



**Southern Alameda County
Geographic Information System Authority
Meeting Agenda and Report
Wednesday, May 24, 2023**

General Order of Business

- | | |
|---|-----------------------------------|
| 1. Call to Order – 6:00 p.m. | 7. Action Items |
| 2. Roll Call | 8. Director Comments |
| 3. Consent Calendar | 9. Date and Place of Next Meeting |
| 4. Public Oral and Written Communications | 10. Adjournment |
| 5. Report of Secretary | |
| 6. Report of Treasurer | |

Order of Discussion

Generally, the order of discussion after introduction of an item by the Chair will include comments and information by staff followed by the Southern Alameda County Geographic System Authority (SACGISA) Board questions or inquiries. An authorized representative or interested citizen may then speak on the item. At the close of public discussion, the item will be considered by the SACGISA Board and action taken.

Addressing SACGISA

Any person may speak on any item under discussion by the SACGISA after receiving recognition from the Chair. When addressing the SACGISA, please state your name and address. In order to insure all persons have the opportunity to speak, a time limit may be set by the Chair for each speaker. In the interest of time, please limit your comments to new material; do not repeat what a prior speaker has said.

Public Oral and Written Communications

Any person desiring to speak on a matter which is not scheduled on this agenda may do so under the Public Oral and Written Communications section of the meeting. The Chairperson will limit the length of presentation. California Government Code Section 54954.2(b) prohibits SACGISA from taking any immediate action on an item which does not appear on the agenda, unless it meets stringent requirements.

Assistance

Assistance will be provided to those requiring accommodations for disabilities in compliance with the Americans with Disabilities Act of 1990. Interested persons must request the accommodation at least two working days in advance of the meeting by contacting John Leon, SACGISA JPA Secretary/City of Fremont GIS Manager at (510) 494-4831 or jleon@fremont.gov.

Information

For information about SACGISA or items scheduled on the Agenda and Report, please visit SACGISA.org or contact John Leon, SACGISA JPA Secretary/City of Fremont GIS Manager at (510) 494-4831 or jleon@fremont.gov.

SACGISA Board	SACGISA Staff
ACWD – Paul Sethy	ACWD – Ariz Naqvi, Girum Awoke, Daniel Park
Fremont – Raj Salwan	Fremont – John Leon, Bronwen Lacey, David Persselin, Sanford Taylor, Ruby Wun, Ron Chan, Ed Chew, Tim Hayes
Newark – Michael Hannon	Newark – Soren Fajeau, Edwin Miranda, Peter Fong, Sheena Raj, Narayan Krishnan
USD – Tom Handley	USD – Richard Scobee, Raymond Chau, Robert Simonich, Curtis Bosick, Christopher Pachmayers, Lusine Petrosyan

**SOUTHERN ALAMEDA COUNTY
GEOGRAPHIC INFORMATION SYSTEM AUTHORITY
MEETING AGENDA
Wednesday, May 24, 2023
6:00 P.M.**

**City of Fremont
Downtown Event Center – Capitol Room
3500 Capitol Ave
Fremont, CA 94538**

**Currently, there are no special requirements.
This is subject to change based on state/county requirements.
Attendees are welcome to wear masks if they want to, but it is not required.**

- 1. Call to Order**
- 2. Roll Call**
- 3. Consent Calendar**
 - 3.1 Approval of Minutes of Last Meeting (Attachment A)**
- 4. Public Oral and Written Communications**
- 5. Report of Secretary**
 - 5.1 Update on JPA Projects**
 - 5.2 Review of Fiscal Year 2022/23 Budget**
 - 5.3 GIS Demonstrations**
- 6. Report of Treasurer/Controller**
 - 6.1 Financial Report (Attachment B)**
- 7. Action Items - General Business Matters**
 - 7.1 Election of Chair and Vice-Chair of the Joint Powers Authority (Attachment C)**
 - 7.2 Approval of FY 2023/24 Budget (Attachment D)**
 - 7.3 Resolution Honoring Al Nagy for Distinguished Services (Attachment E)**
- 8. Director Comments**
- 9. Date and Place of Next Meeting**
- 10. Adjournment**

5.1 UPDATE ON JPA PROJECTS

- **JPA**

- **Update on outreach and communication with City of Union City and Alameda County**

On April 11, 2023, an email invitation was extended to our counterparts at the City of Union City and Alameda County to attend our SACGISA meeting scheduled for May 24, 2023. The invitation included a link to the SACGISA website so that they may access our ongoing and past agendas.

- **Pictometry updated aerial and planimetric data**

Discussions are being held with Alameda County and EagleView to obtain an update of the Pictometry imagery covering the Tri-City area. Pictometry is an aerial image that shows an overhead and side views of buildings and ground locations. It is a tool used frequently by the agencies along with a change detection function between Pictometry aerials of different date vintages, building outlines, deck, and pool finder service.

In addition, the new ortho imagery will be used to generate updated elevation contour lines since the current topographic contour data is over 10 years old. Given the level of development activity in the service area, large areas are significantly out of date which minimizes the value of the photos for engineering, planning, and code or public safety purposes. The elevation contour lines information is critical for activities such as fire control and water flow analysis. Pictometry is an essential component to Fremont's Wildland Urban Interface Map.

- **CAD Submittals Requirements Document Update**

SACGISA agencies have been collaborating with Fremont's Engineering Division to identify what additional utility information should be provided as part of a project's Digital Submittal. The next step will be to approach Engineering firms for the feasibility of acceptance and development of the final requirements.

- **ACWD**

- **GIS Needs Assessment**

The District plans to conduct an internal GIS needs assessment using ArcGIS Survey 123. The purpose is to get total number of users, GIS services/applications utilized, determine number of licenses and extensions needed, and to get user feedback on ways to improve existing services. This will also help bring awareness of GIS technologies other than the desktop ArcGIS application such as Portal/AGOL web maps and dashboards, and GIS add-ins for Excel, SharePoint, etc. that our users may not be familiar with.

- **Lead Service Line Inventory**

The District is required to create an inventory of customer and utility side service line materials by Oct 2024 per EPA's Revised Lead and Copper Rule. Data has been collected for this in previous years and is being collected as part of the AMI project. The District will be working on completing the customer-side and utility inventory and creating a web application displaying the inventory. The District also plans to create a process for capturing ongoing updates to the inventory such as replacements and additions. We are currently exploring the best way to collect, store, and present this information. Options being evaluated include ESRI Lead Service Line Inventory and the District's Cityworks AMS platform which is currently utilized by field staff. The District plans to get the process implemented and working before the end of 2023.

- **Water Use Efficiency Program**

GIS staff is evaluating options for improving the existing processes for collecting, processing, and reporting Water Waste Ordinance related issues. The options being evaluated include Cityworks and ESRI Citizen Problem Report which is a good solution for data intake from the public and displaying the reporting via ESRI's web map. Calls received by dispatch and water waste found by field staff can be recorded in Cityworks, while reports from the public can be taken in via ESRI's Citizen Problem Reporter. The two systems will need to be integrated for reporting and display purposes.

- **Fremont**

- **MMANC – Municipal Management Association of Northern California**

This year the Municipal Management Association of Northern California (MMANC) held their [Annual Winter Forum](#) at Stockton, CA on March 3rd, 2023. GIS Manager John Leon and Data Coordinator Ruby Wun were invited to represent the City of Fremont in a panel discussion on real-world applications of GIS in local government. Joining them on the panel was the City of Bakersfield (Katie Reed, Technology Services Manager). Unfortunately, the panelist from Mariposa County (Ben Ogren, Senior GIS Specialist) was not able to attend. The session's focus was to share experiences with GIS highlighting the ways in which GIS has been used to improve efficiencies and better serve the community and staff. The Panel's purpose was to provide the attendees a better understanding of the potential of GIS in local government and get practical strategies for implementing GIS in their own organizations. Fremont's slide presentation can be accessed [here](#).

- **Address Data Management Design project**

This fiscal year GIS embarked on a GIS initiative covering Address Data Management Design. The primary goal of the Address Data Management Design project is to streamline the addressing process used by GIS and to find more efficient ways to automate and integrate GIS data with the existing business systems (GIS, CRM, Accela, etc.) so that Fremont's community, businesses, and City departments can be better served.

Geographic Technologies Group (GTG) was hired to assist in this project. Their work entailed analyzing the current addressing workflow process and identified areas of improvement. The review occurred over a span of 3 months where representatives from various City departments and partner agencies were interviewed. The study concluded that Fremont has a very comprehensive set of addressing processes which ensured critical functions of addressing and addressing management are achieved along with the documentation of the workflow. GTG also recommended over 20 project tasks which would either improve or streamline the addressing processes. In addition, they provided design suggestions for a more efficient workflow process, modification of existing ones, the addition of new processes, and/or the creation of software programs to automate and accelerate the addressing work.

Five tasks identified in the Address Data Management Design project will be starting this year. They are:

- **Addressing Plan Boundary Creation:** This task involves the development of a semi-automatic process/workflow which would generate an addressing plan boundary polygon outlining the total extent of the address request location as well as assigning a unique Addressing Site Plan Number to the boundary polygon.
- **Streamline Address Point Placement Process:** This task is to simplify and automate as much as possible the address point placement process and institute automated quality control over the process. The current process is heavily manual involving Excel worksheets, updating XY values, and running FME processes.
- **Disperse Multi-Unit Address Points:** This task is to have existing address points which are currently stacked on top of each other dispersed to the address actual assigned location. This level of accuracy is needed for emergency services purposes.

- **Addressing Plan Consolidation and Digitization:** This task involves the scanning, digitizing, and organizing Addressing documents into one central location to simplify access to the documents by staff.
- **Address and Street Name Applications in Accela:** Currently an address request or street name review is emailed to GIS and tracked in an Access Database. This task involves the creation of a GIS Addressing/Street Name application in Accela (Fremont's permitting system). It would allow an applicant to submit their application online along with requested plans through Accela Citizen Access portal (ACA). In addition, it would enable City staff to track the request as it proceeds through the GIS workflow or be able to associate the GIS application to their related applications such as a building permit where a new address is being requested.

- **GIS Strategic Plan project**

As outlined in last year's report, GIS is working with Geographic Technologies Group (GTG) on the development of a five-year GIS Strategic Plan. The purpose of the Plan is to provide a roadmap for future GIS services, applications, and products to serve Fremont's Community, Partner Agencies and City Staff. Approximately 26 internal interviews were conducted covering all City Departments and Divisions. The questions posed to Staff were to find **out** what their GIS needs are (i.e., either for their own use or what they would like to have provided to the public). Based on the responses, there are about 301s wish list items being requested by Staff. These items ranging from requests for additional data & software, integration with existing software programs, custom apps & dashboards, equipment to collect data, Story Maps, training, and workshops). A draft report by GTG analyzing Staff's GIS needs is being reviewed at this time. In addition, an online survey (<https://www.my.fremont.gov/gis-survey>) was posted to find out what interests Fremont's residents and businesses have related to GIS data, apps, and services. The online survey was opened on March 1st and closed on April 16th. Approximately 61 responses had been received.

- **ColdFusion Server Upgrade and Migration**

Use of ColdFusion by GIS began with the implementation of Autodesk MapGuide in 2001. Since that time, it had been upgraded to MX7 (an early version of ColdFusion). ColdFusion is used as the main reporting tool between GIS data and databases while for providing a report to the end-user. Currently, Fremont is in the process of upgrading to the latest ColdFusion 2021 Standard release with a new server that would solely be dedicated to ColdFusion. Additionally, all existing ColdFusion code that has been developed over the years will be migrated, and evaluated for best practices in code improvements, performance, and improved stylizing.

- **eGIS Reporting - ColdFusion reports and SQL Server upgrade, migration, and implementation**

Since 2001, GIS relied on ColdFusion as the main reporting tool between GIS data and MS Access databases for providing reports to the end-user. And, during the summer of 2022, GIS worked with Webapper, a ColdFusion consulting company, to migrate and enhance existing code to the latest version of ColdFusion. Also, another key component of the project was to migrate and consolidate all MS Access databases from multiple servers consolidated into one SQL Server environment.

Currently Fremont 's Public eGIS viewer, Addressing Projects, Facilities and Services Listing, and Official Street Names websites are using the latest ColdFusion code and

accessing databases from our new SQL Server. The City Staff eGIS viewer is currently under GIS User Acceptance Testing (UAT) prior to City department UAT.

- **eGIS Accela report**

eGIS is an interactive mapping application for City Staff providing access to data and mailing list generation. A permit report available in eGIS is currently linked to the Tidemark database (i.e., a permitting program which is no longer in use) for historical research. Work has commenced to develop a new permit report linking, using ColdFusion, it to the current permitting program (i.e., Accela Automation) via the Accela APIs. The permit report is being done in two phases. Phase 1 is a summary report which lists permits associated with a selected parcel. Development of this report is on track and is anticipated to have a draft available for testing by mid-May. Once Phase 1 is completed, Phase 2 which is the development of a report that would provide detailed information on a selected permit in the summary report will commence.

- **ArcGIS Image Server deployment**

GIS implemented ArcGIS Image Server to deliver large aerial imagery using the ECW extension. ECW is the fastest, lowest-load, and lowest-cost image compression and decompression available on the market today. ECW's can compress and decompress the files with only small amounts of RAM and the processes are so fast that you can move and handle ECWs like standard files. With ECWs, you can display enormous images — many gigabytes in size — without pixelation. The latest 2020 aerial web services were incorporated into eGIS viewers for Fremont and Newark. Recently, ACWD has integrated the 2020 web service for use in Cityworks.

- **FME Server Deployment**

GIS implemented an FME Server Production and Development environment. In addition, a load balancer was implemented to direct traffic between 2 FME production servers to reduce any potential workflow bottlenecks as well as to support the automation of current workflow processes. Existing workflows are being migrated to the FME Server environment for automation.

- **Cityworks Asset Management**

Cityworks is an industry-leading GIS-centric enterprise asset management solution designed for local governments and utilities to effectively plan, manage, and assess public infrastructure assets. The Cityworks platform enables seamless integration of inspections, maintenance activities, inventory management, and permitting within a modern configurable software package. Built on ArcGIS technology, the platform allows governments and utilities to work smarter and better serve their communities.

As part of the implementation process, GIS has provided 26 layers in a sandbox environment for use during the testing phase. In addition, City Staff to use Cityworks were onboarded onto Fremont's eGIS Portal for Single Sign On (SSO) access to Cityworks.

Launch of Cityworks is tentatively scheduled for the fall of 2023.

- **Underground Service Alert (USA) Ticket Management System**

The State of California requires anyone planning to conduct an excavation to call 811 before they dig. An Underground Service Alert (USA) Ticket is then issued. A USA Ticket contains information on who will be doing the digging, why they will be digging, when they

will be digging, and where they will be digging. Once a USA Ticket is received by the utility owner, a person is sent to the dig location to locate and mark the buried utilities they own. The City of Fremont receives thousands of USA Tickets each year. The management of these tickets is critical in ensuring the protection of Fremont's critical infrastructure, such as buried fiber optic cables, and for the City to maintain compliance with state law.

BOSS811 Solutions software is being used for the management of the USA Tickets and provides a more efficient way to manage tickets than what was used previously by Fremont. The efficiencies include using a dashboard interface to track number of tickets received, closed, and those past due. BOSS811 is also integrated with the City's GIS to allow an interactive map to be able to show the location of City-owned buried fiber optic cables and signal locations. Both the map and dashboard allow staff to track and visualize ticket locations and status while in the office or in the field. This saves time and reduces the chances that the City's critical infrastructure will be damaged during any digging.

- **Geotab Fleet Management Solution integrated with ArcGIS**

The City of Fremont has implemented Geotab for the management of the City's fleet vehicles. Geotab leverages real-time connected vehicle data feeds that includes location and key ancillary information (such as speed, braking, idle time, vehicle name, engine on or off, etc.) displayed on a map and dashboard. A Geotab Connector for ArcGIS GeoEvent Server provides real-time vehicle locations viewable on the City's interactive GIS maps with additional data from the enterprise GIS database. The ability to view real-time connected vehicle data feeds within the City's enterprise GIS environment empowers frontline decisions by staff as well as helping them respond faster with increased awareness whenever and wherever change occurs (i.e., for example, citizen calls pertaining to potholes, downed trees, and storm-related emergencies like flooding, mudslides, power outages, etc.).

- **Geocortex Analytics**

In the upcoming months, GIS plans to implement Geocortex Analytics to collect, organize, analyze, and display information about its GIS infrastructure. Analytics would enable GIS to monitor the performance of its physical servers, ArcGIS Servers, Geocortex Essentials instances and sites, Geocortex applications, databases, ArcGIS Online, and Portal for ArcGIS instances, as well as Web Applications and Websites. The data that Analytics receives would assist GIS to easily identify problems and trends to better manage and optimize the GIS infrastructure.

With Geocortex Analytics, GIS would be able to set alarms on key resources like servers, infrastructure, and services so that when a resource goes offline, takes too long to send a response, or an error is reported by a component in the GIS infrastructure, alarms will trigger. Alarms can be configured to send notifications via email or text (SMS) so GIS can respond when vital parts of the GIS infrastructure stop working. Also, staff will be able to receive alarm notifications about affected resources.

Geocortex Analytics includes Dashboards which can be used to present/report on data in panels formatted as charts or tables to enable data to be easy visualized, analyzed, reported, and/or be tracked. It will help GIS to understand how its applications are used, and how to best to optimize the GIS infrastructure and improve resource availability.

- **Open Data Hub – Story Maps Gallery**

Due to the growing number of Story Maps being developed, a dedicated [Story Maps Gallery](#) has now been added to the Open Data Hub to make them easier to find. To date, there are a total of 13 Story Maps. As of mid-May, there have been just over 43,200 views of the Open Data Hub Site.

- **New Story Maps**

- [Affordable Housing in Fremont](#)
 - In another recent joint collaboration, the ITS/GIS Division and Community Development created the Affordable Housing in Fremont (a Story Map) showcasing the City's existing and upcoming affordable housing developments.
- [GIS: What is it?](#)
 - The "GIS: What is it" Story Map showcases the products and services provided by the GIS Division within the Fremont's ITS Department.

- **In Progress**

- *CIP Project Locator Story Map*

- **Existing Story Maps**

- [Addressing by the City of Fremont](#)
 - An Addressing Story Map Collection with eight individual Story Maps detailing Fremont's addressing process.
- [Art in Public Places](#)
 - Explore artwork throughout Fremont
- [boxART!](#)
 - Exploring artwork at Fremont's intersections
- [Get to Know Your City Council](#)
 - Information on the Mayor and each City Councilmember, the District they serve and their contact information.

The Open Data Hub is designed to be a tool for our residents as well as for City employees. Explore the updated Open Data Hub and learn more about the range of resources it has available at <https://fremont.gov/opendatahub>.

- **City Departments requesting GIS Data/Web Services**

Fremont GIS Division has been gathering data, creating web services, or using FME for integration with the following projects.

- Community Development
 - Accela permitting
 - Affordable Housing Mapping Story Map
 - Art in Public Places Story Map
 - boxART! Story Map
- City Mangers Office
 - Council District Locator app
 - Get to Know Your City Council Story Map
 - CRM
- Human Services
 - Rent Review
- ITS
 - govDelivery integration with Active Directory
- Maintenance
 - Geotab
- Parks and Recreation
 - ActiveNet
- Public Works
 - BOSS811
- Public Works / Parks and Recreation / Community Services
 - Cityworks Asset Management
- Public Safety
 - Chameleon – Fremont Police – Animal Services
 - CopLogic – Fremont Police – Crime Analysis
 - DataTicket – Fremont Police – Alarms Permits
 - Maverick Map 911 & RMS – Fremont Police
 - ProPhoenix – Fremont Police
 - Real Time Information Center (RTIC) – Fremont Police - Crime Analysis
 - RIPA – Fremont Police

- **GIS participation in Emergency Operation Center (EOC)**

- **Storm Winter Forum**

City Manager Karena Shackelford proclaimed a local emergency for the City of Fremont on January 9, 2023, in response to significant impacts, as well as anticipated continuation, of severe weather throughout the remainder of the week. Fremont joined several Bay Area cities and counties in declaring a Local Emergency. The purpose of this emergency declaration was to give the City legal authority and flexibility to mobilize resources and help ensure critical services and operations continue. Additionally, it allowed the City to request mutual aid from regional, State, and other governmental entities.

GIS is assigned to the Planning Section of the EOC. EOC Staff has access to the Storm Incident Tracker and Earthquake, Weather and Wildfire apps that GIS developed. Also, GIS provided access to the plotter for printing maps and EOC forms at a large scale for Staff to write on.

- **Fire Department**

- **Wildland Urban Interface (WUI) Map updates**

The Wildland Urban Interface Map is an ongoing effort to provide an accurate “hill road” map. The process started in 2018 with the fire crews driving the entire Fremont hill area and capturing GPS data of the roads and any gates/obstructions that may impede emergency services response. The “Wildland Urban Interface Map” works within the iPad based Avenza application with the following benefits:

- Easier to update maps regularly and without printing costs
- Live location on map
- Water supplies, gates, structures, etc. all visible
- Ability to use map even when disconnected from internet access
- Map sharing with non-Fremont agencies assisting the City in mutual aid on incidents
- QR code file access for easy distribution
- Zoom in feature allows for better topo and feature viewing
- Cooperation with our local Parks District GIS Division for a further improved map
- Cell phone location information combined with this georeferenced map aiding in faster arrival times

- **DroneSense for Drones as First Responder (DFR)**

Fremont Fire and Police Departments recently became one of the first joint public safety drone as a first responder (DFR) program in the country and is one of only 11 agencies actively testing this technology. DroneSense was deployed to better manage emergencies using Drones as First Responder (DFR). It proved extremely helpful in establishing situational awareness during the ACE Train derailment in Niles Canyon on Jan 23, 2023. Certified teleoperators can scan and evaluate the situation remotely as well as relay real-time actionable information to officers and field supervisors. The drone software can provide live-streams video of the incident to commanders and first responders – helping first responders to determine the best response to an incident before arriving on scene.

DroneSense has been integrated with the City’s GIS which provides the important capability of being able to view GIS layers while using a Drone. GIS has provided access to layers including addresses, parcels, city limits, streets and Zonehaven boundaries for use in

DroneSense which allows the teleoperators to see addresses, street names and property boundaries while using a Drone.

- **Police Department**

- **RIPA**

The Fremont Police Department, in coordination with the Information Technology Services (ITS)/GIS Division, officially launched the new Racial and Identity Profiling Act (RIPA) app for Stop Data collection on January 1, 2022. The RIPA Act requires data to be collected on stops of people who were arrested, detained, or searched (including consensual searches).

The ITS/GIS Division collaborated with the Fremont Police Department on the RIPA Stop data collection efforts including creating an Esri GIS Survey123 solution for easier data collection. A QA/QC process is in place to ensure data quality meets DOJ specifications. ITS/GIS also created an operational dashboard for Command Staff to view draft collection statistics and filtering capabilities for reporting. Updates to the RIPA app were implemented on January 5, 2023, rollout of enhanced collection improvements.

On March 29, 2023, Fremont submitted RIPA records to DOJ collected from January 1, 2022, to December 31, 2022.

- **Newark**

- **Broadband Master Plan**

The development of a Citywide Broadband Master Plan was awarded to Government Technology Group and approved by the Newark City Council. We anticipate the delivery of a Citywide Broadband Master Plan by the end of December 2023. The Broadband Master Plan is needed for the City to ensure sufficient infrastructure is in place to provide robust broadband services to all residents and businesses. The master plan scope of work would include development of an inventory, to the extent possible, of existing fiber optic infrastructure, identification of unserved and underserved areas, identification of gaps in infrastructure assets, and development of phased improvements to address short-term and long-term needs. The master plan would create the strategies necessary to position the City with a strong broadband presence in order to attract, retain and serve residents and businesses. A focus of the plan will be to develop solutions for improved broadband services to unserved and underserved areas. Following completion of the Broadband Master Plan, a Broadband Infrastructure Project will complete the first potential phase of investment in the City's broadband infrastructure based on the findings, recommendations, and strategies of the Broadband Master Plan. The scope of work for the first phase should be focused on the priorities developed through the master plan process to improve the existing network in the most efficient manner possible. In addition to the \$1M American Rescue Plan Act funding approved for a Broadband Master Plan by the Newark City Council, the State awarded an additional \$1.8M toward the Broadband project through Assembly Bill 179, largely due to the legislative efforts of Assemblymember Alex Lee.

- **Esri Small Government Enterprise Agreement**

The City of Newark entered into a 3-year Esri Small Government Enterprise Agreement (SGEA). With an Esri SGEA, the City gains access to Esri's full suite of GIS products and hosted services for the entire City organization, rather than limited number of named users. The SGEA enables all departments to continue to apply GIS technology in technical and operational areas and to use the software products to develop new applications. This is essential for City departments such as Police, Public Works, Community Development, and Recreation who depend heavily on GIS technology to provide services to the community. The features offered through the SGEA also directly benefit the City's Emergency operations Center (EOC) by providing unlimited licenses so the GIS data can be stored in multiple locations to ensure that the EOC can continue to access GIS data in the event of a major disaster. Data can also be used for internal operations such as assisting Human Resources staff with recruitment and retention strategies.

- **City of Newark GIS Architecture**

To assist staff in setting up the correct GIS architecture, cloud storage procurement and other technical support is needed. The resources provided by the SGEA require the correct architecture, licensing, and services to be in place to provide critical GIS resources needed at a moment's notice. Staff identified Pro-West & Associate as an organization that can fill this gap as they have over 30 years of experience working with Esri on similar projects. One of the strategies unveiled in the City's Information Systems Division Strategic Framework is a GIS Master Plan for the City with a focus on department-centric self-service as an objective and Pro-West & Associates will assist.

- **Technology Master Plan**

The newly created Information Technology Department kicked off the Technology Master Planning process. The IT Department is working with Client First to develop a Technology Master Plan that is a collaborative process across city departments. The process of developing the plan will include a review of not only GIS needs but also ERP, Work Orders/Asset Management, Land Management, Document Management System and CAD/RMS. An analysis of IT benchmark metrics includes system volumes and measurements, help desk volumes, replacement cycles, server platforms, network security and IT staff makeup.

- **Police Department CAD Maps**

Lynx Technologies and Sun Ridge (CAD) collaborated to clean-up the template for Addresses and Streets and process the delivery of creating new feature classes within Newark City limits in the current database. The top 3 layers have been updated (SPAD in the parcels.gdp and streets in the streets.gdp) and have been integrated (shape files from Alameda County).

- **USD**

- **ArcGIS Enterprise Upgrade**

USD has completed upgrading the on-premise ArcGIS Enterprise implementation from 10.6.1 to 10.9.1.

- **Collection System Preventative Maintenance and Inspection Map Printing Application**

USD has completed the implementation of the web mapping application that enables Collection System maintenance staff to self-generate and print maps of CCTV Inspection and Preventative Maintenance Work Order locations for sewer mains and manholes.

- **Environmental Compliance Inspection Mobile Solution**

USD has completed implementation of the C4 Stormwater Inspection in the Environmental Compliance Mobile Solution which integrates Survey123 with the iPACS Environmental Compliance Management System.

- **Block Book Field Maps App**

USD is utilizing ArcGIS Field Maps App to enable staff to cache and utilize the USD Mobile Block Book web maps in areas where there is no mobile device data connection.

- **Treatment Plant Geotech Boring Locations Web Map for CIP**

USD has implemented an ArcGIS Online Web Map that enables Capital Improvement Projects staff to view and update Geotech Boring Locations in the Alvarado Wastewater Treatment Plant.

RECOMMENDATION:

For information only. No action is required.

5.2 REVIEW OF FY 2022/23 BUDGET

BACKGROUND: Below is a chart outlining the FY 2022/23 budget allocation versus actual expenditures.

Item	Amount Allocated	Amount Spent As of 3/31/2023	Anticipated End of Year Expenditures 6/30/2023
Application Development			
eGIS Migration to Geocortex – ACWD and City of Newark sites	\$20,000.00		
Hosted Basemap / Aerial Web Services			
Bing Maps	\$4,540.56		\$4,540.56
System Maintenance			
ArcGIS Server Staff Support	\$5,000.00		
Alameda County			
Pictometry Enhanced Aerial Photography	\$22,600.00	\$22,600.00	\$22,600.00
Administration			
Project Management	\$5,000.00	\$717.35	\$5,000.00
Landbase			
Workflow process programming upgrade	\$20,000.00		
Basemap and Data Maintenance			
Staff Labor	\$20,000.00	\$14,607.32	\$20,000.00
Commercial Data Providers	\$7,000.00	\$3,428.32	\$7,000.00
Contingency			
Miscellaneous	\$20,000.00		
TOTAL BUDGET	\$124,140.56	\$41,352.99	\$59,140.56

RECOMMENDATION:

For information only. No action is required.

5.3 GIS DEMONSTRATIONS

- **ACWD**
 - AMI Meters Dashboard
 - Echologics Web Map
- **Fremont**
 - Story Maps
 - Affordable Housing
 - GIS: What is it
 - eGIS Accela reports
 - Permit Records Summary Report
 - Permit Records Details Report

RECOMMENDATION:

For information only. No action is required.

7.1 ELECTION OF CHAIR AND VICE-CHAIR OF JOINT POWERS AUTHORITY

BACKGROUND: The Joint Powers Agreement establishing the Southern Alameda County Geographic Information System Authority (SACGISA) was executed on April 27, 2000. This Agreement identifies the responsibilities of the member agencies in creating and maintaining a Geographic Information System in southern Alameda County. Each member agency appoints one member of its current legislative body to the Board of Directors, which governs the Authority.

Pursuant to the terms of the Agreement, the Board shall annually elect a Chairperson and Vice-Chairperson. The term of office for the Chairperson and Vice-Chairperson is for one year (July 1 to June 30). The Chairperson represents the Authority and the Vice-Chairperson performs all of the Chairperson's duties in the absence of the Chairperson.

RECOMMENDATION:

The Board to take the following actions:

1. Conduct election of Chairperson
2. Conduct election of Vice-Chairperson
3. Adopt a Resolution (Attachment C) certifying the election of the Chairperson and Vice-Chairperson.

7.2 APPROVAL OF FY 2023/2024 BUDGET

BACKGROUND: Pursuant to Article III of the Joint Powers Agreement, a budget shall be established and used for the design, development, and maintenance of shared resources of the Southern Alameda County Geographic Information System Authority. Staff has prepared a budget for FY 2023/24 based upon an analysis of projected costs.

FISCAL YEAR 2023/2024 BUDGET

Item	Amount Allocated
Application Development	
eGIS Migration to Geocortex – ACWD and City of Newark sites	\$20,000.00
Hosted Basemap / Aerial Web Services	
Bing Maps	\$5,000.00
System Maintenance	
ArcGIS Server Staff Support	\$5,000.00
Alameda County	
Pictometry Enhanced Aerial Photography	\$22,600.00
Administration	
Project Management	\$5,000.00
Landbase	
Workflow process programming upgrade	\$20,000.00
Basemap and Data Maintenance	
Staff Labor	\$20,000.00
Commercial Data Providers	\$7,000.00
Contingency	
Miscellaneous	\$20,000.00
On-Going Activities	
Subtotal	\$124,600.00

Pictometry (One time cost)	
Lidar / DEM / Contours - 1 foot and 2 foot	\$79,060.00
Third Party Planimetrics	\$62,948.00
Reveal TrueTouch Property	\$6,700.00
Reveal Certified Ortho Property	\$6,700.00
Reveal Four Band Color Infrared Property	\$6,700.00
ChangeFinder – Building Outlines	\$38,876.00
ChangeFinder – Pool & Deck locations	\$5,665.00
Subtotal	\$206,639.00
Address Data Management Task (One time cost)	
Disperse Stacked Addresses - Fremont	\$27,000.00
Disperse Stacked Addresses - Newark	\$17,000.00
Disperse Stacked Addresses - Union City	\$15,000.00
Subtotal	\$59,000.00
One-Time Projects	
Subtotal	\$265,639.00
TOTAL BUDGET	\$390,239.00

RECOMMENDATION:

Adopt a Resolution (Attachment D) approving the Budget for FY 2023/24 as shown in Exhibit A. This resolution includes language that clarifies that the Secretary has the authority to transfer funds between line items and to execute contracts with vendors for the approved budget items.

7.3 Resolution Honoring Al Nagy for Distinguished Services

RECOMMENDATION:

The Board to take the following actions:

1. Adopt a Resolution (Attachment E) certifying Al Nagy's distinguished services.

ATTACHMENT A

DRAFT

Meeting Minutes

SOUTHERN ALAMEDA COUNTY
GEOGRAPHIC INFORMATION SYSTEM AUTHORITY
MEETING AGENDA
May 18, 2022
6:00 PM
Union Sanitary District
Board Room
5072 Benson Road
Union City, CA 94587-2508

DIRECTORS PRESENT: Alameda County Water District – Director Paul Sethy
City of Fremont – Councilmember Raj Salwan
City of Newark – Councilmember Al Nagy (*Vice-Chairperson*)
Union Sanitary District – Director Tom Handley (*Chairperson*)

ALTERNATES PRESENT:

DIRECTORS ABSENT: none

OTHERS PRESENT: Public – Kelly Abreu

STAFF PRESENT: Alameda County Water District (Ariz Naqvi, Girum Awoke)
City of Fremont (John Leon, Rafael E. Alvarado, Jr., David Persselin, Ed Miranda, Ruby Wun, Ron Chan)
City of Newark (Soren Fajeau, Lenka Hovorka)
Union Sanitary District (Richard Scobee, Lusine Petrosyan, Allan Briggs, Christopher Packmayer)

STAFF ABSENT: City of Fremont (Ed Chew)
Alameda County Water District (Daniel Park)
Union Sanitary District (Raymond Chau)

1. **Call to Order:** Board Member Tom Handley called the meeting to order at 6:03 PM.

2. **Roll Call**

NAME	PRESENT	ABSENT	LATE (time of arrival)
Alameda County Water District – Director Paul Sethy	●		
City of Fremont – Councilmember Raj Salwan	●		
City of Newark – Councilmember Al Nagy	●		
Union Sanitary District – Director Tom Handley	●		

3. **Consent Calendar**

3.1 **Approval of Minutes of Last Meeting**

Action by Board: Approved minutes of last meeting.

MOTION	2 ND	NAME	AYES	NOS	ABSTAIN	ABSENT
	●	Alameda County Water District – Director Paul Sethy	●			
		City of Fremont – Councilmember Raj Salwan			●	
		City of Newark – Councilmember Al Nagy	●			
●		Union Sanitary District – Director Tom Handley	●			

4. **Public Oral and Written Communications**

- Kelly Abreu (private citizen): Made comments that GIS should be public and actionable. Cited two examples. First example located near the Vargas Plateau where a waterway and culvert were filled in. This area was not actionable because the area sits just outside of the Fremont city limits and area not declared a creek. Second example is a graded lot located south of the Vargas Plateau. This location was made into a nonpermitted parking lot. GIS should be actionable and notify Code Enforcement to deal with questionable areas.

5. Report of Secretary

5.1 Update on JPA Projects

Action by Board: Information Only. No action is required.

5.2 Review of Fiscal Year 2021/22 Budget

Action by Board: Information Only. No action is required.

5.3 Demonstrations

6. Report of Treasurer/Controller

6.1 Financial Report (Attachment B)

Finance Director David Persselin provided a brief summary of the fund balance outlined in Attachment B.

Action by Board: No action is required.

7. Action Items – General Business Matters

7.1 Election of Chair and Vice-Chair of the Joint Powers Authority (Attachment C)

Recommendation: The Board is to take the following actions.

- Conduct election of Chairperson
- Conduct election of Vice-Chairperson
- Adopt Resolution No. 63 (Attachment C) certifying the election of the Chairperson and Vice-Chairperson.

Action by Board: Election of Raj Salwan for Chairperson

MOTION	2 ND	NAME	AYES	NOS	ABSTAIN	ABSENT
		Alameda County Water District – Director Paul Sethy	●			
		City of Fremont – Councilmember Raj Salwan	●			
	●	City of Newark – Councilmember Al Nagy	●			
●		Union Sanitary District – Director Tom Handley	●			

Action by Board: Election of Paul Sethy for Vice-Chairperson.

MOTION	2 ND	NAME	AYES	NOS	ABSTAIN	ABSENT
		Alameda County Water District – Director Paul Sethy	●			
		City of Fremont – Councilmember Raj Salwan	●			
	●	City of Newark – Councilmember Al Nagy	●			
●		Union Sanitary District – Director Tom Handley	●			

Action by Board: Adopt Resolution No. 63 (Attachment C) certifying the election of the Chairperson and Vice-Chairperson.

MOTION	2 ND	NAME	AYES	NOS	ABSTAIN	ABSENT
	●	Alameda County Water District – Director Paul Sethy	●			
		City of Fremont – Councilmember Raj Salwan	●			
●		City of Newark – Councilmember Al Nagy	●			
		Union Sanitary District – Director Tom Handley	●			

7.2 Adoption of Budget for Fiscal Year 2022/23 (Attachment D)

Recommendation: Adopt Resolution No. 64 (Attachment D) approving the Budget for FY 2022/23 as shown in Exhibit A. This resolution includes language that clarifies that the Secretary has the authority to transfer funds between line items and to execute contracts with vendors for the approved budget items.

Action by Board: Adopt Resolution No. 64 (Attachment D) approving the Budget for 2022/23.

MOTION	2 ND	NAME	AYES	NOS	ABSTAIN	ABSENT
	●	Alameda County Water District – Director Paul Sethy	●			
		City of Fremont – Councilmember Raj Salwan	●			
●		City of Newark – Councilmember Al Nagy	●			
		Union Sanitary District – Director Tom Handley	●			

8. Director Comments:

- City of Fremont – Councilmember Raj Salwan
 - Good Job! Very Impressive!
- City of Newark – Councilmember Al Nagy
 - Good Job!
- Alameda County Water District – Director Paul Sethy
 - General comment. Like to see on a web site showing comments from the public to share ideas with their City Councilmember. He has not seen this in any other city. Paul shared with Raj Salwan, who represents the area where Paul lives in that the section of road on Warm Springs Blvd between Mission Blvd and Dixon Landing Road needs to be repaved. Raj assured Paul he is aware of the issue and Hans Larsen has this part of the road on the repaving schedule.
- Union Sanitary District – Tom Handley
 - No Comment

9. Date and Place of Next Meeting:

The next meeting is scheduled to be held at the City of Fremont Downtown Event Center on May 17, 2023 at 6:00 PM.

10. Adjournment:

The meeting was adjourned by Chairperson Tom Handley at 7:32 PM.

ATTACHMENT B

Southern Alameda County Geographic Information System Authority		
Balance Sheet as of 06/30/2022		
BALANCE SHEET		
Cash & Investments		58,259.49
Accounts Receivable		22,088.84
Total Assets		80,348.33
Accounts Payable		-
Other Liabilities		-
Payroll Payable		-
Fund Balance		80,348.33
Total Liabilities & Fund Balance		80,348.33

Southern Alameda County Geographic Information System Authority		
Income Statement as of 6/30/2022		
INCOME STATEMENT		
Revenues:		
Interest Income		528.24
Unrecognized Gains/Loss		(1,520.53)
Revenue from Current Services		55,948.77
Total revenue		54,956.48
Expenditures:		
Salary-General		29,658.77
Contractual/Professional Services		22,600.00
Software Support		3,690.00
Total Expenditures		55,948.77
Excess Revenue over Expenditures		(992.29)
Beginning Fund Balance (7/01/2021)		81,340.62
Ending Fund Balance as of 06/30/2022		80,348.33

ATTACHMENT B (continued)

Southern Alameda County Geographic Information System Authority		
Balance Sheet as of 04/30/2023		
BALANCE SHEET		
Cash & Investments		51,319.10
Accounts Receivable		30,625.94
Total Assets		81,945.04
Accounts Payable		-
Other Liabilities		-
Payroll Payable		-
Fund Balance		81,945.04
Total Liabilities & Fund Balance		81,945.04

Southern Alameda County Geographic Information System Authority		
Income Statement as of 04/30/2023		
INCOME STATEMENT		
Revenues:		
Interest Income		495.18
Unrecognized Gains/Loss		1,101.53
Revenue from Current Services		40,590.45
Total revenue		42,187.16
Expenditures:		
Salary-General		14,562.13
Contractual Services		22,600.00
Software Support		3,428.32
Total Expenditures		40,590.45
Excess Revenue over Expenditures		1,596.71
Beginning Fund Balance (6/30/21)		80,348.33
Ending Fund Balance as of 04/30/2022		81,945.04

ATTACHMENT C

DRAFT

RESOLUTION NO. 65

A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTHERN ALAMEDA COUNTY GEOGRAPHIC INFORMATION SYSTEM AUTHORITY CERTIFYING THE ELECTION OF A CHAIRPERSON AND VICE-CHAIRPERSON

WHEREAS, a Joint Powers Agreement for the formation of the Southern Alameda County Geographic Information System Authority was executed on April 27, 2000; and

WHEREAS, Section 2.5.1 of said Joint Powers Agreement provides that the Board of Directors of the Authority shall annually elect a Chairperson and Vice-Chairperson.

NOW, THEREFORE, BE IT RESOLVED that the Chairperson elected at the May 24, 2023 meeting of the Authority is _____, and the Vice-Chairperson elected is _____.

ADOPTED by the Board of Directors of the Southern Alameda County Geographic Information System Authority at its meeting held May 24, 2023, by the following vote, to wit:

AYES: _____

NOES: _____

ABSENT: _____

ABSTAIN: _____

ATTEST:

Chairman

Secretary

ATTACHMENT D

DRAFT

RESOLUTION NO. 66

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTHERN ALAMEDA COUNTY
GEOGRAPHIC INFORMATION SYSTEM AUTHORITY ESTABLISHING A PROGRAM
BUDGET FOR FISCAL YEAR 2023/24**

WHEREAS, a Joint Powers Agreement for the formation of the Southern Alameda County Geographic Information System Authority was executed on April 27, 2000; and

WHEREAS, Section 3.2 of said Joint Powers Agreement provides that the Board of Directors of the Authority shall adopt a budget of appropriate expenses.

NOW, THEREFORE, BE IT RESOLVED that the budget attached to this resolution as Exhibit A is hereby adopted for Fiscal Year 2023/24.

BE IT FURTHER RESOLVED that members of the Authority are liable for payment of costs incurred under that budget according to the provisions of Section 3.5 et seq. of the Joint Powers Agreement.

BE IT FURTHER RESOLVED that the Authority Secretary is authorized to administratively transfer funds between line items.

BE IT FURTHER RESOLVED that the Chairperson and Authority Secretary are authorized to execute contracts with vendors for the services and amounts identified in the budget, subject to the administrative transfer of funds between line items.

ATTACHMENT D (continued)

DRAFT

RESOLUTION NO. 66

ADOPTED by the Board of Directors of the Southern Alameda County Geographic Information System Authority at its meeting held May 24, 2023, by the following vote, to wit:

AYES: _____

NOES: _____

ABSENT: _____

ABSTAIN: _____

ATTEST:

Chairman

Secretary

ATTACHMENT D (continued)

DRAFT

RESOLUTION NO. 66

EXHIBIT A

FISCAL YEAR 2023/2024 BUDGET

Item	Amount Allocated
Application Development	
eGIS Migration to Geocortex – ACWD and City of Newark sites	\$20,000.00
Hosted Basemap / Aerial Web Services	
Bing Maps	\$5,000.00
System Maintenance	
ArcGIS Server Staff Support	\$5,000.00
Alameda County	
Pictometry Enhanced Aerial Photography	\$22,600.00
Administration	
Project Management	\$5,000.00
Landbase	
Workflow process programming upgrade	\$20,000.00
Basemap and Data Maintenance	
Staff Labor	\$20,000.00
Commercial Data Providers	\$7,000.00
Contingency	
Miscellaneous	\$20,000.00
On-Going Activities	
Subtotal	\$124,600.00

Pictometry (One time cost)	
Lidar / DEM / Contours - 1 foot and 2 foot	\$79,060.00
Third Party Planimetrics	\$62,948.00
Reveal TrueTouch Property	\$6,700.00
Reveal Certified Ortho Property	\$6,700.00
Reveal Four Band Color Infrared Property	\$6,700.00
ChangeFinder – Building Outlines	\$38,876.00
ChangeFinder – Pool & Deck locations	\$5,665.00
Subtotal	\$206,639.00
Address Data Management Task (One time cost)	
Disperse Stacked Addresses - Fremont	\$27,000.00
Disperse Stacked Addresses - Newark	\$17,000.00
Disperse Stacked Addresses - Union City	\$15,000.00
Subtotal	\$59,000.00
One-Time Projects	
Subtotal	\$265,639.00
TOTAL BUDGET	\$390,239.00

ATTACHMENT E

DRAFT

RESOLUTION NO. 67

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE SOUTHERN ALAMEDA COUNTY
GEOGRAPHIC INFORMATION SYSTEM AUTHORITY HONORING AL NAGY FOR
DISTINGUISHED SERVICES AS A DIRECTOR OF THE AUTHORITY**

WHEREAS, the BOARD OF DIRECTORS of the SOUTHERN ALAMEDA COUNTY GEOGRAPHIC INFORMATION SYSTEMS AUTHORITY desires to officially express the Authority's appreciation for services rendered by AL NAGY for continuously serving as a Director of this Authority from Newark's initial involvement in 2000 until his retirement in December 2022.

WHEREAS, during the twenty-two years as a Director of this Authority he provided outstanding service to the citizens of Fremont, Newark and Union City, played a leadership role in the use of the GIS technology shared by all the four participating agencies of the Authority, promoted the use of GIS technologies and programs to provide easy public access to relevant data, supported the use of GIS programs to improve management of the vast amount of geographic data collected and maintained by local agencies, and advocated the utilization of GIS technologies to improve service-delivery and policy making activities of the participating agencies.

WHEREAS, he consistently demonstrated a high degree of leadership, competence, keen interest, dedication and responsibility to public service.

NOW, THEREFORE, BE IT RESOLVED by the BOARD OF DIRECTORS of the SOUTHERN ALAMEDA COUNTY GEOGRAPHIC INFORMATION SYSTEMS AUTHORITY that there be and hereby is proclaimed, individually and on behalf of the people served by the Authority, an expression of appreciation for the distinguished service of AL NAGY in his official duties as a Director of the Authority; and

BE IT FURTHER RESOLVED that this Resolution of official recognition and appreciation be spread upon the official records of the Authority.

ADOPTED by the Board of Directors of the Southern Alameda County Geographic Information System Authority at its meeting held May 24, 2023, by the following vote, to wit:

AYES:

NOES:

ABSENT:

ABSTAIN:

ATTEST:

Chairman

Secretary