

MENDOCINO COUNTY'S TRAILING INFORMATION TECHNOLOGY

July 16, 2021

SUMMARY

Government transparency, enhanced communications, and improved access to services for the public are possible with a continued commitment to modernize and maintain the County's information systems and infrastructure. Since IT evolves rapidly, an upgrade made five years ago may be obsolete due to the availability of newer, less expensive, and more capable alternatives.

This report reflects findings of the Grand Jury (GJ) as of March 23, 2021.

The primary purpose of the GJ investigation was to obtain the status of the Information Technology Master Plan (ITMP) Initiatives and to identify barriers to their timely accomplishment.

Mendocino County's Information Technology (IT) is outdated with 99 Initiatives identified for improvement. The composition and priorities of the Board of Supervisors (BOS) evolved over time and more recently the Supervisors are keenly aware of the need for improvement. Setting priorities, providing leadership, or committing funds to modernize the County's information systems has been a persistent management challenge.

In 2018, the County engaged an experienced consultancy to assess its IT infrastructure and deliver an ITMP to modernize the County's systems after decades of neglect. This comprehensive report listing the 99 Initiatives was delivered to the BOS and County Executives on October 29, 2018 with proposed completion by the year 2023. The recent ITMP now projects that completion is extended out to 2025.

Mendocino County needs to commit to excellence. Effective application of IT provides the public with improved communications, greater transparency and better service. Mendocino County has a good IT plan but it requires continued BOS commitment and effective IT leadership to assure its timely accomplishment.

GLOSSARY

IS - Information Services - typically the staff professionals responsible for managing, developing or operating IT.

IT - Information Technology - a broad general term to refer to technology for developing, maintaining and using computer software, systems and telecommunications for processing data and guiding efficient workflows.

BACKGROUND

In 2017, a Deputy Chief Executive Officer, in discussions with IT Staff and other department heads, recognized the need to develop a long-range plan to guide investments in Information Technologies. A Request for Proposal (RFP) was developed and an experienced governmental-systems-focused consultancy was selected.

The project was initiated in early 2018 with the objective to perform a high-level evaluation of the County's IT and to present a plan to modernize its systems. The consultancy's report was presented to the BOS and County Executive Office in October 2018 and has been the guide for modernizing the County's IT. The consultancy delivered an Optimal Technology Guidance Report (OTG) which identified and prioritized needed improvements for IT management and systems as well as the ITMP which included a timeline and annual costs for a five-year modernization program.

One recommendation was to establish an IT Steering Committee and Charter to prioritize, fund and guide the accomplishment of the 99 Initiatives identified in the ITMP. The initial meeting of the Steering Committee was not held until July 2020 and it has met quarterly under the direction of the Deputy CEO.

METHODOLOGY

The GJ conducted interviews with sixteen representatives of the County including four from the BOS, County staff, and representatives of the IT consultancy. Eleven of the interviewees participated in an assessment of criteria used for evaluating the state of the County's IT.

Ideally, the GJ would have received a master project list such as in a Gantt-style format (see Appendix B) showing the overall project durations and resource requirements for staff and other costs. Such a summary of the initiatives is not available. To assess the status of the ITMP's Initiatives, the GJ analyzed the 99 initiative's and compared the original planned year of completion with a revised year of completion published in the Fiscal Year (FY) 2020/21 budget. Initiatives are listed as: Complete, In-Progress, Planned or Unplanned.

The GJ reviewed and based its findings on the following documents furnished as part of this investigation and analysis:

- Optimal Technology Guidance, October 29, 2018, Sections:
 - Report for Information Technology Master Planning pages 3-36,
 - Technology Master Plan Capital Budget (list of all Initiatives with yearly expenditures 2018-2023) pages 1-5,

- Technology Current State Needs Assessment pages 1-173.
- Attachment H of the FY 2020/21 Proposed Budget (*IT Master Plan Budget 2020_2021 etc.pdf*)
- FY 2020/21 Approved Budget, Section for IT Sustainability Plan pages 567 – 575

DISCUSSION

The effectiveness of the County's IT organization was assessed based on generally accepted management principals of Planning, Organizing, Staffing, Leading and Controlling.¹

An Overall Assessment of Mendocino County's Information Technology

The GJ surveyed eleven representatives, including a mix of elected officials, staff and consultants, and found that the average overall assessment of the various criteria of the County's IT is generally acceptable. The overall score was 2.2 in a range of 0 for deficient to 4 for excellent. The evaluation criteria and average scores are presented as Appendix A.

The following were identified in the survey as needing improvement:

- Effective use of roadmaps (architectures, project plans, staffing) to implementing the County's IT strategy,
- Awareness of County department heads of improved IT solutions (or training on existing systems) to reduce costs or improve services,
- Proactivity of IT Department in researching and recommending improvements to deployment of systems technologies.

Although the initiatives are also present in the ITMP, they remain unaddressed. For example:

- The 2018 OTG report, pages 5-7, compares Mendocino County's IT staffing to peer counties with the conclusion that the County's IT staff supported more system users, computer servers and desktop computers than similar counties.

	County of Mendocino	Peer County Average	Agency Benchmark
FTEs / IT Staff	41	38	69
Servers / IT Staff	5	4	8
Computers / IT Staff	53	30	59

- The 2018 OTG report, page 10, identified the needs for process reviews, formal Project Management and application best practices. These are included in the ITMP's Initiatives and are partially addressed for some but not all improvements:

¹ *Management*, Seventh Edition, Koontz, O'Donnell, Weihsich

- Initiative 3 - Project Planning and Implementation Best Practices
 - Initiative 5 - Business Process Reviews
 - Initiative 6 - Software Selection Best Practices
 - Initiative 8 - User Training and Support
- Vacancies in the Sheriff's IT group of three positions (two technicians and a systems administrator) and at least three to five additional positions in the County IT group including project manager(s) and business process analysts,
 - The Initiatives to be completed in the ITMP require internal staff supplemented by outside consultant specialists to complete project milestones on schedule. The exact staffing requirements are not established based on detailed task and resource loaded project. County IT staff levels are below the Agency benchmark.

The 2021/22 Mendocino County Proposed Budget illustrates a low priority given to improving the County's IT as the Initiatives are first presented on page 567, far into the document. Additionally, the public is not informed via the County website of the need to improve IT and the number of Initiatives that remain unaccomplished, or the successful accomplishments by dedicated IS staff.

The IT staff is making progress but recognition of their work is not readily available. On page four of the CEO Report published January 26, 2021, only three projects were listed as "Complete" for that period. It neglects any mention of the newly implemented election system of November 2020, and several other projects being accomplished such as the Sheriff's Office (SO) fiberoptic project or redundant data "center" located in a former jail holding cell.

Status of the ITMP's Initiatives:

The GJ notes that the County needs a Project Scheduling Master Plan that summarizes the details of individual project plans. Such an executive level summary serves to report overall planned start and completion dates, resource requirements and progress of Initiatives and other systems projects. An illustration of this type of summary is presented in Appendix B.

The GJ approximated the status of the ITMP's 99 Initiatives based on various documents furnished during its investigation. There are multiple projects included under each Initiative which complicates project transparency to the public. The GJ's analysis shows the progress of the 99 Initiatives:

Status:	% of Total Initiatives	Estimated Total Cost	% of Total Estimated Cost
Completed = 19*	19%	\$8.2 million	40%
Currently in Progress = 5	5%	\$1.5 million	7%
Planned, but not Started = 69	70%	\$10.7 million	53%
No Established Completion Dates = 6	6%	\$0	0%

* Of the 19 Initiatives identified as "Complete" in the *ITMP Draft Budget of Nov. 2020*, 14 have completion dates extending past 2021 and may not be complete. Refer to Appendix B for details.

The original estimated completion year given in 2018 for all Initiatives is 2023, and the most recent update of ITMP projects estimated completions stretching into the year 2025. Based on the difference in completion dates between the original ITMP Initiatives and their revised dates in the most recent Mendocino ITMP Draft Budget dated November 4, 2020, the average slippage of this timeline is 1.8 years.

IT should communicate the status of its Initiatives and projects that are in progress or to be initiated within the next quarter or year to the CEO, BOS and the public. There is a general benefit to presenting an accurate picture of what was, is, and needs to be accomplished. Simple reporting could accomplish this. For example:

Status of IT Initiatives								
as of: mm/dd/yyyy								
Project	Title	Status	Priority:	Start	Complete	Budget	Cost to Date	Comment:
17	Aumentum Assessment and Tax Billing System		High	Oct-2020	Jan-2022	\$300,000	\$ 123,456	
12	Munis Gap Analysis and Utilization Improvement		High	Oct-2020	Mar-2024	\$600,000	\$ 254,123	
62	Electronic Mail (Groupwise)		High	Mar-2021	Jun-2021	TBD		Pending BoS approval
76	MCSO Infrastructure Upgrade (Servers, SAN, and Back-ups)		High	Jul-2020	Mar-2021	\$237,000	\$ 198,765	
3	Project Planning and Implementation Best Practices		High	Sep-2020	Dec-2020	\$ -	\$ -	HR recruiting Proj Mgr
List 2 - 3 projects to be initiated in the next quarter:								
9	Training Rooms	Pending	High	Oct-2020	Oct-2020	\$ 25,000	\$ -	
28	Electronic/Digital Signatures	Pending		Oct-2020	Oct-2020	\$ 50,000	\$ -	

- Green identifies projects that are on schedule for completion,
- Yellow those that may need attention with a brief comment as to any issues,
- Red those that may not be completed as planned with a reason.

The GJ concludes that the slippage for completing the Initiatives is the result of several factors including:

- Deficiencies in project planning to recognize staffing and other resource requirements and develop realistic schedules for completion,
- deficiencies in project management and control to complete tasks as planned,
- inadequate staffing of IT for accomplishing the many Initiatives of the plan,
- past inattention by the BOS for setting priorities, providing adequate funding and monitoring the accomplishment of Initiatives.

Benefits of Rapidly Deploying Initiatives:

A Strategic Systems Plan typically identifies a number of systems improvements that may be implemented with minimal effort and that rapidly deliver benefits to the organization. Benefits include modernizing capabilities, improving workflows and procedures, reducing costs using existing or easily implemented systems capabilities.

Under the pressures of social distancing mandates during COVID-19, to its credit, the County's IT organization rapidly addressed and delivered video conferencing thus accomplishing the related Initiatives:

- Parts of Initiative 22 as related to media management,
- Initiative 72 delivery of video conferencing capabilities using Zoom.

Immediate benefits of virtual meetings are:

- Improved public access from the vast geography of the County who may now participate in BOS meetings, Special District meetings, the GJ, etc. without significant travel time,
- reduced travel time and mileage costs of County employees,
- enhanced training capabilities.

This Initiative was originally planned for FY Ending 2020 and FY Ending 2021, but due to the pandemic was largely accomplished in the Spring of 2020. The public and employees of Mendocino County obtained the immediate benefits.

There remain certain Initiatives that have the potential to be accomplished with minimal effort. For example, Initiative 62 - Electronic Mail (Groupwise) initially scheduled in the ITMP for FY 2020 is now planned for FY 2021 through 2025. The logic for such a long delay in updating email services is questionable. *Groupwise* is essentially obsolete with less than a 0.19% market share and is internally managed on five servers which requires support staff and internally supported systems resiliency. It also presents a risk of a data breach as reported by one Supervisor whose identity was recently used in a phishing attempt that passed filters on *Groupwise* and circulated to County staff.

The ITMP Report² in October 2018 proposed its replacement as *Microsoft Exchange* and *Outlook*:

- The County already licenses *Microsoft Office* products for word processing, spreadsheets and other capabilities and *Outlook* and *Exchange* are fully integrated with those applications,
- there are several email archival conversion products to migrate from *Groupwise* to *Outlook/Exchange* or the County could merely cutover, maintaining *Groupwise* for historical archive and use *Outlook/Exchange* on a go-forward basis,
- the County appears to be in a position to implement *Outlook/Exchange* and more rapidly obtain its benefits as either internally managed servers or as a cloud-based application from *Microsoft*.

Using a cloud-based approach like migrating to *Microsoft (MS) Business Professional 365* provides the full suite of *MS Office* products which County employees already use along with *MS email* and *MS Defender* which protect against malware and other cyberthreats. Software and data are hosted in highly secure, resilient sites and systems maintenance shifts to professionals from Microsoft. This accomplishes parts of:

² Technology Current State Assessment report dated October 29, 2018 page 112

- Initiative 55 - Cloud Computing for potential cost savings³
- Initiative 85 - Disaster Recovery Planning (for Office products' processing and data storage)⁴
- Initiative 86 - Disaster Recovery Site Implementation (for Office products' processing and data storage)⁵

This could be an initial assignment for a project manager collaborating with outside contractor expertise to accomplish these initiatives within months, not years. It would also provide the proof of concept for migration of other systems used by the County, such as *MUNIS*, to either cloud or hosted web services.

Cloud Computing is specifically addressed in Appendix G.3 of the FBI's Criminal Justice Information Services (CJIS) Security Policy⁶ with excellent descriptions of essential characteristics, deployment models (public, private, community, hybrid), service models (Software as a Service, Platform as a Service, Infrastructure as a Service) and security implications. Refer to Figure 1 for a conceptual diagram. Bottom-line: cloud computing would be permitted for systems used by law enforcement.

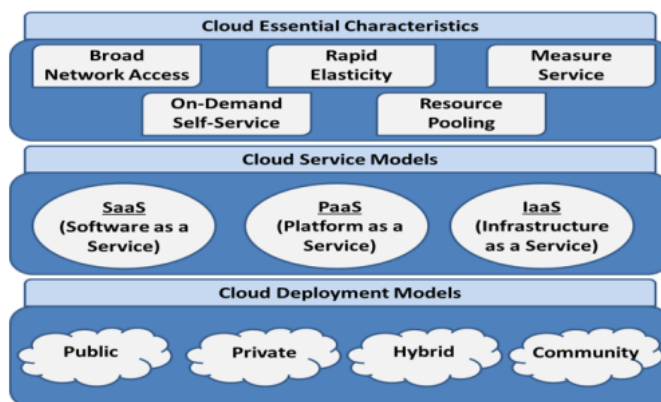


Figure 1 - Visual Depiction of the NIST Cloud Computing Definition

The SO recently installed a fiber optic conduit and circuits from the Low Gap Administration center to the jail facility. Both the SO IS and the County's IS are addressing the need for redundancy by building computer rooms in separate remote locations. The internally supported computer rooms require back-up for electrical and air conditioning, floor space and support staff. The SO presently has its central computer system in one building while the County has its computer systems in another. The GJ notes that server racks in both rooms lack earthquake resistant tie-downs.

Had the County coordinated its IT support, only one server room and a back-up site would have been required. However, if the County had pursued a strategy to move its systems to a cloud or hybrid computing model, the vendor would provide redundant systems, cooling and electrical

³ *ibid*, page 103

⁴ *ibid*, page 153

⁵ *ibid*, page 155

⁶ [CJIS Security Policy v5-9 20200601.pdf](#) Version 5.9 06/01/2020, pages G-15 to G-31

power. The County would only need to assure that it had long-line redundant connectivity though the several internet service providers in Mendocino County.

Some other examples of Initiatives that could be rapidly initiated and completed include:

- Initiative 45 OpenGov - this has been licensed by the County since 2017 (or the County could use the Tyler Transparency Service as it already licenses *MUNIS* and *Aegis* systems which are fully integrated with that product⁷). *OpenGov*, or similar product, provides automated reporting in easy to understand, graphical formats of financial information to elected officials, staff, and the public. Refer to Appendix D for an illustration of features.
- Initiative 89 Security Assessment⁸ - the County's last assessment was reportedly in 2005 or 2006 and best practices are to independently assess at least every three years. The assessment was planned for FY 2021/22 but since it is severely past due it needs immediate attention and could be performed as a contracted service by a professional, independent information systems auditor as a responsibility typically that of a County Auditor/Controller.

The County did implement email phishing testing of staff in June 2020 with an initial failure rate of 40.9%, followed by additional staff training and a retest with a 23.5% failure rate. The typical Industry failure rate is 14%; the County needs to address this continued deficiency as it poses a *severe risk* to the County's and public's information.

- Initiative 31 Website Content (Management Training) – Appendix C contains examples of obsolete or dysfunctional web pages of the County and presents a survey and assessment of the forms available on the County's website. The following is a summary of the results and does not include forms that are not available:

Status:	Number of Forms
Acceptable (functional)	3
In Progress of Improvement	14
Planned for Improvement	2
Needs Improvement but Not Currently Planned	9
Total	28

Nearly all forms on the County website available to the public to request services, provide reports to the County, apply for permits, etc. need improvement. Most forms merely allow information to be filled out and the Form printed and then mailed to the applicable County Department where it is manually logged and processed.

⁷ *ibid* page 89

⁸ *Ibid*, page 158

This is in sharp contrast to how most businesses and other Counties use forms on their websites, as workflows are automated once a customer (the public) submits a request. Some of the County's outside vendor systems support such capabilities but have not been deployed. One example of a recently implemented success using the *Aumentum* system is providing the ability for County taxpayers to pay property and some other taxes on-line.

The Grand Jury could not locate any feature for the public to suggest improvements to the County website or administrative departments (apart from sending an email).

Departments are responsible for maintaining their webpages. The SO in November 2020 addressed its website maintenance needs by issuing an RFP to an outside vendor to maintain its website. The County missed an opportunity to combine its needed website improvements with those of the SO into a more comprehensive RFP to address all County website deficiencies. As an alternative, the County would have found advantage in recruiting its own webmaster or outsourcing website maintenance to a professional services firm.

County websites are inconsistent and do not use ".gov" as the governmental unit domain registry, maintained by the Federal General Services Administration (GSA):

- The County's site is from: <https://www.mendocinocounty.org> (.org is typically for private sector organizations)
- The SO site is from: <https://mendocinosheriff.com> (.com is typically for private businesses)

Organization

During the GJ investigation the BOS decided to create the position of Chief Information Officer (CIO) which would have been one of the recommendations of this GJ report.

Qualifications for a CIO would include:

- proven accomplishment of large IT projects on time and within budget,
- strong leadership with excellent communication skills,
- progressive in understanding and applying modern IT approaches such as software as a service, cloud or hybrid computing,
- organizational transformation through workflow automation,
- strong financial background with a focus on improving Return on Investment.

Ways to obtain a CIO's expertise:

- outsource,
- engage a consultant (advantage: can terminate easily if progress is not made),
- hire an employee and make accomplishment a requirement for retention and award of any benefits or bonuses.

IS has one Division Manager and one Operations Manager with one IS coordinator, six technicians and six network systems analysts listed on the County's Staff directory. The GJ understands that the County is recruiting a project manager and business process analysts.

A deeper explanation for the skills and expectations of a business process analyst are:

- identification of process inefficiencies,
- recommendation for opportunities to improve efficiency and streamline processes through the application of IT technologies.

The SO has its own separate IS organization with one manager, one systems administrator, one developer/analyst and one personal computer technician. The IS Department supports the local area network and *Sophos* malware protection and provides systems administrative assistance as needed to the SO.

According to the California State Association of Counties description of the Sheriff-Coroner Office, Information Services is not one of its typical six office responsibilities which all focus on law enforcement related duties.

Mendocino County can benefit from a consolidated IT shared services model that allows for greater flexibility in staffing assignments, systems equipment and focus on the IT Initiatives of Mendocino County. Background investigations would continue to be required of IS Staff that support the SO systems if they must access DOJ or FBI provided systems. A dotted line responsibility would exist between the Sheriff or Undersheriff and the CIO.

Per California Law Enforcement Telecommunications Systems Policies Procedures Practices:⁹

- B. Personnel authorized terminal access to the CLETS may be sworn law enforcement or criminal justice personnel, non-sworn law enforcement or criminal justice personnel, volunteer personnel and private vendor technical or maintenance personnel who have been subjected to a background security clearance to include, at a minimum, the following checks:
1. A CA DOJ fingerprint-based criminal offender record information search.
 2. An FBI fingerprint-based criminal offender record information search.
 3. Additionally, the CA DOJ criminal justice databases may be accessed for background investigation of law enforcement and criminal justice employees, with the exception of the Automated Criminal History and Mental Health Firearms Prohibition Systems.

⁹ [clets-ppp.pdf](#) 12/19 page 42

Funding and Management Concerns

The overall estimated costs to accomplish the County's existing ITMP Initiatives appear reasonable based on the professional, experience guidance of the October 2018 ITMP and the annual ITMP budgets. However, adequate funding appears deficient and may not include all organizational costs for additional staffing:

IT Initiative	Project Comments	Priority	Third Party Assistance Required	Source	FY20-21 Budgeted	FY21-22 Budgeted	FY22-23 Budgeted	FY23-24 Budgeted	FY24-25 Budgeted
Total Application					\$ 2,020,456	\$ 1,270,000	\$ 1,130,000	\$ 475,000	\$ 125,000
Total Infrastructure					\$ 4,822,600	\$ 4,206,300	\$ 2,926,672	\$ 1,012,581	\$ 1,447,329
GRAND TOTAL					\$ 6,843,056	\$ 5,476,300	\$ 4,056,672	\$ 1,487,581	\$ 1,572,329
Allocated Funding					\$ 2,165,741				
Difference					\$ 4,677,315				

County Policy 35 adopted May 23, 2000, and not updated since, established funding for IT Replacement, specifically:

The County of Mendocino shall fund the Information Technology Reserve with automatic deposits of an amount no less than \$20,000 per month from the General Fund. Unless specifically directed by the Board of Supervisors, the automatic deposits shall not cause the Reserve to exceed an accrued balance of \$850,000. In the event that the Reserve accrues a balance of \$850,000, deposits may be suspended until funds are withdrawn for information technology-related expenditures sufficient to draw the balance of the Reserve below \$850,000. Should economic conditions warrant, the Board may suspend deposits into the Information Technology Reserve.

The Office of Auditor/Controller was unsure of its reserve balance or usage but confirmed that the IT Reserve (Fund 7170) as of June 30, 2020 had a balance of \$5,296,205.23.

FINDINGS

- F1. The CEO and BOS have not clearly defined the scope, authority or recruitment strategy for the proposed CIO position.
- F2. The completion of the 99 Initiatives of the IT Master Plan has been delayed by 21 months due to factors such as a low priority for improving IT, uncoordinated project management, budgetary commitments and demonstrated deficient leadership.
- F3. The BOS approves funding for the ITMP but does not participate on the ITMP Steering Committee to communicate priorities, provide leadership and approve resources.

- F4. Since some costs are recorded in departmental budgets but not consolidated into the ITMP, the total cost of the Initiatives is possibly underrepresented by millions of dollars.
- F5. The SO IS Department has been allowed to operate separately from the County's IS department which is a detriment to efficient delivery of services and cost effectiveness.
- F6. If the IT staff with access to DOJ systems have received clearance to maintain equipment of the SO, there is no legal obstacle that would prevent reporting to a central IT Department headed by a CIO.
- F7. Project status reporting is not clearly or regularly represented to the public and the BOS, thus leaving them uninformed of IT's priorities and project initiatives.
- F8. Project Manager position(s) are unfilled, or the need not recognized, which leads to project plans not consistently being prepared for the management of IT Initiatives.
- F9. Project managers and process application analysts are critical and unfilled positions in Mendocino County's IT organization, which is already understaffed given the number of Initiatives in the ITMP as well as on-going operational needs.
- F10. The County's efforts to secure its systems has not been evaluated by an independent audit in more than fifteen years which presents a considerable risk of systems compromise or ransomware attack.
- F11. The Auditor/Controller has not established the accounting procedure for the mandated funding reserve established by County Policy 35 which is obsolete and inadequately capped at \$850,000.
- F12. Unlike many modernized California Counties, there are few mechanisms for the public to request most on-line County services or electronically submit forms thus inadequately serving the needs of the public and efficiently processing through County staff.
- F13. The County plans to issue an unnecessary and expensive RFP to select an alternative email service to replace *GroupWise*, when *Microsoft* email could simply be implemented. The County already licenses all other *Office* software from *Microsoft* except for email which is tightly integrated with all other *Microsoft* products.

RECOMMENDATIONS

The Grand Jury recommends that:

- R1. the BOS and CEO define the scope, authority, fiscal responsibility, recruitment strategy for and establish the position of Chief Information Officer/Director of Technology by August 1, 2021. Possibilities for filling this position include: outsourcing, consulting service or direct hiring of an at-will director with the charge to complete the ITMP by July 1, 2026. (F1, F2)

- R2. the CIO position focus on improving the IT infrastructure in a steady, timely manner with quarterly public status reporting of active and planned Initiatives to the CEO and BOS including planned start and completion dates, progress status, budgeted cost and spending to date. (F1, F2, F7-F9)
- R3. by August 1, 2021, the BOS assign at least one member to take part in the quarterly ITMP Steering Committee meetings and report back to the BOS to set priorities for projects and to facilitate funding. (F3)
- R4. the BOS establish a consolidated, shared County IT Department responsible for all IT functions under the direction of a Chief Information Officer/Director of Technology by FY 2022. Any centralized IT staff that support the SO shall receive the requisite background check required by DOJ. (F4-F6)
- R5. the BOS with the CIO, as part of the FY 2022-23 budget, consolidate all IT related costs, including ITMP funds into a single IT budget that accurately reflects total IT costs. These costs could then be appropriately allocated to department budgets as a proportioned shared service thus providing greater transparency to the public. (F4, F7-F9)
- R6. the BOS revise Policy 35 by October 1, 2021 and base its funding on the capital cost needs established in the ITMP. (F3, F4, F7-F9, F11)
- R7. the BOS, through its CIO, engage a County-government-experienced consultancy to evaluate all websites managed with County funds, including those of Special Districts. This to include recommendations for the design/maintenance strategy and cost/benefit justified funding to better serve the public by January 1, 2022. (F12)
- R8. the Auditor/Controller, as part of their responsibility for safeguarding County assets, engage an independent outside auditor to evaluate the County's systems, website and network security and recommend corrective actions. This is in addition to continued quarterly phishing testing. (F10)
- R9. by August 1, 2021, the County IS cutover all County email services from *GroupWise* to *Microsoft Exchange* as the email server and *Outlook* for the user interface. (F13)

REQUIRED RESPONSES

Pursuant to Penal Code § 933 and 933.05, the grand jury requires responses as follows:

From the following governing bodies within 90 days:

- BOS (F1-F9, F11-F13, R1-R9)

From the following elected officials within 60 days:

- SO (F4-F6, R4)

- Auditor/Controller (F10, F11, R6, R8)

REQUESTED RESPONSES

Pursuant to Penal Code § 933 and 933.05, the grand jury requests responses as follows:

From the following officials within 90 days:

- Director of Information Services (F13, R9)
- Chief Executive Officer (F1-F2, F8, F9, F13, R1, R2, R9)

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code § 929 requires that reports of the Grand Jury not contain the name of any person or facts leading to the identity of any person who provides information to the Grand Jury.
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BIBLIOGRAPHY

Attachment H Mendocino County Information Technology Master Planning Budget 2020/21

Criminal Justice Information Services (CJIS) Security Policy, U.S. Department of Justice, Federal Bureau of Investigation Version 5.9
06/01/2020 CJISD-ITS-DOC-08140-5.9

California Law Enforcement Telecommunications System Policies, Practices and Procedures (and Statutes), California Department of Justice California Justice Information Services Division Rev 12/19

Digital Counties Survey 2020 – Winners Announced (govtech.com)

Mendocino ITMP Draft Budget 2020-11-04

Report for Information Technology Master Plan (ITMP), October 29, 2018 (*report to the BOS and County Staff prepared by an outside consultancy*)

APPENDICES:

A – ASSESSMENT OF IT CRITERIA

B - MENDOCINO COUNTY’S PROJECT PLAN SAMPLES VS. BEST PRATICES

C - MENDOCINO COUNTY’S WEBSITE PUBLIC DISSERVICE

D - EFFECTIVE PUBLIC COMMUNICATION AND TRANSPARENCY: OPENGOV

APPENDIX A ASSESSMENT OF IT CRITERIA

<u>Criteria:</u>	<u>Average Score:</u>	<u>Compared to Exceptional</u>
The Strategic vision of the effective and efficient use of Information Technologies for governing, reporting and providing services within the County	2.3	57%
Effective use of roadmaps (architectures, project plans, staffing) to implementing the County's IT's strategy	1.7	43%
Awareness / knowledgeability of staff (both IT and user communities) of emerging technologies and support strategies / tactics (outsourcing, shared services, contracting, software as a service)	2.4	60%
Alignment of the IT strategy / master plan and its priorities for implementation with the key functions and services of County governance and citizen services (law enforcement, records, taxation, etc.)	2.3	58%
Awareness of County department heads of improved IT solutions (or training on existing systems) that could reduce costs or improve services?	1.9	47%
Participation of County departments (key users or department heads) in setting priorities for acquiring and implementing best of class technology	2.3	56%
Proactivity of IT Department in researching and recommending improvements to deployment of systems technologies?	1.9	48%
Correct priorities are being followed for acquiring and implementing IT technologies	2.7	68%
Overall:	2.2	55%
Deficient		0
Needs Much Improvement		1
Improving / Needs Improvement		2
Acceptable		3
Exceptional		4

As a step in the interviews of 11 representatives including a mix of Elected Officials, Staff and Consultants, they were asked to subjectively rate the following criteria of IT using a scale of 0 to 4, where 0 means not acceptable and 4 is exceptional. The summarized results are presented below:

The **conclusions** are that the County's IT is not Exceptional but is also not Deficient. Three criteria that need attention are:

- **Project Planning and Management,**
- **Awareness of County department heads** for improvements to reduce costs or improve services
- **Proactivity of the IT Department** in researching and recommending improvements.

APPENDIX B

MENDOCINO COUNTY'S PROJECT PLAN SAMPLES VS. BEST PRACTICES

Examples of Mendocino County's varied IT Project Plans:

- Calendar style for the Aumentum Property System Replacement:

February 2021						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
31	1 AT Data Conversion End User Training	2 AT Data Conversion End User Training	3 AT Data Conversion End User Training	4 AT Data Conversion End User Training	5 AT Data Conversion End User Training	6
7	8 Go Live Data Validation & 2020 Balancing	9 Go Live Data Validation & 2020 Balancing	10 Go Live Data Validation & 2020 Balancing	11 Go Live Data Validation & 2020 Balancing	12 Go Live Data Validation & 2020 Balancing	13
14	15 Holiday	16 Go Live	17 Go Live	18 Go Live	19 Go Live	20
21	22 Go Live Support	23 Go Live Support	24 Go Live Support	25 Go Live Support	26 Go Live Support	27

- Spreadsheet punch list style for the Microwave Upgrade:

A	B	C	D	E	F
Item	Action Description	Resp. Party	Anticipated/Required Completion	Completed	Comments/ Status update
1	Site survey for Radio/MPLS Network	Peter Crosbie	2/26/2020	2/26/2020	Survey to start on February 25th.
2	Survey for Point Arena tower and equipment room	Peter Crosbie	2/26/2020	2/26/2020	Meeting scheduled at the site on February 25th.
3	Release of radio order to manufacturing	Sung Tran	3/5/2020	3/6/2020	PCNs sent to Mendocino Co. for approval on March 2nd.
4	Schedule remote network design workshop	Johnny Zhang		3/2/2020	Workshop held on March 3rd.
5	Provide services lists to Ning (Johnny)	Gary Henning	3/19/2020	3/17/2020	Gary stated that there are no additional updates.
6	Provide first draft of updated HLD	Ning Zhang	3/24/2020	3/19/2020	Revision provided on 3/25.
7	Provide LLD for 9500 MPR radios	Trevor Bartlett	3/27/2020	3/26/2020	E-mail from Trevor on 3/26.
8	Provide warehouse address for equipment deliveries	Peter Crosbie	3/25/2020	4/3/2020	E-mail from Peter on April 3rd.
9	Approval of HLD	Greg Glavich	4/10/2020	4/9/2020	Approved on April 9th.
10	Completion of config. files for 7705s	Kevin Asato	4/17/2020	4/17/2020	
11	Shipment of radios to warehouse after factory testing	Ron Basso, Peter Crosbie	5/15/2020	5/19/2020	Delivered to Tracy warehouse on May 19th.
12	Shipment of antennas & line equipment to warehouse	Ron Basso, Peter Crosbie	5/28/2020	5/28/2020	Antennas will be delivered to Tracy warehouse on May 28th.
13	Need access to Mendocino County's network for integration planning and review of configs for 7450s and 7250s	Kevin Asato, Mendocino County	6/15/2020	5/27/2020	Kevin stated that he has a way to get access. This issue is closed.
17	Need permit for 40 foot tower	Greg Glavich	8/31/2020	9/2/2020	Approval has been received.
19	Need most current detailed drawing for the new tower	Peter Crosbie	9/11/2020	9/9/2020	

- Gantt-style Project plan for the Point Arena Expansion Project:

ID	Task Name	Duration	Start	Finish	Predecessor	Resource Names	Feb 9, '20	S	M	T	W	T	F	S
1	Mendocino County Point Arena Expansion Project	178 days	Thu 2/20/20	Mon 10/26/20										
2	✓ Site survey for 3 MW Radio/MPLS sites	2 days	Tue 2/25/20	Wed 2/26/20		Peter Crosbie								
3	✓ Site survey for Point Arena tower	2 days	Tue 2/25/20	Wed 2/26/20		Peter Crosbie								
4	✓ Frequency Coordination and FCC Licensing	59 days	Thu 2/20/20	Tue 5/12/20										
5	✓ Frequency coordination	8 days	Thu 2/20/20	Mon 3/2/20		Sung Tran								
6	✓ Approval of coordination data	1 day	Tue 3/3/20	Tue 3/3/20	5	Mendocino County								
7	✓ FCC Licensing Process	50 days	Wed 3/4/20	Tue 5/12/20	6	Nokia								
8	✓ Engineering and Manufacturing of MW Radios	30 days	Mon 2/24/20	Fri 4/3/20										
9	✓ Engineering design	3 days	Mon 2/24/20	Wed 2/26/20		Sung Tran								
10	✓ Ordering and manufacturing of radios	22 days	Thu 2/27/20	Fri 3/27/20	9	Sung Tran								
11	✓ Testing and delivery of radios to factory staging area	5 days	Mon 3/30/20	Fri 4/3/20	10	Nokia								
12	✓ Prepare LLD for radio configurations	15 days	Mon 3/9/20	Fri 3/27/20		Trevor Bartlett								
13	✓ Update for High Level Design and configuration files	34 days	Tue 3/3/20	Fri 4/17/20										
14	✓ Conduct remote network design workshop	1 day	Tue 3/3/20	Tue 3/3/20		Ning Zhang								
15	✓ Modify High Level Design document	16 days	Wed 3/4/20	Wed 3/25/20	14	Ning Zhang								
16	✓ Approval of HLD	11 days	Thu 3/26/20	Thu 4/9/20	15	Mendocino County								
17	✓ Develop configuration files	6 days	Fri 4/10/20	Fri 4/17/20	16	Kevin Asato								
18	✓ New Point Arena Tower Site	172 days	Thu 2/27/20	Fri 10/23/20										
19	✓ Prepare electrical drawings	9 days	Thu 2/27/20	Tue 3/10/20		Peter Crosbie								
20	✓ Prepare rooftop engineering drawings	12 days	Thu 2/27/20	Fri 3/13/20		Peter Crosbie								
21	✓ Install power cables between two buildings	5 days	Mon 5/4/20	Fri 5/8/20		Peter Crosbie								
22	✓ Order and install generator	155 days	Mon 3/2/20	Fri 10/2/20		Peter Crosbie								
23	✓ Run electrical up to new equipment room	10 days	Mon 5/11/20	Fri 5/22/20		Peter Crosbie								
24	✓ Framing of equipment room	10 days	Mon 5/11/20	Fri 5/22/20		Peter Crosbie								
25	✓ Install DC Power	4 days	Tue 7/21/20	Fri 7/24/20		Peter Crosbie								
26	✗ Erect and install 40' tower	60 days	Mon 8/3/20	Fri 10/23/20		Peter Crosbie								
27	✓ Ordering/delivery of antennas and line equipment	59 days	Mon 3/9/20	Thu 5/28/20		Peter Crosbie								
28	✓ Ordering & delivery of 7705 equipment to factory staging area	35 days	Mon 2/24/20	Fri 4/10/20		Nokia								
29	✓ Ordering & delivery of TSM-8000 to Mendocino County	24 days	Mon 3/2/20	Thu 4/2/20		Sung Tran								
30	✓ Factory integration of radios, 7705s and TSM-8000	27 days	Mon 4/13/20	Tue 5/19/20										
31	✓ Racking, cabling and pretesting	10 days	Mon 4/13/20	Fri 4/24/20		Nokia								
32	✓ Installation and integration of TSM-8000 and configuration files	5 days	Mon 4/27/20	Fri 5/1/20		Nokia								
33	✓ Factory integration testing	4 days	Mon 5/4/20	Thu 5/7/20		Nokia								

Project: Mendocino County Pt. Arena Date: Tue 10/27/20	Task		Inactive Milestone		Finish-only	
	Split		Inactive Summary		External Tasks	
	Milestone		Manual Task		External Milestone	
	Summary		Duration-only		Progress	
	Project Summary		Manual Summary Rollup		Deadline	
	External Tasks		Manual Summary			
	External Milestone		Start-only			

Many IT projects of the County lack a project plan with detail tasks, durations, interdependencies, and resource loading.

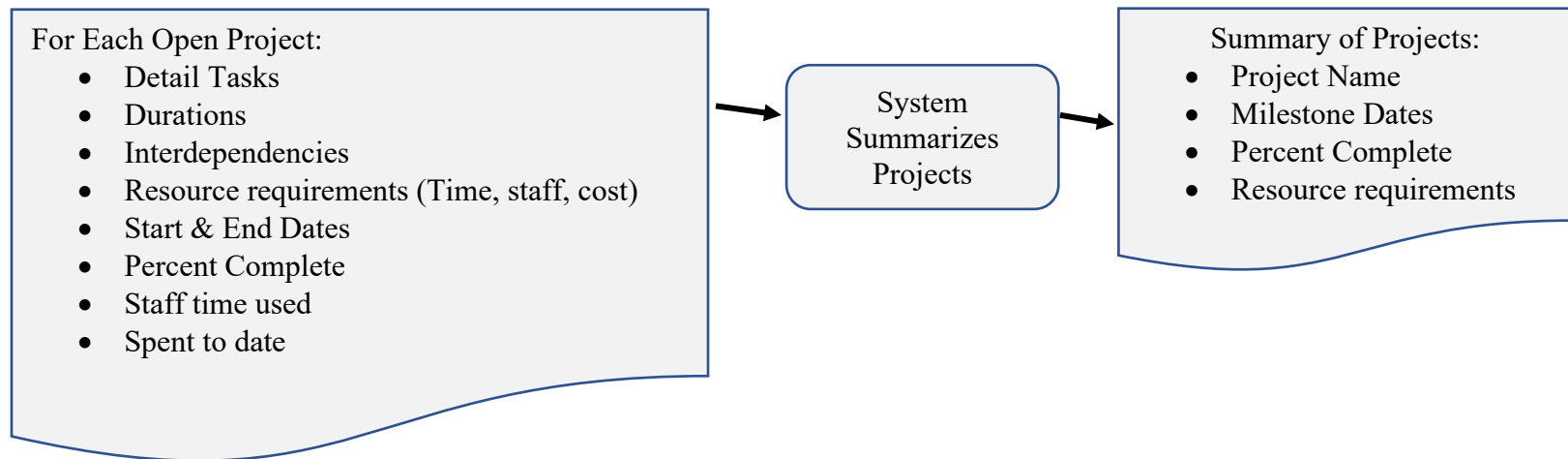
Best Practice Suggestions:

Monthly Executive Presentation to BOS and Published on IT Webpage:

Status of IT Initiatives								
as of: mm/dd/yyyy								
Project	Title	Status	Priority	Start	Complete	Budget	Cost to Date	Comment:
17	Aumentum Assessment and Tax Billing System		High	Oct-2020	Jan-2022	\$ 300,000	\$ 123,456	
12	Munis Gap Analysis and Utilization Improvement		High	Oct-2020	Mar-2024	\$ 600,000	\$ 254,123	
62	Electronic Mail (Groupwise)		High	Mar-2021	Jun-2021	TBD		Pending BoS approval
76	MCSO Infrastructure Upgrade (Servers, SAN, and Back-ups)		High	Jul-2020	Mar-2021	\$ 237,000	\$ 198,765	
3	Project Planning and Implementation Best Practices		High	Sep-2020	Dec-2020	\$ -	\$ -	HR recruiting Proj Mgr
List 2 - 3 projects to be initiated in the next quarter:								
9	Training Rooms	Pending	High	Oct-2020	Oct-2020	\$ 25,000	\$ -	
28	Electronic/Digital Signatures	Pending		Oct-2020	Oct-2020	\$ 50,000	\$ -	

The above is summarized from a top-level view of all projects in progress per below:

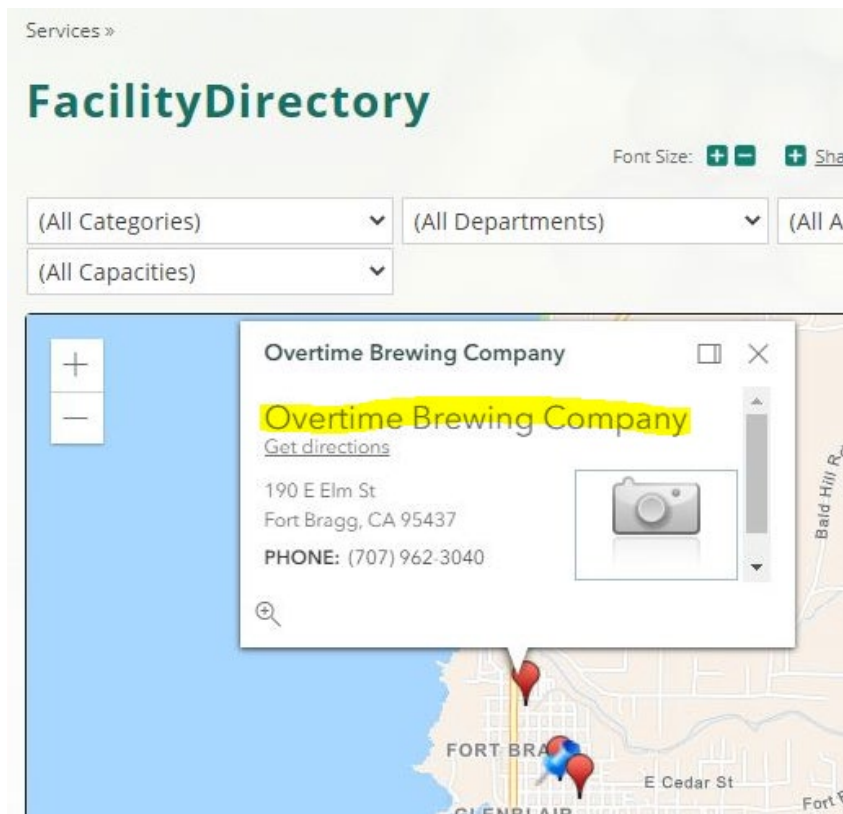
Integrated Project Planning Approach:



APPENDIX C

MENDOCINO COUNTY'S WEBSITE PUBLIC DISSERVICE

When searching for **County Facilities** in its website, it is interesting to note this inclusion in the County's Facility Directory:



or when searching for Form 700 Filings to see a list of individuals departed months or years from the County:

The Mendocino County Clerk-Recorder accepts and files the Statement of Economic Interest (Form 700) for:

- County Supervisor District 1 • Name redacted; HAS BEEN REPLACED
- County Supervisor District 2 • Name redacted; HAS BEEN REPLACED
- County Supervisor District 3 • Name redacted; HAS BEEN REPLACED
- County Supervisor District 4 • Name redacted; currently in position
- County Supervisor District 5 • Name redacted; HAS BEEN REPLACED
- Planning Commissioner • Name redacted; HAS BEEN REPLACED
- Planning Commissioner • Name redacted; HAS BEEN REPLACED
- Planning Commissioner • Name redacted; currently in position
- Planning Commissioner • Name redacted; HAS BEEN REPLACED
- Planning Commissioner • Name redacted; currently in position
- Planning Commissioner • Name redacted; currently in position
- Planning Commissioner • Name redacted; HAS BEEN REPLACED
- District Attorney • Name redacted; currently in position
- Treasurer-Tax Collector • Name redacted; currently in position
- County Counsel • Name redacted; HAS BEEN REPLACED
- Chief Executive Officer • Name redacted; currently in position

The Grand Jury reviewed the County's website and listed the Forms available. The IS Department was requested to rate each form as: A=Acceptable, NI=Needs Improvement, IP=In-progress of being improved, PI=Planned for Improvement. *The examples are forms that have to be printed and emailed in.* Results are presented on the following page:

Summary: A 3 IP 14 PI 2 NI 9 Total: 28

<u>Department:</u>	<u>Suggested Areas of Improvement?</u> (examples noted)	<u>Rating:</u>
Agriculture	Pesticide reporting forms (various)	NI
Animal Care Services	Pet license application / renewal	A
Assessor, County Clerk, Recorder	1. Change of ownership statement 2. Vote by Mail application	A/IP
Auditor/Controller	1. Change of address form for property 2. County budget – public visibility 3. Financial dashboards	1,2:None apply. 3: open gov (CEO)

County Counsel	Notice of Claim form	NI
Cultural Services	Library offers several on-line forms Parks uses email for group reservations	PI
District Attorney	(probably no improvement)	(discovery)
GIS Information	1. Assessor Parcel Map (almost impossible to locate) 2. Parcel Look-up (3 rd party – OK)	IP
Health & Human Services	3. Monitoring Well Application 4. Non-std Septic Monitoring form 5. Water Well Application, etc....	NI
Human Resources	Various employee forms	Internal
Planning & Building Services	1. Costal Permit Applications 2. Building Permit Applications / Inspection Requests 3. TrackIt Land Use 4. Cannabis Applications and Reporting	IP
Probation	Public records request (contracted with Lexipol?)	?
Public Defender	County Inmate Locator fails as HTTP 404	fixed
Sheriff / Coroner	Website RFP? 1. Complaint Form 2. CCW Applications	NI
Transportation	1. Encroachment Permit Application 2. Transportation Permit Application 3. Road Problem Report Form	IP?
Treasurer/Tax Collector	1. Penalty Cancellation Request form 2. Tax Payments (various are on-line) 3. Cannabis Tax forms	IP

APPENDIX D

EFFECTIVE PUBLIC COMMUNICATION AND TRANSPARENCY: OPENGOV

OpenGov provides transparent and easy to understand reports to the public and County elected officials and executives. They feature the ability to drill down to additional levels of detail. **Examples below for illustration:**

Annual Report

Updated On 5 Mar, 2021

← Back ↻ History ↺ Reset

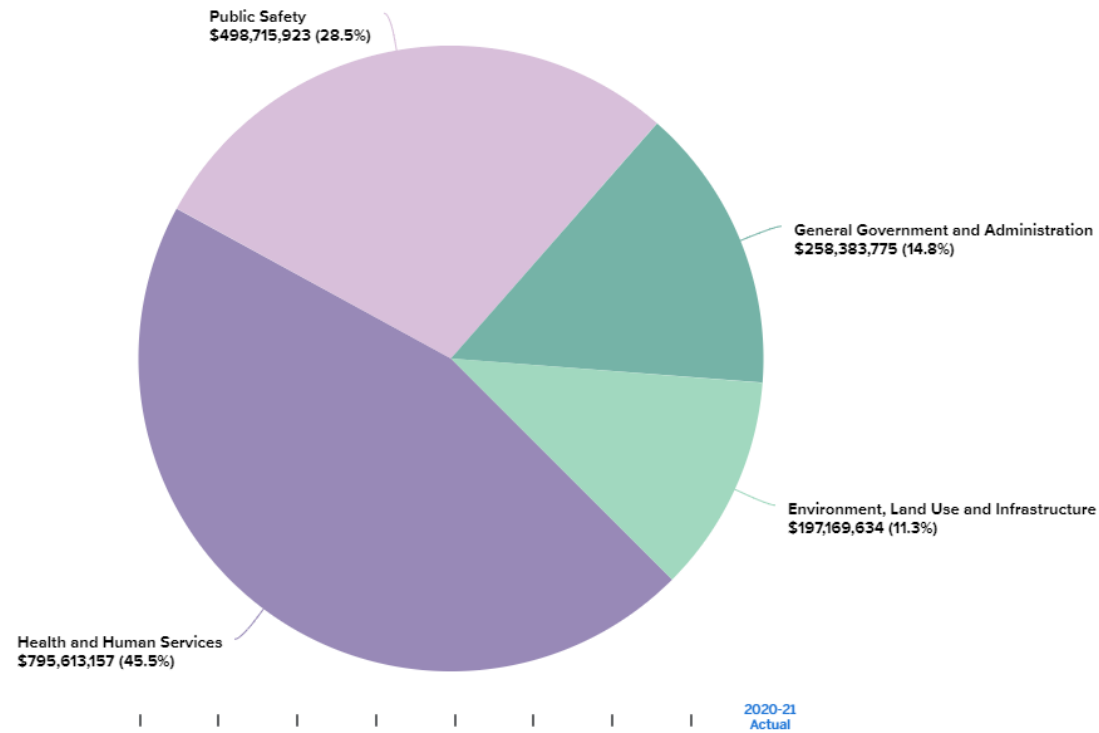
Broken down by

Service Areas

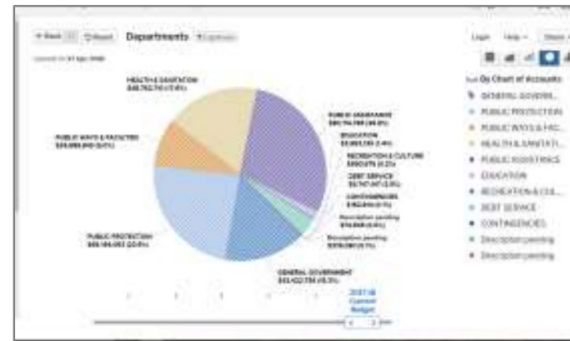
▼ County Funds

▼ Expenses

Visualization



Expense ID	2019-20 Actual	2019-21 Actual	2019-21 Actual	2019-21 Actual	2019-21 Actual	2019-21 Actual	2019-21 Actual
GENERAL GOVERNMENT	\$ 32,738,126	\$ 23,062,122	\$ 30,701,739	\$ 30,850,476	\$ 38,761,009	\$ 30,390,806	\$ 31,167,199
PUBLIC PROTECTION	40,415,363	48,393,039	40,807,394	45,443,223	47,752,067	40,896,836	53,186,031
PUBLIC WORKS & FACILITIES	15,909,940	22,467,788	13,876,968	14,830,833	13,366,713	14,574,740	35,107,364
HEALTH & SANITATION	35,296,278	36,411,288	31,732,333	39,880,832	38,973,086	33,586,303	33,363,083
PUBLIC ASSISTANCE	18,775,440	57,042,484	56,305,182	52,904,308	54,388,188	58,471,821	67,741,067
EDUCATION	1,848,838	1,733,988	1,738,518	1,901,293	2,221,809	2,613,313	2,345,454
RECREATION & CULTURE	367,388	342,046	311,518	321,362	286,671	431,284	542,871
DEPT SERVICE	12,805,384	13,604,011	10,812,913	11,211,370	10,123,883	9,802,388	8,194,586
CONTINGENCIES	0	0	0	0	0	0	0
Discretionary pending	0	0	0	0	0	0	0



Current Year Report

Updated On 5 Mar, 2021

← Back History Reset

Broken down by

Service Areas County Funds Expenses

Visualization

