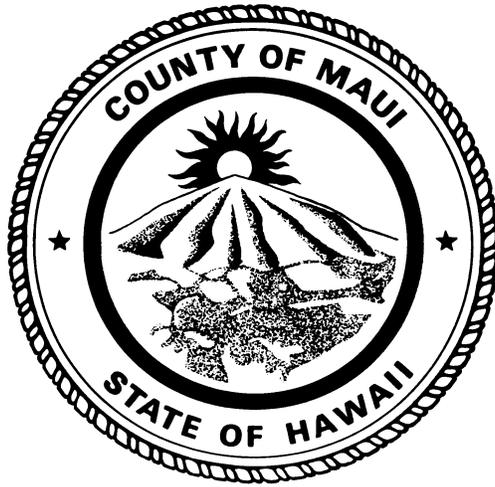


COUNTY OF MAUI



COST OF GOVERNMENT COMMISSION

REPORT ON STRENGTHENING THE COUNTY OF MAUI'S TECHNOLOGICAL INFRASTRUCTURE

May 2021

COST OF GOVERNMENT COMMISSION COUNTY OF MAUI

Report on Strengthening the County of Maui's Technological Infrastructure

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*The Commission shall have the power and duty to:
Study and investigate the organizations and methods of operations of all departments,
commissions, boards, offices, and other instrumentality of all branches of the county government
and determine what changes, if any, may be desirable to accomplish the policy set forth herein.¹*

COMMISSIONERS

Michael Williams, Chair
Noemi Barbadillo, Member
Paula Heiskell, Member
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Susan Pu, Member
Sarah Simmons, Member

¹ Charter, County of Maui, Section 3-9.3 (2019)

COST OF GOVERNMENT COMMISSION

Report on Strengthening the County of Maui's Technological Infrastructure

I. INTRODUCTION

In August 2019, the Cost of Government Commission decided to review the County of Maui's information technology practices. The initial goals of the investigation were to evaluate opportunities to upgrade the technology used to provide County services, and to explore ways to improve internal County processes. Just a few months later, the COVID-19 pandemic changed the technological landscape. With offices closed and the potential loss of public participation in government, the County was forced to pivot quickly to accommodate the technological needs of both its employees and constituents.

This report examines how the County is actively exploring areas where technology can assist with its response to the COVID-19 pandemic and whether that same technology can make County processes more efficient. The report examines some of these recent changes and challenges to upgrading the County's technological infrastructure and offers the following recommendations:

1. That the County establish a work from home policy that departments can implement on a case-by-case basis as appropriate for the work performed by its employees;
2. That the County continue to explore software applications to assist the County with its internal workflows as well as to enhance the services it provides to the public;
3. That a separate Department of Information Technology be created and that the Maui County Charter Commission evaluate the issue further;
4. That the Administration engage in detailed union negotiations to seek solutions to the compensation roadblock for Information Technology Division personnel;
5. That beginning in Fiscal Year 2023, the Mayor and County Council give serious consideration to increasing the Information Technology Division budget both to better compensate IT personnel and to fund the capital needs for technology modernization programs that will make all County operations more efficient.

II. BACKGROUND: INFORMATION TECHNOLOGY SERVICES DIVISION

The County of Maui's Information Technology Services Division ("IT Division") falls under the Department of Management. Jacob Verkerke served as the Chief Technology Officer (CTO) of the IT Division until his retirement in November 2020. The Division is now headed by Vince Hu. There are 53 employees in the IT Division, which is responsible for the following: (1) establishing hardware, software, and network standards; (2) monitoring the acquisition, development, and use of computer technology; (3) maintaining an effective end-user support program; and (4) continuing evaluation of information systems technology for potential County applications.

The work of the IT Division is distinct from the work done by other information technology analysts/technicians who are hired by other departments. According to Mr. Verkerke, this separation is a creature of past hiring decisions of previous administrations, and these employees are not supported by the IT Division. The Legislative Branch (including the County Council, Office of Council Services, Office of the County Auditor, and Office of the County Clerk) is supported by separate information technology employees. Due to privacy concerns, the Legislative Branch has kept itself somewhat separate from the IT Division.

III. WORK FROM HOME POLICIES

According to Deputy Managing Director Josiah Nishita, approximately one-third of the County's 2,400 employees worked remotely at the height of the COVID-19 pandemic. Though some have returned to their County offices, many employees continue to work from home if permitted by their Department. Telework could be a viable long-term option for certain departments, or certain groups of employees in certain departments, to increase County operational efficiencies.

The COVID-19 pandemic devastated the County's economy, but also provided an opportunity to receive Federal emergency funding to cover costs for teleworking. These funds were used to cover the costs of additional laptops, monitors, virtual private networks (VPNs), phones, and additional software licenses. According to former CTO Jacob Verkerke, when the County implemented teleworking in March 2020, the IT Division was able to accomplish the following: (1) created 325 VPNs for secure access within 14 days; (2) configured 170 new laptops and adjusted over 355 desktops; (3) deployed the BlueJeans software application to ensure that public access to ongoing government business continued uninterrupted; and (4) enabled over 400 county employees to telework. The current CTO, Vince Hu, estimates that there are an additional 80 laptops available to distribute upon request to County departments.

With increased telework, County processes will have to be more digitized so that employees can access information remotely. For example, the Workday program

allows payroll to be processed online instead of through paper forms submitted to administrative staff at each department. Although it would take time for departments to adapt to these workflow changes, increased digitization would allow technological innovations to inform County processes and reduce redundancies that are common with outdated systems.

The County and its employees might also enjoy cost savings if more employees worked remotely. For example, the County could save large sums on rent and utilities for office space and parking. Shared offices among departments could be created through staggered schedules, which also would reduce the amount of office space needed. Even with the proposed purchase of The Maui News building and moving departments to the newly constructed County of Maui Service Center, the County will need to continue renting space in the Wailuku area if reductions to office space needs are not made.

The Department of Management conducted a survey of 400 employees in July 2020. Of the 195 who responded, 72% stated that working remotely increased productivity during worktime due to fewer distractions. Employees also reported that they gained worktime due to less time spent commuting to work. Employees without assigned parking in Wailuku spent less time moving vehicles from one two-hour space to another. Fewer commute trips would also save on fuel and reduce tailpipe emissions.

Flexibility is the primary advantage of working from home for many employees. For example, the County of Maui does not have a paid family leave policy. In lieu of such a policy, teleworking provides working parents the flexibility to tend to family obligations while still being able to work full time.

There are several issues that need to be carefully considered before implementing a permanent work from home policy. First, managers may find it more difficult to manage and monitor employees to ensure that employees are working during public hours. To combat this, project management systems and key performance measures should be revamped and tracked carefully to ensure that work is being completed. A web-based application, such as Asana, can assist with organizing, managing, and tracking departments that do team-based projects. Monitoring employees on County computers can also be used to track productivity.

In addition, some County employees may require phone connections to complete work functions, and may need to be issued County cell phones, to avoid using personal phones for County business. There are technological solutions for this, such as Amazon Connect, which allows users to make phone calls using a computer. Corporation Counsel may need to review and revise County policies on the use of county laptops, personal phones, or other devices.

The Commission recommends that the County institute a work from home policy that departments can implement on a case-by-case basis as appropriate for the work performed by its employees.

IV. SOFTWARE APPLICATIONS

The County purchased several software applications that are now being fully utilized due to the pandemic.

A. BlueJeans

BlueJeans is the platform used for all County meetings, including County Council and board and commission meetings. It has allowed for greater public participation across the County. Residents who previously could not attend meetings in person are now able to call or login to a meeting from the location of their choice, testify if they so choose, and watch or listen at their convenience. Meetings are also recorded and can be made available on demand.

The BlueJeans platform can also increase board and commission participation by those who live in more remote parts of Maui or on Moloka'i or Lana'i. For example, the Cost of Government Commission's membership includes commissioners from Hāna, Lana'i, and Moloka'i. Without the added time and associated costs associated with travel to the County Building for monthly meetings, Commission attendance is consistent, and turnover has decreased.

BlueJeans has also increased participation in internal staff meetings from employees who work in remote areas because they are now able to call in and participate. According to comments provided by Josiah Nishita, County staff report that conducting meetings via BlueJeans has led to fewer back and forth in-person meetings and increased productivity.

B. Maka'ala Everbridge Mobile Application

The Everbridge software is used to push out emergency notifications. This is location-specific software, so messages only go to specific locations and not the entire County. For example, during recent flooding in the Ha'ikū area, cell phones within the range of the affected cell towers received the flooding warning directly on their phones. Instead of blanketing the entire island with warning messages, contributing to messaging fatigue, the County successfully adopted a more efficient messaging system. For now, the application is only used to provide emergency messages related to imminent threats to health and safety such as severe weather, flooding, gas leaks, and police activity. In the future, the application could be used to report nonemergency issues to specific departments, such as water main breaks or other damage to County property.

These two applications are just a small example of the change that technology can bring to processes that had not been changed in years. The momentum gained from the technological upgrades due to the COVID-19 pandemic should not be cast aside to return to "normal." Each County Department

should look to permanently adopting technological processes that were temporarily allowed during the pandemic. Changes as small as accepting electronically submitted documents, forms and signatures could have a drastic impact on future workloads.

The Commission recommends that the County continue to explore web applications to assist the County with its internal workflows as well as to enhance the services it provides to the public.

V. LONG-TERM STRUCTURAL CHANGE — CREATION OF A DEPARTMENT OF INFORMATION TECHNOLOGY

The County of Maui's IT Division is currently housed under the Department of Management. By comparison, the City & County of Honolulu and the County of Hawai'i both have Departments of Information Technology, while the IT Division for the County of Kaua'i is housed under its Department of Finance. Maui County's legislative branch, which includes the County Council, County Clerk, Office of Council Services, and County Auditor, uses its own IT support, which seems to be a product of history and an ingrained separation of responsibilities. It is unclear the extent to which the County Council's IT support staff works with the IT Division under the Department of Management. Other individual departments do have information technology analysts on its staff. For example, the Planning Department's Geographic Information System (GIS) Mapping technicians work with the IT Division as needed.

Based on discussions with former CTO Verkerke, the IT Division does not make suggestions for more efficient workflows. The IT Division is not in a position to guide departments toward more efficient workflows and technological processes, as those improvements are arguably guided by the departments themselves and the Administration's directive. However, once department processes are implemented, there is little incentive to improve efficiencies.

The department currently tasked with pushing technological reforms is the Department of Management. Projects currently underway and/or near completion include the MAPPS project—Maui's Automated Permitting and Planning System—which will assist several departments in modernizing its review of land use permits and processing, and the HR/Payroll upgrade to Workday, which will get all departments onboard to a modern platform to allow for more accurate recordkeeping. Further, an upgrade of the email system to MExchange is in process.

The Commission asserts that the County should prioritize the implementation of new technology and technological reforms and that the creation of a new Department of Information of Technology is a first step. According to Mr. Verkerke, the current practice is for County departments to provide a technologically-related request to the IT Division at varying stages of contractual implementation. If the IT Division were its own Department, it could have more extensive oversight and participation in a

Department's technological planning. For example, Mr. Verkerke suggested that he could have individual technicians assigned to specific departments, who could schedule quarterly reviews to discuss technology-related upgrades.

Creating a new Department will require additional funding. In addition, there will need to be careful consideration of the appointment process for a Department director to ensure that the process is depoliticized; continuity in leadership of a Department that manages the County's information systems is essential. Finally, as discussed in the next section, there is an IT staffing shortage due to bargaining unit restrictions that depress wages to a point where qualified applicants are difficult to attract.

The Commission recommends the creation of a separate Department of Information Technology and urges the Maui County Charter Commission to evaluate the issue further.

This department will be charged with assisting all County departments with the use of technology to achieve department goals and provide increased services to the public.

VI. INFORMATION TECHNOLOGY BUDGET

A. Recruitment

Both CTOs Verkerke and Hu highlighted the difficulty of recruiting qualified talent. There are 53 employees in the Information Technology Services Division. Mr. Hu explained that he recently attempted to fill a vacant position but had four different candidates turn down offers because of compensation issues.

Union bargaining constraints contribute, in part, to the County being unable to offer competitive wages. For example, an Information Analyst may earn approximately \$70,000 on the high end with the County of Maui, but similar jobs in other jurisdictions are paying upwards of \$100,000 per year. Coupled with the high cost of living on Maui, committing to the position does not pencil out for many candidates.

Furthermore, hiring outside contractors is discouraged as a standard practice, and there are union agreements that restrict this option. Finally, there are other constraints to overtime and/or standby pay. Mr. Verkerke reported that it is costly to have County employees handle infrastructure emergencies on a standby basis due to union agreements on overtime pay. This leaves the County exposed to higher wage costs and lengthy wait times to correct issues with the IT infrastructure.

Whether renegotiating salaries for information technology positions is a viable option is unknown at this time, and may require coordination from other parties involved. Perhaps bargaining unit exemptions could be explored to increase salaries and attract applicants. If salary caps can be increased, the annual budget also will need to be increased for those positions.

The Commission recommends that the Administration engage in detailed union negotiations to seek solutions to the compensation roadblock for Information Technology Division personnel.

B. Infrastructure Improvements Require Funding

Unfortunately, technology is expensive, and continued upgrades are required for security and functionality purposes. The current budget for FY2021 called for \$12.6 million dollars, which was a 14.9% increase over the previous year, and FY2022 calls for a reduction to \$11.3 million dollars. By comparison, the City and County of Honolulu budget for FY2021 was \$26.5 million. Due to the current uncertainty brought on by the COVID-19 pandemic, increasing the budget for IT infrastructure is an unlikely option at this time.

The Commission recommends that beginning in Fiscal Year 2023, the Mayor and County Council give serious consideration to increasing the Information Technology Division budget both for better compensation of IT personnel and to fund the capital needs for technology modernization programs that will make all County operations more efficient.

VI. Summary and Recommendations

Technological advances allow our communities to accomplish goals never thought possible. At the same time, change can be difficult, and the favorite retort of those who are reluctant to implement new processes — “this is how we’ve always done it” — will forever remain. Nonetheless, this Commission urges the County to consider making technological improvements a first step of the long-range planning for all departments.

Due to the COVID-19 pandemic, we have learned that work from home policies can be successfully implemented, and they should remain long after the threat of COVID-19 has passed. Additional software applications need to be explored to improve the County’s internal workflows and enhance the County’s efficient delivery of services. To organize this exploration into uncharted territory, a separate Department of Information Technology should be created so that it can better plan and implement the County’s technological infrastructure improvements. Finally, the County must increase funding levels to ensure it can meet the changing technological landscape.

The Cost of Government Commission therefore recommends the following:

1. That the County establish a work from home policy that departments can implement on a case-by-case basis as appropriate for the work performed by its employees;
2. That the County continue to explore software applications to assist the County with its internal workflows as well as to enhance the services it provides to the public;
3. That a separate Department of Information Technology be created and that the Maui County Charter Commission evaluate the issue further;
4. That the Administration engage in detailed union negotiations to seek solutions to the compensation roadblock for Information Technology Division personnel; and
5. That beginning in Fiscal Year 2023, the Mayor and County Council give serious consideration to increasing the Information Technology Division budget both to better compensate IT personnel and to fund the capital needs for technology modernization programs that will make all County operations more efficient.

The Commission urges the County to look beyond a “this is how we’ve always done it” mindset, and instead continually look for ways to improve and grow its technology infrastructure as the County’s needs evolve.

VII. ACKNOWLEDGMENTS

The Commission would like to thank the Victorino Administration, as well as the members of the Maui County Council, who have continued to support and consider the Commission’s work.

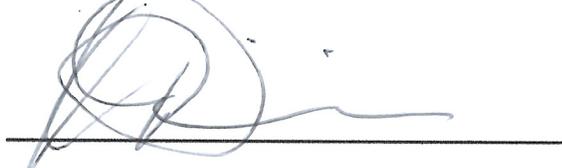
The Commission thanks Deputy Managing Director Josiah Nishita, current Chief Technology Officer Vince Hu, and former Chief Technology Officer Jacob Verkerke for their cooperation and insight.

The Commission also thanks Corporation Counsel Deputies Gary Murai and Keola Whittaker for their guidance, advice, and assistance in ensuring that the Commission is adhering to all legal matters correctly.

The Commission would like to thank Commissioner Sarah Simmons whose work was central to this report. She exemplifies public service and care for our County and community.

Finally, the Commission would like to thank the Office of the County Auditor and Shelley Pellegrino, Technical Writer for the Commission, for their professionalism and support.

Respectfully Submitted:



**MICHAEL WILLIAMS, CHAIR
2021 – 2022 COMMISSION TERM**

5/19/21

DATE