

To: Kelvin Lewis

Chatham County

From: Tom Maureau

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Subject: Chatham County CAD/RMS – Background Information Examples

Below are examples of information provided in the San Mateo County, CA CAD/Mobile RFP to provide the Project Team a frame of reference.

- 1. Statement of Intent
- 2. Background
- 3. Strategic objectives
- 4. Workload
- 5. Public Safety Departments
- 6. IT Note: The County chose to provide limited information. More detailed information will be seen in other RFP examples
- 7. GIS

SECTION I – GENERAL INFORMATION

Statement of Intent

As outlined in more detail in Section II – Scope of Work, this Request for Proposals (RFP) seeks a qualified provider to design, configure, train, implement, and maintain a fully-functional, turn-key, scalable, integrated, Commercial Off the Shelf ("COTS"), Computer Aided Dispatch/Mobile/Business Analytics System in accordance with the terms and conditions of this RFP.

San Mateo County has identified the need to upgrade their Public Safety information systems, technologies and applications; using an integrated approach, in order to better support the operations of its Public Safety agencies including:

- Public Safety Communications (PSC)
- Law Enforcement
- Fire/Rescue



Emergency Medical Services

San Mateo County is seeking a hardware/software solution that addresses their strategic vision, goals and objectives, and requirements articulated in this RFP.

Responding Proposers are required:

- To have experience in the Public Safety CAD/Mobile industry for a minimum of five years
- A proven integrated CAD/Mobile solution that is successfully employed by public safety jurisdictions of similar size or larger than San Mateo County, California
- Superior Project Team with a highly-experienced Project Manager, Subject Matter Experts, and Technicians supporting the implementation of all equipment, software, wiring, interfaces and training of personnel
- Proven positive relationships with current customers as San Mateo County wants to establish a relationship with a partner going forward

The target start date and term for the proposed services is January 2018 through Month January 2020, subject to negotiation of a final agreement.

Background

The County of San Mateo is situated between the metropolitan areas of San Francisco and San Jose, California. The population is 747,000 which occupies approximately 455 square miles of urban, suburban and rural landscape. San Mateo County is part of the San Francisco Bay Area and covers the majority of the San Francisco Peninsula. San Francisco International Airport is located at the northern end of the county and Silicon Valley begins at the southern end. The county's built-up areas are mostly suburban neighborhoods with some areas being very urban, and are home to several corporate campuses. The County has 16 cities, four towns and approximately 20 unincorporated communities.

Refer to Enclosure 4 - *San Mateo County Economic Forecast* for additional demographic and estimated population growth information.



San Mateo County Strategic Objectives

San Mateo County has employed the same CAD system since 1993 and is seeking to replace the current system with a modern Commercial Off the Shelf (COTS) system.

The primary objectives of the CAD/Mobile/BI Project are:

- Commercial Off the Shelf (COTS) integrated solution for San Mateo County Public Safety departments that are end users of the CAD/Mobile/BI system
- Cost effective solution that will provide the best Return on Investment (ROI)
- System Integrator ownership for all solutions (e.g., a single help desk number for support and services for all proposed applications)
- Maximize effectiveness of current staffing
- Improve public safety productivity
- Improve the quality of 9-1-1/Emergency Communications Center, Law Enforcement,
 Fire/Rescue, and Emergency Medical Services to citizens
- Improve the efficiency and effectiveness of Public Safety operations
- Leverage technology systems for maximum operational effectiveness
- Employ public safety industry best practices and standards
- Increase information sharing capabilities

Some of the specific project objectives related to San Mateo County Public Safety operations include:

- Reduce response times to calls for service
- Improve Information Management capabilities
- Improve Operations Management capabilities
- Improve the quality of PSC, Law Enforcement, Fire and EMS department work products
- Improve internal and external customer satisfaction
- Improve internal and external operational and administrative communication
- Improve safety for public safety personnel and citizens
- Measure the effectiveness of strategies and tactics in a timely manner
- Analyze the deployment of personnel and resources
- Improve situational awareness and command and control



- Enhance employee productivity
- Eliminate redundant and repetitive actions
- Reduce operational risks
- Reduce and/or eliminate administrative time

Respondents to this RFP shall provide information explaining how the proposed solution will meet and/or exceed the above goals and objectives. Additionally, it is the desire of San Mateo County to leverage the experience and expertise of the CAD/Mobile/BI industry and is open to any recommendations and/or options that could improve public safety services in a cost-effective manner.

Refer to the below Sections for detailed background information:

- Section VI Public Safety Department background and workload information
- Section VII Current State Data Center
- Section VIII San Mateo County GIS



SECTION VI – DEPARTMENT BACKGROUND & WORKLOAD INFORMATION

Office of Public Safety Communications

The Office of Public Safety Communications (PSC) facility is located in the basement of the Hall of Justice and Records, located in the County seat of Redwood City, while administrative and systems management offices are located in two separate buildings on the same campus. Currently, maximum staffing in the Dispatch Center occupies 13 workstations, where most are occupied 24 hours a day, seven days a week.

PSC is divided into three functional sections: Administration, Operations and Systems Management. The civilian Director reports to the Assistant County Manager and has two Assistant Directors and three Operations Managers. Each 12-hour shift has a Shift Supervisor and the average line staff on-duty is 11. The System Management Unit currently has one Supervisor, a Lead and an IT Technician.

The Dispatch Center is slated to move to a new facility in April 2018 on the same Government Center campus. The number of workstations that will be incorporated in the facility is up to 30, not including five which are slated for the new training room. Considering the upcoming transition, it's useful to identify the potential of scalability should consolidation continue to occur in the County.

| | Now | Future |
|------------------------|-----|-----------|
| Line Staffing & SPCA | 50 | Up to 110 |
| Supervising Dispatcher | 7 | 11 |
| Lead Dispatcher | 1 | 16 |
| Middle Managers | 5 | 6 |
| Assistant Directors | 1 | 2 |



| Office Support | 1 | 3 |
|--------------------|----|-----------|
| Technology Support | 1 | Up to 6-8 |
| Total | 67 | 157 |

The Center's core services include:

- Primary Public Safety Answering Point (PSAP) serving those 9-1-1 callers who seek assistance from law enforcement agencies contracted with, to include:
 - San Mateo County Sheriff's Office serving the unincorporated areas of the county, and the cities and entities of Half Moon Bay, Millbrae, San Carlos, Portola Valley, Woodside and the Transit Police covering San Francisco to Gilroy via contractual agreement
 - East Palo Alto Police Department
 - o Broadmoor Police Department
 - Daly City Police Department
- Calls for fire and/or medical incidents are transferred to PSC for the administration of Medical Priority Dispatch protocols and dispatched to the ambulance contractor (AMR), the South San Francisco Rescue Ambulances, and to all 11 Fire Service Departments/Districts)
- Mutual Aid Coordination services for all police departments in the county.
- Primary dispatch and mutual coordination for all fire departments in the county.
- Provides dispatch services to the countywide Narcotic, Vehicle Theft and Gang Task forces when in operation.
- Provides dispatch services countywide for multi-agency grant projects such as "Avoid the 23" and
 "Saturation Traffic Enforcement Program" details

Provision of part-time and/or "on-call" communications and dispatch services to San Mateo County departments or contractors including but not limited to:

- Probation
- Coroner
- Public Works Agencies: The same city and county agencies that law enforcement dispatch services are provided
- Information Services



- Area Office of Emergency Services
- District Attorney
- Superior Court
- Peninsula Humane Society
- Environmental Health
- Parks Departments: The same city and county agencies that law enforcement dispatch services are provided
- Building Inspectors: The same city and county agencies that law enforcement dispatch services are provided

In addition, the following discretionary services include but are not limited to:

- Provision of emergency direct emergency alarm monitoring for private homes and businesses for a fee (Patriot Alarm System)
- Custodian of Records and County Master Street and Addresses for State 9-1-1
- Mobile Communications and Field Support for County Sheriff and North Central Regional SWAT
 Teams
- Special Detail Dispatching (e.g., Avoid the 23, Transit Night Games)
- Support of the Public Safety Paging System
- On-site programming for CAD and Public Safety Systems
- Alternate 911 PSAP for Allied Agencies
- Emergency Back-up for police dispatch centers in the County
- Customer CAD enhancements for customer agencies



| Public Safety Communications | | Count | |
|--------------------------------|--------|---------|-----|
| PSC Employees | | 75 | |
| CAD Access Equipment | | Count | |
| Dispatch/Call Taking Positions | | 23 | |
| Non-Dispatch Computers with | Center | Desktop | 100 |

Additional San Mateo County PSAPs

All other police agencies in the County either have their own 9-1-1 Dispatch Center or contract for those services, which include:

- South San Francisco Police, also dispatches for Pacifica Police and at night for Colma Police
- Colma (daytime only)
- San Bruno Police
- Burlingame Police
- Hillsborough Police
- San Mateo Police, also dispatches for Brisbane Police
- Belmont Police
- Foster City Police
- Redwood City Police
- Atherton Police
- Menlo Park Police



San Mateo County PSC CAD System and Workload

PSC operates a Northrop Grumman (NG) Computer Aided Dispatch (CAD) System (formerly PRC). The CAD software has been continually enhanced and hardware replaced since it was first installed in 1992 earning a reputation of high system reliability by having an over 99.99% 'up' time per year. The CAD and the County's Message Switch share the same operating system, which was designed for fault tolerance of each. PSC maintains the hardware and software. The PSC CAD runs the NG client software for Mobile Data which is deployed in the Sheriff's, East Palo Alto Police, Broadmoor Police, Daly City Police, Transit, some fire service and ambulance supervisor vehicles. CAD incident/case data transfers to multiple record management systems including Sunridge Systems, SunPro, and Fire House.

- 2016 = 312,145
- 2015 = 295,728
- 2014 = 294,232

2016 CAD Workload Breakdown

| Department | CAD Incident Count |
|---|-----------------------|
| Department of Public Works | 4,149 |
| Emergency Medical Services | 57,024 |
| Countywide Fire Dispatch | 72,839 |
| Broadmoor Police | 8,366 |
| East Palo Alto | 32,828 |
| Daly City Police | 11,119 / 70,000* |
| Law Mutual Aid | 10,081 |
| Sheriff's unincorporated and contract communities (bayside) | 100,203 |
| Gang Task Force & Special Details | 5,802 |



| Transit Police | 9,734 |
|----------------|---------|
| Total | 312,145 |

^{*}Assumed full-time Dispatch for Daly City Jan 1. CAD incident volume is anticipated to reach 70,000 annually



San Mateo County Law Enforcement

San Mateo County Sheriff's Office

The Sheriff is responsible for planning, organizing, directing, and reviewing the activities and operations of the Sheriff's Office, including adult correctional facilities, rehabilitation, and reentry services for offenders; public safety and emergency services; forensic laboratory services and specialized programs, such as narcotics, search and rescue, and bomb detection and disposal. The Sheriff and his Office coordinate assigned activities with other county departments and outside agencies as well as provide highly responsible and complex administrative support to the County Manager and Board of Supervisors.

1. Agency Workload Breakdown

| San Mateo County Sheriff's Office | 2016 | 2015 | 2014 |
|--|--------|--------|--------|
| Activity generated via 7-digit line | 38,389 | 37,716 | 35,717 |
| Activity generated via 9-1-1 | 7,751 | 8,232 | 8,399 |
| Activity generated via Alarm Company | 175 | 45 | 8 |
| Activity generated via Alarm System (in Dispatch Center) | 14 | 33 | 28 |
| Activity generated via Radio (field initiated) | 38,253 | 36,088 | 38,307 |
| Activity generated via 9-1-1 wireless | 12,874 | 13,902 | 15,343 |

2. Agency Background Information

- Comprehensive law enforcement services for more than 70% of the County
- Direct jurisdiction over the unincorporated areas in the County
- Contract police services for the Peninsula Corridor Joint Powers Board (Caltrain) and the San Mateo
 County Transit District (SamTrans)
- Investigative services for the San Francisco International Airport
- Contract law enforcement services for the cities and towns of Half Moon Bay, Woodside, Millbrae
 Portola Valley, San Carlos, and Eichler Highlands



- 3. Industries
- Stanford Linear Accelerator in Menlo Park
- High concentration of biotechnology companies in San Carlos
- Three airports (San Francisco International, Half Moon Bay and San Carlos)
- San Mateo County Recology (Waste Management) Office in San Carlos
- San Mateo County Transit Authority in San Carlos
- Major agriculture suppliers along the coastline
- 4. Special risks for Agency
- High volume adjustments to transient population
- Three airports one international airport and two small plane/craft
- Proximity to San Francisco and Silicon Valley (San Jose/Santa Clara)
- Earthquake zone SF Peninsula located along the San Andreas Fault-line
- Caltrain tracks from San Francisco to Gilroy with 25 stations/stops in between
- Coastal area and inner Bay (tsunami zone)
- San Francisco watershed water supplier to SF Peninsula via the California State Hetch Hetchy
 Aqueduct
- Doran bridge spans over the Crystal Springs Dam
- Lantos Tunnel allowing for transit through mountainous and steep coast side territory
- Sheriff's Office explosive ordinance storage
- San Mateo County Sheriff's Office Firearms and Training Center alongside populated areas (e.g., County Park, Golf Course, Restaurant)

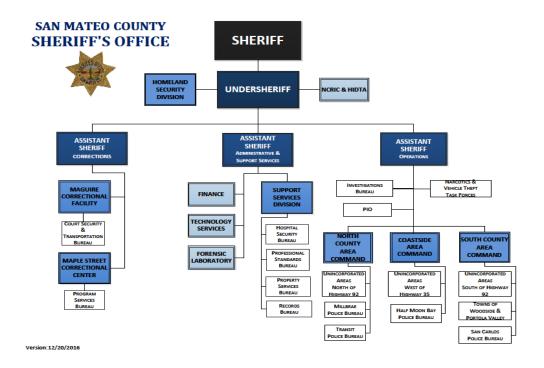
Other systems accessed or managed by the Sheriff's Office:

- Mug Shot System
- Jail Management System ATIMS
- Coplink
- APBNet or TRAK
- E-Subpoena Systems Karpel Solutions
- CJI Case Search
- RIMS RMS



County Message Switch

5. Agency – Department Organization Breakdown



6. Facilities

- San Carlos, Half Moon Bay, Millbrae, North Fair Oaks, and Moss Beach substations
- San Mateo County Sheriff's Office Forensic Laboratory & Coroner's Office
- Office of Emergency Services
- San Mateo County Center
- Maguire Correctional Facility and Maple Street Correctional Center
- Hillcrest Juvenile Detention Facility
- Property and evidence storage facilities throughout the County
- Gang Intelligence, Narcotics Task Force, and Vehicle Theft Task Force offices

7. Personnel Breakdown

- 1 Sheriff
- 381 Sworn



- 158 Correctional Officers
- 261 Civilian
- 801 Office Total

| San Mateo County Sheriff | Count |
|-----------------------------------|-------|
| Sworn Employees | 381 |
| Civilian Employees | 261 |
| Total Employee Count | 801 |
| CAD Access Equipment | Count |
| Mobile Data Computers | 80 |
| Desktop Computers with CAD Access | 200 |



Daly City Police Department

- 1. Agency Background Information
 - a. 7.66 square miles, comprised primarily of residential neighborhoods
 - b. Service a reported 110,000 people
 - c. Very dense with limited potential of new growth without rebuilding
 - d. Local area hospital, shopping mall and major transit systems
 - e. Border City of San Francisco, topography inhibits data communication
 - f. 6 patrol beats, with 16 reporting districts
- 2. Agency Personnel Breakdown
 - a. 1 Chief, 2 Captains, 7 Lieutenants, 14 Sergeants, 80 Police Officers, 20 support personnel (parking, desk), 12 civilian clerks for records
 - b. 4/10-hour shifts (days, swings, midnights) and 3/12.5-hour shifts (days, swings, midnights)
 - c. Mobiles Running Sun Ridge for RMS, Mobiles, Property
 - d. Operate out of 1 primary station/facility, with one designated substation at the local mall
 - e. Primary facility is within City Hall
 - f. 5 Fire Stations, 20 City buildings for other divisions and recreation
- 3. Agency Workload Breakdown
 - a. CAD incidents 2015 = 86,688 / 2016 = 82,378
 - Mobile workload Minimum personnel logged on at one time 6 (midnights) /
 Maximum at one time 40 (swing shift overlap)
 - c. Case reports: 2015 = 11,222 / 2016 = 10,927



| Daly City Police Department | Count |
|-----------------------------------|-------|
| Sworn Employees | 110 |
| Civilian Employees | 25 |
| Total Employee Count | 135 |
| CAD Access Equipment | Count |
| Mobile Data Computers | 55 |
| Desktop Computers with CAD Access | 70 |



SECTION VII - CURRENT STATE DATA CENTER

San Mateo County PSC Data Center

- 1. Primary and Secondary Primary only data center, no secondary at this time
- 2. Footprint available New data center will be in excessive of 950 sq./ft.
- 3. Cabinets Closed cabinets in 24 or 36-inch width (19" standard mounting)
- 4. Electrical/UPS capacity PSC data center is allocated 96KW utilizing redundant electrical & UPS systems
- 5. HVAC capacity N+1 cooling for the data center to cool 96KW
- 6. Networks Not yet designed
- 7. Data warehouse Existing SQL server instance



SECTION VIII - SAN MATEO COUNTY GIS

San Mateo County GIS Overview

In early 2016, the County undertook an 8-month long project to prepare its first "5-Year Enterprise GIS Strategic Plan." Phase I of this project took an exhaustive look at the GIS needs of each of the thirteen participating departments/divisions in San Mateo County. Based on the findings of Phase I a series of preliminary recommendations for an enterprise GIS system architecture (hardware, software, and networking) were laid out in Phase II of the project. The Phase II report made a case for how each component of system architecture interact with each other, their place in an enterprise GIS, and how these components come together within the context of the current and future County organization model regarding a full GIS enterprise implementation.

The County is recently working on soliciting services of a consultant to develop a strategic enterprise GIS system architecture that successfully meets our users' performance expectations. This project is expected to be initiated by May 2017. Two of the County's most high profile projects, the Assessor's Office, "County-wide Cadastral Mapping Project" and the Public Safety Communications department's "Integrated CAD/Mobile /Business Analytics Project" are expected to have a significant influence on the "To-be" future state enterprise GIS architecture. County GIS understands that planning and design activities related to fulfilling project needs of these two projects are of utmost priority and the incoming consultant will be expected to plan and prioritize the implementation activities keeping this information in mind. Furthermore, County is also currently working on acquiring recent Aerial Imagery and LiDAR data and this project too will have a considerable influence on the future-state enterprise GIS system architecture.

In addition, all County departments are planning to migrate GIS data and workflows to Esri's Local Government Information Model (LGIM). This too will have a considerable influence on the "To-be" future state enterprise GIS architecture design.

System Architecture Design Overview

The County GIS is currently operating as a hybrid governance model. The 2016 study made recommendations to continue using and formalizing the hybrid model with technology, data, and software being managed centrally and users being enabled in a distributed fashion (see Chapter 3: GIS



Governance Model). The GIS architecture has significant impact on this recommendation and interrelates to the software deployment suggestions. For example, easy to use data browsers and mobile applications have been recommended that rely on a central GIS server and the use of ArcGIS Online. GIS browser technology will allow non-GIS users to quickly access GIS data, create their own reports, and create their own maps. This allows the casual user to have quick and user friendly access to GIS. This approach enhances and expands the GIS usage at the department level in which end users do a majority of their own GIS tasks while relying on a central group of GIS experts for assistance with high level operations. Mobile GIS extends GIS capabilities into the field allowing for a multitude of functionality including viewing maps, correcting attributes, and collecting new features.

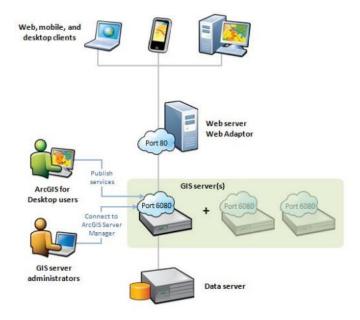
The GIS Team in the Information Services Department (ISD) provides services related to hardware, software, databases, networking and training for the enterprise wide GIS. Other GIS functions are performed by staff within the various departments. It is County's desire to have a central GIS data repository that (i) enables department to manage and maintain their business data with ease, (ii) facilitates data/information sharing, and (iii) prevents the existence of disparate copies of data that inculcates lack of confidence in data accuracy and completeness.

Recommended (Future State) System Architecture

The 2016 report made some preliminary recommendations for a GIS system architecture that was not detailed (See <u>Chapter 7: GIS System Architecture</u>). One of these recommendations was that the County should continue to use and further deploy a client-server based GIS architecture that is centered on the geodatabase and ArcGIS for Server. This was further illustrated by the graphic included below where a centrally managed system houses all GIS data and applications. In turn, data and applications specific to the needs of each department will be made available to the end users through various applications and methods.



ArcGIS Server site architecture



Enterprise GIS Centered on the Geodatabase and ArcGIS for Server

*Image courtesy of Esri, Inc.

The report also noted that the existence and maintenance of a centrally-located enterprise geodatabase(s) is the cornerstone component in San Mateo County's GIS program. The geodatabase is accessed directly through multiple desktop GIS applications, as well as various Esri ArcGIS Services. It was recommended that the County moves its geodatabase to Esri's LGIM as much as possible. This recommendation is further supported by the fact that San Mateo County Assessor's office is undertaking an ambitious task of reconstructing the entire parcel fabric (~250,000 parcels) in Esri's LGIM and many of the other departments are following suit.

San Mateo County currently uses Oracle Spatial for its enterprise GIS database. Primarily for the reasons of cost savings, end user simplicity, and ease of administration, the study recommended that the County migrate to Microsoft SQL Server.

Current Status of GIS Data

Below is the current state of some of the datasets that might be used in this project by the incoming vendor. The in-depth report on the current state and future recommendations on all County GIS datasets is available for Proposer's review (see Chapter 5: GIS Data Assessment)



The 2016 report also did a preliminary assessment of the current state of the County's street centerline dataset. It was indicated that many attributes may be stored in it such as the name of the street and the address ranges along that street. Street centerlines can also support a number of important functions within the GIS:

- Road name labels
- Road classification (highway, arterial, surface, etc.) support symbology
- Address ranges support geocoding
- Linear Referencing System (LRS) support mile marker geocoding
- Vehicle routing, when one way roadways are attributed
- Drive-time modeling, when speed limits are integrated

The street centerline data was created from County aerial photos. The Public Works

Department currently maintains the street centerline data. An analysis was performed on this dataset in early 2016 against the street GIS data using Esri's Data Reviewer. There were 49 features that had invalid geometry, 5 multi-part features, 12 duplicate geometry features, 567 dangles, 663 orphans, and is estimated to be 70% accurate spatially. There were several fields that had missing or NULL values such as FULL_NAME, NAME, and TYPE. Traditionally street centerlines were created for address matching and address location identification. The following are reflected in the street centerlines:

- The centerlines contain information about the street name, type, address range, ZIP code, and other address attributes
- Each line was digitized in such a way that the direction of flow, if one-way, was captured from
 the lowest address to the highest. This is important for proper address matching and routing.
 There are some inconsistencies in the current street centerline file. Some centerlines are drawn
 correctly, but others need to be flipped.
- The centerlines were created so that they are continuous from intersection to intersection. For
 example, the 100 block of Main Street should be a continuous line until it reaches the next
 intersection and becomes the 200 block.



The 2016 report assessed that the address point layer needs to be audited, existing data verified and normalized, and missing data needs to be created. The following is a brief outline of some of the short comings that need to be worked on before address database can be made NENA compliant:

- Extraneous fields
- Spatial verification of the structure on the parcel. May require fieldwork to accommodate
- Fill data gaps by cross checking with various data sources from existing address databases (911, Planning, others)
- Create and edit address points for multiple dwelling units accounting for all apartment/unit locations. May require fieldwork to accommodate
- Add/correct the missing addresses

Because the address point layer is in poor shape (completeness and accuracy), a holistic address point layer creation project should be undertaken.

The address point data was created and compiled from various sources. The address points are not complete, especially regarding multi-tenant dwellings. Multiple address points are not correctly placed on structures that are multi-unit (e.g. commercial, condominiums, etc.). The various city GIS groups maintain their own address points for their municipalities and do not rely on SMC address data. Based on results from Esri's Data Reviewer, there are 47,690 points that have duplicate geometry and approximately 70% of the points need to be adjust spatially. Most of the attributes are populated, but some fields are missing values. At present, there are additional fields that need to be added to this dataset to make it NENA compliant.

GIS Licenses

San Mateo County houses their core GIS data via Esri's ArcSDE utilizing Oracle 11g as its relational database. The County has also selected Esri software for their GIS desktop and server solution. Esri licensing is under one customer number and are all managed centrally. This simplifies license management and ensures that the County is getting the most use out of their GIS software. For instance, a user in a specific department may utilize an Esri license on a given



day. Once the user is done using that license, it is moved back to the central pool of GIS licenses, then it becomes available to all users. In effect, this allows for maintaining fewer copies of the software as the software is available in a pool on an as needed basis. Currently, the County has the following Esri licensing available in its centralized software pool:

| Product | Product Type | License | Total Authorization |
|---|-----------------|----------------|---------------------|
| ArcGIS for Desktop Advanced | Core | Concurrent Use | 1 |
| ArcGIS for Desktop Standard | Core | Concurrent Use | 7 |
| ArcGIS for Desktop Basic (ArcView) | Core | Concurrent Use | 10 |
| ArcGIS for Desktop Basic (ArcView) | Core | Single Use | 1 |
| ArcGIS Spatial Analyst for Desktop | Extension | Concurrent Use | 4 |
| ArcGIS for Server Enterprise Standard | Core | Server | 3 |
| ArcGIS for Server Enterprise Standard (Staging) | Core | Server | 2 |
| ArcGIS Image Extension for Server Enterprise Standard | Extension | Server | 1 |
| ArcGIS Online Level 2 Plan | Core | ArcGIS Online | 2 |

GIS Viewer Applications

All departments within the County have access to GeoCortex for property lookups as well as some customized applications developed in Flex and JavaScript. There is currently an internally developed application available internally and externally for Planning. The GeoCortex application is not available to staff on mobile phones as it requires users to be given access by their IP address. GeoCortex provided custom development within the properly lookup



application for the County. The application provides end users with parcel and property information. There are not any additional data layers available for querying or viewing. The viewer is intended to satisfy common GIS property viewing needs across the organization. Regarding the Flex based applications, Esri has stopped providing updates to both the Silverlight and Flex APIs in favor of JavaScript and HTML5. In addition, this application is custom and will require updates over time.

The County GeoCortex license and platform is available for the departments to develop their custom web and mobile applications.

GIS Application Being used in the Cities

Existing PSC-CAD Application

- 1. Existing Northrop Grumman CAD dispatch system for PSC
 - CAD application utilizes a link to a map book page. MAPIT function displays the 1000'x2000' 300 scale of the area of the dispatch call. Map displays streets, address, property lines, hydrants, and other related site information such as driveway access, building footprint and Knox box location. Other land features are annotated such as schools, parks and hospitals. Pre- fire plans were developed are also available through the MapIT link tool that is a function of pdf embedded links
- 2. Existing enhanced dispatch screen on iPads
 - Tablet Command is an iPad /iOS application to manage incidents. It is a
 user-friendly application that has extensive on-scene management
 capabilities as well as mapping tools and utilities. See
 http://tabletcommand.com/
 - Tablet command has extensive functionality to consume any number of GIS datasets from shapefiles to kml and map services. Currently, directions are used extensively to direct incident. Hydrant locations and developed preplans locations are accessible via hosting them in ArcGIS online and the actual drawings are loaded locally on iPad via Good Reader sync tools.



 This application opens access to datasets County-Wide in contrast to the MapIT command with Northrop Grumman is only available to Battalion Chiefs and the Active Engine.

Public Safety GIS Future State

San Mateo County has initiated a project to upgrade countywide GIS data to meet public safety and NENA standards.