

COUNTY OF EL PASO

Information Technology Department (Consolidated Data Processing) Consolidation Report

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NOTE: This is a public version of the original document presented to the County Judge. The only difference between this document and the original is that the names of the employees have been removed for their privacy. The consultant feels that the removal of the employee names makes no material difference as to the conclusions reached herein. Should the reader want to see the names of the employees then an Open Records Request should be made with the County.



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Executive Summary

A review of the County's existing budget has revealed that 14 departments within the County of El Paso have 26 employees classified as data processing or information technology professionals outside of the County's official IT department. Removing certain staff, which this consultant feels are misclassified leaves a staffing table of 14 employees with a total cost to the County in the amount of \$616,379.00.

The County's current IT consolidation efforts have resulted in the centralization of most computer servers within the enterprise. The exception to this centralization effort is two (2) County departments, the **County Attorney's Office** and the **Sheriff's Department**. It is the opinion of this consultant that the duplication of services already provided by the County's data management organization has resulted in higher costs for the County due to duplication of services.

Consolidating the missing departments under the County's data management department will result in an **immediate savings of \$50,000** this fiscal year. Another \$45,000 can be leveraged by leaving the Sheriff's Network Administration position open and allowing the County's IT department to provide those services. This would result in an immediate **cost savings of \$95,000** to the County.

After consolidation is completed, the County should realize another **\$100,000 over the next year** in reduced labor costs and an additional **\$50,000 in licensing fees**. Immediately upon consolidation of the remaining departments, the County should realize an **annual savings of \$245,000**.

Additionally, **\$600,000 of annual costs** can be analyzed by the Consolidated Data Processing Department and upon completion of the cost analysis most of these costs may likely be eliminated with the elimination of duplicated services thus creating additional savings to the County.

Background of Study

In March 2007, Martin Paredes began an operational review of the El Paso County's information technology department's deployment of resources at the request of County Judge Anthony Cobos. In conducting the review it was the consultant's intention to provide the County Judge an assessment of the current deployment of Information Technology (IT) infrastructure and personnel across the County to study the feasibility of realizing cost savings through the consolidation of these services under the County's existing Consolidated Data Processing Department.

Toward this end, the consultant evaluated:

- Existing infrastructure deployment,
- County IT Staffing,
- IT Budgets for County Departments,
- Government and Private Practice Best Practices.

Methodology

In conducting the study the consultant obtained information from a number of sources to include:

Interview with Peter Cooper, Chief Technology Officer, County of El Paso,

Review of the County of El Paso FY2007 Budget,

Comparable data and operating statistics for other Texas counties,

Review of manpower schedules,

Review of best practices for Information Technology by leading firms.

Study Overview

This study was commissioned by County Judge Anthony Cobos within the larger context of reviewing the County's FY2007 Adopted Budget in preparation for the upcoming County of El Paso budget hearings. The focus of the study was to analyze the current deployment of information technology across the enterprise to include departmental staffing to determine if a savings can be realized through the consolidation of data processing services.

The consultant, Martin Paredes, is currently the CEO of Cognent, Inc. and has over 15 years of experience in the information technology field. The consultant's experience includes development, deployment and management of information technology for multinational companies and governmental agencies in diverse countries. The consultant has successfully developed best practices and continues to perform consulting services for companies across the nation. The consultant was not paid any fees for the performance of this study.

The consultant began the review by determining the extent of existing IT centralization within the County. To the consultant's surprise, the County of El Paso has successfully centralized the vast majority of its information technology services under the supervision of Peter Cooper, the County's Chief Information Officer. With the exception of a few departments that maintain servers and support personnel under their control, the majority of the County has already centralized its information technology services.

Centralization of information technology services is often met with some resistance by stakeholders because of the perceived impression that centralization may lead to reduced services and, or the perception of loss of security over data management. The existing centralization of IT services within the County, under the direction of the Chief Information Officer, should alleviate these concerns as the centralization has been proven successful for the entity both in the reduction of costs and the performance of IT services.

The results of the consultant's study are documented in the next section. The recommendation by the consultant will likely be met with some resistance but an analysis of industry standards best practices has proven that consolidation of IT services not only realizes cost savings for the enterprise but also results in better services for data users.

Finding and Conclusion

Existing Staffing and Equipment Deployment

A review of the County's existing budget has revealed that 14 departments within the County of El Paso have 26 employees classified as data processing or information technology professionals outside of the County's official IT department. An analysis of the staffing deployment follows.

Department	Employee Name	Position Title	Salary
Associate Family Court 1	{removed for public ver}	Data Entry Clerk II	\$14,165.00
Auditor	{removed for public ver}	Data Entry Clerk I	\$19,537.00
Auditor	{removed for public ver}	Data Entry Clerk II	\$20,025.00
County Attorney	{removed for public ver}	LAN Support II	\$45,474.00
County Attorney	{removed for public ver}	LAN Support III	\$58,956.00
County Clerk Records Mgmt	{removed for public ver}	Records Management Tech	\$25,016.00
County Clerk Records Mgmt	{removed for public ver}	Records Management Administrator	\$47,776.00
County Court at Law Admin	{removed for public ver}	Data Entry Clerk II	\$20,526.00
County Court at Law Admin	{removed for public ver}	Data Entry Clerk II	\$14,165.00
County Court at Law Admin	{removed for public ver}	Data Entry Clerk II	\$14,518.00
County Court at Law Admin	VACANT	Data Entry Clerk II	
District Attorney	{removed for public ver}	Computer System Support Analyst	\$40,682.00

District Attorney	{removed for public ver}	Systems Technician	\$32,163.00
District Attorney	VACANT	Systems Technician	
District Clerk	{removed for public ver}	Computer System Support Analyst	\$40,682.00
District Clerk	{removed for public ver}	Data Entry I	\$18,139.00
Elections	{removed for public ver}	Computer System Support Analyst	\$40,682.00
General & Administrative Road & Bridge	{removed for public ver}	GIS Manager	\$70,123.00
Justice of the Peace 4	VACANT	Data Entry Clerk I	
Juvenile Probation Special Revenue	{removed for public ver}	Data Entry Clerk JPD	\$27,314.00
Public Defender	{removed for public ver}	Data Entry Clerk I	\$19,057.00
Public Defender	{removed for public ver}	Data Entry Clerk I	\$19,534.00
Sheriff Law Enforcement	{removed for public ver}	Computer Programmer (SO)	\$63,889.00
Sheriff Law Enforcement	{removed for public ver}	Data Entry Clerk (SO)	\$20,210.00
Sheriff Law Enforcement	{removed for public ver}	Network/Computer Supervisor (SO)	\$68,318.00
Tax Office	{removed for public ver}	Computer System Support Analyst	\$40,682.00

TOTAL \$781,633.00

The staffing table above reveals personnel performing duties traditionally under the operational overview of the entity's information technology department, but in the case of the County are actually performing duties outside of the control of the IT department leading to the possibility of duplication of services and an adverse affect on the economies of scale resulting in higher costs to the County.

Although the consultant feels strongly that consolidation of data services should include consolidation of voice, or telephone services, the County's technology chief has expressed reservations in his department's ability to adequately allocate the appropriate resources to this function and therefore consolidation of voice/telephone services is not included in this report.

Possible misclassification of positions

It is this consultant's opinion that the Data Entry Clerk positions in the staffing table above are in fact misclassified by the departments. This consultant's feels that many of the misclassified staff actually perform duties specific to the department and therefore should be classified as Clerks I, II or III. It is outside the scope of this report to analyze the individual duties of the employees and therefore they will be removed from consideration for consolidation.

The consultant encourages the County of El Paso to audit the Data Entry Clerk positions to determine their true job functions and make necessary adjustments as needed. Two of the Data Entry Clerk positions especially seem out of place for the enterprise when comparison to other similar departments is analyzed. For example, the Data Entry Clerk II position in the Associate Family Court 1 seems incompatible to the enterprise in light of the fact that Associate Family Court 2 and Associate CPS Court do not appear to have the same staffing requirement. Likewise, the Data Entry Clerk I position for Justice of the Peace 4 also seems incompatible to the enterprise when the other Justice of the Peace departments do not seem to employ Data Entry Clerks. Reclassification of these positions to their appropriate level should result in savings to the County and the proper allocation of staffing deployment.

County Clerks Records Management Department

Peter Cooper, County technology department head, feels that the job functions of the two Records Management employees listed above, a Records Management Technician and Administrator are too specialized to realize any cost savings to the County by bringing them into the County's IT department. This consultant agrees with his assessment and therefore for the purposes of this report, the analysis of the staffing distribution across the County will not include them.

Department Staffing of Information Technology Personnel

Removing the positions addressed above leaves the County with the following staffing table.

Department	Employee Name	Position Title	Salary
County Attorney	{removed for public ver}	LAN Support II	\$45,474.00
County Attorney	{removed for public ver}	LAN Support III	\$58,956.00
District Attorney	{removed for public ver}	Computer System Support Analyst	\$40,682.00
District Attorney	{removed for public ver}	Systems Technician	\$32,163.00
District Attorney	VACANT	Systems Technician	\$31,379.00
District Clerk	{removed for public ver}	Computer System Support Analyst	\$40,682.00
District Clerk	{removed for public ver}	Data Entry I	\$18,139.00
Elections	{removed for public ver}	Computer System Support Analyst	\$40,682.00
General & Administrative Road & Bridge	{removed for public ver}	GIS Manager	\$70,123.00
Sheriff Law Enforcement	{removed for public ver}	Computer Programmer (SO)	\$63,889.00
Sheriff Law Enforcement	{removed for public ver}	Data Entry Clerk (SO)	\$20,210.00
Sheriff Law Enforcement	{removed for public ver}	Network/Computer Supervisor (SO)	\$68,318.00
Tax Office	{removed for public ver}	Computer System Support Analyst	\$40,682.00
TOTAL			\$571,379.00

The new staffing table lists 13 employees across seven departments with a total annual cost to the County of El Paso in the amount of \$571,379.00. During the preparation of this report, the Sheriff's Department posted Job vacancy number 13-07 on May 7, 2007. This vacancy lists an opening for a Network Administrator with an annual salary of \$45,000. The addition of this position brings the total of IT staff outside of the County's information technology department to 14 employees with a total cost to the County of \$616,379.00.

A cost breakdown by County department follows.

Department	Number of Employees	Cost
County Attorney	2	\$104,430.00
District Attorney	3	\$104,224.00
District Clerk	2	\$58,821.00
Elections	1	\$40,682.00
General & Administrative Road & Bridge	1	\$70,123.00
Sheriff Law Enforcement	4	\$197,417.00
Tax Office	1	\$40,682.00

As demonstrated by the chart above, seven (7) County departments employ 14 individuals in functions directly related to data processing yet are not under the control of the County's data processing department. This allocation of the staffing accounts for an annual cost of \$616,379.00 to the County. The decentralization of this staffing table has most likely led to the duplication of services and higher costs in training and a lack of redundancy for supporting the County's data services.

Allocation of Servers across the County

Peter Cooper's consolidation efforts have resulted in the centralization of most computer servers within his department. The exception to his centralization efforts are two (2) County departments, the **County Attorney's Office** and the **Sheriff's Department**. Currently the County Attorney maintains six (6) servers delivering services such as DNS to users of the County Attorney' office. This duplicates services already provided by the County's data management organization. Two additional servers provide SQL services to the department, also

a duplication of services. The Sheriff's Department maintains an *Exchange Server* for departmental communications and Microsoft Access database servers.

Traditionally and according to Best Practices, DNS and database servers should be housed within the entity's server rooms rather than in each department. This not only ensures proper operation of the services delivered by these servers but also results in the sharing of resources in personnel and licensing resulting in reduced costs to the enterprise, in this case the County of El Paso.

Centralization of computer resources, both in equipment and in personnel has been proven an effective cost savings measure for private sector enterprises. The decentralized deployment of data servers has forced the County's IT services department to expend resources to support the infrastructure while the County is forced to spend extra monies in licensing and support fees that would not exist if the servers were housed within the County's data centers as best practices calls for. In the case of the County of El Paso, the fact that most of the information technology services have already been centralized under Peter Cooper's department the remaining servers and personnel outside of his control have not only generated more expenses for the County but in fact have forced the IT department to expend resources to support these orphan systems that would not be needed if they were housed as suggested by this consultant.

Decentralized systems generally generate higher costs of maintenance and support by the fact that economies of scale cannot be applied to them in licensing fees and their costs to maintain are higher because of their decentralized nature. Centralized computer systems can be managed from within a domain that allows security and upgrade patching to be automated according to the policies in place for the enterprise. Licensing of resources can be deployed from a centralized location allowing the proper number of licenses to be purchased avoiding duplication and reducing the individual costs through the application of economies of scale.

Issues of Consolidation

The departments that have not consolidated their data processing services under the County's Consolidated Data Processing Department have previously expressed reservations for consolidation. Public sector consolidation efforts have also met with initial resistance but have resulted in significant cost savings for and improved service for the entities upon completion of the consolidation efforts. For the purposes of this report, the consultant will address the three major reasons given against consolidation. These are data security and integrity, timely access to support services and funding sources.

Data security and data integrity

Data integrity is the most commonly expressed resistance to consolidation efforts both in the private and public sectors. In the case of the County of El Paso the issue of data security and data integrity has already been addressed by the fact that the County's Consolidated Data Processing Department currently manages some of the county's most sensitive data securely and effectively. Currently Cooper's department manages the data warehousing for the District Attorney's office, arguably one of the most sensitive data within the County. The County's information technology department also manages most of the County's data within its domain. Because of this, data security and integrity should not be an issue during consolidation of the final missing departments.

Access to support services

Promptness and quality access to technical support staff during moments of service trouble or outages is of concern to most during any discussion of consolidation. As demonstrated above, the County's Consolidated Data Processing Department currently manages over 90% of the technology infrastructure of the County and provides support services to most of the departments. The IT department currently enjoys **a 97% approval rating** from the County's departments for services performed with a significant portion rating the department as excellent. Department heads have routinely written letters of commendation for the services rendered by Cooper's department. A sampling of these letters is included for review.

The data processing services department has amply demonstrated its ability to provide effective and timely service to the County's computer users therefore the issue of access to support services is moot in the opinion of this consultant.

Funding sources (grant monies)

One of the most overused excuses for resistance to consolidation is the funding sources available to each department. Of these, grant monies is the most common. Although each department within the County has the ability to leverage public funds from many sources the use of these funds does not necessarily require the deployment of staff for the funds. Funding sources, regardless of their requirements, can still be used to fund positions within the organization regardless of which department they ultimately report to. Through intra-departmental cooperation the monies can still be used to fund the positions through departmental billing that offsets the associated costs thus resulting in reduced redundant costs to the County.

For example, in the case of the Sheriff's Department, the current open position for Network Administrator can be resourced from within the County's information technology department while the County leverages the grant monies to offset the associated costs. To accomplish this, the County's financial services can generate internal accounting transactions that allow the grant to be used by the Sheriff's Department to offset the cost of the use of a Network Administrator. The result would be access to a Network Administrator for the Sheriff's Department and a reduction of \$45,000 to the County.

Benefits of Consolidation

The benefit of consolidating the County's orphan servers and IT personnel is reduced costs and more efficient IT services. Having personnel deployed throughout the enterprise results in higher costs to the County because the duplication of services and the higher cost to maintain staffing certification and training. Deploying servers outside of the data processing department results in higher costs to maintain each server because the inability of the organization to make use of standard maintenance regimes. The inability to leverage economies of scale for licensing fees and the duplication of bandwidth use for connectivity for access to data are an added financial burden to the County that would not be necessary if the County concludes the centralization it has already started.

The County's Consolidated Data Processing Department has already consolidated the majority of the County's information technology services under its umbrella. This has resulted in improved service to the County's data processing users and a reduction in data management costs. Including the remaining departments under this effort not only are sensible but will also result in significant savings to the County.

Consultant's Recommendations

The consultant informally surveyed 17 counties in the State of Texas. The vast majority of the counties have already centralized the majority of their staffing and equipment under their respective information technology departments. Bexar, Travis and Cameron have not centralized their IT staffs but for the most part have centralized their data processing equipment with few exceptions. Dallas County is currently in the process of consolidating their equipment into one data processing department.

Cost Benefits to El Paso County

Peter Cooper is confident that consolidating the remaining departments under the County's data management department will result in an **immediate savings of \$50,000** this fiscal year by not filling the IT department's open position. Another \$45,000 can be leveraged by leaving the Sheriff's Network Administration position open and allowing the County's IT department to provide those services. This would result in an immediate **cost savings of \$95,000** to the County.

After consolidation is completed, the County should realize another **\$100,000 over the next year** in reduced labor costs and an additional **\$50,000 in licensing fees**. Immediately upon consolidation of the remaining departments, the County should realize an **annual savings of \$245,000**.

Additionally, \$600,000 of annual costs will be analyzed by the Consolidated Data Processing Department and upon completion of the cost analysis these costs would most likely be eliminated with the elimination of duplicated services.

Other intangible cost savings to the County will result in the form of savings in training programs for IT professionals and the cross training of staff to support the IT infrastructure resulting in increased data processing reliability. These savings should be realized in subsequent years as the economies of scale and standards based deployment of technology is realized. Other recommendations by the consultant follow.

Renaming of the Consolidated Data Processing Department to Information Technology Department

The consultant recommends that the County Commissioner's consider renaming the Consolidated Data Processing Department to the Information Technology Department to better reflect the department's mission to the County. The department's head, Peter Cooper is currently classified as the Chief Information Officer and the renaming of the department will follow the convention already established by the Commissioner's appointment of Peter Cooper.

Possible Misclassification of Positions

The consultant encourages the County to audit the Data Entry Clerk positions to determine their true job functions and make necessary adjustments as needed. Two of the Data Entry Clerk positions especially seem out of place for the enterprise when comparison to other similar departments is analyzed. For example, the Data Entry Clerk II position in the Associate Family Court 1 seems incompatible to the enterprise in light of the fact that Associate Family Court 2 and Associate CPS Court do not appear to have the same staffing requirement. Likewise, the Data Entry Clerk I position for Justice of the Peace 4 also seems incompatible to the enterprise when the other Justice of the Peace departments do not seem to employ Data Entry Clerks. Proper classification of this staff may result in savings to the County.

Sheriff's Network Administrator Position

It is the consultant's recommendation that the Sheriff's Network Administrator position not be contracted until the County Commissioners have had the opportunity to analyze the report and make a determination on whether to centralize the remaining IT services under the Consolidated Data Processing Department as is the recommendation of this consultant. This will allow the Consolidated Data Processing Department the ability to make a determination on whether the position is necessary for the enterprise or if the functions of this job can be performed by the existing IT staff thus resulting in a cost savings measure for the County.

Thomason Hospital

Although outside of the scope of this report, the consultant feels that an analysis of Thomason Hospital data processing services should be undertaken to study the feasibility of consolidating Thomason data processing services within the County. The consultant strongly feels that consolidation of Thomason and County data processing services will result in significant cost savings for both entities and would increase IT support responsiveness to all users.