

# Innovation and Technology

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# Department Overview

## Budget Units

Budget Unit	Program	2022 Proposed Budget
<b>I&amp;T Administration</b>		<b>\$ 252,124</b>
610-30-300	Innovation & Technology Administration	\$ 252,124
<b>Video</b>		<b>\$ -</b>
100-31-305	Video	\$ -
100-31-307	Public Access Support	\$ -
<b>Applications</b>		<b>\$ 2,369,287</b>
100-32-308	Applications	\$ 2,369,287
<b>Infrastructure</b>		<b>\$ 2,202,453</b>
610-34-310	Infrastructure	\$ 2,202,453
<b>GIS</b>		<b>\$ 1,424,906</b>
610-35-986	GIS	\$ 1,424,906
<b>Total</b>		<b>\$ 6,248,770</b>

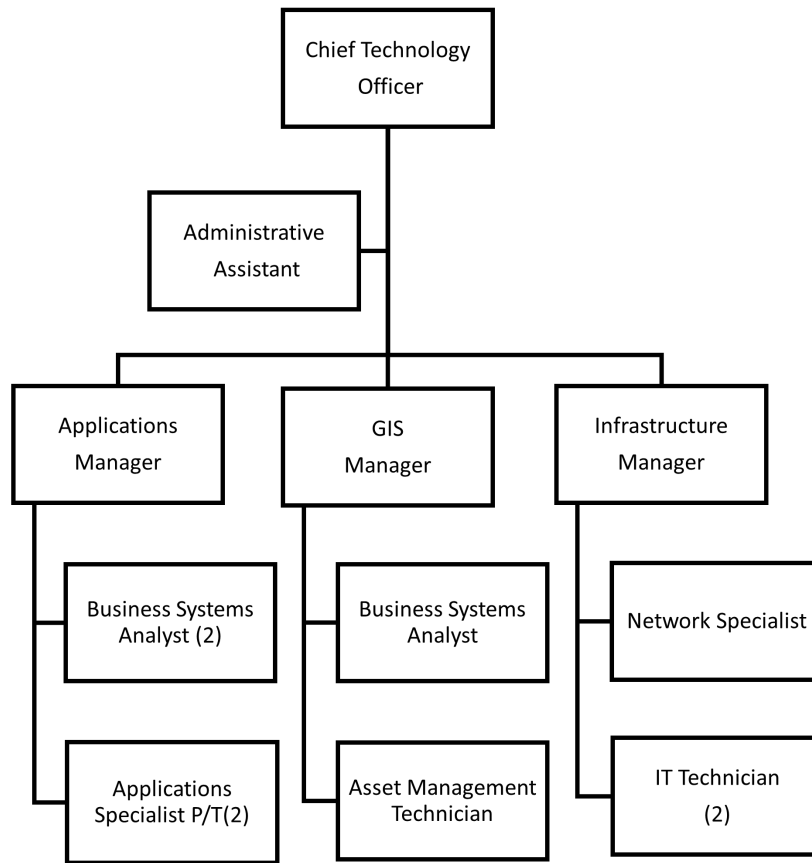
# Budget at a Glance

## 2022 Proposed Budget

Total Revenues	\$ 4,572,658
Total Expenditures	\$ 6,248,770
Fund Balance	\$ (727,802)
General Fund Costs	\$ 948,310
% Funded by General Fund	15.2%
Total Staffing	11.9 FTE

# Organization

Bill Mitchell, Chief Technology Officer



## Performance Measures

Goal: Provide superior delivery of information and technology services to city employees and constituents while continually enhancing levels of engagement.

Benefit: Integrated information services enable customer access to the tools and information they need, when and where they need it.

Performance Measure	FY 2019 July-June	FY 2020 July-June	FY 2021 July - Dec	Ongoing Target
GIS: Increase Open Data average site visits per month	210	1504	895	300
GIS: % of time spent Developing Applications/% of time Maintaining applications	Not tracked	10%/90%	11%/89%	35%/65%
GIS: Met Requests within SLA (map, data, Web maps, Cityworks, schema, other) completed	Not Tracked	287	130	300
GIS: Increase Property Information (Internal/External) site visits per month	420/383	665/2671	369/1588	610/440
GIS: Cityworks utilization - # of assets Cupertino maintains vs # of assets maintained in Cityworks. Also the % increase of work units completed (WOs, INSP,SRs)	40/27 -3%	40/31 70%	40/31 20%	40/40 20%
Infrastructure: Percentage based upon number of scheduled projects/Number of projects completed on time	Not tracked	80% 4/5	100% 3/3	100%
Infrastructure: Percentage based upon number of HelpDesk tickets/SLA measurements	Not tracked	93%	92%	90%
Infrastructure: % Customer satisfaction based upon Satisfaction Rate from helpdesk tickets	Not tracked	99.1% 110/111	100% 50/50	85%
Infrastructure: % of network uptime (not including planned maintenance)	Not tracked	99.9%	100%	99%
Applications: % of citywide-enterprise application project management performed on time and on budget	95%	96%	95%	95%
Applications: Number of website visits/hits <sup>1</sup>	1,615,799	1,624,377	800,164	1,500,000

<b>Performance Measure</b>	<b>FY 2019 July-June</b>	<b>FY 2020 July-June</b>	<b>FY 2021 July - Dec</b>	<b>Ongoing Target</b>
Applications: Number of support request for the applications support per month	Not tracked	45	65	20
Video <sup>2</sup>				

<sup>1</sup> Corrected to include total number of visits/hits

<sup>2</sup> Video Division Performance Measures can be found in the Administration Department

## Workload Indicators

### Applications Division

Workload Indicator	FY 2019 July-June	FY 2020 July-June	FY 2021 July-Dec
Enterprise Programs Support & Maintenance <sup>1</sup>	Not tracked	2,500 hours	1,900 hours
Application Development <sup>2</sup>	Not tracked	1,500 hours	800 hours
Percentage of Project Management Performed on Time and Budget for Citywide Applications <sup>3</sup>	96%	95%	95%

<sup>1</sup>The Application division is responsible for supporting enterprise business platforms like ERP, Land Management System, Recreation System, City Digital Records, City Website and many programs like Admin Services digital transformation, citywide permitting, licensing and enforcement solutions. All these programs and services require constant enhancements, support and maintenance. The related tasks may range from providing staff user access to these platforms to issues that may require intensive programming and configurations to resolve. Troubleshooting existing or building new application configuration rules and parameters based on the current business process or new requirements. Creating custom application workflows in back office enterprise platforms like Accela, and New World to configuring business processes and integrating these enterprise software systems. Some issues require working and coordinating with software vendors to identify and resolve business workflows and other operational related problems. Application integrations is a big solution in providing end to end business solutions. Coordinating the scheduling of corrective patches and upgrades between vendors and staff.

<sup>2</sup>Applications division creates custom software solutions like Bid Management solution and Permit Parking software solutions. Application development for these kind of software solution goes through all stages of Software Development Life Cycle (SDLC) of Requirement-gathering, Analysis, Designing, Coding, Testing and Deployment of these custom software solutions. The Application team works with various city department and other key stakeholders during phases of SDLC. Application staff gather business requirements, participate in a variety of system user and work groups to identify user needs and operational, programmatic, and or regulatory changes affecting application requirements and other related issues. Perform software application coding, building system integration and interfaces between applications. Perform end user application tests for functionality and usability. Writing test scripts based on business processes. Perform system tests, integration test and performance (volume) tests.

<sup>3</sup>This measure involves the task of project research and communications, project charter creation, creating or reviewing statement of work, contractor research and selection process, activity and resource planning, creation of work breakdown structure, team building, time management, deliverable management, customer satisfaction, risk management, communication management, project closeout process and documentation.

**Infrastructure Division**

<b>Workload Indicator</b>	<b>FY 2019 July-June</b>	<b>FY 2020 July-June</b>	<b>FY 2021 July-Dec</b>
Percentage of helpdesk requests completed 48 hours or less <sup>1</sup>	93%	92%	92%
% of network uptime <sup>2</sup>	99.9%	99.9%	100%
Number of IT Projects Completed <sup>3</sup>	80% 4/5	100% 3/3	167% 5/3

<sup>1</sup>Infrastructure is responsible for the acquisition, maintenance and support of all computer hardware necessary for the City's leading edge network (server, storage, switch, security, appliance) and end user (PC, tablet, VoIP Devices, Smartphones) services. Exemplary customer service coupled with highly skilled staff is the trademark of this team.

<sup>2</sup>Ensuring the City's vast network environment meets Business Continuity and Disaster Recovery requirements is a major responsibility of Infrastructure. Two geographically diverse data centers connected with a high speed Ethernet connection that traverses over 1000 miles provides this much needed service. 24x7 monitoring is done via a plethora of tools and contract services managed by Infrastructure.

<sup>3</sup>PC based applications such as Microsoft Office, Team Collaboration, Adobe, Softphone, Antivirus, Teleconferencing and many more are procured, configured, maintained and supported. Citywide education of these products as well as end user security is the responsibility of Infrastructure which ensures a skilled City staff that know how to utilize software efficiently and securely.

**GIS Division**

<b>Workload Indicator</b>	<b>FY 2019 July-June</b>	<b>FY 2020 July-June</b>	<b>FY 2021 July-Dec</b>
Hours Spent Web Application Development <sup>1</sup>	Not tracked	460/tracking is still being refined. This is not an accurate account.	250/ tracking is still being refined. This is not an accurate account
Map, Data, Analysis, Report, Application Configuration Requests, Workflow Enhancements Completed Requests <sup>2</sup>	Not tracked	422	176
Number of I&T workplan projects completed <sup>3</sup>	Not tracked	100% 11/11	70% 7/10
GIS Training staff on all things GIS - GIS capabilities, how to use applications, demoing the GIS tools City staff have available to them, etc.	Not tracked	Not tracked	Not tracked



1The GIS Division builds web applications for staff to use as a tool in their daily workflows. The web application Property Info is a great example of this. Staff use it to review properties for development - select a property see all the associated layers of data, and access any related laserfiche documents. Property info is the main web mapping application staff use so we are constantly making improvements based on requests or new advancements in web development, or available widgets. We also create a number of web applications for the public <https://www.cupertino.org/online-services/open-government-data/city-maps/web-maps-and-applications> everything from the service finder that give residents a one stop shop of all City services to the CIP story map that give the public a visually appealing way to quickly interpret what capitol improvement projects are scheduled this year, where the project is located, what the project entails, and current status.

2GIS receives requests from staff and sometimes Commissioners, Sheriffs office, City Council members... These requests range from hard copy maps (ex. Update a zoning designation and print all new zoning maps) to interactive web maps (ex. PW had a consultant evaluate a section of Regnart Rd and Chad asked us to create a web map with the data point locations and associate photos), data request (ex. how many Trees were trimmed this year), Data changes (ex. can I see this layer symbolized by status and added to property info application), crystal report requests (ex. fleet wants a report that shows how many times each vehicle has a repair work order based on a dynamic timeframe), to application modifications (ex. the Tree Division is tasked with mediating a tree virus issue and they would like a new work order type so they can track the problem over time or Planning had us create a layer for private trees and then add it to the Property info application.) Evaluating staff use of an application and implementing ways to streamline that workflow. Reduce the number of steps to performing a task by configuring/coding an application in a way that eliminates redundancies. We are also asked to configure GIS for enterprise applications such as Accela and ActiveNet.

3Project research and communications, project charter creation, SOW creation, contractor research and selection process, activity & resource planning/work breakdown structure, team building and motivation, time management, deliverable management, ensuring customer satisfaction, risk management, communication management, project closeout process, documentation

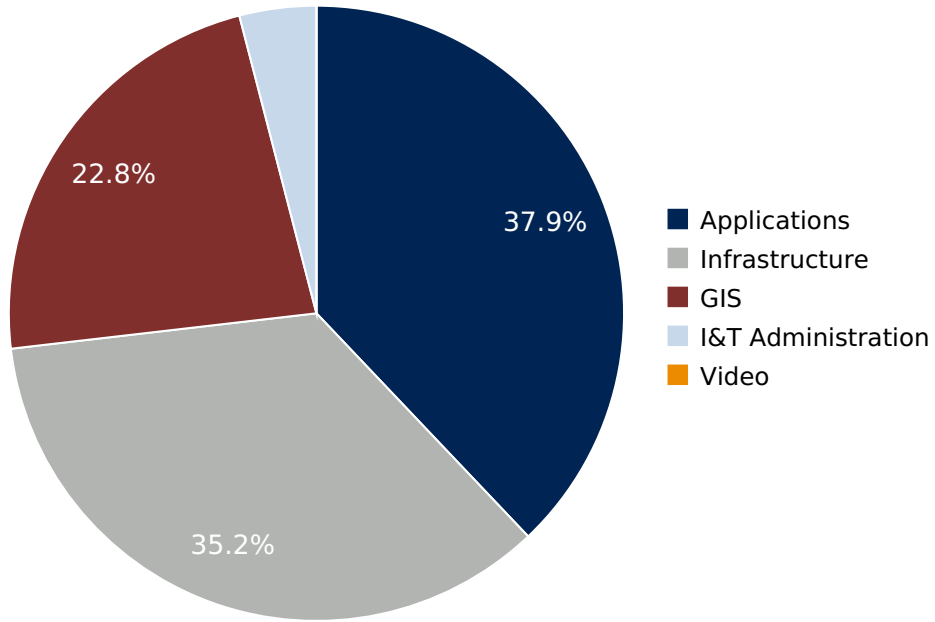
## **Multimedia Division**

Multimedia Division Workload Indicators can be found in the Administration Department

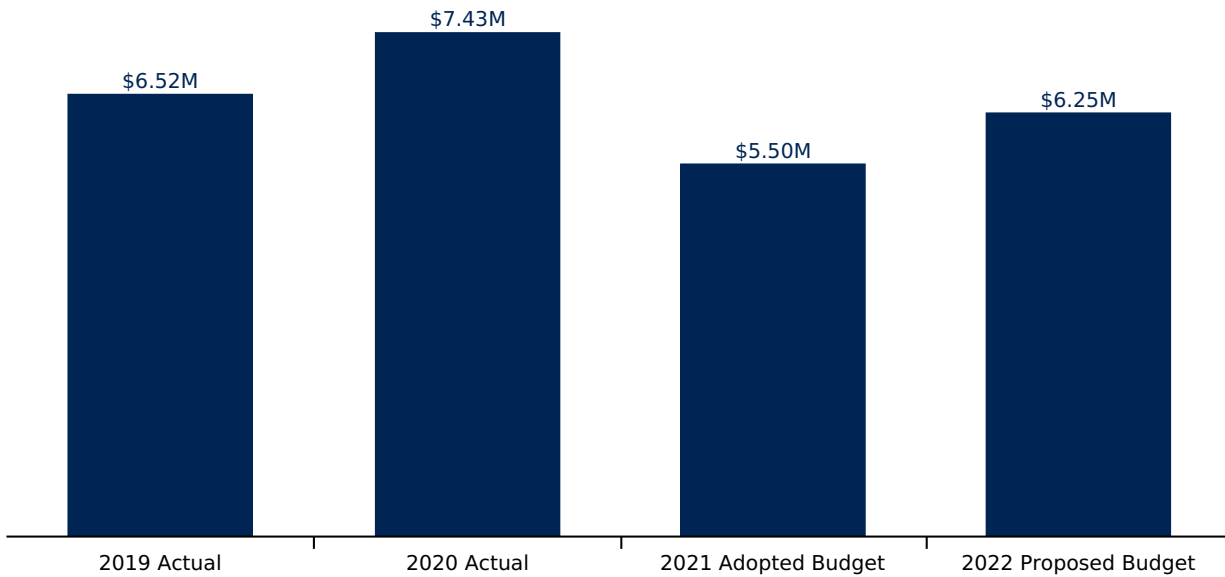
## **Proposed Budget**

It is recommended that City Council approve a budget of \$6,248,770 for the Innovation and Technology department. This represents an increase of \$752,992 (13.7%) from the FY 2020-21 Adopted Budget.

## Proposed Expenditures by Division



## Department Expenditure History



## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
Intergovernmental Revenue	\$ 13,496	\$ -	\$ -	\$ -
Charges for Services	\$ 3,765,092	\$ 2,739,704	\$ 3,989,234	\$ 4,572,658
<b>Total Revenues</b>	<b>\$ 3,778,588</b>	<b>\$ 2,739,704</b>	<b>\$ 3,989,234</b>	<b>\$ 4,572,658</b>
<b>Expenditures</b>				
Employee Compensation	\$ 2,060,331	\$ 2,193,929	\$ 1,935,740	\$ 2,072,164
Employee Benefits	\$ 818,248	\$ 1,039,353	\$ 786,454	\$ 857,214
Materials	\$ 1,200,801	\$ 1,611,936	\$ 1,700,226	\$ 1,969,176
Contract Services	\$ 917,642	\$ 839,759	\$ 458,179	\$ 908,600
Cost Allocation	\$ 1,295,911	\$ 1,437,210	\$ 246,932	\$ 303,672
Special Projects	\$ 230,769	\$ 310,676	\$ 320,000	\$ 66,000
Contingencies	\$ -	\$ -	\$ 48,247	\$ 71,944
<b>Total Expenditures</b>	<b>\$ 6,523,702</b>	<b>\$ 7,432,863</b>	<b>\$ 5,495,778</b>	<b>\$ 6,248,770</b>
<b>Fund Balance</b>	<b>\$ 257,917</b>	<b>\$ (1,072,796)</b>	<b>\$ (588,048)</b>	<b>\$ (727,802)</b>
<b>General Fund Costs</b>	<b>\$ 3,003,035</b>	<b>\$ 3,620,365</b>	<b>\$ 918,496</b>	<b>\$ 948,310</b>

## Staffing

Total current positions - 11.93 FTE

Total proposed positions - 11.93 FTE

# Innovation & Technology Administration

Budget Unit 610-30-300

Information Technology - I&T Administration - Innovation & Technology Administration

## Budget at a Glance

	2022 Proposed Budget
Total Revenues	\$ -
Total Expenditures	\$ 252,124
Fund Balance	\$ (252,124)
General Fund Costs	\$ -
% Funded by General Fund	0.0%
Total Staffing	0.5 FTE

## Program Overview

The Innovation & Technology Department Administration Division is responsible for the strategic planning, governance, policy setting, and leadership in the use of digital services for the City. The services include a state of the art network which provides transport for best of class business applications, e.g., financial, land management, recreation, asset management, HR, e-commerce and work order management. Additionally, Administration ensures oversight of budget, tactical plans, succession planning, partnership development (internal/external) and staffing. Procurement and budget monitoring are also responsibilities of Administration.

## Service Objectives

- Develop a roadmap to effectively leverage existing technology and adopt emerging technology to meet business needs.
- Create and sustain a workplace atmosphere that promotes a balance between employee innovation, accountability and business needs.
- Ensure two-way communication between and among the City organization and stakeholders.
- Improve user experience including ease of use, availability, and accessibility within the context of compliance with industry standards.
- Ensure transparent and easy access to City information and services via multiple technologies, e.g. social media, TV, web, and radio.

## Proposed Budget

It is recommended that City Council approve a budget of \$252,124 for the Innovation & Technology Administration program. This represents a decrease of \$104,382 (-29.3%) from the FY 2020-21 Adopted Budget.

Increases in Compensation and Benefits are due to negotiated salary and benefits changes.

The decrease is primarily due to a reduction of Special Projects from FY20-21. The projects completed included pilot adaptive traffic signaling, pilot multi-modal traffic count, pilot noise measurement, and pilot pollution monitoring.

For FY21-22, staff will be focusing on building a Security Framework and Audit. This proposal is two-fold: 1) Staff will utilize outside assistance in creating a security framework and 2) Conduct a in-depth cyber and physical security penetration test to identify current weaknesses in the City's security posture.

## Special Projects

The following table shows the special projects for the fiscal year.

Special Project	Appropriation	Revenue	Funding Source	Description
Security Framework and Audit	\$60,000	\$60,000	Internal Service Fund	Cyber security posture enhancements
<b>Total</b>	<b>\$60,000</b>	<b>\$60,000</b>		

## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
Charges for Services	\$ 359,741	\$ 235,631	\$ -	\$ -
<b>Total Revenues</b>	<b>\$ 359,741</b>	<b>\$ 235,631</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Expenditures</b>				
Employee Compensation	\$ 95,800	\$ 93,426	\$ 112,457	\$ 115,790
Employee Benefits	\$ 39,116	\$ 42,452	\$ 45,468	\$ 49,027
Materials	\$ 9,900	\$ 11,456	\$ 7,450	\$ 9,878
Contract Services	\$ 21,329	\$ 1,440	\$ 5,800	\$ 75,300
Cost Allocation	\$ 85,954	\$ 89,236	\$ -	\$ -
Special Projects	\$ -	\$ -	\$ 185,000	\$ -
Contingencies	\$ -	\$ -	\$ 331	\$ 2,129
<b>Total Expenditures</b>	<b>\$ 252,099</b>	<b>\$ 238,010</b>	<b>\$ 356,506</b>	<b>\$ 252,124</b>
<b>Fund Balance</b>	<b>\$ 107,642</b>	<b>\$ (2,379)</b>	<b>\$ (356,506)</b>	<b>\$ (252,124)</b>
<b>General Fund Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## **Staffing**

Total current positions - 0.53 FTE

Total proposed positions - 0.53 FTE

There are no changes to the current level of staffing.

# Video

Budget Unit 100-31-305

General Fund - Video - Video

## Budget at a Glance

	2022 Proposed Budget
Total Revenues	\$ -
Total Expenditures	\$ -
Fund Balance	\$ -
General Fund Costs	\$ -
% Funded by General Fund	0.0%
Total Staffing	0.0 FTE

## Program Overview

In FY 2020-21, this program will be transferred to the City Manager’s Office. A complete discussion of this program can be found under Budget Unit 100-12-305. This program will remain in order to maintain historical data, however once all prior year data as listed in the table below is \$0, this program will be removed.

## Proposed Budget

There is no budget requested for this program.

## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
Intergovernmental Revenue	\$ 13,496	\$ -	\$ -	\$ -
Charges for Services	\$ 11,164	\$ 8,003	\$ -	\$ -
<b>Total Revenues</b>	<b>\$ 24,660</b>	<b>\$ 8,003</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Expenditures</b>				
Employee Compensation	\$ 493,401	\$ 505,578	\$ -	\$ -
Employee Benefits	\$ 177,043	\$ 210,977	\$ -	\$ -
Materials	\$ 38,380	\$ 43,830	\$ -	\$ -
Contract Services	\$ 103,565	\$ 77,271	\$ -	\$ -
Cost Allocation	\$ 344,883	\$ 280,610	\$ -	\$ -
Special Projects	\$ 188,879	\$ 340,362	\$ -	\$ -
<b>Total Expenditures</b>	<b>\$ 1,346,151</b>	<b>\$ 1,458,628</b>	<b>\$ -</b>	<b>\$ -</b>
<b>Fund Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>General Fund Costs</b>	<b>\$ 1,321,493</b>	<b>\$ 1,450,626</b>	<b>\$ -</b>	<b>\$ -</b>

## Staffing

Total current positions - 0.00 FTE

Total proposed positions - 0.00 FTE



# Public Access Support

Budget Unit 100-31-307

General Fund - Video - Public Access Support

## Budget at a Glance

	2022 Proposed Budget
Total Revenues	\$ -
Total Expenditures	\$ -
Fund Balance	\$ -
General Fund Costs	\$ -
% Funded by General Fund	0.0%
Total Staffing	0.0 FTE

## Program Overview

In FY 2020-21, this program will be transferred to the City Manager’s Office. A complete discussion of this program can be found under Budget Unit 100-12-307. This program will remain in order to maintain historical data, however once all prior year data as listed in the table below is \$0, this program will be removed.

## Proposed Budget

There is no budget requested for this program.

## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
<b>Total Revenues</b>	\$ -	\$ -	\$ -	\$ -
<b>Expenditures</b>				
Contract Services	\$ 70,301	\$ 73,850	\$ -	\$ -
Cost Allocation	\$ 1,961	\$ 1,828	\$ -	\$ -
<b>Total Expenditures</b>	\$ 72,262	\$ 75,678	\$ -	\$ -
<b>Fund Balance</b>	\$ -	\$ -	\$ -	\$ -
<b>General Fund Costs</b>	\$ 72,262	\$ 75,678	\$ -	\$ -

**Staffing**

Total current positions - 0.00 FTE

Total proposed positions - 0.00 FTE

# Applications

Budget Unit 100-32-308

General Fund - Applications - Applications

## Budget at a Glance

	2022 Proposed Budget
Total Revenues	\$ 1,613,055
Total Expenditures	\$ 2,369,287
Fund Balance	\$ -
General Fund Costs	\$ 756,232
% Funded by General Fund	31.9%
Total Staffing	3.5 FTE

## Program Overview

The Applications Division manages business requirements gathering, design, development, procurement, project management, implementation and ongoing maintenance and support of all enterprise-wide business systems and programs. These systems include Financial Enterprise Resource Planning (ERP), Land-use Management System, Recreation Management System and their related customer facing portals. Additionally Applications division is responsible for electronic content management (records retention) system and city's procurement management system.

The Applications Division manages the City's website, Intranet, and mobile apps development. The division staff supports e-service programs and services like permitting, licensing and enforcement. Applications division is responsible for creating custom SaaS software platforms like bid management solution and residential parking permits solution. They are also responsible for application integrations so critical business data can flow between enterprise platforms. Applications division staff also generate critical business analytics and reports to aid city staff in getting insight through data visualization and helps department supervisors and managers in decision making and measurements of key performance index and goals.

## Service Objectives

- Deliver business solutions that meet customer requirements and integrate within the City's application framework.
- Assist departments in developing streamlined and effective business processes that are easy to understand and translate into existing and new enterprise applications.
- Work closely with City staff and members of the community to ensure that the City's enterprise application platforms are relevant and provide value to all the stakeholders.
- Collaborate with various City departments to determine that the City's enterprise software solutions meet the functional requirements and long-term application implementation strategy of the organization.
- Create and maintain effective online and mobile user access to municipal information and services.
- Enable and facilitate the use of communication and technical resources by nontechnical staff and

customers.

- Generate business data dashboards to city staff and external stakeholders.

## Proposed Budget

It is recommended that City Council approve a budget of \$2,369,287 for the Applications program. This represents an increase of \$387,988 (19.6%) from the FY 2020-21 Adopted Budget.

Increases in Compensation and Benefits are due to negotiated salary and benefits changes.

During the last fiscal year, the Application Division implemented large business critical enterprise applications as well as various other mid-size and smaller application solutions to solve the organizational business need.

For FY21-22, the Applications team will support and maintain programs and enterprise application systems by continuing with implementation of new business solutions, enterprise applications integrations and by building custom reporting to help run the City's business processes smoothly and seamlessly. Applications team will work on various projects including migration of Business License administration from the New World ERP to Accela, city's land-use management system, ERP need analysis, implementation of the customer services solution, redesigning of city's website, HR performance management solution and Intranet hub. The applications staff will focus on using Business Intelligence tools to perform data analysis and building custom dashboards thus developing the data analysis functionality layer on top of the citywide application systems.

## Special Projects

The following table shows the special projects for the fiscal year.

Special Project	Appropriation	Revenue	Funding Source	Description
Accela Business License	\$25,000	\$25,000	General Fund	Conversion to new Business License system
Campaign Docs	\$3,500	\$3,500	General Fund	Campaign disclosure enhancements
City Data Services	\$1,500	\$1,500	General Fund	Community Funding Grant Program data management
Community Climate Solutions	\$4,000	\$4,000	General Fund	Community engagement efforts for CAP
Customer Service Solution for CDD	\$65,000	\$65,000	General Fund	Request and data management for CDD customer communications

ERP Exploration	\$50,000	\$50,000	General Fund	Exploration of new financial system
Esports	\$1,700	\$1,700	General Fund	Parks & Recreation app programming
Green Halo	\$7,860	\$7,860	General Fund	Construction recycling management
Intranet Hub Consulting Services	\$20,000	\$20,000	General Fund	Intranet revamp and enhancement
Lobbyist Registration System in Netfile	\$15,000	\$15,000	General Fund	Lobbyist management and monitoring system
Performance Management Application	\$32,000	\$32,000	General Fund	System for employee performance and coaching
Pre-Employment Assessment and Tests	\$5,000	\$5,000	General Fund	System for pre-employment enhancements
Public Engagement	\$20,000	\$20,000	General Fund	Public engagement enhancements
Redesign of City Website	\$45,000	\$45,000	General Fund	Redesign of City website
<b>Total</b>	<b>\$295,560</b>	<b>\$295,560</b>		

## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
Charges for Services	\$ -	\$ -	\$ 1,307,803	\$ 1,613,055
<b>Total Revenues</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 1,307,803</b>	<b>\$ 1,613,055</b>
<b>Expenditures</b>				
Employee Compensation	\$ 488,649	\$ 471,362	\$ 623,650	\$ 671,629
Employee Benefits	\$ 167,895	\$ 153,882	\$ 225,939	\$ 242,843
Materials	\$ 510,914	\$ 981,919	\$ 958,682	\$ 1,053,932
Contract Services	\$ 298,617	\$ 236,801	\$ 124,833	\$ 365,400
Cost Allocation	\$ 143,205	\$ 178,096	\$ -	\$ -
Special Projects	\$ -	\$ -	\$ 25,000	\$ -
Contingencies	\$ -	\$ -	\$ 23,195	\$ 35,483
<b>Total Expenditures</b>	<b>\$ 1,609,280</b>	<b>\$ 2,022,060</b>	<b>\$ 1,981,299</b>	<b>\$ 2,369,287</b>
<b>Fund Balance</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>
<b>General Fund Costs</b>	<b>\$ 1,609,280</b>	<b>\$ 2,022,061</b>	<b>\$ 673,496</b>	<b>\$ 756,232</b>

## Staffing

Total current positions - 3.50 FTE

Total proposed positions - 3.50 FTE

There are no changes to the current level of staffing.

# Infrastructure

Budget Unit 610-34-310

Information Technology - Infrastructure - Infrastructure

## Budget at a Glance

	2022 Proposed Budget
Total Revenues	\$ 1,882,195
Total Expenditures	\$ 2,202,453
Fund Balance	\$ (128,180)
General Fund Costs	\$ 192,078
% Funded by General Fund	8.7%
Total Staffing	4.5 FTE

## Program Overview

The IT Infrastructure Division is responsible for technology-related expenses for the citywide management of information technology services. The Infrastructure Manager and staff are responsible for computer helpdesk, network availability, and performance, security and compliance, incident response, disaster recovery and business continuity, project management of implementations and upgrades, purchasing and inventory control, technical training, and maintenance of systems. Infrastructure is also tasked with ensuring that the City continues to follow best practices in technology adoption and security practices.

## Service Objectives

- Provide and continuously improve helpdesk support as this function is often the face of IT that staff interacts with on a daily basis.
- Maintain standards and procedures for the replacement, support, and maintenance of all City-owned computing devices, printers, networks, peripherals and systems defined by City policy.
- Continue innovation and outreach to ensure the City follows best IT practices relating to equipment, policy, and security practices.

## Proposed Budget

It is recommended that City Council approve a budget of \$2,202,453 for the Infrastructure program. This represents an increase of \$125,739 (6.1%) from the FY 2020-21 Adopted Budget.

Increases in Compensation and Benefits are due to negotiated salary and benefits changes.

Over the past year(s), the Infrastructure Division has re-engineered the compute and applications infrastructure for the City. Improvements include the rebuild of the City's wired/wireless network, server, telephone, and storage environments. Additionally, Disaster Recovery solutions and Active Network Threat remediation.

For FY21-22, IT will move forward with additional Active Net Payment Card Readers, updating the Council Voting system infrastructure, Multi Factor Authorization, Interactive Projector System, a Redundant Satellite network System, multi-factor authentication, Line Locator with GPS, Access Controls for the Senior Center Facility, a Skydio UAV Drone, Wireless Bridge for the OES Vehicle, and WiFi network Expansion in City Parks.

## Special Projects

The following table shows the special projects for the fiscal year.

Special Project	Appropriation	Revenue	Funding Source	Description
ActiveNet Additional Readers	\$9,000	\$9,000	Internal Service Fund	Payment processing machines
Council Voting System and Timer	\$32,000	\$32,000	Internal Service Fund	Council voting and meeting enhancements
Multi-Factor Authentication	\$19,500	\$19,500	Internal Service Fund	Dual authentication network security
Interactive Projector System with Games	\$7,000	\$7,000	Internal Service Fund	Projector and gaming
Line Locator with GPS	\$15,000	\$15,000	Internal Service Fund	Underground power lines mapping
Redundant Satellite Network	\$10,000	\$10,000	Internal Service Fund	Reliable communications during emergency
Senior Center Access Controls	\$16,000	\$16,000	Internal Service Fund	Building access controls
Skydio Drone	\$18,000	\$18,000	Internal Service Fund	Drone for image capture and disaster assessment
Wireless Bridge	\$12,400	\$12,400	Internal Service Fund	City's OES vehicle connection with facilities
Wireless Network and Internet Park Expansion	\$20,500	\$20,500	Internal Service Fund	WiFi expansion
<b>Total</b>	<b>\$159,400</b>	<b>\$159,400</b>		



## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
Charges for Services	\$ 2,284,031	\$ 1,629,376	\$ 1,767,098	\$ 1,882,195
<b>Total Revenues</b>	<b>\$ 2,284,031</b>	<b>\$ 1,629,376</b>	<b>\$ 1,767,098</b>	<b>\$ 1,882,195</b>
<b>Expenditures</b>				
Employee Compensation	\$ 537,277	\$ 605,073	\$ 645,656	\$ 657,676
Employee Benefits	\$ 248,851	\$ 353,426	\$ 283,050	\$ 307,679
Materials	\$ 516,478	\$ 445,355	\$ 544,670	\$ 653,369
Contract Services	\$ 300,142	\$ 303,138	\$ 247,546	\$ 192,900
Cost Allocation	\$ 553,720	\$ 701,888	\$ 246,932	\$ 303,672
Special Projects	\$ 41,890	\$ (29,686)	\$ 90,000	\$ 66,000
Contingencies	\$ -	\$ -	\$ 18,860	\$ 21,157
<b>Total Expenditures</b>	<b>\$ 2,198,358</b>	<b>\$ 2,379,194</b>	<b>\$ 2,076,714</b>	<b>\$ 2,202,453</b>
<b>Fund Balance</b>	<b>\$ 85,672</b>	<b>\$ (677,818)</b>	<b>\$ (64,616)</b>	<b>\$ (128,180)</b>
<b>General Fund Costs</b>	<b>\$ -</b>	<b>\$ 72,000</b>	<b>\$ 245,000</b>	<b>\$ 192,078</b>

## Staffing

Total current positions - 4.50 FTE

Total proposed positions - 4.50 FTE

There are no changes to the current level of staffing.

# GIS

Budget Unit 610-35-986

Information Technology - GIS - GIS

## Budget at a Glance

	2022 Proposed Budget
Total Revenues	\$ 1,077,408
Total Expenditures	\$ 1,424,906
Fund Balance	\$ (347,498)
General Fund Costs	\$ -
% Funded by General Fund	0.0%
Total Staffing	3.4 FTE

## Program Overview

The Geographic Information Systems (GIS) program captures, manages, analyzes, and displays all forms of geographically referenced information for the City of Cupertino. Through maps, reports, dashboards, and charts we provide ways to view, understand, question, interpret, and visualize, our City in ways that reveal relationships, patterns, and trends. The GIS Program works to help our staff, citizens, business, and development communities answer questions and solve problems by looking at our data in a way that is quickly understood and easily shared – on a map!

## Service Objectives

- Cupertino GIS works to provide and support state-of-the-art GIS mapping services and applications in the rapidly evolving and expanding field of geospatial technology.
- Create, collect, maintain, and distribute high quality, up-to-date, and complete geospatial data.
- Ensure that the City’s GIS systems and data are available for day-to-day City and regional purposes.
- Share the City’s GIS data and services as widely as possible.
- Raise the awareness of GIS.
- Integrate spatial technology into Cupertino’s business processes and applications.
- Support emergency planning, response, and recovery.

## Proposed Budget

It is recommended that City Council approve a budget of \$1,424,906 for the GIS program. This represents an increase of \$343,647 (31.8%) from the FY 2020-21 Adopted Budget.

Increases in Compensation and Benefits are due to negotiated salary and benefits changes.

Last Fiscal year, GIS implemented telematics for City vehicles. Telematics has enabled fleet managers to download engine performance, and vehicle operations data for City vehicles. This data will help improve preventative maintenance, operator safety, fuel efficiency, vehicle utilization, and reduce vehicle downtime.

For FY21-22, GIS will move forward with bringing Augmented Reality to McClellan Ranch, develop Data Governance and Data Warehouse, Drone Deploy, and replacing the static display at Quinlan Community Center with a state of the art interactive displays.

## Special Projects

The following table shows the special projects for the fiscal year.

Special Project	Appropriation	Revenue	Funding Source	Description
AR McClellan Ranch	\$40,000	\$40,000	Internal Service Fund	Augmented reality bringing the native wildlife to life at McClellan Ranch
Data Governance and Data Warehouse	\$75,000	\$75,000	Internal Service Fund	Migrate data from existing applications to a common database.
Drone Deploy	\$18,000	\$18,000	Internal Service Fund	Process drone data with survey grade accuracy.
ESRI Web Editor Licenses	\$10,000	\$10,000	Internal Service Fund	Continue to build and deploy web maps and apps used by Cupertino residents and staff, but have better security, quicker deployment, and single sign-on behind the scenes.
Online Services Subscription Fees	\$2,200	\$2,200	Internal Service Fund	Subscription fees for building and deploying web maps and apps.
Quinlan Touch Screen	\$40,000	\$40,000	Internal Service Fund	Interactive touch screen for visitors at Quinlan Community Center.
Rapid Plan	\$4,000	\$4,000	Internal Service Fund	Software for designing and creating high level traffic plans for roadway shutdowns.
<b>Total</b>	<b>\$189,200</b>	<b>\$189,200</b>		

## Revenues and Expenditures

The following table details revenues, expenditures, changes in fund balance and General Fund costs by category for two prior fiscal years, the Adopted Budget for the prior fiscal year, and the Proposed Budget for the current fiscal year:

Category	2019 Actual	2020 Actual	2021 Adopted Budget	2022 Proposed Budget
<b>Revenues</b>				
Charges for Services	\$ 1,110,156	\$ 866,694	\$ 914,333	\$ 1,077,408
<b>Total Revenues</b>	<b>\$ 1,110,156</b>	<b>\$ 866,694</b>	<b>\$ 914,333</b>	<b>\$ 1,077,408</b>
<b>Expenditures</b>				
Employee Compensation	\$ 445,204	\$ 518,490	\$ 553,977	\$ 627,069
Employee Benefits	\$ 185,343	\$ 278,616	\$ 231,997	\$ 257,665
Materials	\$ 125,129	\$ 129,376	\$ 189,424	\$ 251,997
Contract Services	\$ 123,688	\$ 147,259	\$ 80,000	\$ 275,000
Cost Allocation	\$ 166,188	\$ 185,552	\$ -	\$ -
Special Projects	\$ -	\$ -	\$ 20,000	\$ -
Contingencies	\$ -	\$ -	\$ 5,861	\$ 13,175
<b>Total Expenditures</b>	<b>\$ 1,045,552</b>	<b>\$ 1,259,293</b>	<b>\$ 1,081,259</b>	<b>\$ 1,424,906</b>
<b>Fund Balance</b>	<b>\$ 64,603</b>	<b>\$ (392,599)</b>	<b>\$ (166,926)</b>	<b>\$ (347,498)</b>
<b>General Fund Costs</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ -</b>

## Staffing

Total current positions - 3.40 FTE

Total proposed positions - 3.40 FTE

There are no changes to the current level of staffing.