# NAPA COUNTY GRAND JURY
## 2022-2023

## June 21, 2023

## FINAL REPORT

# INFORMATION TECHNOLOGY
# SERVICES IN NAPA COUNTY

# Summary

The use of technology by County departments and residents has increased significantly over the past several years. Robust Information Technology (IT) is imperative to the reliable and efficient function of County government operations and the delivery of services to the public. People have a growing expectation for increased availability and access to systems and services because of rapid advances in technology and a shift to more online services.

Access to these services 24/7 has become a baseline expectation for both the employees of the County and the general public. Live video streaming Board of Supervisors (BOS) meetings, online minutes and agendas, property and geographical information, public records, County budgets, online forms and filings processes are all examples of online services expected today.

Effective implementation of IT is key to enhancing efficiency, reducing costs, and turning data into useful information, which in turn provides better customer experiences for both County employees and citizens. Integrated, strategic and resilient County IT plans are critical to meet these needs. The 2022-2023 Napa County Grand Jury (Jury) investigated the County's IT structure including the interactive processes between departments and the management of these systems. Areas such as departmental planning, budgeting, structure, and support are key interests. The Jury finds a need for a more strategic and cross-departmental strategy for IT and makes recommendations for how to achieve these goals.

# Background

IT is an essential part of the delivery of services by Napa County and involves the use of hardware, software, services, and supporting infrastructure to manage and deliver information using voice, data, and video. This technology enhances the productivity of employees, supports the daily functions of departments, and stores critical information in both digital and analog forms. The IT department provides work processes in a multitude of ways that allows the County to interact with and serve its residents.


IT has two components – infrastructure and applications. Infrastructure is the system of computers, servers, proprietary networks, WiFi, radio communications, internet and security. This system allows applications to perform tasks and move, store, and share data where needed. Applications are software and sometimes require specific hardware that is used to perform these work functions. Applications range from a simple word processing program for drafting documents to more complicated programs such as the criminal justice information systems that connect law enforcement, court, and detention systems. Some applications are purchased as "packages" from vendors who specialize in government processes.

Federal or state agencies provide some applications where integration is important between government agencies. Other applications are developed by the County itself for specific needs or purposes. California law (SB-272) requires the County to provide a list of the "Enterprise Systems" that are used across multiple departments or contain information collected about the public. The Napa County list contains 47 different applications that are used and supported.

Napa County Information Technology Services (ITS) supports all areas of County business and services. ITS is responsible for the development, maintenance, and security of the County IT infrastructure such as networks, desktop computers, servers, and radio systems. County departments define their own IT needs within their yearly budgets. ITS and County departments work together in the selection and implementation of needed applications. Most County departments have their own IT staff and request assistance from ITS when needed.

Most of ITS's $18 million of funding is received from individual County departments for the provision of their IT services. This accounting process is a "bill back" model where the County department is charged for the use of common infrastructure and devices like laptops, radios, phones, and desktop computers. About 10% of the overall budget is for internal ITS department projects mainly for support of the infrastructure within the County.

Given the importance and rapid development of Information Technology, the Grand Jury decided to investigate the overall operations and strategy of the County Information Technology Services.

## Glossary/Acronyms

- CJNET: Criminal Justice Information Management System
- DB: Data Base
- HHS:  Health and Human Services
- ITS: Information Technology Services
- IT: Information Technology
- PBES: Planning Building and Environmental Services


## Methodology

### Napa County Department Interviews

- Assessor's Office
- Child Support Services
- Elections
- Health & Human Services
- Information Technology Services
- Auditor-Controller Office
- Library Staff
- Planning Building and Environmental Services Department
- Probation Department
- Sheriff's Department

### Documents Reviewed

- Alameda County IT Report
- Contra Costa County IT Report
- Los Angeles County IT Report
- Mendocino County IT Report

- Napa SB 272 PDF list
- Santa Cruz County IT Systems

## Websites Reviewed

- Alameda County IT Department
- Center for Digital Government's 2022 Digital Counties Survey
- El Dorado County IT Department
- Nevada County IT Department
- Napa County Information Technology Services
- Napa County Health and Human Services
- Napa County Library
- San Luis Obispo County IT Department
- Santa Cruz County IT Department
- Yolo County IT Department

# Discussion

## *Infrastructure Support and Development*

ITS manages most networks and systems such as phones, servers and storage systems for the County. The Jury found one exception in the library system, where the Library Director established a separate network that is five times faster than what the County provided because patron's needs were not being met by the existing network speed/bandwidth. This additional library system resulted in funding and managing two networks rather than one for the County.

The Jury learned that County departments experience issues with moving large files, file size restrictions with email, and video conference failures. These limitations are the result of insufficient network speed and bandwidth. The Jury experienced this issue during multiple Zoom calls with County personnel where their network connection dropped many times. Staff members were forced to turn off video feeds or call us back on their cell phone in order to continue the conference. County network capacity needs and improvements take time to assess, plan and implement. Forward planning and budgeting is required to provide for future network needs.

## *Application Support and Development*

The Center for Digital Government's surveys[1] establish benchmarks and provide public-sector leaders with meaningful recognition for improving digital government. Counties are required to inventory their applications by California law. Of the 47 identified applications for Napa County, seven were developed and are maintained by the County. Six applications were developed and are maintained by the State of California. Packaged applications are developed and maintained by independent software vendors and are sold to multiple counties. Napa County uses 28 separate packaged application vendors. These vendors can be small companies with a single application or larger companies that provide multiple applications supporting a variety of functions within the County.

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[1] The Center for Digital Government and National Association of Counties' Digital Counties

The Jury learned that State and Federal authorities frequently change the requirements for local governments thereby requiring updates to County applications. In the case of County developed applications updates must be done by the ITS department. For vendor supplied applications, the updates, upgrades and maintenance of the application are done by the vendor.

The Criminal Justice information systems (CJNet) is an application that has been under development by Napa County ITS for over seven years. CJNet has been partially deployed over this time to some departments while other departments struggle with their old systems. This application ties together information of public records for court cases, warrants, and probation and involves many different services. Some county staff with experience of similar off the shelf software noted the implementation of the application took only two years to deploy. Additionally, the vendor updated the application every year as part of their service contract. The County has made substantial progress in the digitization of paper documents, however the Jury found at least three different and incompatible solutions being used. The departments have led individual efforts to convert to digital records and records management systems, which led to the selection of different solutions. This use of multiple solutions has resulted in redundant procurements and the need for County employees to learn and maintain different solutions that do the same function.

As an example, the County uses multiple mapping systems. Mapping systems are the geographic description of data. Mapping systems are used extensively by the County Assessor and Planning, Building and Environmental Services (PBES). PBES uses a digital Geographic Information Systems (GIS) for all their mapping processes. The County Assessor's office uses an analog film-based media for maps. Mapping is also valuable to the Fire Department, Elections, HHS, water management, law enforcement, and other County departments which would benefit from a common mapping system. Disparate and incompatible systems cause extra effort when data needs to be shared between departments. Santa Cruz is an example of a county that locates its GIS staff within ITS and provides a centralized service to all departments.

## Inter-Departmental Interactions

The Jury learned of several instances where sharing data between departments would lead to increased value for the County. Faster client response, increased employee efficiency, rapid analysis of data for effective outcomes, easier reporting, and faster development of grant applications are some examples of benefits for employees and residents. Different County services often touch the same individual in separate interactions. A holistic view of all services provided to a client would benefit all parties. Some service requests require County employees to access information from multiple applications. For example, HHS and Criminal Justice (Courts, Probation, Sheriff) currently operate separate systems; sharing data between these entities could improve client service.

## Budgeting

Currently each department submits an annual IT budget within their overall annual budgetary process. ITS then develops a budget that incorporates the individual department requests as well as a budget for their own projects. Ninety percent (90%) of ITS funding comes from individual department budgets.

IT support and maintenance are delivered continuously and their costs are budgeted on an annual basis. Infrastructure projects and application development are multi-year endeavors and require a long term commitment of funds and resources. The Jury learned of instances where department leaders improvised to finance longer term application development projects with unused funds from other projects when needed. In addition, the current budgeting process does not lend itself to infrastructure and application development projects that support multiple departments. Multi-year planning and budgeting guided by a County-wide IT strategic plan would address these shortcomings.

# Findings

**The Jury found that:**

F1. Napa County has insufficient network bandwidth for the increasing use of video conferencing, document imaging, and large file management.

F2. In at least one instance a County developed application took longer to implement and was more difficult to maintain than a packaged application.

F3. Multiple departments would benefit from a common data management system as part of the County infrastructure.

F4. The County's focus on annual and department-level budgeting makes planning and adoption of longer term infrastructure and application development projects more difficult.

F5. There is not a comprehensive County-wide strategy on IT infrastructure or applications.

# Recommendations

**The Jury recommends that:**

R1. By June 1, 2024, the Napa County CEO articulate a vision for digital government that facilitates cross department collaboration, community engagement and enhances government productivity.

R2. Starting with the 2024-2025 budget cycle, the Napa County CEO adopt an annual IT Strategic Plan that includes multi-year objectives and investments in data integration, infrastructure, communication, and digitization.

R3. By June 1, 2024, the Napa County CEO should initiate a project to implement a common data management system in order to share information across departments and applications.

R4. By December 1, 2023, the Napa County CEO should consider a policy that new proprietary (County developed) applications be deployed by exception only.

R5. By December 1, 2023, the Napa County CEO should consider a policy that existing proprietary applications be replaced by packaged applications.

# Commendation

Napa County ITS is effective in implementing application systems and enhancements on behalf of separate departmental needs. This effectiveness includes project management and support.

# Required Responses

**The following responses are required pursuant to Penal Code sections 933 and 933.05**.

- Board of Supervisors: F1, F2, F3, F4, F5. R1, R2, R3, R4, R5.

# Invited Responses

- Chief Information Officer  F1, F2, F3, F4, F5. R1, R2, R3, R4, R5.
- Chief Operations Officer F1, F2, F3, F4, F5, R1, R2, R3, R4, R5.

Reports issued by the Grand Jury do not identify individuals interviewed. Penal Code section 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.