Time Accounting, Cashiering, Court Calendar, Probation, and Purchasing.

## 2.2 Project Management Methodology

*Finding 5: We found that the Project Management methodology used by the Assessor was much more informal than we would reasonably expect to find on a project of this type.*

At a minimum, the project management methodology would be expected to track time (labor hours), cost, and deliverables during the life of the project, and forecast the schedule and cost to complete. The application of a methodology to a project must be included in the cost estimates. Overhead cost for the project increases as the project management methodology becomes more formal, however, project *risk* increases as the formality of the methodology decreases.

There were two major reasons given for the informal approach to project management. First, was the wide variety of work being performed. The current Assessor, Mr. Green, was using the same resource(s) to perform in-house maintenance on business systems, day-to-day support of the office LAN, and for new development work. He assigned top priority for work being performed by the temporary employee to the day-to-day network administration and desktop PC support functions. Consequently, development work on the new system became difficult to forecast as it could be (and was) interrupted anytime there was an issue effecting the department's information technology and its operation.

The second reason for the informal approach was that the development team was very small and worked in close proximity to Mr. Green. From Mr. Green's perspective, this close working arrangement reduced the need for more formal project management methodology. However, it also led to confusion and misunderstanding outside of the Assessor's Office as to the nature and status of the system, progress on new development and Mr. Green's plans for the future.

## 2.3 Project Plan

*Finding 6: We found no formal documentation of a project plan associated with this project. However, after considerable discussion with the Assessor, we were able to understand his vision of the project. It is clear to us, after these discussions that the Assessor understands the business impacts of this effort, and understands the objective he is trying to reach.*

Normally, we would expect to see a documented plan for the project that stated goals, objectives, resources (labor and materials), critical events, and event dependencies. An example of event dependencies would be the relationship of the purchase, delivery, and installation of a server computer by the date that system testing was scheduled to begin. Slippage in the first event delays the second.

We have provided a diagram in Appendix A of this report that illustrates at a very high level what we understand the project objectives to be and the path being followed to arrive there. The diagram is not a project plan, but a conceptual diagram of the project intended to help the readers of this report understand our findings.

The Assessor arrived at his cost estimates for the project costs by reflecting on his considerable experience in several previous migrations of the County's Property Tax system. He evaluated the progress which had been made to-date and projected the cost to complete the final phase based upon what he thought was left to do. It is important to note here, that the final phase of the project was defined to be the migration of the existing screens (business processes) to the new platform. This planned migration is the type of work that was most similar to previous efforts. Therefore, Mr. Green would be the best person to make reasonable estimates based on his past experience.

While we believe Mr. Green's estimates are based upon reasonable assumptions and his considerable past experience with this system, we cannot attest to their validity. If our recommendations are followed, it is likely that the final estimated cost for the project would be higher than the previous estimates. It is only after careful negotiations of a proposed contract using the criteria defined in our recommendations that final and more accurate cost estimates will emerge.

## 2.4 Code (System) Development Methodology

*Finding 7: The Assessor was using a methodology known as "Rapid Prototyping" or "Iterative Development".*

This software development technique is highly interactive (typically between the designer and a knowledgeable user) and can be quite adequate for focused projects attempting to introduce new technology. At the same time this methodology does not

produce any significant documentation because the designer is constantly trying new things, showing them to the user, and incorporating the user's feedback.

At some point, the designer must stop the iterations and document the work produced. That point is usually after all prototyping is complete. Prior to that point, the prototype itself serves as the documentation. This can easily get out of hand if the project is very large or if there are very many people involved in the effort. In the Assessor's case this was a small focused effort involving very few people. Therefore, the fact that there is no formal documentation at this point does not surprise or concern us.

While we are not concerned at the level of documentation at this point in time, we did hear staff's concerns about the impact upon staff time taken up by the project using this development approach. Our assessment was limited, so we did not make any effort to verify or determine the level of staff time that was needed to support the development effort. Based upon our observations of the system's development status, we believe that the most intense period of interaction between the office staff and any software developer is over. However, we have included a specific recommendation that would address this issue should a new contract to finish the project be negotiated.

When performing iterative development, some technical aspects of the system are frequently "stubbed-out." This means that the code to provide that functionality is not really there. This is often the case when one is trying to develop a new user interface, which is what we observed that the Assessor was doing. This allows the developer to focus on one aspect of the system at a time without having solved all of the technical problems of the finished system. Clearly, all such "stubbed-out" portions of the code would have to be completed before the system would be usable. While we did not examine the code directly, discovering that portions of the system had been "stubbed-out" would not have changed our conclusions given the development approach the Assessor was following.

As can be seen from our diagram (Appendix A), the introduction of new technology into the Assessor's system was being accomplished in an evolutionary rather than revolutionary manner. This approach has produced successful results in the Assessor's office for many years. Initially, the Assessor's office developed and maintained a Paradox database application running on a DOS PC to perform comparative sales analysis using data extracted from the X1 system. This system was moved off the Paradox system in the mid-1990's to the emerging Microsoft office suite. The replacement system used the MS Access Database as an initial deployment with the intention of eventually moving to a more robust database platform. At the time this was considered an upgrade in technology which moved the comparative sales application onto a relational database with a Graphical User Interface (GUI), namely Windows.

In 1995 digital photographs were introduced to the office which could be stored on a shared server computer and viewed with stand-alone viewer software. The Assessor

estimates that this modification generated a saving of \$22,000 a year in Polaroid film costs. Integration of the digital photographs into the Access database improved productivity of the Assessor's staff and lowered document management costs (of the pictures).

The MS Access database product suite used includes some database design tools that the Assessor and the developer (a temporary County employee in the Assessor's Office) used to restructure the data for all of the Assessor's data residing back on the X1. The design we observed was a highly normalized relational data base design. A highly normalized relational design for a database has several well-established benefits in terms of total cost of ownership. The term "total cost of ownership" (TCO) refers to taking a comprehensive view of all aspects of costs, both initial and on going. Use of a relational database helps to create what is called an "open-system." An open-system assures that other County department's data needs from the Property Tax system could be met without requiring them to be on the same platform. Generally, this would apply even if they decide to purchase a different off-the-shelf system (provided those systems are "open" as well). However, for many (mostly technical) reasons, we caution the County about using MS Access as a database platform for long-term strategic use in the County (see section 2.6 for additional TCO aspects).

The Assessor is well aware of the known limitations in MS Access. Initially, MS Access was being used as an application prototyping and production tool and to aid in the re-design of the new Property Tax database. However, the intended prototype turned out to have immediate payback in terms of productive use by the Assessor's office. As a result of this value, the prototype containing comparable sales and digital photos was placed in production and is in use today. The Assessor described to us his intent to develop and implement the new database using MS SQL Server. MS SQL Server is Microsoft's premier database product and is presently one of the industry leaders for strategic enterprise database platforms.

The new system design that the Assessor is currently introducing, includes a new way of structuring data called "compound data architecture" and new development methodology called "Object-Oriented Development"(OOD) in a "Thin Client" environment. Compound data architecture allows computer systems to collect, store and present much more than just the text-based information which most users are familiar. Things such as pictures, video/voice recordings and drawings can be stored and manipulated with much the same ease as simple text by the user. But for the developer, it requires significant new skills and the use of new and different practices.

In order to understand the significance of Thin-Client software, consider an older form of software architecture (but more modern than that employed on the X1) that is very popular today called Client/Server. In this approach, the software is divided into two different parts called the Client and the Server (or Client/Server software). The Server portion controls the database and maintains its integrity. The Client portion controls the

presentation of the information to the user. This has usually resulted in development of two separate sets of programs, one running on a database-server computer and one set running on each user's workstation. This results in each user having to have a copy of the client portion of the application and introduces significant system management challenges.

While it was initially thought by the industry that Client/Server systems would be less expensive to develop, operate and maintain than traditional "mainframe" or "legacy" systems, experience has proven otherwise. Studies have been published by well know research firms like The Gartner Group showing that Client/Server systems are up to 5 times as expensive as mainframe systems. Because of this huge difference another approach had to be found.

The latest means to develop software that attempts to address this issue is called Thin-Client application development. Thin-Client applications require very little software to be loaded on the user's workstation, preferably nothing more than an Internet web browser (which is frequently already present). Thin-Client applications are very new and require additional tools and skills over and above the move to Object-Oriented Development. In particular, the use of automated testing tools is highly recommended. The Assessor is developing the new system using this Thin-Client approach. During the course of our assessment we have heard this referred to as "Browser" software. We did not find the expected use of any automated testing included in the Assessor's plan.

*Finding 8: The staff resources being used to develop the new system were also being used to maintain the old system. This seems to have caused considerable confusion about what was being done, progress being made, and cost of the effort.*

As a result of this practice, development on the new system would proceed only when everything else (technology wise) in the Department was working well. This is frequently the way a small staff is managed especially if there are no external deadlines for the new development like Y2K. The disadvantage is the protracted nature of the development time and the lack of a visible schedule for completion. This appears to be the way the Assessor's Office was run for a number of years preceding the term of the current Assessor. With the recent move in the County to consolidate IT resources into a centralized department, a more focused effort to complete this project is needed. This will help to limit cost and allow better tracking of project status and deliverables.

## **2.5 Change Management Policies and Practices**

*Finding 9: We found no formal change management policies or practices in use in the Assessor's Office. We checked with the County's IS department (in order to consider recommendations for the Assessor to follow) and found that there were no formal change management policies or practices in use there either. Both the Assessor and*

*the IS Director acknowledged a need to develop a more formal approach to change management in the County.*

Change management policies and practices become more and more critical as two things occur. First, as the number of developers grows, change management is needed to assure that work proceeds on an orderly and predictable basis. In other words, change management practices keep programmers from compromising each other's work.

Second, as the software completes testing and moves into production, change management is important to assure that new functions and features are added to the system and that they do not adversely affect the production environment. This process is referred to as "controlled release". The Assessor's system was not yet in a state which would benefit from a controlled release environment. The small size of the development team enabled the Assessor to perform version control manually.

## **2.6 IT Infrastructure (development/test/production environments)**

*Finding 10: The development tools being used to support this project consisted of industry standard off-the-shelf products. Proper use of these products places the County in the industry mainstream and has already produced concrete benefits.*

Use of standard off-the-shelf products for systems development presents a minimum risk to the organization of being out of step with industry standards. The Assessor was using Visual Basic, MS SQL Server, AutoCAD, Windows NT and MS Office for the project. These are all mainstream products. In addition, a single company, Microsoft, supports all but AutoCAD. Having a single vendor for all or most of the supporting products can enhance support opportunities and make interaction and integration of system components less problematic.

The benefits of the system developed using modern tools and techniques include lower total cost of ownership (TCO) because of the following aspects:

- Increased labor pool of qualified programmers – use of current technology increases the available pool of trained resources.
- Normalized relational databases are easier to maintain and require less complex code structure through the use of SQL (Structured Query Language).
- Object-Oriented programs enjoy a high potential for re-use if carefully constructed.
- Use of automated testing improves reliability for all systems, which improves County productivity.

In addition, specifically concerning the Assessor's project:



- The Assessor's Office has already witnessed improved productivity with the limited functions deployed so far. However, these were just prototype systems. Finishing the project could help consolidate those gains and add additional document management tools that should further enhance productivity.
- The project allows the County to have concrete information upon which to base future directions for technology upgrades.
- The County may be able to recoup some portion of its development costs through data subscription services or even licensing the software to other counties or licensing the system to a vendor.

*Finding 11: The development, test and production environments are not well defined.*

It is a common practice in these types of projects to set up multiple server computers where each computer supports either the development, test or production environment. This approach helps assure that the developers, testers and users operate in a known and stable environment. This way, a problem encountered while testing a change to the system will not affect the systems operation in production.

In the Assessor's case, the system was under development and the development team was small. This small configuration reduces the importance of multiple environments. However, formalizing a separation before the system enters production would be essential.

## **2.7 Other Relevant Issues**

Two other relevant issues surfaced during the course of our assessment. The two issues were Communications and Funding. Discussions of those two issues are included in this section.

### ***Communications***

In Section 2.2 of this report, we identified that there was "confusion and misunderstanding outside of the Assessor's office as to the nature and status of the system, progress on new development and Mr. Green's plans for the future." This breakdown in communications between the parties and the ensuing need for the public to have a level of understanding of how funds were being spent, caused the project to be halted. At the point that the project was halted, design documentation was not complete and may now be partially lost. These actions may have cost implications in the future if, or when, the project is resumed. *More important*, it became clear to us that effective communications and mutual trust must be rebuilt between the parties for the future good of the County, the

success of the IS Strategic Planning process and the successful completion of this project.

### ***Funding Plans***

*Finding 12: At the time that the contract was presented to the Board by the Assessor (December 1999), the Assessor had a reasoned approach in mind for funding the project. The Assessor's Office had not adequately communicated this plan to the County Administrator's Office and had not followed up on several administrative and/or procedural steps necessary to put the plan in motion.*

*Finding 13: Some of the assumptions used to create the December 1999 funding plan are no longer valid, requiring modification to the plan if the project is to proceed at any level.*

At the request of the County Board of Supervisors, we were asked to review and report on the plans the Assessor had to fund this project. We were also asked to review those plans with the Budget and Auditor's offices and report our findings. The following five sections of this report cover this issue. The changes in circumstances that have occurred over time have been factored into our recommendations in section 3 of this report.

### ***Source of Assessor Funding***

Nevada County allocates budgets in a "Fund" structure. A Fund is a self-balancing set of accounts (balance sheet) that allows the County to track revenues and expenditures in a segregated fashion. This approach minimizes the co-mingling of funds and is a common practice in Governmental Accounting. Within each fund, the County further categorizes funds into five classes. Class 1 funds are for Salaries and Benefits, while Class 2 funds are for Expense items (materials, supplies, etc.). The remaining classes are not relevant to this discussion.

The Assessor's office is funded primarily from the County's General Fund. The General Fund is the largest pool of discretionary funds that is appropriated by the Board of Supervisors. The largest portion of the Assessor's appropriation comes from the General Fund in Class 1 (Salaries and Benefits).

In addition, the County receives funds from the State of California intended to augment funding in the Assessor's office. We will refer to this program as the "State Loan Program". Nevada County receives approximately \$234,000 each year from the State Loan Program (SLP). Funds from the SLP come with strings attached. First, the County (the Assessor) must submit a plan to the State describing how the funds will be used and the State must approve that plan.

Second, the County must agree to fund the Assessor's operations at a level that is at least equal to or higher than the General Fund level for that office in 1993. Finally, the Assessor's Office must meet State mandated performance standards for the collection of property taxes.

If the County meets all the State's requirements spelled out in the SLP, then the State "forgives" the loan on an annual basis. The SLP is an annual program authorized by the Legislature, and unspent funds generally return to the State, although the State did allow the previous Assessor to carry-over unused funds into subsequent years.

### ***Assessor's Funding Plan (December 1999)***

The Assessor's plan for funding this project was formulated following a County decision to enforce limits on the use of temporary employees. Up to this time, the systems development effort and other technology work in the Office had been supported using temporary employees and funded out of Class 1 funds. The County's decision on temporary employees required the Assessor to use a contract for these services funded out of Class 2 funds.

In December of 1999 when the plan was presented to the board, the Assessor's Class 1 funds were under spent. This under spending of Class 1 funds was a consistent pattern that had developed over several years. During the course of our discussions, we heard several reasons stated for this problem. County staff generally attributes their difficulty in filling vacancies to general labor shortages and/or low unemployment in the area, wage and salary competition, and the backlog of work in the Human Resources Office.

In proposing the contract to the Board, the Assessor took the following issues into consideration in building his funding plan:

- Finishing the project and continuing the support of IT in that office would cost about \$200,000 over an eighteen (18) month period.
- The proposed contract would span two fiscal years (99/00 and 00/01) thus reducing the impact on the budget in any one year.
- Some Class 1 money (historically under spent) could be used.
- Some State Loan Program (SLP) funds could be used over the two fiscal years.

With this information in hand, we discussed the plan with both the Budget and Auditor's Office. Following are the responses from those offices.

### ***Budget Office Response to Assessor's Funding Plan***

The Budget Office offered the following comments on the Assessor's funding plan:

- Transfers from Class 1 funds to Class 2 funds require the Department to explain and justify the request. The County Administrator's Office reviews these requests.
- There is no specific policy in the County forbidding such a transfer between funding classes.
- There is no policy describing acceptable criteria for a class to class transfer. Each request is handled on a case-by-case basis by the County Administrator's Office.
- The Budget Office has no record of a transfer request from the Assessor to fund the proposed contract.

### ***Auditor's Office Response to Assessor's Funding Plan***

The Auditor's Office offered the following comments on the Assessor's funding plan:

- There is nothing conceptually wrong with the plan or nothing that would limit the Auditor's support in carrying it out.
- There is a problem with the plan, in that the Assessor has not (to the Auditor's knowledge) communicated the plan for the use of SLP funds in this manner.
- The Auditor is aware that there is a state requirement for staffing levels in the Assessor's Office that could affect the allocation and use of SLP funds, if the Assessor's Office staffing levels drop below the mandated minimum levels.

### ***Factors Affecting Assessor's Funding Plan (September 2000)***

During the course of our discussions on this issue, we became aware of new developments and/or changes in circumstances that invalidate the old plan. The developments we identified are:

- The under spent Class 1 funds from FY 99/00 reverted to the General Fund Fund Balance at the end of FY 99/00 and were reallocated to other uses in the FY 00/01 budget process. In other words, unspent funds from FY 99/00 that could have been transferred to support this contract are no longer available.
- We are too early in the fiscal year to predict with the same level of certainty, how much Class 1 funding will be unspent in the current fiscal year (FY 00/01).

- The Assessor would like to reduce the number of unfilled positions in his office as soon as possible. This would impact the availability of excess Class 1 funds in the future.
- There is a need to enter into discussions with the State as soon as possible to clarify whether or not the State would support the use of SLP funds for the project. We believe that there is a high probability that the state would approve such a use, but we found no evidence that the County had ever had this discussion with the State.
- The County has begun an enterprise wide program to develop a Strategic Plan for Information Technology. It is our understanding that this plan will identify priorities for IT spending in the County.
- The Board has appropriated a pool of funds (\$500,000 in FY 00/01) to cover the costs of major IT infrastructure and systems upgrades.

### **3 Options and Recommendations**

#### **3.1 Project Options**

Our review of this project and the work accomplished thus far has allowed us to identify a number of potential future courses of action that could be taken by the County at this point. Consideration of these options and their pros and cons was an essential part of formulating our final recommendations. We have included a description of four possible scenarios or options in this report. Other variations are possible, by combining and/or modifying the scenarios to meet the County's needs. A final decision on which options best meets the needs of Nevada County rests with the Board of Supervisors. Whichever option the Board chooses to take, we recommend that work and decisions that need to be made, be made in an incremental fashion. That way, new information that becomes available (such as a firm price to complete the Comparative Sales System) be documented and factored into the next decision point.

In the Pro's and Con's section of each option, we have included some information that describes our best professional judgement on the potential cost and revenue impacts of each option. Our intent in presenting this information was only to show these costs and revenues relative to the other options/scenarios we have presented. In other words, when we say that option 1b is the lowest cost to the County we mean that it would be a lower cost than option 2a or 2b.

It is also important to note that predicting the exact level of lost revenue under these scenarios would be very unreliable because there are so many variables. However, we do believe that there is a relationship between cost (or investment in technology) and the County's ability to collect Property Taxes (revenue). In other words, reasonable and cost effective investment in technology has the

potential to increase Property Tax revenues. We also believe that every dollar spent will not necessarily generate the same amount of additional revenue. The key is finding the point of maximum returns for dollars invested.

**Option 1: Stop the project.** We have included two variations on the "Stop Project" option.

**1a: Stop the project completely.**

**Pros:**

- We see no benefits to taking this course of action.

**Cons:**

- Efforts and any funds spent to date will be a total loss to the County.
- Future improvements in the operation of the Assessor's office supported by the design of the new system will not occur. As a result it is likely that property tax revenue will grow at a lower rate than possible with the new system's features.

**1b: Stop the project and enter into a contract with a qualified organization to document the status and work that has been done to this point.**

**Pros:**

- Lowest cost in terms of new money to the County.
- Documentation would have some limited future value to the County if the project were to be continued at a later date.

**Cons:**

- Efforts and funds spent to date will be a significant loss to the County.
- Future improvements in the operation of the Assessor's office supported by the design of the new system will not occur. As a result it is likely that property tax revenue will grow at a lower rate than possible with the new system's features.

**Option 2: Continue the project** using a qualified contractor/consultant under contract. There are two variations on the "Continue Project" option.

**2a: Complete the development, testing and documentation of the Comparative Sales system and place that functionality in service in the County Assessor's Office.** This system is about 90% complete at the present time.

**Pros:**

- Finishes a part of a system that we estimate is already about 90% complete and allows the usable portion to be put in service to the County.
- Moderate costs compared to other options (higher than Option 1a or 1b and lower than 2b).
- Once implemented, the new system will improve effectiveness and efficiency in the Assessor's Office. That could mean higher revenues to the County over time.
- Some of the new functionality could be shared with other County Departments.
- We see no material or adverse impact on other County systems in pursuing this option.
- This is consistent with overall direction for IT in the County – in other words this is not a dead end effort or an effort that is in conflict with the general direction being taken in the County as we understand it.

**Cons:**

- We see no detrimental affects in taking this option other than the potential loss of the benefits of the complete new system (see 2b below) if the effort stops at this point.

**2b:** Complete the development and implementation of a system to replace all of the legacy Property Tax system running on the County's main computer. Such an effort should be done in logical "stages" with an assessment of benefits at the completion of each stage before proceeding on to the next stage.

**Pros:**

- Gives the County an incremental approach to systems development that assures success and helps control costs.
- Upgrades a major core system in the County.
- In the long run, the new system has the potential to reduce software maintenance costs and improve system efficiency when compared to maintenance and operation of the existing legacy Property Tax system.
- Once implemented, improves effectiveness and efficiency in the Assessor's Office that could mean higher revenues to the County over time.
- Some of the new functionality could be shared with other County Departments.

- Consistent with overall direction for IT in the County – in other words this is not a dead end effort or an effort that is in conflict with the general direction being taken in the County as we understand it.

**Cons:**

- Highest cost of all the options.
- Could impact the County's ability to fund other technology projects.

**3.2 Recommendations**

We believe the most reasonable course of action for the County to take at this time is to proceed incrementally beginning with Option 2a and then potentially proceeding on to 2b as we have outlined above. We also recommend that all project decision making be integrated with the County's overall IT Strategic Planning process. The first 10 steps towards implementing this recommendation are:

1. The Assessor's Office should develop and document a moderately detailed project plan and cost estimate for the completion of the Comparative Sales system. The plan should include adequate time for testing and documenting the new system. The project plan and estimate should be cooperatively reviewed by the IS Director, and the IT Strategic Planning Committee to assure that all the parties understand the plan and that it is adequate for the next steps in the process.
2. The County Assessor and County Administrator (or designee) should discuss the project plan and cost estimate with the appropriate parties at the State of California. The goal of these discussions would be to get a commitment for minimum and maximum funding levels they would support for this project. Having a State funding commitment in hand is key to understanding the level of impact this project will have on the County's IT Strategic Plan and IT project spending.
3. The Assessor's Office should contact the previous developer and determine if that developer is interested in completing the project. If the developer is interested then the Assessor's Office should request an estimate from the developer to complete the Comparative Sales system project. Once the estimate is complete, proceed to step 5.
4. If the developer is not interested in completing the project, then the County should proceed on to step 6.
5. The Assessor, the IS Director and the IT Strategic Planning Committee should cooperatively review the developer's estimate and jointly determine if it is in the best interest of the County to negotiate a sole-source contract with the developer to complete the Comparative Sales system. If the group



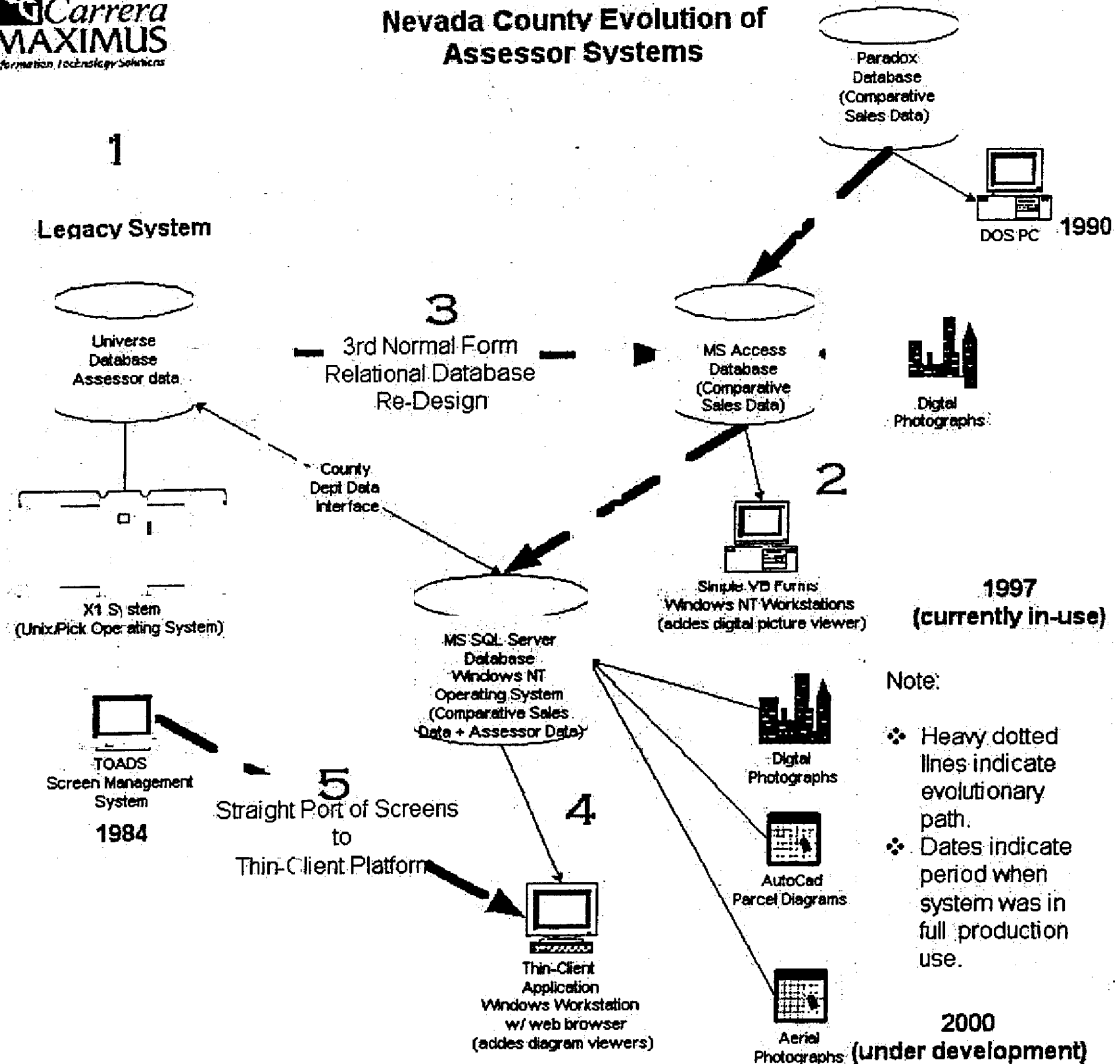
- determines that the estimate is reasonable, then proceed on to step 8. If not, proceed to step 6.
6. The County should issue a Request for Proposal to qualified vendors for an estimate to complete (develop, test and document) the Comparative Sales system.
  7. The Assessor, IS Director and IT Strategic Planning Committee should evaluate the vendor's proposals and determine if it is reasonable for the County to continue with the project. If so, continue on to step 8.
  8. Using the appropriate project estimate from either step 5 or step 7, determine (through the IT Strategic Planning Process) the priority and funding for the Comparative Sales system project. The recommendations on the Comparative Sales system will have to take into consideration the availability and level of State Loan Program Funds available to support the project.
  9. Recommend for Board consideration and approval the priority of all IT projects, including the Comparative Sales system, as part of the IT Strategic Plan.
  10. If the Cooperative Sales system is funded by meeting the priority tests in the IT Strategic Planning process, the County can enter into contract negotiations with the most responsive proposer as determined in step 5 or step 7. Once the contract is in place, and development completed, the County can then evaluate the success of the Comparative Sales system project. The evaluation will help the County determine if it is in your best interest to continue with the effort and replace the rest of the Property Tax system. A process similar to that described in steps 1-9 above could be used in the next phase of the project.

### 3.3 Additional Recommendations

1. In the future, any development work on the new system be separated from the day-to-day maintenance of the existing systems and the operation and maintenance of the Assessor's LAN.
2. The operation and maintenance of the Assessor's LAN should be provided by in-house County Information Systems Department. The Assessor and the Information Systems Department should negotiate a "Service Level Agreement" that outlines the terms and conditions for this support as well as the terms and conditions for support of the X1 legacy Property Tax System.
3. The County should fully consider its plans to upgrade X1 and the UniVerse database in establishing the future direction for this project and other County IT projects. The County should clarify the direction that is to be taken with the TOADS screen design/management system.

4. The communications difficulties in the County that have developed as a result of this project need to be addressed before significant progress and/or success can be realized. The current atmosphere of mistrust and lack of communications between the parties appears to be adding to the confusion and misunderstanding of technical issues. We would suggest that trust be built based on objective measures of system performance with concrete results and not on trying to explain past actions and misunderstandings.
5. The Assessor should be encouraged to take an active part in the County's IS Strategic Planning process.
6. If it is determined that the project should proceed under a development contract, then the new contract must contain:
  - Well-defined fixed price deliverables.
  - Concise descriptions of deliverable systems documentation.
  - Concise descriptions of deliverable systems test plans, and require the contractor to document the tools and methods used.
  - A reasonable schedule review process with visible milestones and regular status assessments and reports.
  - Definition of the County's options for terminating the contract in the event that milestones are not being met by the contractor/consultant. This should include standard contract terms including a deliverable schedule and the contract clause: "time is of the essence".
  - Intellectual property clause clearly stating that the County owns the rights to any software or other products developed as a result of this project.
  - Reasonable process for the contractor/consultant's access to County staff. This could include parameters and guidelines for design review meetings between the contractor/consultant and staff in the Assessor's office.
  - Mutually acceptable process for approving deliverables that would enable independent project oversight.
  - Because this project will probably stretch over multiple fiscal years, a "Funding Out" clause should also be included.

## Appendix A – Evolution of Assessor Systems



### LEGEND

- Unix and Pick - Operating Systems running on the X1 Platform
- TOADS - Character based screen management system running under Unix
- Universe - PICK based system with captive database
- Paradox - PC (DOS) based database system
- MS Access - MicroSoft Windows relational database system suitable for prototyping and short-term use - includes Visual Basic form generators
- MS SQL Server - Premier MicroSoft relational database suitable for long-term production use by multiple users.
- Thin-Client - application software providing database access using little or no special software running directly on the workstation except a web browser (eg. Netscape Navigator or MS Internet Explorer)

## **Appendix B - Background and Qualifications of the Consultants**

### **Stephen R. Ferguson**

Mr. Ferguson is the Director of Government Consulting at Carrera-MAXIMUS. He has over 26 years experience as a Chief Information Officer/Senior Executive in the public sector. His experience includes CIO/MIS Director positions in the City of Westminster, Colorado (1973-1978), the City of Arvada Colorado, (1978-1983), the Florida Department of Transportation (1983-1989), the City of Oakland, California (1989-1996), the Metropolitan Water District of Southern California (1996-1998) and the County of Sacramento (1998-2000).

Mr. Ferguson has extensive experience as a public administrator in delivering information technology services and solutions to a wide range of government agencies. His technology experience spans many areas including, telecommunications, 800 MHz trunked radio systems, data center operations, applications development and maintenance, network administration, data administration, Internet/Intranet, records management, criminal justice systems, Geographic Information Systems, property tax systems, welfare and child support systems, and Finance/ Human Resources/ Payroll systems. He has administered IT services for agencies that have ranged in size from less than ten (10) to over 400 IT professionals and with budgets up to \$100 million in agencies with annual budgets of between \$30 million and \$1.8 billion.

Mr. Ferguson has a B.Sc. degree in Computer Science from Metropolitan State College, Denver and a M.S. in Public Administration from Colorado University.



## **Kris Warren**

Mr. Warren is a senior consultant with more than 26 years of direct leadership experience in all phases of software development and systems integration life cycles. From 1997-2000, Mr. Warren served as Carrera's Practice Director of Y2K Services where he was responsible for all aspects of Year 2000 resolution including assessment, conversion, awareness training, and risk management services. During this time, he oversaw the Y2K remediation of statewide accounting systems and assisted Counties with risk management and mitigation in areas so diverse as airport systems, water purification plants, and common business systems.

Mr. Warren is an effective public speaker who is well received by both technical and non-technical audiences. He has won praise for the clarity of his explanations before County Boards of Supervisors, and has served as an expert witness on multiple occasions. Mr. Warren's diverse experience and expertise in numerous software development and project management methodologies provides the foundation for him to teach classes in software architecture, database design, development methodologies, risk management, business continuity planning, and project management.

His application experience crosses many industries, both public and private, and includes Manufacturing, Financial Services, Materials Handling, Logistics, and Public Sector Accounting. He has directed large-scale projects involving thousands of users and networks spanning multiple countries. In addition to his other duties at Carrera, Mr. Warren serves as the leader of the Project Management Affinity Group. This group establishes standards and mentoring for all of Carrera's project managers. Mr. Warren also has an extensive background on California Model State contracts and has assisted clients with contract language development and negotiations.

**COUNTY OF NEVADA**

**ART GREEN**

**ASSESSOR**

950 Maidu Avenue  
Nevada City, CA 95959-8600  
(530) 265-1232  
FAX 265-1270

August 30, 2000

The Honorable Carl Bryan  
Presiding Judge of the Nevada County Courts  
Nevada County Court House  
Nevada City, CA 95959

Subject: Assessor's Responses to the 1999-2000 Nevada County Civil Grand Jury Interim Report,  
dated June 7, 2000.

Dear Judge Bryan:

Attached is the Nevada County Assessor's responses to the 1999-2000 Nevada County Civil Grand Jury Interim Report, dated June 7, 2000, as required by the California Penal Code, Section 933.05.

The Assessor would like to thank the members of the 1999-2000 Grand Jury for their participation and effort in preparing the Interim Report.

Sincerely,

Arthur G. Green  
Assessor

AG/hg

Attachment

cc: Foreman, Grand Jury  
Ted Gaebler, County Administrator  
County Counsel

## RESPONSE TO FINDINGS

"1. The Assessor, in sworn testimony before the Grand Jury, stated that he had been a business partner of the temporary male employee (as identified in the Interim Report). In his public response to the Grand Jury report he stated that "the male worker was never a 'business partner' nor did the Assessor state that he was." Clearly, the Assessor has given conflicting statements. The Grand Jury has a copy of the fictitious business name statement filed with the County Recorder by the Assessor, stating that the Assessor and the male employee were indeed partners."

**RESPONSE:** The Assessor disagrees with the finding. The Assessor and the temporary male employee had been in business together and the Assessor so stated to the Grand Jury. The Assessor and the temporary male employee were never in business as partners and any verbal response to Grand Jury questions by the Assessor was never intended to convey that impression.

The Grand Jury has failed to mention that the fictitious business name statement in question was never published and therefore was not legal nor was it capable of being put into practice. The fictitious business name statement in question was replaced by a subsequent recorded fictitious business name statement that WAS PUBLISHED (and therefore legal and binding) on which the business, a sole proprietorship, was based.

The Grand Jury also fails to mention that the business relationship was finished before the temporary male employee was hired by the Assessor's Office and that it was the prior Assessor who originally hired the temporary male employee.

"2. The Grand Jury Interim Report on the Assessor's Office recommended that before any more funds are spent on the computer system the Assessor provide the County Information Systems Department with documentation of his proposed system. To date this has not occurred."

**RESPONSE:** The Assessor disagrees with the finding. The Assessor has provided the County Information Systems Department with extant documentation of the proposed system and so noted in the response to the Grand Jury on May 24, 2000.

"3. In his response to the Grand Jury Interim report the Assessor stated that since he "took office in November 1998, less that \$200,000 has been spent for computer equipment and application programs in the Assessor's Office." The Grand Jury examined all payroll records and invoices paid for computer hardware, studies, software, and computer related expenses. Between November 15, 1998, and December 31, 1999, the following amounts were spent:

Paid to temporary employees	\$ 139,210
Employers share of FICA (7.65%)	10,650
Total employee cost	\$ 149,860
Paid to outside vendors	\$ 195,119
<b>TOTAL COMPUTER EXPENSE</b>	<b>\$ 344,979"</b>

**RESPONSE:** The Assessor disagrees partially with the finding. The Assessor is pleased that the Grand Jury concurs that computer equipment and application programs have cost less than \$200,000 (\$195,119 according to the Grand Jury). The State-funding program, SB719, primarily funded these costs. This State program provides funds to be used exclusively to improve Assessors' Offices. The funding was in jeopardy of being reclaimed by the State since it had not yet been used for computerization as prescribed by the prior Assessor.

The total employee cost of the temporary computer specialist employees since November 15, 1998 (\$149,860 according to the Grand Jury) was for a period that included 2 budget years for two employees. Thus the employees averaged less than \$38,000 per employee per year. That salary level (no other benefits were included) was a bargain for the expertise and services the temporary employees provided. The temporary employees spent substantial amounts of time maintaining existing computer systems, besides their time spent developing the Internet software, the progress of which the County Board of Supervisors halted over my objection. The State SB719 funding program also provided most of the funding for the temporary employees. The State had approved the expenditure of its funds for the temporary employees' computer work. It should also be noted that the Assessor's Office during this time period was understaffed and operated well within its budget.

The work of these temporary employees had a direct bearing on the increases in productivity in the Assessor's Office since November 1998. Those increases in productivity are projected to generate additional property tax revenues in Nevada County that will exceed 4 million dollars by 2003. As just one example of how computerization of the Assessor's Office benefits our citizenry, Nevada County is one of the few counties in California that has been able to promptly issue supplemental assessments; several counties are years behind.

"4. There is a question as to who will own the Assessor's proposed computer system upon its completion. There is no formal County procedure regarding ownership of intellectual property."

**RESPONSE:** The Assessor agrees with the finding.



"5. The Assessor's response to the interim Grand Jury report, filed April 17, 2000, failed to meet the requirements of California Penal Code Section 933.05."

**RESPONSE:** The Assessor disagrees partially with the finding. The original response did technically fail to comply with Penal Code section 933.05, in that it left off the formal statements of "agree" "disagree" or "disagree partially." Certainly, any fair reading of the response should have left a reader with no question as to which portions of the Grand Jury's report the Assessor agreed with and which portions the Assessor did not agree with. In any event, the Assessor provided a supplemental response to the Grand Jury on May 24, 2000 as per the Grand Jury's request. A copy of that response is attached.

### **RESPONSE TO RECOMMENDATIONS**

"1. The Grand Jury strongly recommends that the Board of Supervisors order a software evaluation of the Assessor's proposed system from an unbiased major consulting firm prior to spending any further taxpayer funds."

**RESPONSE:** The Assessor agrees with this recommendation, but cannot implement it as it is directed to the Board of Supervisors. The Assessor has viewed drafts of such a Consultants' Report he imagines the Grand Jury may soon have opportunity to read.

"2. The County needs to develop a formal policy on the ownership of computer source code and the legal ramifications of intellectual property developed by County employees and elected officials on County time and at County expense."

**RESPONSE:** The Assessor agrees with this recommendation, but cannot implement it as it is directed to the Board of Supervisors.

### **OVERALL CONCLUSIONS**

The Assessor hopes that those unbiased members of the Grand Jury will by now, and with the further benefit of the forthcoming Consultants Report, see that the scandalous allegations made are baseless. The Assessor also hopes that propriety and relevant facts will dominate any future Grand Jury reports on the Assessor's Office. The innovative and beneficial accomplishments of the Assessor's Office have not been recognized to date. The Assessor is always ready to demonstrate the excellent improvements that the Assessor's Office has made for Nevada County.

4. There is a question as to who will own the Assessor's proposed computer system upon its completion. There is no formal County procedure regarding ownership of intellectual property.
5. The Assessor's response to the interim Grand Jury report, filed April 17, 2000, failed to meet the requirements of California Penal Code Section 933.05.

### **CONCLUSIONS**

1. The Assessor's response to the interim Grand Jury report contradicts his sworn testimony and public documents.
2. Since the Assessor's proposed computer system should be integrated with other departments at additional cost, it seems appropriate that the Information Systems Department be involved in this effort.

### **RECOMMENDATIONS**

1. The Grand Jury strongly recommends that the Board of Supervisors order a software evaluation of the Assessor's proposed system from an unbiased major consulting firm prior to spending any further taxpayer funds.
2. The County needs to develop a formal policy on the ownership of computer source code and the legal ramifications of intellectual property developed by County employees and elected officials on County time and at County expense.

### **RESPONSES REQUIRED**

Board of Supervisors: September 30, 2000

Nevada County Assessor: August 31, 2000