

Attachment 2 - ISD FY 19-20 Emergency Response Highlights

ISD has stretched existing resources significantly.

- Across all operating areas, services have been maintained.
- Technical capacity (network, server, storage, device counts) have been expanded to support shifts in emergency and departmental needs.
- Expanded IT resiliency and develop readiness for PSPS and Fire Season
- Public and internal communications resources expanded significantly (Web sites, GIS, eMail, virtual conferencing, voice ports, etc.).
- Business applications have been modified and added to support essential services and evolving processes across County departments.

How we did it:

- Great people – all staff working together and fully engaged. 80% currently via telework and 20% on-site.
- Stressed safety and followed best practice guidance early and often.
- Prioritized work on essential needs as guided by the BOS, CAO, EOC, DOC COOP structures.
- Re-deployed surplus inventories and expanded mobile device counts (laptops, tablets, phones)
- Expedited procurements during a time of disrupted supply chains (IT equipment like PPE)
- Absorbed costs by controlling operational expenses and being strategic with our staffing levels.

Challenges:

- Over 27,000 hours of FY 19/20 ISD labor directly coded to emergency support (EOC, DH DOC, COOP, etc. – significant resource shift.
- Over \$500K in direct expense (for equipment and supplies) without corresponding revenue.
- 10X increase in infrastructure capacity for shift to telework (Web Sites, VPN, Internet, voice circuits, conferencing, etc.).
- Non-essential projects and infrastructure replacements slowed down or shifted – back logs.
- 36,000 requests a 40%+ increase in call/request loads for the fiscal year – leads to service response delays
- Operational maintenance lagging (upgrades, monitoring, routine support, etc.)
- Restarting priority projects proves challenging as resources still heavily engaged in emergency and recovery efforts.

TECHNICAL SERVICES

ISD has shifted resources to support COVID-19 response and recovery.

- Provided 177 surplus devices (Laptops, Desktops, Monitors, etc.) to assist essential service delivery through extensive moves to telework.
- Transitionally funded and acquired 167 new Laptops to support expanded EOC functions and DOC operations.
- Stood up numerous work sites to support expanded operations including the Alternate Care Site, Testing Stations, Supply Chain support, Contact Tracing Teams, and Data Management staff.
- Expanded Internet and access circuits 10X to support the shift to remote work and expanded digital communications in support of all County departments.

- Deployed new technology to allow for dynamic scaling of voice lines to support significant increase in call volumes.
- Expanded Virtual Private Network (VPN), Firewalls, WebEx / Zoom Virtual Conferencing Tools to support connectivity, communications and collaboration.

Preparing for a more resilient future – Data Center

- Shifted existing infrastructure replacement investment to establish out of County disaster recovery site (Circuits, Virtual Server Clusters, Security and Network components).
- Began testing new recovery site by spinning up ~200 virtual servers, core directory and security systems, and started testing several enterprise applications functionalities.
- Used lessons learned to create bills of materials and to-go kits to rapidly shift operations to alternate sites

Expansion of Communication Services

- New Hotlines/Call Trees
 - COVID-19 Testing and Information
 - COVID-19 Anti-Body Testing
 - Disease Control Medical Provider
 - Warm Line
 - Homeless Complaints
 - Homeless Shelter
- Deployment of Jabber Soft phone and Smart phone devices to all county employees, 9000+ devices configured.
- Migrated 3000+ phone numbers from PRI to SIP calling, preventing the PRI circuits from reaching maximum capacity.
- New WebEx Cloud Service
- New WebEx Cloud VoIP Call Routing via Expressway
- New Cloud Hosted Chat Applications; WebEx Teams and Microsoft Teams testing
- New Support for Zoom Conferencing
- New Support for SIP Enabled Board Conference Room Equipment
- New Twilio SMS Work Status Reporting

Expansion of VPN Services

- New Primary VPN Load-balancing
 - Added Additional VPN appliance to handle load-balancing
- Increased VPN Capacity from 300 to 1500 Total User Capacity
 - Ability to increase to 2250 Total User Capacity
- New Virtual ASA to increase density without new hardware
 - One added in Alameda (Fully Functional)
 - One added at ISD Main (Standby)
- New Meraki SOHO Z3 VPN appliances
- New Meraki AutoVPN Hub for SOHO appliances
- New Phone-VPN Service for Cisco IP 8945 Phones
- Increased VPN at Alameda for Disaster Recovery from 25 to 750 Total User Capacity

Expansion of Network Services

- New 10gb Internet from Comcast, dedicated to offload high volume traffic and to load balance additional VPN services
- Increased Internet from AT&T, 100mb to 1gb
- Increased Internet at Alameda DR Site, 30mb to 100mb
- Increased Network Services to Alameda DR Backups, 1gb to 5gb
- New DM VPN Configuration for internet only remote site connectivity using existing hardware
- New Location: EOC-RSS off Airport Blvd.
- New Los Guilicos Classroom A and B Wireless Connectivity for Grand Jury to reconvene safely
- Upgraded Network Connectivity for the EOC Data Center to 10gb connectivity

Expansion of Security Services

- Enforcement of Credential Detection from increased malicious activity taking advantage of changing business practices
- New DUO Dual Factor Authentication Capacity for a Work-from-Home with increased security option

DCO Response Items

- Reactivated an additional 4 Remote Desktop Session Host servers for the PC Bank farm.
- Supported Service Desk by answering overflow of support phone calls until call volume subsided.
- Became content experts for WebEx and Zoom; training and walking several County staff through process.
- Created and managed dozens of login and Exchange accounts to support the EOC and DOC.
- Increased capacities on public facing Web Sites – multiple server expansions and site virtualization
- Migrating Amazon Web Services VM backups to alternate site to AWS circuit can be used for VPN
- Increased backup frequency for EOC data
- Deployed additional virtual Firewalls at main data center and alternate recovery site

ENTERPRISE DEVELOPMENT SERVICES

Supporting high volume of requests to modify or expand web sites, GIS spatial tools and data collection systems to support information gathering and sharing across all sectors. Highlights:

Applications Team

- Developed web application to assist Disease Control to better manage the Covid testing notification process and automated the emails of negative test results eliminating staff time needed to call the client.
- Provided project management and application services to develop the technology solution to automate the Covid testing lifecycle and contact tracing which was paper driven and error prone resulting in long lag times for clients to receive their test results. Data collection, accuracy tools, reporting, web and ArcGIS automated reporting to support analysis and planning.

Innovation Team

- Worked with IBM to develop COVID-19 Check App, support materials, provided training and training guides, and vendor management, PR materials, etc.
- Developed ACCESS COVID-19 Cohort Care Plan for Watson Care Manager

- Worked with IBM and IMDT/ County Counsel to develop JR Trail Care Plan and Assessments for Outreach and engagement

JUSTICE TEAM

- Implemented jail system enhancements to allow Classification to track inmates who tested positive for COVID-19 including enhanced integration with SCPSC (Consortium to share new information with DWDAT site.
- Implemented IJS system changes to support the prevention/mitigate the spread of COVID-19 in the Jail in conjunction with Courts changes to calendaring mechanism to which isolated court appearances by inmates from the same module
- Central Warrant System Enhancements
- Implemented system changes to accommodate Judicial Council's decision to allow \$0 bail during the pandemic.

WEB TEAM

- Created dedicated Covid-19 web pages on socoemergency.org including a Virtual Local Assistance Center with a built-in website comment form
- Posted all health orders (some up to 30 pages), amendments, videos, and any other related content
- Developed search functionality that produced results specifically from Frequently Asked Questions on the Covid-19 pages
- Created an eForm to facilitate Business self-certification in English and Spanish during beginning phase of the reopening
- Created an eForm for employee and employer check in English and Spanish
- Created an eForm for community organization and young adult resources requests
- Automated the nightly update of Covid-19 statistics from GIS data sources for approximately 25 different categories to produce an accessible alternative

GIS TEAM

- Create and maintain the public viewing "dashboard" application for COVID-19 case data, Roadmap to Reopening, and other data elements, hosted in ArcGIS Online and linked to SoCoEmergency.
- Create interactive map of all case locations to help find clusters of cases over time. Can filter data by Race/Ethnicity, Source, Age, or date.
- Update the mobile and desktop versions of the Covid-19 dashboards with Spanish translations.
- Fulfill service requests for ad-hoc mapping and data requests as needed to support the County's COVID-19 response.
- Refer questions from the public to the appropriate government agency where appropriate.
- Geocode the weekly IHSS vulnerable clients list for use in the EOC & DOC (includes geocoding unmatched addresses but otherwise mostly automated)
- Update the IHSS vulnerable client's script to include new fields (Priority Level, Contact Timeline, Jurisdiction) for use in the EOC.

RECORDS TEAM

Implemented the following forms to enable mobile or remote submission vs. in-person, as well as facilitate remote work:

- CRA – Vote by Mail application. This allows voters to request a vote by mail application, selecting permanent status if they choose to do so, and selecting a political party if registered with no preference
- CRA – Assessor’s Change of Address request. This allows property owners to request change of mailing address for properties assessed by the County of Sonoma.
- Records/Mail staff have been providing essential Records and Mail services throughout the SIP
 - Resumption of Courier service 6/15/2020.
 - Approximately 371,000 pieces of mail have been processed between 3/17-6/30.
 - Managed almost 1800 box and file retrievals and refiles and accepted approximately 600 new boxes.