The Bill Blackwood Law Enforcement Management Institute of Texas

Consolidation of Law Enforcement Dispatch Operations in Harris County Texas

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ABSTRACT

Harris County, Texas is investigating the feasibility of a consolidated communications facility for law enforcement agencies. As one of the major metropolitan counties, Harris County agencies respond to large volumes of calls for service and, correspondingly, require a need for coordinated communications facilities and systems that can meet that high demand. With the current advances in technology available, there are few impediments to developing a coordinated facility with shared systems and resources. This coordination could effectively deliver quality service to constituents while still providing adequate control of personnel and ensuring calls for service activities follow appropriate jurisdictional policies. Information used to support this position will be extrapolated from reports, articles, and periodicals along with information from subject matter experts.

While research in this subject sometimes varies from positive to negative, the conclusion to be drawn from this paper will strongly support the desire and need for a consolidated dispatch operation. Such an effort would deliver significant benefits in resource sharing by spreading a call load across a pool of call takers and would provide for better resource coordination and crisis management. By placing Harris County's ten separate dispatch centers into one hardened facility, agencies could realize the benefit of technical advances and service delivery that often lack due to individual budget constraints. Harris County should undertake the necessary steps to develop and implement this program by defining budgetary needs and governance as soon as possible. The views and opinions expressed in this paper are strictly the author's and are not representative of the Harris County Pct. 4 Constables Department.

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INTRODUCTION

There has been a slow evolution of law enforcement and emergency service dispatching in Harris County, Texas. In order to better understand this process, the evolution began many years ago when law enforcement agencies utilized police officers to man the police dispatch desk. Personnel assigned answered the phones and then sent units to desired locations via radio. Many of the larger agencies had the ability to hire civilians and train them as call takers, where information could be written down and forwarded to a trained dispatcher who would then dispatch the unit to the call for service. Over the years, some agencies improved on this process through budget increases, training improvements, and technology advances. Many agencies, most specifically those in Harris County, became more and more fragmented. This resulted in individualized communication operations with personalized phone numbers connected directly to each entity. Citizens began relying heavily on the specialized services they could receive; however, the communications fragmentation often led to confusion and unnecessary delays. Some of the agencies worked with others and some did not, depending upon the political or constituent spectrum at the time. With the advent of the 911system nationwide, it was evident that improvements in police dispatch centers were necessary. Over the years, 911 has become more integrated into society, and public safety authorities "increasingly face the difficult task of balancing optimized performance, in mission critical, life-saving applications with sound fiscal management" (Bono, 2012, para. 2).

Harris County, Texas law enforcement is comprised of ten separate county agencies, covering separate jurisdictional boundaries within the county. Over the

course of many decades, these entities have become more segregated and divided into political fiefdoms that have allowed for individually styled law enforcement based upon constituent desire or need. Each agency has separate budgets, and their enforcement capabilities and technological advances are primarily governed by budgetary allowances approved by the Commissioners Court. Each agency is overseen by an elected or appointed official, and each often acts or responds at the discretion of the commissioners' views or desires for their precinct.

The sheriff is the primary responding law enforcement entity in the county that is also divided into these eight separate Constable Precincts (*Appendix A*). Each precinct within the county is governed by an elected constable who has oversight over his/her law enforcement agency. Each elected constable has the authority to design their department and respond to constituent desires as budget and innovation allows. These entities have become very adept at working towards their own goals and have become independently successful in their own right within their jurisdictional boundaries.

Agencies utilize their budgetary allowances to proceed as necessary and to provide for the requirements of their demographics. Call volume increases, based primarily on continued population growth and cuts in county funding have provided more reason for agencies to consider consolidation of resources. All county agencies are in the same boat: trying to do more with less. Recent budget cuts forced agencies within Harris County to either cut or layoff personnel that have yet to be backfilled completely.

Many of these personnel cuts came from the support areas of law enforcement, including dispatch and records management positions. These cuts have forced agencies to consider service cuts and have salary cuts, forcing many to work harder for

less money. At the time of this research, Harris County Pct. 4 Constable, stress-related illnesses and time off requests have been on increase with these cuts and critical mistakes from overburdened workers may happen sooner rather than later. There is a definitive increase in time off requests as calls for service continues to increase and levels of personnel remain constant (Harris County Constable Pct. 4 Human Resource Department, 2011).

Each agency also has individualized their technological capabilities, and over the years, some agencies have become more advanced than others. Due to these most recent budgetary cuts and constraints, agencies in Harris County are currently suffering more from a lack of technology upgrades that are required to keep up with the more advanced technology infrastructure already in place. It could be argued that budgetary savings are the predominant reason to consolidate services; however, it has been found that "shared services success stories assess cost savings" (as cited in Local Unit Alignment study, 2009, p. 19). However, "some of these cases state that improvements in service delivery and quality should be the primary motivator in forming shared services. Sharing seldom reduces quality of the service, and often sharing improves quality" (as cited in Local Unit Alignment study, 2009, p. 19). According to the National Emergency Number Association (NENA), the impetus to consolidate dispatch services can also be driven by budget shortfalls, declining quality of services, escalating personnel costs, staffing shortages, difficulty implementing new technologies, and increased workloads for dispatchers. The desire to foster collaboration between politically fragmented jurisdictions should also be added to the list (Cleveland State University, 2009).

The political complexion in Harris County is also complicated and cumbersome at best and offers extraordinary obstacles to overcome. It is imperative that each agency be able overcome these obstacles. One of the many obstacles is that agency heads have an aversion to a sense of loss of control, and no effort to this point has been made to develop a more coordinated approach. In the absence of a true planning effort, misperceptions build about loss of control, and facility distance from central offices adds to these negative perceptions. It is crucial that the control over such a facility should lie in the hands of a combined governing board, including representatives from each entity. Because each agency has their own unique communications area, each requires individual budgets, facilities, and manpower.

Agency budgets are strained to maintain these individualized efforts to supply the most up-to-date technology, training, and management. It is more-important than ever that "participating agencies cooperatively engage in the evaluation of consolidation, coordination and preparation of a unified operating procedures and policies" (Communication Technology Division, 2010, p. 1). Services to the communities and constituents of Harris County could be vastly improved through a more effective and efficient means of coordination and consolidation of dispatch. Budgetary constraints on agencies could be minimized through the sharing of technological advances and a coordinated facility manned and trained together instead of independently.

Communication facilities, by rule, must be under the control of law enforcement, so overall management of the operations would fall under law enforcement coordinated efforts. The combination of all would optimally result in overall improved interoperability,

cost savings, and combined physical facilities, which will free up much needed space at individual agencies.

POSITION

Research has turned up many consolidated or shared dispatch centers currently in operation in this country. Areas similar in nature to Harris County such as Miami, Florida (http://www.miamidade.gov/police/), Shawnee County, Kansas, (http://www.snco.us/cecc/), Nashville, Tennessee, (http://www.nashville.gov/ecc/), Harrisburg (Dauphin County), Pennsylvania (http://www.prnewswire.com/newsreleases/pennsylvania-state-police-break-ground-for-first-of-five-consolidated-dispatchcenters-that-will-use-latest-technology-to-speed-troopers-to-incidents-55548772.html), Charleston County, South Carolina (http://www.charlestoncounty.org/departments/dispatch/index.htm), and many others currently have consolidated dispatch operations in service. These centers operate 24 hours a day, 7 days a week, and provide service to their areas in an efficient and effective manner. It is evident from this research that consolidation or a coordinated communications center is the wave of many current law enforcement entities and the future of others. Over the years, the number of emergency calls has increased significantly with the advent of 911 and improvements in dispatch capabilities became necessary (Harris County, Texas, 2012a).

Many individual agencies were and still are not connected to a Public Service

Answering Point (PSAP) and rely heavily on individual communications systems

manned and maintained by the individual agency. Public demand for seamless

communications, with a quality and rapid dispatch service has been created by these

technological advances. Advanced technologies such as cell phones, internet capabilities, wireless technologies, and even television shows have created a public demand for quicker response by law enforcement. The expectation is that law enforcement should be able to respond to service by calling one number. However, many areas, including Harris County, still have separate dispatch operations with separate numbers to call for service. Many of the individualized dispatch operations are cracking under the strain of budgetary issues and the advent of these technological demands.

An in-depth feasibility study would be the utmost source in supplying the specific data required to facilitate this effort. A study for a joint dispatch center was completed by Cleveland State University in 2009 and was conducted by the Center of Public Management's, College of Urban Affairs. This study provided a detailed assessment of the feasibility of consolidation of public safety dispatch for 14 separate entities in the Cuyhoga County, Ohio area. The report highly recommended consolidation that would not only improve overall service but would ultimately allow for considerable cost savings over the course of several years (Cleveland State University, 2009).

As previously stated, Harris County law enforcement is divided into ten separate agencies excluding the City of Houston other small towns and villages within Harris County. With a population of over 4 million plus residents covering some 2,400 square miles, it is the third largest county in the United States (United States Census Bureau, 2012). According to Computer Aided Dispatch data extrapolated from queries, Harris County Law enforcement agencies respond to over 1 million calls for service per year (*Appendix B*). As stated, each agency involved has its own unique communications

area, with current technology and systems that are already in place. Such a coordinated facility would provide a commonly shared facility in which these same personnel are housed together. This would effectively relieve Harris County of maintaining ten unique and separate facilities for the sheriff, eight constables, the fire marshal, and district attorney's office. As an example of department size, Constable Pct. 4 is the largest constables' agency in the nation, with over 400 employees, covering some 510 square miles and over 750,000 residents. Harris County as a whole covers over 2,000 square miles. Bringing these agencies together in a shared facility would have functional side benefits as well. This site would become a single point of contact for citizens, deputies, records managers and outside agencies.

Over the past few years, the idea of consolidation has been thought of only in terms of maybes. As budgets shrink and populations (in Harris County) continue to grow, it is now time to think in term of feasibility, not possibility of consolidation.

Informal discussions have taken place, and the obvious need has risen to the surface.

Some elected and appointed officials may scoff at the idea; however, dispatch center consolidations are not something new. Many have operated successfully for years and have a history of documented success stories. A primary Public Safety Answering Point (PSAP) associated with a Consolidated Communications center is the answer for Harris County. The PSAP/Communications center is a practical method of combining standardized services, standardized training, and operating procedures. According to the Association of Public-Safety Communications Officials International (APCO, 2012), they have "Proposed competencies and minimum training requirements for Public Safety Communications training coordinators" (para.1). It would be highly

recommended that training be coordinated with a professional training organization or association such as APCO.

Harris County currently utilizes what is termed as shared services. All Harris County law enforcement agencies are already committed to the use of a common Computer Aided Dispatch (CAD/ARS) system with common Report Management System (RMS) and 800mghz radio systems. Although these services are shared and data is shared through a common 911 call center and/or data warehouse, each agency is responsible for dispatching from its separate call center. Lags in call times often occur along with problematic communications in trying to determine which agency should accept or respond to the call for service. Procedures are in place to help, but oftentimes, calls for service become convoluted, changed, or redirected once the call is received and dispatched. Supervisors can intervene and change the direction of the call or "send the call back" to its original origin, causing these crucial time lags. There is also a shared county technical support group (ITC) that oversees primary systems and data bases; however, specific department hardware is housed at separate locations. There is a high amount of duplication of efforts, personnel, and management, but the idea of control remains intact.

A consolidated or coordinated dispatch center offers a plethora of advantages to Harris County including, but not limited to, efficient dispatch collaboration between agencies, interagency sharing of information, and reduction of duplication of services, and employee training or cross training. Additionally, a common physical location/site and long term cost savings would be an enormous advantage for all. Employee schedules could be combined for efficiency and pooling of financial and technical

resources would allow for standardization of equipment. Operating procedures would also be standardized, and records management or shared records would be accessible at a single location.

Although overall budgets have been recently reduced, the current financial situation in Harris County may in fact lend itself to the process of consolidation. Urban Area Strategic Initiative (UASI) grants for relocation are available; however, lead-time for funding is a full year at best. The Harris County 911 board also has some possible funding available for relocation from fees assessed (Harris County, Texas, 2012b). The Harris County Sheriff's office would most likely be best suited to oversee management of the facility since it already operates the 911 call center and sheriff's office dispatch center. Commissioners should direct an oversight committee with individual agency representatives as combined agency oversight for the project and for major program operations and strategic planning and purchase. This committee should also oversee all decisions regarding purchases of equipment, operations methodologies, and fiscal oversight. A backup facility should also be considered as call centers are designed to run 24 hours a day, seven days a week. These facilities are subject to weather related issues and hardware and software malfunctions. When considering this type of consolidation, the backup site should include necessary communications systems and power backup in case of breakdowns or weather interruptions. Consolidation of law enforcement dispatch operations is the best case scenario for Harris County. Sheriff Royal of Truckee County, Nevada stated it best: "The consolidation will introduce new efficiencies and enhance public and officer safety, Royal said, because everybody will

be on the same frequency and communications will be more streamlined" (Renda, 2012).

COUNTER POSITION

The consolidated approach to dispatch service in Harris County presents a number of barriers. Public safety communications is a very sensitive and technical environment requiring an extremely high grade of service. This level of service is not only demanded by the constituents of Harris County but also by governing bodies overseeing public safety consolidated models a specific number of call takers are required to handle the thousands of emergency calls daily that would be funneled through the PSAP. Individual agencies that continue to operate with undersized and undermanned dispatch centers will eventually be unable or unprepared for the continued demands of increased call loads. Technical standards such as waiting no more than 10 seconds for service are common in other PSAPs. This center would, of course, require proper staffing to cover the overwhelming call intake and proper dispatch of the calls for service. Current communications facilities are manned separately, and manpower has been cut severely. Individual agencies have been barely able to keep up with this demand, although they continue to provide a fairly standardized and personalized level of services that the community demands. In law enforcement, consolidation has become a key factor and according to Dispatch Magazine On-line, "the pressures to consolidate public safety communications center have been felt nationwide for several years, but since 2008 even more jurisdictions have been forced by budget deficits to consider giving up their communication centers" ("Consolidation issues," 2011, para.1).

Budgeting for such a large initial investment may be difficult to overcome. Startup costs for such an entity would typically be in the millions of dollars. A new building facility complete with required computer upgrades, monitors, phones systems, etc. would be required, and coordination between so many governmental agencies for this venture would be a difficult task at best. With an overall budget of 1.2 billion dollars, Harris County segregates its budget between agencies to best suit individual requirements (Harris County, Texas Fiscal, n.d.)). Law enforcement in Harris County alone takes up over 500 million dollars of this budget, with the sheriff's office being responsible for the majority portion with a budget well over 400 plus million dollars. Technical system upgrades such as CAD (Computer Aided Dispatch) systems would have to be considered along with functions such as GPS (Geographical Positions Systems) to track all resources. The current RMS (Records Management System) may require additional upgrades to house the compilation of data to be made available to records managers of each agency involved. Currently, a law enforcement technology committee is in place and could successfully oversee such a venture.

Other potential hardships would be realized (initially) for manning such a facility. Harvesting of current employees would be required from each agency and training specific to the consolidated location would be necessary. These employees, however, come sufficiently trained and would only take a short amount of time to acquaint themselves with the new system. Employees would suffer from the potential of relocation, parking fees, distances to drive and working under the guidance of what may be deemed as an outside agency. Many employees are loyal to their current areas of employment and transfer to another entity would require adjustment. The training for

these employees would have to incorporate operating procedures that each agency currently expects or requires. Elected or appointed officials may not be willing to lose the personalized service that current dispatch employees provide for their agency. Although, in the majority of entities reviewed, an adequately-equipped, properly-managed consolidated center is more than capable of meeting the needs or demands of the communities they serve. Upon review of several articles pertaining to PSAP consolidation experiences, one stands out: the Dakota Communications Center (DCC) in Dakota County, Minnesota. The article stated that "key issues for consolidation involved: effective governance, human resources, facility location and design, technology, and the relationship among the stakeholders" (Therkelsen, Cox, & Schroepfer, n.d., p. 1).

Dispatch consolidation project advocates must communicate strong and objective reasoning that clearly demonstrates why consolidation is the best option and that a consolidated center will meet local needs. The personal contact that officers and employees currently enjoy may be lost, and relations with community members could suffer. Political controls over each agencies service areas could be lost except through committee contact. Accountability of or complaints on employees would have to be channeled to the properly associated agency for action review and methodologies for handling complaints or employee actions and oversight would require significant consideration.

To compound these issues, turnover rates in these types of positions are frequent, primarily due to the high stress nature of the job, long hours and low wages commensurate with law enforcement dispatching (Headsets 911, n.d.). For example,

police Chief Todd Walker of Macon County Georgia stated that their dispatch center has a problem with turnover "Partly because of the high stress the job entails" (Petty, 2012). Therefore, a method for hiring of replacements would require additional coordination between agencies unless the PSAP was manned by a single political subdivision. Management or leadership of such a facility would require extreme collaboration with each agency involved. A decision regarding management and oversight of such a facility would be required. An organizational chart, most-likely approved by the PSAP committee, would be needed to satisfy the requirements of each agency. Constant review of services being provided would be necessary and most likely mandated. Strong leaders with exceptional management skills would be required to manage such a facility. This type of leadership available in current offices may be limited but required in such an important collaborative position. Leadership is "an extremely important management issue" (as cited in Michelson, 2006, para. 6). Harris County has a multitude of competent managers and strong leaders in place that could successfully fill these positions.

CONCLUSION

Coordinated dispatch facilities have become commonplace and have been proven successful in many major metropolitan and rural areas. Centers previously mentioned and communications centers in areas like Ramsey County, Minnesota, (www.co.ramsey.mn.us), the Washington County consolidated communication center in Oregon (www.wccca.com), the Santa Cruz consolidated communication center in California (www.sccecc.org), and many others have proven to be very successful. Consolidation in Harris County could effectively relieve Harris County of maintaining ten

unique facilities for the sheriff, eight constables, the fire marshal, and district attorney's office. Planning for such a venture would require exceptional coordination between agencies. The type of consolidation and planning required would have to be consistent with other similar successful facilities and would require effective and functional operations standards. According to an IACP study, some functional standards in consolidation terms may be defined as "two or more agencies that combine certain functional units, such as emergency communications, dispatch or records" (IACP, 2003, para. 1). Emergency communication center operations provide the critical link between citizens and officers who respond to law enforcement calls for service. Some of the challenges for elected and/or appointed officials are ensuring a high quality, state-ofthe-art emergency communication operations in the face of limited resources and the continued expanding demands for service. These challenges could be easily overcome, as a consolidated center would be the most effective means of combining and maintaining resources. Implementing this consolidated facility would require an extensive amount of coordinated efforts and a plan of action consistent with other PSAP locales.

An effective plan for consolidation would consist of a comprehensive effort covering a multitude of categories. Overall planning would likely be the most relevant and primary issue to be addressed. Planning should consist of interviews with management and staff of agencies involved to determine goals. This should include a review of short term and long-term goals for the project and a development of implementation plans. It should also include a review of current capital improvement plans and a review of relevant documentation associated with current PSAPs. A review

of policies and procedure documents, terminologies, and rules from involved agencies would be required for conflict/synergy as well as a review of level of uniformity of service that is expected by agencies including a method for implementation of uniformity. A proposed governance structure and a process for communications between agencies are required. Overseeing the process would also require the implementation of an oversight body consisting of representatives from all entities involved. A proposal of a new "chain of command" to create synergy and reduce conflict between agencies should be implemented. An operations plan would require a review of existing PSAP policies and documents required pre and post consolidation. A review of "day to day" operations would necessitate interviews with current supervisory staffs of involved agencies for consistency and their expectations of overall operations.

A review of scheduling and staffing options, uniforms, and logos is required along with efficiency consideration of operational support technology for interoperability. A facilities plan would require a review of existing or proposed operating facilities along with the requirements to successfully implement facility equipment (I.E. generator, back up lighting, redundancy requirements, etc.). Interviews should be conducted for proposed facility layout and workstation environments and an environment plan should be created.

A recruitment, hiring, and training plan is required to evaluate staffing levels compared to national or state standards. Staffing formulas should be developed to determine appropriate personnel needs. A review of selection criteria for personnel along with testing requirements is necessary. Salary structures should be reviewed for consistency. A radio system, frequency management and computer database would

require a review of FCC regulations, Texas Crime Information, and National Crime Information (TCIC/NCIC) rules and other county state and federal requirements. A "Terminal agency coordinator" should be selected for oversight of law enforcement databases, TCIC/NCIC, radio policies, and procedures. A review of all systems including, but not limited to, mapping, computer aided dispatch (CAD/ARS/RMS) reporting systems, global positioning, and call sign requirements is necessary along with an accepted propagation model for software and radio frequencies.

There is a distinct dichotomy involved in a complicated process such as a consolidated dispatch system. It is important, however, to law enforcement and the community to overcome these obstacles and join hands for what could be a long-term solution to a long-term problem. Agency managers working together to create a solution is by far the most effective method to begin such a process. A recent news article sums up the issues at hand: According to a recent report from the US Department of Justice, it is clear that the role of law enforcement has changed, primarily based upon the declining economic climate of our country. In many cities, Melekian said, "the losses will be permanent and will require agencies to adapt by consolidating services and applying new technologies to meet the demand for services" (as cited in Johnson, 2011, para. 15).

The primary goal for Harris County should be to create seamless communication between all law enforcement agencies, and the Department of Homeland Security has created an initiative to ensure that state and local agencies work toward emergency management communication goals. The need to coordinate resources and maximize technical efficiencies has never been more evident. A number of the local law

enforcement leadership in Harris County has become involved in an effort that should position Harris County as a "showpiece for consolidating emergency communications and inter-agency coordination" (Hickman, R., personal communication, December 19, 2012). A local CAD/ARS task force group has been recently developed, combining resources from multiple agencies at one centralized location and overseen by a director. For the first time in many years, this CAD/ARS development group has brought together personnel with a common mission.

As previously stated, consolidation would not only improve overall service but ultimately allow for considerable cost savings. Melekian (2011) also stated that "The effects of the economic downturn on law enforcement agencies may be felt for the next five to 10 years, or worse, permanently" (as cited in Johnson, 2011, para. 3). Consolidation of services could be a key factor in overall cost savings for law enforcement.

Combining existing forces and other personnel with common goals would allow for a smoother technological transition from the current compartmentalized systems to one multi-agency communications center. There is only one alternative, and that is to be fiscally responsible in county government by combining technological resources and manpower to supply essential services at lower costs to those who entrust law enforcement the most: the citizens.

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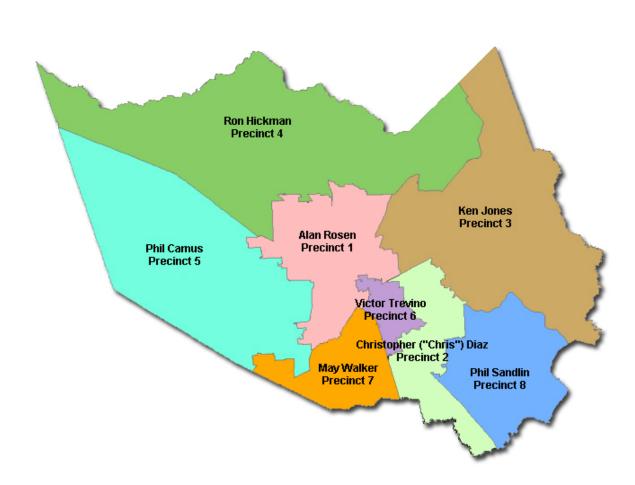
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APPENDIX A Harris County 2012



APPENDIX B

Harris County Calls for Service	
2009-2011	

2009				
Agency		Total Calls		
Constable Pct 1		53,677		
Constable Pct 2		15,542		
Constable Pct 3		40,939		
Constable Pct 4		248,255		
Constable Pct 5		200,654		
Constable Pct 6		19,239		
Constable Pct 7		43,859		
Constable Pct 8		30,797		
Sheriff Dept.		736,340		
Total		1,389,302		

2010				
Agency		Total Calls		
Constable Pct 1		52,033		
Constable Pct 2		16,700		
Constable Pct 3		34,618		
Constable Pct 4		257,343		
Constable Pct 5		188,763		
Constable Pct 6		22,586		
Constable Pct 7		55,002		
Constable Pct 8		40,055		
Sheriff Dept.		713,423		
Total		1,380,523		

2011				
Agency		Total Calls		
Constable Pct 1		58,174		
Constable Pct 2		14,615		
Constable Pct 3		36,768		
Constable Pct 4		238,221		
Constable Pct 5		179,240		
Constable Pct 6		20,868		
Constable Pct 7		57,712		
Constable Pct 8		47,088		
Sheriff Dept.		694,409		
Total		1,347,095		