Information Technology Steering Committee (ITSC)

AGENDA

Thursday, August 23, 2018
10:00 a.m. to 11:30 a.m.
1151 Punchbowl Street, Room 410, Honolulu, Hawai`i

I. Call to Order

II. Review and Approval of July 27, 2018 Meeting Minutes

III. Public Testimony on Agenda Items
Any interested person may submit data or views, in writing or in person, to the committee on any agenda item. Testimony must be related to an item on the agenda, and such person shall be required to identify the agenda item to be addressed by the testimony. Each individual or representative of an organization is allotted three (3) minutes, or an amount of time otherwise designated in advance by the chairperson, to provide testimony to the ITSC.

IV. Enterprise Project Status Update: Department of Taxation's Tax System Modernization (TSM) (also see: https://my.sharpcloud.com/html/#/story/b04657dc-0318-4db8-a58f-b4ebd9e24dde/view/13be7f9f-bd3b-4303-9a08-5859503474ea)

V. State of Hawaii Information Technology Strategic Plan

A. ITSC discussion and action, as appropriate, on the July ITSC and Stakeholder Forums – Walk through ***Forum Key Takeaways*** document, answer questions.
- Also reference ***ITSC Stakeholder Forum 7.27.18 Notes*** document for transcription of all input.

B. ITSC discussion and action, as appropriate, on ***Draft Covenants, Vision, and Purpose*** document.

C. ITSC discussion and action, as appropriate, on ***State Standard of Excellence Criteria for Investing in What Works*** Appendix document (also see: https://2018state.results4america.org/2018_Invest_In_What_Works_State_Standard_of_Excellence.pdf)

D. ITSC initial thoughts and suggestions for IT Plan's 3-, 5-, and 10-year goals and the key capabilities that would need to be acquired or strengthened to achieve them.

V. Good of the Order
A. Announcements
B. Next Meeting: August 29, 2018, 10:00 a.m. to 12:00 p.m., 1151 Punchbowl Street, Room 410, Honolulu, Hawai`i

VI. Adjournment

Individuals who require special needs accommodation are invited to call ETS at (808) 586-6000 at least three (3) working days in advance of the meeting.

Information Technology Steering Committee (ITSC)

established for the State of Hawai`i per HRS §27-43(b)

Meeting Minutes

Friday, July 27, 2018, 1:30 p.m.

1151 Punchbowl Street, Room 322 B&C, Honolulu, Hawai`i

DRAFT

Members Present:
Todd Nacapuy, Chair, Office of Enterprise Technology Services (ETS), State of Hawai`i
Jared Kuroiwa, KHON2
Michael Nishida, First Hawaiian Bank
Christine Sakuda, Transform Hawai`i Government
Kevin Thornton, Judiciary, State of Hawai`i
Marcus Yano, SystemMetrics Corporation
Garret Yoshimi, University of Hawai`i

Members Absent:
Benjamin Ancheta, `Ekahi Health System
Aryn Nakaoka, Tri-net Solutions
Kelly Taguchi, Spectrum
Representative Kyle Yamashita, State Legislature

Other Attendees:
Valri Kunimoto, Deputy Attorney General, State of Hawai`i
Todd Omura, ETS
Michael Otsuji, ETS
Arnold Kishi, ETS
Mark Choi, ETS
Peter L. Fritz, Member of the Public
William Albritton, Leeward Community College
Myoung Oh, Spectrum
Michael Fors, Public Consulting Group
Leslie Mullens, Playbook Consulting Group, Facilitator

I. Call to Order

Chair Nacapuy called the meeting to order at 1:33 p.m. Quorum was established with seven members present.

II. Review and Approval of June 14, 2018 Meeting Minutes

The June 14, 2018 meeting minutes were unanimously approved without change.

III. Public Testimony on Agenda Items

No public testimony was given; however, Mr. Fritz requested a list be provided of the attendees at the morning stakeholder workshop.

IV. State Information Technology Strategic Plan – ITSC Stakeholder Feedback

DRAFT

Per HCR 94, ITSC is requested to submit a State Information Technology Strategic Plan ("the plan") to the Hawaii State Legislature twenty days prior to its 2019 regular session.

Update to ITSC on Stakeholder Workshop #1 (Update on Morning Workshop)

Chair Nacapuy briefed the ITSC on a workshop ETS held in the morning with representatives from selected State agencies, Legislators, and community organizations. The ITSC will run through the same exercise this afternoon to gather more ideas for forming the IT Strategic Plan. The general public was invited to participate in today's session, and further input will be sought in future sessions. Chair Nacapuy turned to Leslie Mullens, facilitator for the plan development, to run the exercise with the ITSC. Ms. Mullens described the exercise as the first step in the process for plan development, and the intent is to gather input from as many stakeholders as possible. Today's exercise involves asking questions that are meant to gather perspectives on what ITSC believes is needed to develop a robust strategic plan that will best serve the constituency. In future meetings, the ITSC will be asked to review draft plans and their updates. The ITSC gave input on the exercise questions, which are compiled with the morning workshop input and summarized in a stakeholder analysis.

V. Good of the Order

A. Announcements: None
B. Next Meeting: August 23, 2018, 10:00 a.m. at 1151 Punchbowl Street, Room 410, Honolulu, Hawai`i

VI. Adjournment

The meeting adjourned at 3:40 p.m.

ITSC STAKEHOLDER FORUM
KEY TAKEAWAYS

On July 27, 2018 PlayBook conducted two stakeholder forums with over 50 participants to gather input and diverse perspectives about the State's IT support function that's driven by ETS. This document provides an executive summary of a 23-page report of the complete transcribed responses from those forums.

Special note: A fair portion of feedback was tactical-level suggestions or recommendations that fall under "ETS Roadmap" – whether already existing in the online Roadmap, or a request to expand/augment that Roadmap. We have not included tactical Roadmap input in this summary because the primary purpose of the strategic planning document is to drive higher level strategy and planning.

TOP LEVEL TAKEAWAYS

- There's a clear need for stakeholders to understand **governance around data**. Data-related questions ranged from processes and policies (e.g. Who gets to see what data?) to how to better coordinate citizen data for problem-solving, planning, and service. See "DATA" below for the forum response highlights.

- There was a great deal of energy around some level of **centralization of IT services**. Stakeholders are looking to ETS for guidance, leadership, and/or ownership around issues like Project Management (requests for an enterprise-wide PMO), training, staffing, app development, procurement, standards/guidelines, security, budget, grants/funding, cross-agency collaboration, architecture/infrastructure, business process (re-)design, strategy, modernization, legislative education and advocacy.

- ETS has an opportunity to **improve communications** about their work. Stakeholders were interested in getting more explanation or detail around technology decisions, how to use the Roadmap, public access to information, ETS's overarching vision & strategy (and how each project links to that), project development and management, data use, needs prioritization, project funding, vendor ratings/satisfaction, consistent detail on staffing and contractor resources, and improved alignment of Roadmap projects with business strategies and legislative priorities.

- Stakeholders identified several **change management challenges** that need to be addressed for ETS to be more successful in delivering on their strategy. Key themes emerged around more effective explanations for "why", benefits of and urgency for change, probably impacts & timing along with mitigation plans, believable assurances that the proposed changes will "stick" across changing administrations, impact to culture and processes, incentivizing buy-in and change

adoption, generational sensitivity, and a need for change management training for IT leadership across the board.

- Other **big questions** were generated as a result of the forum. Most of them were around change management (reflected above). Others included cascading the new ETS strategic plan through all state departments for alignment, departmental and staff accountability/compliance to decisions and requirements in the plan, adequate IT staffing and budget for implementation and maintenance, legislative buy-in and support, metrics and ongoing evaluation/course correction, union partnerships, cross-department coordination/collaboration, marketing accomplishments & impact, governance, training, and cross-administration continuity.

- Stakeholders wanted more **guidance and standardization** in the following areas: Software & hardware purchases, procurement/bulk purchases for better rates, vendor rating system, longitudinal information, best practices in other states/agencies, security, failure learnings, education and training standards, searchable database of technical issues (open & resolved), naming conventions (interoperability), architecture, compatible cross-department data exchange, metrics, data governance, and other enterprise standards.

  When we asked the forum what would be needed to **encourage statewide buy-in** of the upcoming strategic plan, responses ranged from effective communication and change management to adequate funding and accountability (oversight "with teeth", "Carrots" and "sticks"). People suggested assigning effective change agents to provide structure and prioritization on gaining buy-in as relationship managers to the rest of the stakeholders. There was also a call for leadership – that the governor and all of the department heads being vocal, enthusiastic supporters of the plan. There may need to be additional legislation to enforce compliance, as well as built-in benefits for compliance that won't be available for those who don't adopt.

- ETS foresees blockchain technology, voice recognition, artificial intelligence as **emerging trends and technologies to watch**. Blockchain allows for data to be accessible to anyone on the internet. Meanwhile, artificial intelligence plays an integral part of voice recognition technology.

- Stakeholders highlighted **current or anticipated future IT challenges/threats** of competitive compensation and staff retention, system maintenance and upgrades, an assured funding cycle, a change-averse organizational culture, cybersecurity, disaster management planning, an adequate education pipeline developing our future IT workforce demand, loss of human knowledge/decision-making and creativity due to over-reliance on technology, loss of soft skills, a generational digital literacy gap, and embedded legacy.

- When asked about specific concerns and challenges around **data management and transparency**, stakeholders focused most on understanding the goals around transparency, data

quality and normalization, providing context for data to avoid misuse or misinterpretation, balance between transparency vs. privacy & trust, data owner cooperation, data protection and security, "right-sized" access, legal issues, standardization, and training.

DATA – comment highlights

- Data Definition = What's public, What's private? What can be shared? See Record Report System @oip.hawaii.gov
- Development of technologies to get data from existing sources
- Development of policies for departments to publish data
- Master Data Management at a statewide level (i.e., "a person" standardized fields, then data sharing and single source of record for the entity, and systems that need to use it. Standardization of data collection. minimizing duplication of data
- Need broad representation of who develops goals/objectives (stakeholders). Embracing partners outside government to help
- Data security and integrity
- Understand what "open data" really means to people. Be strategic about what data is shared. Easy to overshare.
- Change management necessary: Working with departments to feel comfortable sharing data
- Predictive information to determine outcomes (e.g. Students success, Health outcomes, Between departments)
- Need acknowledgement by Administration and Legislature that data goals and objectives are a priority

Consider the Governor's 3 Goals (Effective Government, Efficient Government, Open Government): and how the ETS Roadmap addresses them. What's missing from the current "ETS Priorities" List & Roadmap?

AM Stakeholder Forum Input

- IAM = Identify & Access Management

  Technical & Procedural

- Data Definition = What's public, What's private? (3*)
  - See Record Report System @oip.hawaii.gov
- What are the metrics for efficient, effective, open? (4*)
  - Accountability (2*)
  - Point of contact for site & projects
- Labor fulfillment strategy
- Roadmap touchpoints purchasing, contracting (2*)
  - Roadmap should articulate "technical debt"
- Development of policies for departments to publish data (4*)
- Development of technologies to get data from existing sources
- Consistent level of detail and content (fidelity)
- Establish single source of truth-dashboard
- Funding sources & spends – sustainability
  - Ongoing operating cost
  - Ongoing contracts
- New procurement system incl. contact management
- More detail on milestone dates – estimated/actual, time by milestone
- Iterating cyclical, responsive
- Where did the money go?
  - Date of last update on dashboard
  - Date of last review
- DMV: make process easy

- Transparency guidelines
  - Appropriate level of "need-to-know" (funding amount/funding sources should only be available to Legislature, Admin…)
- There is a need to have an enterprise architecture approach that links business strategies, to performance goals and organized by enterprise solutions so the listed IT projects on the IT Roadmap links back to performance goals of a business strategy.
- Attached is DOH enterprise architecture that links the DOH business processes via a business reference diagram, service performance objectives, to enterprise solutions that application solutions projects are categorized under.

ITSC Forum Input

- Missing departments: UH, DOE
- Lack of collaboration between projects
- How department projects integrate with each other
- Historical projects to avoid redundancy
- A "duplicate" finder
- Lack of data in "open data" expanded section (1*)
- Define EFFECTIVE, EFFICIENT, OPEN
  - What is meant by the above?
  - How will we know what the end state is?
- Master Data Management at a statewide level (i.e., "a person" standardized fields, then data sharing and single source of record for the entity, and systems that need to use it. (1*)
- Corporate culture is not shared throughout all departments

What areas of focus are important in the development of statewide data goals and objectives?

AM Stakeholder Forum Input

- Broad representation of who develops goals/objectives (stakeholders)
  - How does it affect the consumer?

- Data security and integrity
- How can we save money while modernizing?
- Data maintenance?
- What data can be shared? (2*)
- Making as much data as possible available to be transparent. (Being strategic about what data is shared. Easy to overshare.) (1*)
- Understand what "open data" really means to people.
- Change management. Working with departments to feel comfortable sharing data. (2*)
- Embracing partners outside government to help formulate and meet these goals.
- Standardization of data collection – internal and external to government. (1*)
- What role does/will historical data play?
- Interoperability of technology to facilitate data sharing/exchange – minimizing duplication of data and code. (2*)
- Determine "what" and "why" we are sharing commitment by all levels of the organization. (2*)
- Upkeep of data (1*)
- Training and education (digital literacy)
- How to incentivize change -> "why"
- How do we define data? (Gov't data, external data)
- Who is responsible for governance of data goals and objectives? And compliance (accountability).
- Applicability of goals
- Who are the likely users of open data?
  - What are their interests?
- State Vendor rating system (Yelp)
- Need to look at government transformation in three areas:
  1. Outside (citizen) looking inside (government)
  2. Inside (government) looking outside (citizen)
  3. Interdepartmental transaction.
- We focus a lot on #2 and #3 because that is under government control but need better focus on #1.
- What does the citizen want government to do to improve service?

ITSC Forum Input

- IT Risk Management Program to understand where to focus resource. You can't boil the ocean, look for things that add value and have multiplier effects, and solve problems.
- Make all data digital, available -> Determine PII
  - What data structure exists and what's being stored? Meta Data
  - What's not being stored?
- Data governance model included in RFP ->process/standards
- Predictive information to determine outcomes
  - Students success
  - Health outcomes
  - Between departments
- How to share data between State Departments
- Acknowledgement by Administration and Legislature that data goals and objectives are a priority.
- Data/knowledge sharing
- Identify and collect data that solves a specific problem.
- Gain efficiencies and costs
- Consolidation/reduce redundant efforts/data stores
- Standards necessary to support consolidation
- Consistent records-retention
  - Policies
  - Practices
- Paperless – scan/digitize
- Inclusivity – accessibility
  - Ref. MS inclusiveness
- DR – store, retain, recover
- Knowledge sharing
- Data sharing, leverage resources (cross system/org)
- Compliance

In what other ways can ETS support the Departments and constituents (and the work they're doing)?

AM Stakeholder Forum Input

- Statewide 24/7 SOC operations
- Educating Legislature and public on role of ETS and services provided.
- Share CISO's knowledge.
- Understanding each department's IT situation
- Centralized IT procurement specialists at ETS (SPO) (6*)
- Centralized app development
- Dedicated program managers for $10M> IT projects (1*)
- Expertise in change management in Hawaii
- ETS requirements for minimum staffing for dept. projects depending on scope/budget (2*)
- Increase training stateside (IT)
  - IT staff (1*)
  - End users in departments
  - Constituents?
- Establish a permanent training (physical, virtual, curriculum, trainers-on-demand) (2*)
- Standard app or template or training for project management, IT ticket support, GL, accounting (1*)
- Advertise/push out OneNote training for state boards – specifically how to combine audio recording with contemporaneous written notes.
- Training on how to customize SharePoint for your own department. (1*)
- Facilitate vendor-provided training opportunities across multiple agencies.
- Consultation on standardization within departments and statewide.
- Be aware of different generations.
- EPMO
- Core services
  - NTP
  - FTP
  - DNS
  - ESB/IPOAs, etc.

- Public records regulations (2*)
- UIPA guidance
- Centralize cost/budget requests
- Cyber security guidance
  - MDM
- Develop a statewide enterprise architecture by understanding the general needs of the citizens, what departments need to communication with the citizens and what interdepartmental interaction is required to improve efficiency. Just introducing and implementing sheared services tools is not enough.

ITSC Forum Input

- Standards
- Shared grants (externals)
- IT Procurement
  - Clarity, RFP support – short path with an open data focus, and benefits of complying with standards.
  - IT RFP standards, e.g., language, SLAs
- State-wide ITAM, EAM systems to understand and prevent 40 year old systems.
- Cross-agency project support teams – staff rotation?
  - Tech
  - OCM
  - PMO
- Architecture Enterprise standards
- Support central enterprise systems (ERP)
- Infrastructure/DR
  - Networks
  - Storage
  - Compute
- Negotiate at scale – SW, HW, services (1*)
- Ensure all citizens (in remote areas) have online access to gov't services (1*)
- State services
- Centralized IT resources:

  - Software, hardware, procurement, PMO for depts., business process re-/design, training IT professional development

- ETS should communicate the State's IT strategy. The "driving force" to get departments to adopt evolving technology = modernize.
- More oversight (IV & V) over technology programs and projects, and report status to ITSC, Gov't, Legislature

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What elements of the current roadmap(s) need more explanation or detail communicated out?

AM Stakeholder Forum Input

- Information on other technologies used in specific areas
- Better/clearer explanation for the public (3*)
  - How to use site
  - Projects
  - Someone to contact with questions
- Funding sources and requirements (2*)
- Break out new vs. old (change/time) (1*)
  - Funded or not?
- Roadmap to where? Big picture/end goal (2*)
- Clearer explanation of data use (including outside data)
- Better way to connect common projects (synergies between projects and departments) (2*)
- How does ETS decide/examine combining similar projects?
- If combining, is there co-op agreement as required by statute?
- Uniformity of project details – acceptable examples and best practices in Hawaii and other states. (1*)
- How projects are prioritized/criteria (1*)
- Project deliverables, esp. shared with other departments, public.
- Add more project management tracking.
- Could roadmap list who contractor/vendor is and metrics/deliverables? As related to IT

efficiencies/trends.

- Updates page/tab
- Special v. General Fund
- Consistency in presentation of data
- Integration to the budget data from BNF
- Vendor charges (1*)
- Currently the IT roadmap list projects timelines and cost basically showing only the expense side of IT. Need to type projects to enterprise solutions that are addressing business strategies and there performance objectives. This will result in the IT Roadmap as showing the strategic direction of the state using technology to get there.

ITSC Forum Input

- More details/consistent details, map to staff, department, ETS and contractor resources
- Require population of all critical fields
- They all appear to be independently created and maintained without an overarching or cohesive underlying strategy or plan.
- Accountability to the roadmaps, timetables, budgets (1*)
- ITSC does not have visibilities to overall project statuses tied to the roadmaps
- Dates of creation
- One stop shop for information
- Relationship between departments and with ETS (role)
- How are priorities assigned by Administration/Legislature?
- Where do legislative priorities fit in? Or are displayed?

What change management challenges for the State do you foresee?

AM Stakeholder Forum Input

- Buy-in, consistent understanding, agile change, communication (3*)

- Skills/educating on using the tech (2*)
- Continuity of current projects if there's change in administration (3*)
- Communicate to all stakeholders AND external people (consumers) (2*)
  - Workplace culture
  - Understanding "why"
  - Scalability of change
  - Fear of failing (or succeeding)
  - Perception that project will go away w/next administration
  - Taxpayer disputes for spending
- Bringing up the baseline before the change (or in order to change) (1*)
- Security ->understanding PII and data security concerns (1*)
- Availability of resources and time to effectuate change (1*)
- Standardization of change management
- Recognition/prioritization of change management and integration into project plan (1*)
- Change management training for leadership
- Identifying change agents within each department
- Make unions a force for change management. How? (3*!)
  - Positioning union as change management trainers
  - Increasing communication with unions
  - Including unions in planning
- Current over-reliance on outside consultants to do change management (no street cred.)
- Staff/support for departments who depend on contractors/vendors
- Changes to public web assets should/should not be subject to public comment period?
- Reconciling legacy assets/process with "modern" methodologies
- Standardization of business processes and procedures
- A modern/up-to-date Uniform Chart of Accounts
- Recognition of prior admin successes rather than failures to show support of workers invested in those projects
- Attract new talent

ITSC Forum Input

- Changes in administration do not allow for continuity of many change initiatives.
- Understanding changes/planned changes in order to leverage knowledge and skill sets that may exist in other department, and share.
- Break down the barriers to sharing data and knowledge between departments. Open communication.
- Unions ->manage in fear
- State job as a launching point for career
- Legacy culture/cost hurdle to change things, systems costs to modernization
  - $$
  - Staff
- How do you reward change ($/budget cut)
- Aging workforce – 30%. Generation gaps of workers.

What other big questions need to be addressed in the new strategic plan?

AM Stakeholder Forum Input

- What happens to modernized technologies already in place? How does new strategic plan affect current initiatives? (1*)
- What are the benefits to each agency?
- Do agencies have a choice to opt-out or opt-in?
- What is the current strategic plan? (Is there one?)
- How do strategic plans get communicated?
- How do you make people pay attention to the plan?
- How does this get integrated into other non-IT strategic plans?
- How do we get buy-in at all levels, including public?
- What does this mean in simple terms? How do we simplify plan for regular people?
- What is the accountability for buy-in/compliance/communications, etc., for the plan?

- Maintenance:
  - Who is responsible for it?
  - What is the consistent State expectation?
  - Who pays?
- IT personnel retention (1*)
- Removal/retraining of substandard staff
- Training
- Benefits
- How do we streamline hiring practices?
- How does the legislature and public use the roadmap?
- Training for staff/legislative staff
- How do we get non-Gov't/detached agency to get involved?
- How do we create longevity/priorities with administration turnover? (CIO not an appointed position.)
- Can it be expanded to all State Departments?
- How do we convince legislature what IT projects are important? (1*)
- Funding (3*)
- Who does the strategic plan apply to?
- How do we address varying "lines of business" specific to each respective department/connecting similar lines of business?
- What is the plan to operationalize the strategy?
- Continuity of plan(s)
- Re-evaluation of existing plans and resources
- How do we measure success?
- (Re)measuring existing metrics and plans
- Continued evaluation
- Is information technology an expense to the state or an important strategic partner in achieving the state strategic objectives? Right now there is so much focus on how much technology is costing the state that there is no mechanism to highlight real contribution of IT to the efficiency and effectiveness of government.

ITSC Forum Input

- Need to develop better partnership with union.
- Better coordination and guidance between all State Departments for business continuity program and disaster recovery exercises.
- How do we measure (the metrics) to evaluate the State's efficiency and effectiveness, and communicate to the public (transparency)?
- Hold all departments accountable to the State Strategic Plan (Non-IT/Business and IT).
- Education and training
- How to market accomplishments
- How to go through Administration changes?
- Accountability – who/what is accountable for staff?
- Impact of existing culture – change (of IT existing structure) – people legacy org of CM (1*)
- Governance
- Integration of other branches of government
- Longevity, relevance and public support, engagement.
- Commitment to execute the plan, i.e., $$ to do what it takes.

In what areas would guidance or standardization help your IT Team?

AM Stakeholder Forum Input

- Standardization will help with software and hardware purchases. (2*)
- Build a wider base technical expertise. (3*)
- Economics of scale (procurement, staff, learning…) (3*)
  - Allow other agencies to jump in on bulk purchases (communicate beforehand to see who would be interested).
- IT procurement under SPO (2*)
- Electronic procurement database/system

- Rating system for vendors
- Give "general" direction – many paths to top of mountain
- Set baseline (minimum guidelines) (1*)
- Track information longitudinally (1*)
- Share procedures/policies with each other/share successes and failures (2*)
- Best practices – prescribe opportunities to share info, guidance.
- Standard: have a statewide SOC Operations Unit (security standardization). (1*)
- Learn what OTHER States/Gov't agencies are doing – learn how it helps us.
- Training on new tech (1*)
- Standard function for any business-related process should have software selected and each department can buy-in to accomplish that function, and have support for that software beyond Office 365, Adobe, e.g., Oracle, Tableau. (1*)
- Standardization of education and training ->building skillsets. (1*)
- Standardization of use and dissemination of data using cloud (not just gov't data).
- Communication channel between in-state IT teams – not just through leadership.
- Searchable list/database of technical issues other teams have seen/resolved (1*)
  - Like a weird error some users got
  - Or a networking bug
  - Not just whatever ETS has internally
  - Message board?
    - Post the issue and ask for suggestions
- Centralized subject matter expert – SWAT team
- Interoperability
  - Naming conventions
  - API's
  - Web services
- Reference architecture for new application paradigm (e.g., cloud)
- UIPA process, including legal, IT, business owner of data

ITSC Forum Input

- Yes to all
- Guidance
- Compatible data exchange between divisions/departments (1*)
- Procurement process (1*)
  - Backed up with authority of ETS to enforce (2*)
  - Needs to be across all state Gov't, including outside of Administration, judiciary, DOE, UH, Legislature
- Standardization of metrics state-wide.
- Measures of success, problems, milestones, results, outcomes, will enable effective reporting and tracking -> better accountability.
  - Should be backed by data and not subjective measures.
- Data governance
- What's the stick?
- Focus – concentrate on task at hand
  - Coordinate roles and responsibilities (dept and ETS)
- Results driven (don't overthink stuff)
  - Don't be afraid to fail
- Commit to Enterprise standards (list to Todd)
- Cyber security – broad collaboration across agencies
- Infrastructure as commodity, e.g., GPC
- Desktop virtualization, VDI

What other mechanisms are needed to encourage (enforce?) statewide buy-in of the strategic plan? (i.e., reorganization, personnel, policy, directives, legislation)

AM Stakeholder Forum Input

- Educating! Communicating WHY (customized communication for different areas; different formats –

video, written, webinar).

- Need EFFECTIVE change agents (hiring right people)
- Willingness to be transparent (reassurance that what's shown isn't a judgment on the organization but a starting point for changes).
- Fund what's on strategic plan
- High level directives without being coerced
- Workshops/timely updates for other users (i.e., legislature/public/other orgs)
- Clear and effective communication
- Consequences for non-buy-in
- Accountability
- Constant follow-up, keep relevant, prioritizing plan
- Connections to other plans (not just IT-related plans)
- Dedicated resources to enforce/encourage statewide buy-in for plan
- Milestones
- Leadership – hear Gov't and Dept. heads talking about it, same message
- Incentives for people on the ground, ask questions about it (apply Design Thinking).
- Increase licenses across Departments
- Leverage other supportive community partners to ensure more resources for strategic plan (i.e., Transform HI Gov't).
- CIO taking reluctant participants to lunch
- More teeth to open data legislation, policies
- ETS needs a "sales" organization, business relationship managers
- Maintain high level support
- A business approach to strategic planning is key to buy-in. Those that have the power of funding and legislation have a very basic question (what's in it for me and my constituents?) Once they see how technology is linked to doing business in the state and see how it will meet their basic questions, buy-in will be automatic.

ITSC Forum Input

- Make it a law, no oversight governing body to the State, an independent group outside of government. ITSC oversight of entire State.
- Hybrid IT Department
- Additional legislation
- Invite participants/be involved
- Consultants vs. State employees
- Public information/Ads
- Institutionalize the strategic plan – legislature and administration
- Kick ass communication plan and storytelling
  - Where, why, what's in it for me?... for all audiences
- Lessons learned from other states and countries
- Supporting legislation
- "A stick," sledgehammer, sword, scalpel (cut out the fat), and "carrot" (1*)"
- Benefits to comply with standards
- Waste – "use it or lose it" -> need a means to support sensible funding and efficiency
- G-fund surplus to ETS reserve account/some value pool to support shared priority
- Life collective confidence/shared benefits
  - Cabinet and executive buy-in commitment to support ETS
- Standardization -> helps provide benefits to field

What emerging technologies and trends do we need to watch and address?

AM Stakeholder Forum Input

- MFA (multi factor authentication)
- IOT
- Internet updates

- 5G
- Lack of sustainable grid in future
- Power walls (highly efficient batteries)
- Bandwidth hogs (emerging tech that eats up internet, i.e., Netflix)
- Real-time collaboration environments
- Millennial mindset (1*)
- Keeping up with compliance (State, National and International)
- All data shared for procurement
- Cloud (2*)
- Blockchain (3*)
  - Shared source applications
- AI and algorithms/decision-makers while protecting privacy (2*)
- Greater availability of wireless for all
- Smart buildings/smart infrastructure (1*)
  - Public expects instant access/convenience
  - Public more cynical of gov't
- Telecommuting and mobility
  - Provide security in a mobile environment – personal/business devices (1*)
- Bodycams for law enforcement (video surveillance) (DLNR, airport security, sheriffs)
- Biometrics while protecting privacy
- Drones, secured areas
- Cyber security
- Efficiency – data analytics for business efficiency
- Robotics
- Digital currency
- Compliance GDPR
- For DOH it is big data analytical tools for our environmental monitoring and prevention objective. For the Hawaii state hospital IoT and AI to support security of campus and patient protection.

ITSC Forum Input

- Have a chatbot to help navigate websites/interact with public, and service to process requests automatically
- Use emerging technology to bridge IT generation gaps. Accessibility.
- Trend: state data availability -> private business to provide gov't services. Social policy – where do you charge citizens for date?
- Trusting AI to grab and interpret data correctly.
- IoT – Gov't should adopt to provide efficiency and effectiveness
  - Need a good strategy and approach for "efficiency and effectiveness"
- State needs to evaluate carefully if blockchain is going to be useful for State business. Don't just fall for hype.
- Mobile. Convenience – BYOD. The citizen expectation for (already behind) faster service. Now, Now, Now!! Workers to manage a mobile workforce, and being productive or safe.
- Keeping up with IT security (hackers vs. cyber defense), ID theft, fraud.
- 5G => Change interaction with citizens
- Russians and Chinese and North Koreans
- Broad threats – insider threats
- Outsourcing vs. insourcing
- When to adopt new/emerging technology
  - Impact
  - Threats
  - Legal support

What current or anticipated future IT challenges/threats need to be addressed in the new strategic plan?

AM Stakeholder Forum Input

- Comparable pay to private sector
- Consistent upgrading (1*)

- Keeping systems current with technologies (1*)
  - Update systems
- Knowledge transfer from retirees/business continuity
- Ensuring a funding cycle to keep info systems current with technologies
- Organizational culture
- Resist change
- Standardization
- Accountability
- Will priorities change/shift with future administrations? (4*)
- Cyber security (1*)
- Electromagnetic pulse (EMP) or other disaster-related threats. (Disaster recovery scenarios that threaten livelihood.)
- Keeping IT talent in State (2*)
- Building/expanding IT education to maintain pipeline (and ensuring teachers/faculty in education system K-12/Higher Ed) (2*)
- Creating job training to accompany education. (Work with colleges, develop training program, ETS hires grads and trains them, and supplies skilled and trained resources to departments.) (1*)
- Threat of becoming too dependent on technology and losing human knowledge/decision-making/creativity.
- Disappearance of soft skills – ensuring we build and cultivate soft skills
- Creating stress management/info management with information overload
- Labor/skill set and organizational structure
- Pandemic events
- Union rules and impact on BC/DR remediation
- Revisit "critical infrastructure" in light of cloud strategy
- Compliance by all departments and agencies
- Outdated equipment, software, policies… (1*)
- Hardening of infrastructure
- Communicating/notifying on new directions/tools/…and funding requirements needed –

communication to legislature (1*)

- Reluctance to abandon bad processes in favor of off-the-shelf products
- Need a business approach to technology in state government. Without this, there will be general technology implementation focused and there will be fragmented solutions versus consolidated solutions.

ITSC Forum Input

- Security/CISCO (1*)
- Quantum computing -> workforce
- Private vs. public employment
  - Hiring
  - Retention
  - Compensation
- Value drop to work in the public sector
- Departments not able to keep up with pace of change
- Digital literacy gap
  - Generation gap
- Fiber infrastructure/How do we get on the internet?
- Workforce – new + retention – skills shortage. Brain drain because of cost of living, and better opportunities elsewhere.
- Cyber threats. Need "white hat" help to recognize. (1*)
- "Mine" vs. "Ours" – separate IT silos
  - Change culture of IT orgs
- Authority gaps (above authority level (1*)
  - Educate importance
  - Manage up
  - Educate decision-makers, stakeholders
- Embedded legacy (high hurdle to change) (1*)
  - Tech
  - Apps
- Executing and funding large projects. How to do this?
- Fee vs. Free (how to fund efforts, projects.)

- Increased threat from private companies to use state data and deliver better services. Obsolescence. Skills/function.
- Cyber threat from state sponsored (Russia/China) actors.
- Keep strategic plan current and relevant over long term.
    - "Institutionalize" the strategic plan

What are your specific concerns and challenges around data management and transparency?

AM Stakeholder Forum Input

- Expanded, standardized definitions (2*)
- Continuity of platforms across leadership
- Need a new financial management system
- How CIP money is used?
- Data quality, normalization, state (1*)
- Intended vs. unintended transparency (3*)
- Transparency by design
- Enable the public (consumer) with context and tools to "understand" data (1*)
- Link to existing system to eliminate "double" entry (1*)
- Motivating data sharing (2*)
- Cooperation by data owners
- Goal of the Business Unit is to provide services/"extra work"
- COMMITMENT to transparency (1*)
- Service oriented architecture
- Uniform chart of accounts (1*)
- Accountability
- Data protection and security (*1)

- Consistency across department of data codes/fields/names, allowing better sharing across departments and broader/more useful public data sets for open data
- Project status updates – what part of the project is being worked on?
  - Project management
- Standardized project management tool/IT communication
- Scalable tools
- Strategic integration tools
- Resources for data grooming and aggregation to avoid misuse and security issues (1*)
- Education and training of staff
- Resources and staffing to implement and maintain (1*)
- Data Plan – inventory, classification, use, etc.
- Legal issues surrounding data sharing
- Ensuring data is up-to-date/date data is from should be clear
- Creating different access levels to data
- Ensuring integrity of data
- Archival access to encrypted data

ITSC Forum Input

- Privacy
  - Impact on transparency
  - Standards, statutes & regulations may hinder (conflicts)
- Update interface/interchange standards and MDM (1*)
- Data sharing practices
- Accessibility standards and practices/training
  - (1*)Enterprise governance
  - Committee
  - Broad participation
- Inconsistent practices (1*)
- Catalog of records/sources, taxonomy of records
  - What records?

  - Who maintains?
- Open data/State data hub/permissions access
  - Master data
  - Integration challenge
- Pricing – free/not free
- Enterprise data governance committee
- Security – access
- Lack of overall data strategy (1*)
- Lack of ownership data strategy – CDO (1*)
- Lack of enterprise-wide data classification
  - Public
  - Inside Gov't
- Lack of requirements to publish current data. Who holds State Gov't accountable to publish? i.e., State workforce data book
- Data needs to be accessible. There needs to be greater awareness of what data needs to be published.
- Data compliance variation between Federal and State
- What is the goal for data?
  - Data sharing to reduce customer interactions
  - Better security and regulatory compliance
  - Better reporting and analysis (analytics)
- Who "owns" the data (Dept.? ETS? Public?)

STATE IT SYSTEM VISION STATEMENT – draft

Be the premier IT organization in the state that continues to attract and retain top talent in order to reach the state's 100% renewable energy goal.

- 80,000 jobs paying $80K by 2030 in the IT/high-tech industry (across the state, public & private)
- Need IT infrastructure to support 100% renewable energy by 2045
- Will keep the economy going. Will be the 4th core industry in our economy

STATE IT STRATEGIC PLAN PURPOSE STATEMENT – draft

The purpose of this IT Strategic Plan is to:

- Clearly articulate the State IT System's future vision, strategic priorities, expected outcomes, major initiatives to achieve those priorities, and responsible owners for key plan elements.
- Create an instrument to support awareness and accountability for all parties to the strategic plan.
- Fulfill HRC 94 requirements

COVENANTS – draft

ETS's Core Covenants (already used internally)

1. **Our employees are our greatest asset.** We attract and retain great IT talent and only bring consultants as staff augmentation work to support our own architects and leaders.
2. **We empower our employees.** We try to make sure they understand that each one of them can make a difference and they're empowered to make things happen. Their input is valuable and our leaders listen.
3. **It's OK to fail.** We've created an environment where it's OK to test the boundaries and try new things. It's OK to fail as we grow and learn – it's the quickest way to learn, when we take the time to learn and share that new knowledge.
4. **Communication is key for buy-in and engagement.** Each employee, State IT partners, and our key stakeholders must understand why we're doing a project and how it effects their job.

Additional Agreements or Guiding Principles to Consider

- **We welcome diverse perspectives and healthy debate as the best path to the best solutions**
- **We're evolving all State IT teams to a higher level of excellence.** Consistently communicated, implemented, and evaluated standards for performance, deliverables, and behavior.
- **We're evolving as a State IT system** – Where it makes sense, when it makes sense, with the planning & support to make everyone successful.
- **We make business and technology decisions that:**
    - **…Realize economies of scale** – We evaluate the likely ROI for every tax dollar that's being spent and make all decisions based on being able to achieve acceptable Return on Investment. Our teams are empowered to negotiate with our vendors for the best possible value and return.
    - **…Are aligned to the governor's priorities** – Everything we work on directly supports the Governor's top priorities. We also work on and support any projects or initiatives that will fulfill or comply with a law, an administrative directive, or memo.
    - **…Can be implemented with commercial, off-the-shelf software.** We do not use custom development for software because of expense, ongoing maintenance costs, and legacy challenges.
    - **…Will be supported with cloud-based technology wherever possible.**

Appendix: State Standard of Excellence Criteria for Investing in What Works

CRITERIA TITLE	CRITERIA DESCRIPTION
1. Strategic Goals	Did the governor have public statewide strategic goals?
2. Performance Management / Continuous Improvement	Did the state or any of its agencies implement a performance management system aligned with its statewide strategic goals, with clear and prioritized outcome-focused goals, program objectives, and measures; and did it consistently collect, analyze, and use data and evidence to improve outcomes, return on investment, and other dimensions of performance?
3. Data Leadership	Did the governor's office or any state agency have a senior staff member(s) with the authority, staff, and budget to collect, analyze, share, and use high-quality administrative and survey data—consistent with strong privacy protections—to improve (or help other entities including but not limited to local governments and nonprofit organizations improve) federal, state, and local programs? (Example: chief data officer)
4. Data Policies / Agreements	Did the state or any of its agencies have data-sharing policies and data-sharing agreements—consistent with strong privacy protections—with any nonprofit organizations, academic institutions, local government agencies, and/or federal government agencies which were designed to improve outcomes for publicly funded programs, and did it make those policies and agreements publicly available? (Example: data-sharing policy, open data policy)
5. Data Use	Did the state or any of its agencies have data systems consistent with strong privacy protections that linked multiple administrative data sets across state agencies, and did it use those systems to improve federal, state, or local programs?
6. Evaluation Leadership	Did the governor's office or any state agency have a senior staff member(s) with the authority, staff, and budget to evaluate its major programs and inform policy decisions affecting them? (Example: chief evaluation officer)
7. Evaluation Policies	Did the state or any of its agencies have an evaluation policy, evaluation plan, and research/learning agenda(s), and did it publicly release the findings of all completed evaluations?
8. Evaluation Resources	Did the state or any of its agencies invest at least 1% of program funds in evaluations?

CRITERIA TITLE	CRITERIA DESCRIPTION
9. Outcome Data	Did the state or any of its agencies report or require outcome data for its state-funded programs during their budget process?
10. Evidence Definition and Program Inventory	Did the state or any of its agencies release a common evidence framework, guidelines, or standards to inform its research and funding decisions and make publicly available an inventory of state-funded programs categorized based on at least two tiers of evidence?
11. Cost-Benefit Analysis	Did the state or any of its agencies assess and make publicly available the costs and benefits of public programs?
12. Use of Evidence in Grant Programs	Did the state or any of its agencies (1) invest at least 50% of program funds in evidence-based solutions or (2) use evidence of effectiveness when allocating funds to eligible grantees (including local governments) from its five largest competitive and noncompetitive grant programs?
13. Innovation	Did the state or any of its agencies have staff, policies, and processes in place that encouraged innovation to improve outcomes?
14. Contracting for Outcomes	Did the state or any of its agencies enter into performance-based contracts and/or use active contract management (frequent use of data and regular communication with providers to monitor implementation and progress) to improve outcomes for publicly funded programs?
15. Repurpose for Results	Did the state or any of its agencies shift funds away from any practice, policy, or program which consistently failed to achieve desired outcomes?