

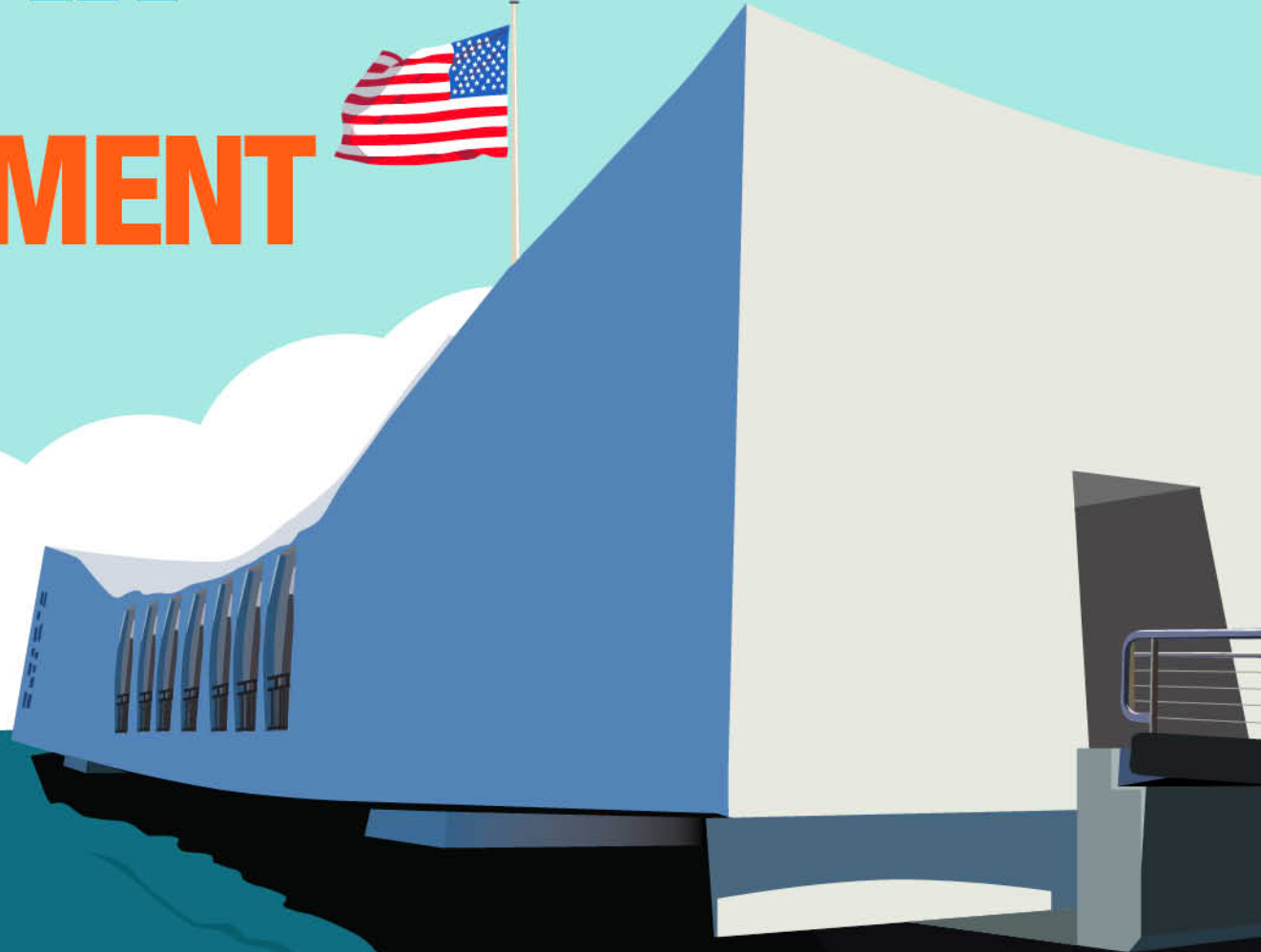
GOVERNMENT TECHNOLOGY[®]

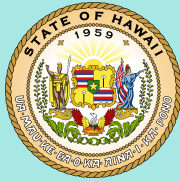
HAWAII

**DIGITAL
GOVERNMENT
SUMMIT**



**HONOLULU
HAWAII
NOVEMBER
TWENTY-FIRST
2013**





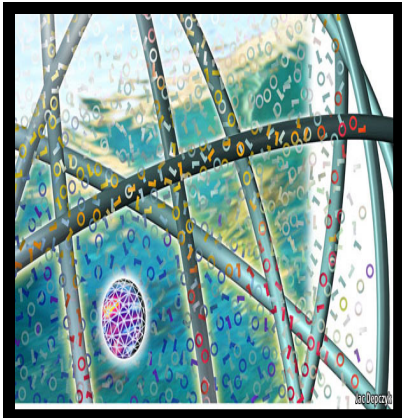
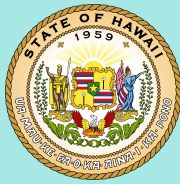
- **G1 – Data Governance**

- **Problem Statement**

- Governments are increasingly expected to rise to the challenge of sharing data horizontally and vertically across agencies/jurisdictions as well as to the public. There is a tremendous payback in the reduction of duplicated efforts.
 - But where do you start and who should drive it?
 - Who owns the data?
 - How do you keep it secure?
 - What standards should be used?
- This session looks at current trends, strategies and successes.

- **Alignment with State Transformation Plan**

- Strategy #3: Governance (Transparency and Accountability)
- Top 10 Programs: Open Government; Governance



- **Definition**

- **Data:** “facts and statistics collected together for reference or analysis” (Source: Internet)
- **Governance:** “is the act of governing. It relates to decisions that define expectations, grant power, or verify performance. It consists of either a separate process or part of decision-making or leadership processes.” (Source: Wikipedia)

- **Background**

- Data + Context = Information; Information + Experience = Knowledge; Knowledge + Understanding = Wisdom
- Data will grow by 800% in the next five years with 80% Unstructured Text/Media (Gartner)
- **Federal Government**
 - Privacy Act; Espionage Act; Information Quality Act; AG Guidelines: “Share everything, Protect what you must”
 - President’s Open Government Directive (2009)
- **Hawaii State Government**
 - Uniform Information Practices Act HRS 92F: “General Rule of Disclosure” - “All government records are open to public unless access is restricted or closed by law”
 - Open Data Bill (2013)

OPEN GOV



Privacy

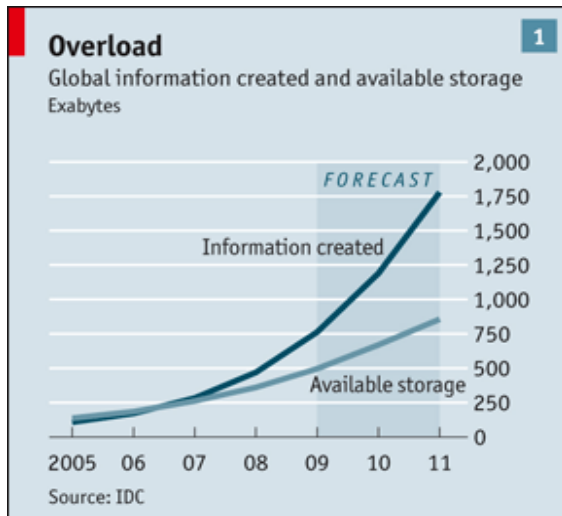


Protect
Security

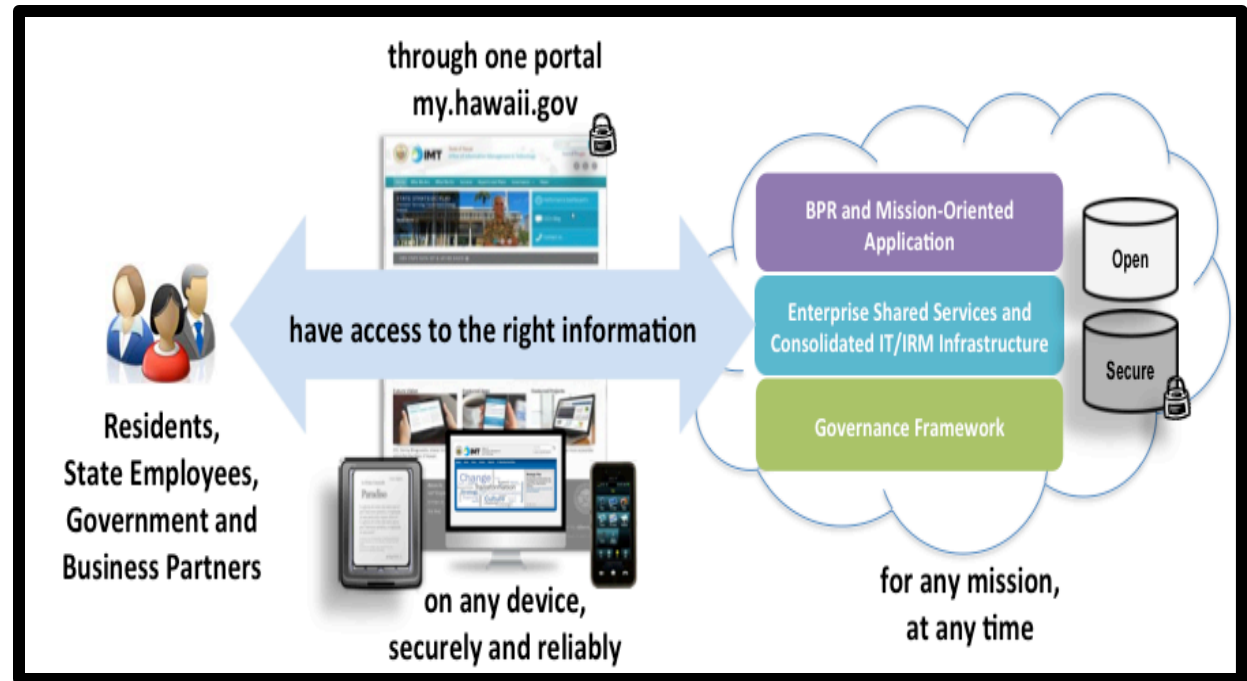


Information
Quality

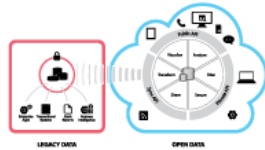
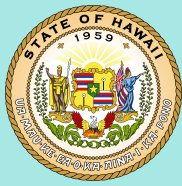
- **Data is Growing Exponentially; Two Types – Open/
Closed**



**Up 800% every 5 Years
with 80% Unstructured
Text/Media (Gartner)**



Share Everything – Protect What You Must

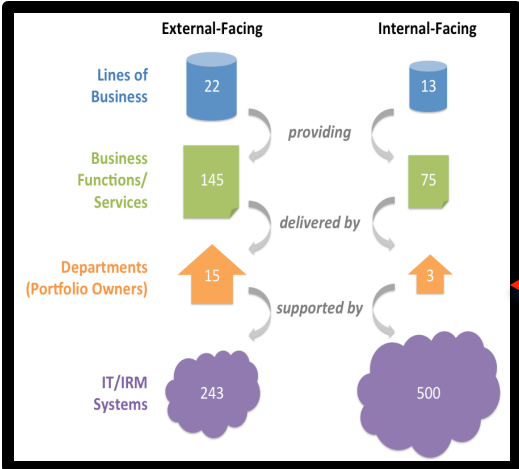


Attribute/Characteristic

Legacy Data

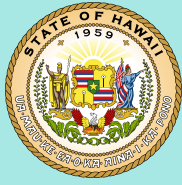
Open Data

Attribute/Characteristic	Legacy Data	Open Data
Core Use Cases	Data Collection, Process Automation, Enterprise Apps	Data Use and Reuse, Data Sharing and Collaboration, Ad Hoc Apps
Key Influences	Corporate Network Computing	Internet, Web 2.0 and the Social Web
Who Benefits?	Data Practitioners	The Rest of Us
Where's the Data?	On Premise	In the Cloud
Organizational Model	Business Process Optimized	Consumption Optimized
Designed for	The PC	The Web
Security and Permissions	Secure	Secure
Accessibility	Very Restricted	Very Accessible
Scalability	Employee Use	Widespread Use
Finding the Data	By Table Name	Searchable Catalog
Data Exploration and Analysis	Add-on PC/Desktop Tools	Native in Platform; In Web Browser
Charts and Maps	Add-on PC/Desktop Tools	Native in Platform; In Web Browser
Ad Hoc Access	None to Limited, guarded by a gatekeeper	Open and unfettered but authenticated
Developer Access	None to limited, rigid access via closed protocols	Open, standards-based, modern (RESTful) APIs
Reporting	Static	Dynamic
Data Usage Metrics	Ask the Gatekeeper	Open

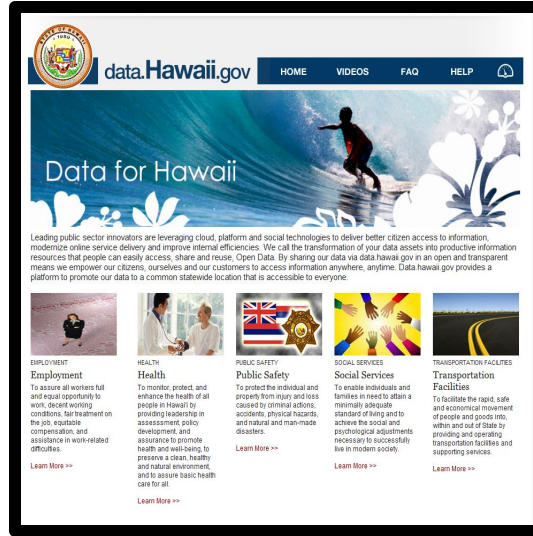


743 Legacy Systems





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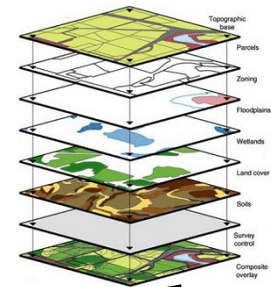
Visualize



Socialize

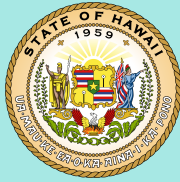


Mobilize



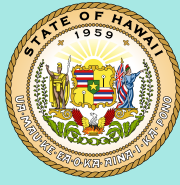
Analyze

GI: Data Governance



- **Distinguished Panelists**

1. **Blake Oshiro** - Deputy Chief of Staff, Office of the Governor, State of Hawaii
2. **Beth Blauer** - Director of Govstat, Socrata, Inc.
3. **Christina Tydeman** - Director of Data Governance Office, Department of Education, State of Hawaii
4. **Jesse Souki** - Director, Office of Planning, State of Hawaii
5. **Lorrin Kim** - Chief, Office of Planning, Policy, and Program Development, Department of Health, State of Hawaii



Blake Oshiro

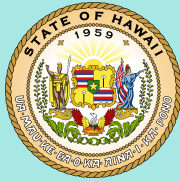
Deputy Chief of Staff, Office of the Governor,
State of Hawaii

WHY ARE WE DOING THIS?

- What gets measured gets done and what gets done get continuously measured
- Communications
- Accomplishments



- Policy Management and Decision Making
- Strategically showing areas that “need improvement”
- Transparency



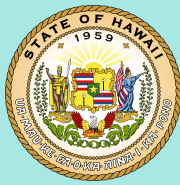
Where do you start?

The answer: From the top (Governor's Office)

In order for the state to continue to evolve to the ideal data-driven model we must start to think more strategically about how data is used in our organizations.

AND...





IT IS THE LAW

2013's ACT 263

Requires executive branch departments to make electronic data sets available to the public. Absolves the State from liability for certain deficiencies or incomplete data.

Requires the **Chief Information Officer** to develop policies and procedures to implement the open data initiative. Appropriates funds. Effective July 1, 2013(HB632)





Who Owns the Data?












The Answer: You do! But we are here to help.

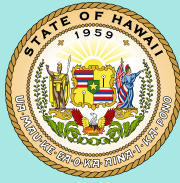
- The creation of a statewide data inventory
- Implement the Open Data Act (2013's Act 263, HB632):
Decide how data gets in to the open data portal
- Standardization of data and descriptions of data
- How data is used to measure performance



Top 50 Employers - Honolulu County

Largest employers in Honolulu County as provided by InfoGroup.

	Unique ID	 	Name	 	Physical Location	 
1 	712316884		Altres Medical		967 Kapiolani Blvd	
2 	424441988		Kapiolani Medical Ctr		1319 Punahou St # 630	
3 	386132104		Kyo-Ya Co Ltd		2255 Kalakaua Ave	
4 	001457480		Queen's Medical Ctr		1301 Punchbowl St # 1	
5 	967978214		Hawaii Health Systems Corp		3675 Kilauea Ave	



How do you keep it secure?

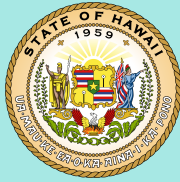
Answer: Protect what must be protected and open the rest.

- Create a Data Council who will:
 - Define standards
 - Explore the capacity of data
 - Prioritize data inclusion for Open Data
 - Curate the statewide data inventory
- CIO and Departments must create and maintain the security and privacy controls at the data level



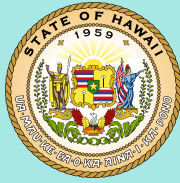
What standards should be used?

- Answer: Open is our default
 - We will lead our transformation into a digital/mobile government with our data standards
 - Led by the CIO and our Data Council
 - We will adopt best practices
 - International, national, state and local data standards
 - Including Open Data standards
 - Standards will be uniform across the state
 - Security
 - Privacy
 - Data/Data Sharing



TIMELINE

- September 18, 2013: Announcing Hawaii Data Council
- September 24, 2013: Appointment of one person (and one back-up) to the Hawaii Data Council
- Week of October 1, 2013: Convene the first Council meeting and self-appoint a chair and co-chair
- Week of October 18, 2013: Full review of the Governor's May 14 memo with compliance or alternative to compliance identified
- Week of November 1: Review of compliance with Governor's May 14 memo
- November 21 is the Hawaii Digital Summit
- Soon thereafter, official launch



Beth Blauer

Director of GovStat, Socrata, Inc.



Welcome to the Era of Data-Driven Government

Presented by: Beth Blauer, Director of GovStat, Socrata



The Era of Data-Driven Government is Now

In 2013, making gut decisions is *expensive* and *dangerous*.

By unlocking their treasure troves of data, governments can take a more effective approach to solving persistent problems.

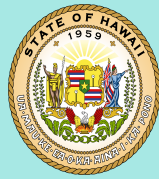
A new era of data-driven government and civic innovation is taking shape and the results are amazing.



- Where do you start and who should drive it?
 - JUST START! Start with the data you already collect and with a strategic framework that is already in place. Data-Driven efforts need to be led from the top!
- Who owns the data?
 - The Agencies should always remain data owners
- How do you keep it secure?
 - You ask questions, abide by the law, but make open the default
- What standards should be used?
 - Standards should be articulated in a collaborative format drawing from your needs

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- <http://youtu.be/LPqEg3Xh7xg>

The Evolution of Data-Driven Government

CompStat
NYC Police

CitiStat
Baltimore

StateStat
Maryland

1995

1999

2006

2013

New York City
New Orleans
Somerville
Kansas City
San Mateo
Raleigh
Louisville
Baltimore
Washington
Maryland

Hawaii

And Many More...

MARYLAND STATESTAT WAR ROOM







DELICIOUS SANDWICHES • TASTY SALADS • COLD MILK

**FREE
MEALS
HERE**

**FOR ALL KIDS
18 & UNDER**

HEALTHY



For more information call 800-4-A-CHILD
or visit www.4achild.org



Results: Ending Childhood Hunger

From the 2010-11 to 2011-12 school year more than 22,000 additional Maryland children received a nutritious breakfast at school.

From November 2009 to November 2012, the number of children enrolled in the state Food Supplement Program has increased by more than 31%.

The February 2013 report—*Ending Childhood Hunger: A Social Impact Analysis*—found that schools participating in Maryland Meals for Achievement are seeing:

- ❖ Up to a 7.2% lower rate of chronic absenteeism
- ❖ Students who are up to 12.5% more likely to achieve proficiency on standardized math tests





Data Driven Government in Hawaii: The New Day Dashboard

- In 2011 former Maryland Governor Glendenning was invited to present and this began a conversation with the State of Hawaii on the benefits of Data Driven Government
- In 2012 Hawaii Launched their very own Open Data Portal
- Also in 2012: Hawaii Completed a Draft of the State Strategic Framework Identifying Mission Vision Goals and Objectives
- In 2013 Hawaii embarked on making their data actionable with the acquisition of GovStat:
 - Track the implementation of the New Day Plan
 - Confirm and discover the the actions in the State's Strategic Framework
 - Comprehensive platform to communicate the state's many accomplishments

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Energy Sources by 40% by 2030

This goal is measured by tracking Hawaii Renewable Portfolio Standard (RPS) [Explore the data](#)

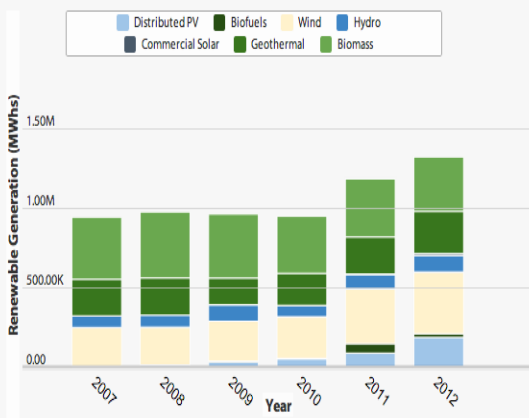
13.7 percent
Current as of Dec 2012

13.16 percent
Dec 2030 Target

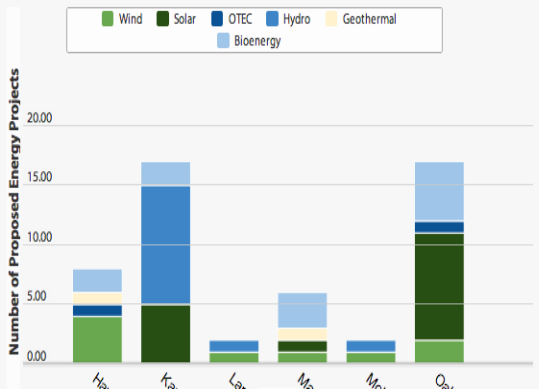
On Track



Hawaii Renewable Energy Generation By Resource



Currently Proposed Renewable Energy Projects In Hawaii



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Environmental Stewardship

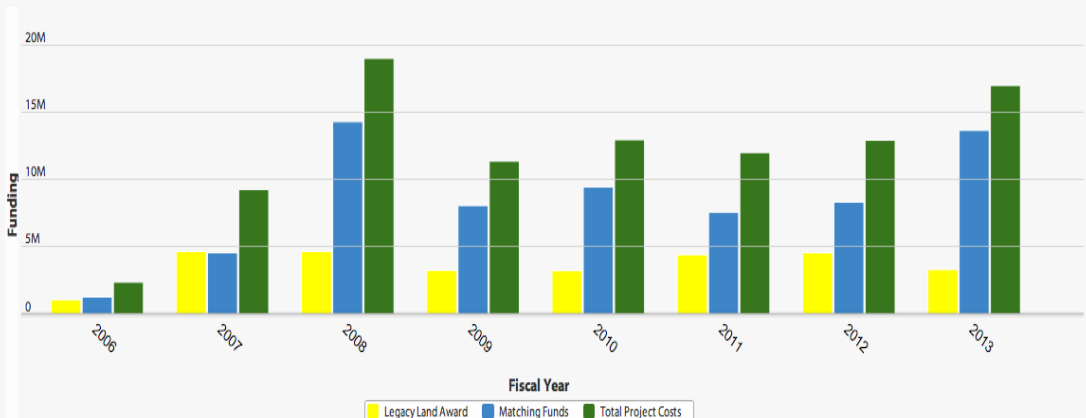
Legacy Land will increase Resource Lands Protected by 100% by August 2021

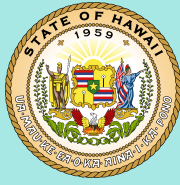
This goal is measured by tracking Resource Lands in Acres Protected Resource Lands. [Explore the data](#)



Legacy Land - Matching Funds Bar Chart

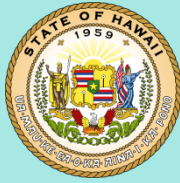
This chart shows total project costs in green with Legacy Land Award + Matching Funds in yellow and blue, respectively.





Christina Tydeman

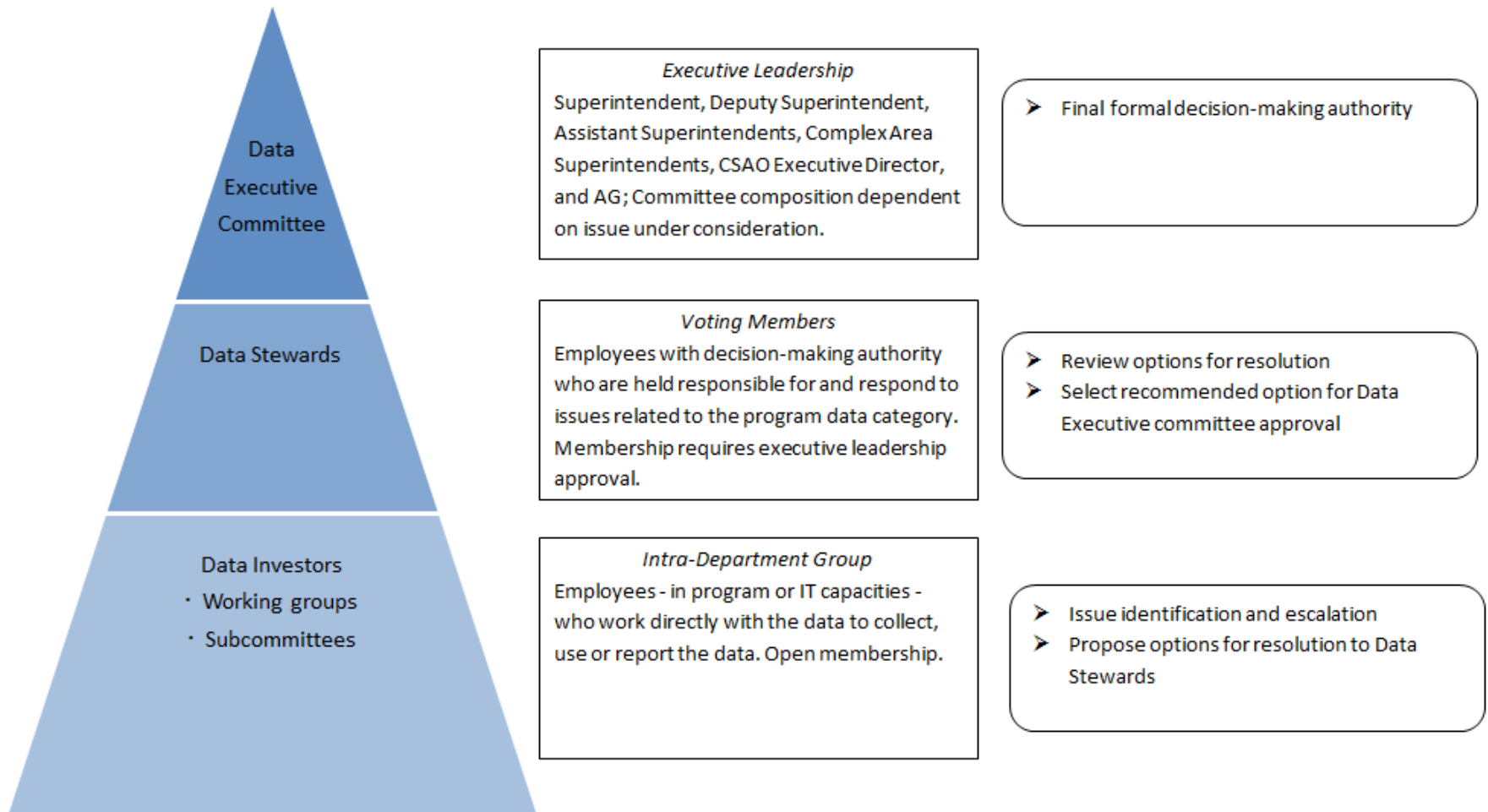
Director of Data Governance Office, Department of Education, State of Hawaii



Data Governance is a system of decision rights and accountabilities for information-related processes, executed according to agreed-upon models which describe who can take what actions with what information, and when, under what circumstances, using what methods.

- Data Governance Institute

Same employer ≠ Same language



G1: Data Governance, Dashboards, Data Council



Data Issue Resolution Process Flow & Timeline*

*For data issues identified to go through the data issues resolution process

	Responsible Group	Activity	Timeframe
1. INTRA-DEPARTMENTAL MEETING (monthly)			
1.1	Intra-Departmental group	Issue is identified and communicated <i>Note: Issues may occasionally be raised via direct communication with DGO and subsequently conveyed at the intra-departmental meeting or online via SharePoint.</i>	At monthly meeting <i>(or via direct communication, see note in "Activity" column)</i>
1.2	Intra-Departmental group	Subcommittees/workgroups and members are created for issues identified to go through the data issues resolution process.	At monthly meeting
1.3	Data Governance Office	Makes note of issue(s), subcommittees/workgroups and members, etc. for <i>Data Issues Resolution</i> SharePoint site.	At monthly meeting
2. ISSUE POSTED TO DATA ISSUES RESOLUTION SHAREPOINT SITE			
2.1	Data Governance Office	Post issue to <i>Data Issues Resolution</i> SharePoint site: <ul style="list-style-type: none"> • <i>Create an item in the "Data Issues In Resolution Process" section of the SharePoint site;</i> • <i>Create a subcommittee/workgroup workspace (team sub-site) for member use;</i> • <i>Remind subcommittee/workgroup lead to communicate any site needs to DGO (Chris) and, as the committee progresses through their discussion, to update DGO as to any documentation, etc. that will need to be escalated.</i> 	No later than 1 business day after meeting when issue was presented
3. SUBCOMMITTEES/WORKGROUPS PREPARATION OF RESOLUTION OPTIONS			
3.1	Intra-Departmental group	Continue discussions and work on issue; Prepare and develop "options to resolve the issue" for consideration by Data Stewards	1-3 months
3.2	Intra-Departmental group	Provide status report and communicate other questions/concerns about issue at subsequent monthly meetings (if needed)	As needed at subsequent monthly meetings

G1: Data Governance, Dashboards, Data Council



Roles and

Responsibilities

Role	Membership	Authority	Meeting	Data Governance Website	Data Ethics
Data Governance Office	Director and staff	<ul style="list-style-type: none"> Facilitate processes Monitor progress 	<ul style="list-style-type: none"> Coordinate meeting logistics Facilitate quarterly and bi-monthly meetings Prepare meeting, agenda, documents and notes 	<ul style="list-style-type: none"> Manage website Post and remove documents Maintain issues log Monitor voting and reports results 	<ul style="list-style-type: none"> Promote data ethics certification and maintain log of certificates Provide trainings, support materials and technical assistance Achieve certification and model ethical use of data
Data Executive Committee	Superintendent, Deputy Superintendent, Assistant Superintendents, Complex Area Superintendents, CSAO Executive Director, and AG; Committee composition dependent on issue under consideration.	<ul style="list-style-type: none"> Identify and designate staff to roles (e.g., data stewards, etc.) Require and ensure participation of designated staff. 	<ul style="list-style-type: none"> Quarterly for decision-making and reporting 	<ul style="list-style-type: none"> Review documents and comments 	<ul style="list-style-type: none"> Authorize data ethics certification for all employees Encourage and incentivize participation for all employees Achieve certification and model ethical use of data
Data Stewards	Employees with decision-making authority who are held responsible for and respond to issues related to the program data category. Membership requires executive leadership approval.	<ul style="list-style-type: none"> Actively participate in data steward meetings, including decision-making process. 	<ul style="list-style-type: none"> Quarterly in person – prior to Data Executive Committee meeting Monthly conference call or webinar 	<ul style="list-style-type: none"> Post documents relevant to issues Review documents and comments Online voting by deadline 	<ul style="list-style-type: none"> Achieve certification and model ethical use of data
Data Investors	Employees - in program or IT capacities - who work directly with the data to collect, use or report the data. Open membership.	<ul style="list-style-type: none"> Identify data problems, issues, concerns. Communicate to the various groups any changes/ modifications that affect data. 	<ul style="list-style-type: none"> Bi-monthly General meeting Monthly working groups or subcommittees (frequency may vary dependent on urgency of issue) 	<ul style="list-style-type: none"> Review documents and comments Submit issues for resolution 	<ul style="list-style-type: none"> Achieve certification and model ethical use of data

G1: Data Governance, Dashboards, Data Council

- View All Site Content
- Documents**
- Resolved/Closed Issues
- Lists**
- Announcements & Reminders
- Data Issues In Resolution Process
- Enterprise Architecture Information
- Meetings & Deadlines
- Discussions**
- Issues for Discussion
- Sites**
- Intra-Departmental Group
- People and Groups**
- Recycle Bin

HIDOE - Projects > Data Issues Resolution

Data Issues Resolution Site

Announcements & Reminders

Created	Announcement	Created By	More Information
9/9/2011 8:23 AM	SURVEY CLOSED: Issue #3 (Establish a data issues resolution process) surveys are now closed. Results will be posted shortly.	Christine Shaw	
9/6/2011 7:37 AM	SURVEY CLOSED: Issue #4 (Establish meeting time) survey is now closed.	Christine Shaw	Click here to view survey results and outcome
7/15/2011 1:34 PM	Welcome! New users, please click here for more information.	Christine Shaw	

Add new announcement

Data Issues In Resolution Process

Issue ID	Created	Issue Summary	Voting	Supporting Documents	Issue Status	Discussion/Comment
1	7/5/2011 1:05 PM	Develop a single data request process for the department.			In Subcommittee	
2	7/5/2011 1:09 PM	Address issues related to teacher-student data linking			In Subcommittee	
3	7/22/2011 8:23 AM	Establish a data issues resolution process.	Survey is CLOSED	Click here to go to the document library	In Vote	Click here to go to the discussion board
4	7/22/2011 8:24 AM	Set a standing meeting time for the Data Stewards group.	Survey is CLOSED	Issue has been archived. Click here to view survey results and outcome.	Resolved	

Add new item

Issues for Discussion

Subject	Created By	Replies	Last Updated	Related to Issue No.
There are no items to show in this view of the "Issues for Discussion" discussion board. To create a new item, click "New" above.				

Add new discussion

Meetings & Deadlines

Title	Location	Start Time	End Time
Data Stewards Training & Kickoff Meeting	BOE Room	8/29/2011 9:00 AM	8/29/2011 10:00 AM
Intra-Departmental Meeting	BOE Room	9/1/2011 2:00 PM	9/1/2011 3:30 PM

Add new event

Subcommittee Workspaces

- College Access Portal Subcommittee Workspace
- Data Issues Resolution Process Subcommittee Workspace
- Data Request Process Subcommittee Workspace
- External Email Providers Subcommittee Workspace
- Intra-Departmental Data Exchanges Subcommittee Workspace
- Race_Ethnicity Data Cleaning Subcommittee Workspace
- Teacher-Student Data Linking Subcommittee Workspace

Add new link

Resolved/Closed Issues

Type	Name
	Race_Ethnicity
	Teacher of Record
	LDS Access Levels
	Data Stewards Meeting Time

Add new document

Data Stewards Resources

- Data Stewards Meetings
- HIDOE Acknowledgement of General Confidentiality Expectations (PDF)
- HIDOE FERPA Website
- The Forum Guide to Data Ethics Online Course

Add new link

Enterprise Architecture Information

- Change Control Board (CCB) -- Change Requests
- Technical Architecture Review Council (TARC)

Add new link

Assistance & Feedback

Need assistance?
 Please visit our [help site](#).

If you have a data issue to propose, please email us the information.
 Email: DGO@notes.k12.hi.us

Your feedback is appreciated.
 Please contact us with your suggestions.
 Email: DGO@notes.k12.hi.us
 Phone: (808) 440-2850

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Lessons Learned



- *Patience & Persistence*
- *Revisit Process*
- *Flexibility*
- *Communication*
- *Training*

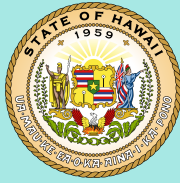
`christina_tydeman@notes.k12.hi.us`

Hawaii State Department of Education

Data Governance website

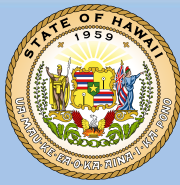
<http://datagovernance.k12.hi.us/>

*G1: Data Governance, Dashboards, Data
Council*



Jesse Souki

Director, Office of Planning, State of Hawaii



Open Data in the Office of Planning

2013 Hawaii Digital Government Summit

November 21, 2012



Jesse K. Souki, Director

<https://www.facebook.com/OfficeofPlanning.HIgov>

<https://twitter.com/PlanningHIgov>

<http://planning.hawaii.gov/gis>

gis@dbedt.hawaii.gov

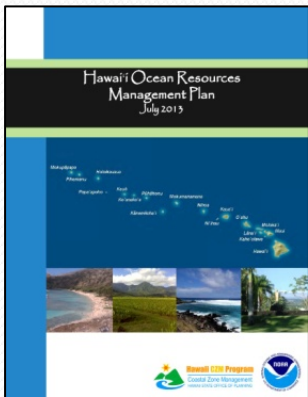
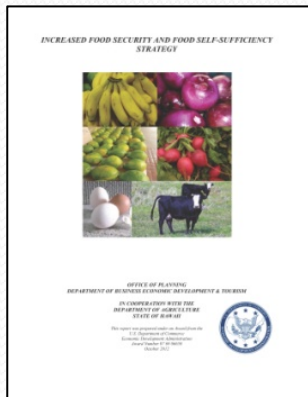


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OP Web Site



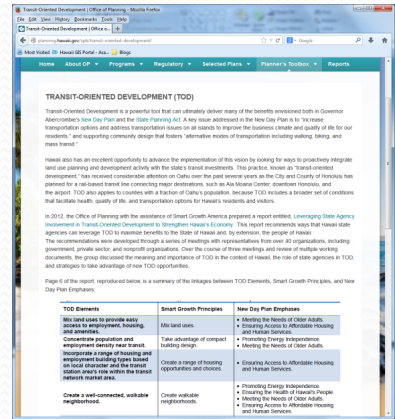
Reports



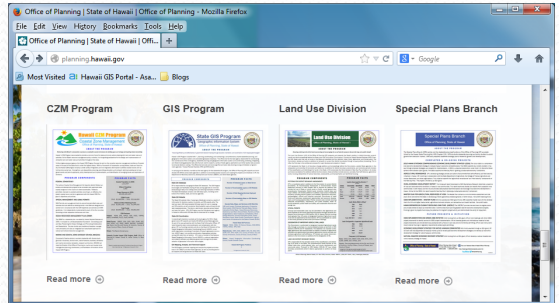
Planner's Toolbox

- Planner's Toolbox
- Adapting to Climate Change
- Brownfields Revolving Loan Fund
- Coastal Hazards
- Cumulative & Secondary Impact (CSI): Stormwater Impact Assessment
- GIS Data, Maps, Tools, Apps
- Low Impact Development
- Rural Economic Development
- Rural Policy and Best Practices Project
- Transit-Oriented Development

Issue Papers



Program Information



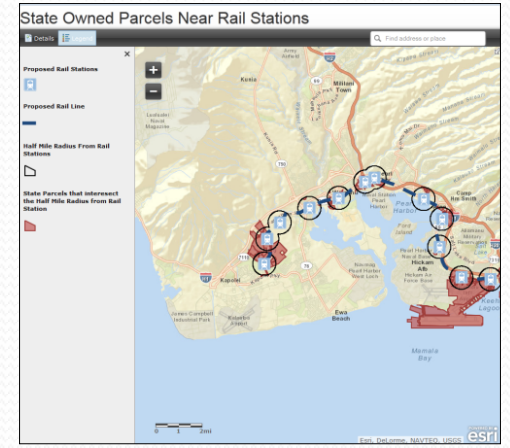
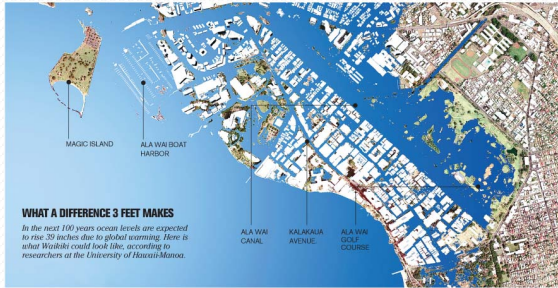
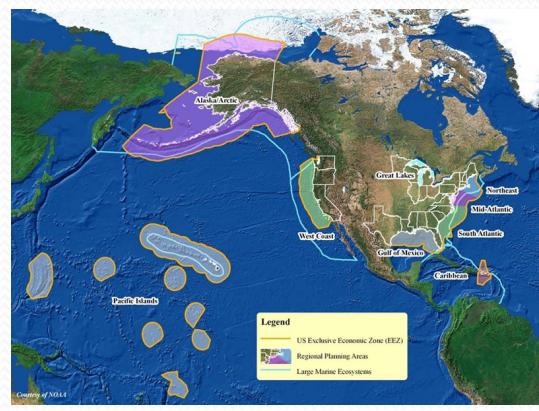
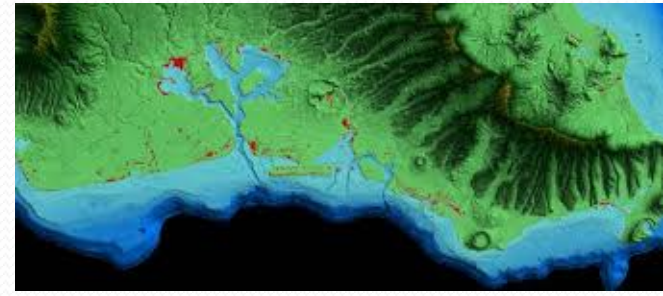
Social Media





HAWAII DIGITAL GOVERNMENT SUMMIT

Spatial Planning



HAWAII DIGITAL GOVERNMENT SUMMIT



Hawaii State GIS Website: <http://planning.hawaii.gov/gis>

The screenshot shows a web browser window displaying the Hawaii State GIS Program website. The browser's address bar shows the URL planning.hawaii.gov/gis/. The website header includes the **hawaii.gov** logo, a search bar with the text "search this site", and a "Search.U.S.A.gov" link. A navigation menu contains links for Home, About OP, Programs, Regulatory Resources, Selected Plans, Planner's Toolbox, and OP Reports. The main content area features a banner for the "HAWAII STATEWIDE GIS PROGRAM" with a scenic image of a Hawaiian coastline and a logo for the "HAWAII STATEWIDE GIS PROGRAM" from the "HAWAII STATE OFFICE OF PLANNING". Below the banner, the text "Hawaii Statewide GIS Program" is displayed. A section titled "What is the GIS Program?" provides a brief description of the program's mission. On the right side, a "GIS LINKS" section lists several categories: GIS Data, Maps, Tools, and Applications, Other Resources, GIS REST Services, and HBGN, each with a dropdown arrow.



Existing State GIS Data

Administrative Layers

Agricultural Land Use maps (OP/DOA)
Ahupuaa Boundaries (DLNR)
Census Tract Boundaries (US Census)
Development Plan Boundaries (OP)
Election Precincts (DAGS/LG)
Enterprise Zones (DBEDT)
Government Land Ownership (OP/Counties)
Harbors (DOT)
Hydrographic Units (OP/DLNR)
Judicial Districts (OP)
State Land Use District Boundaries (LUC)
Legislative Districts (DAGS/LG)
Marine Life Conservation Districts (OP/CZM)
National Marine Whale Sanctuary (NOAA)
Parcels (Counties)
Parks (DLNR, Counties)
Reserves (DLNR)
Special Management Areas (OP, CZM)
Water Quality Control Sites (OP/CZM)
Wells (DLNR)

Ocean Layers

Bathymetry (Various)
Bottom Type (NOAA)
Coastal Resources (OP/CZM)
Fish Aggregating Devices (OP/DLNR)
Marine Managed Areas (DLNR)
Ocean Recreation Areas (CZM)
Water Quality Classifications (DOH)

Basemap Layers

Coastlines (OP/USGS)
Coastal Names (OP)
Dams (DLNR)
Elevation Contours (OP/USGS)
Geographic Names (OP/USGS)
Hydrography (OP/USGS)
Public & Private Schools (OP/DOE)
Roads (OP/DOT/Counties)
Trails

Hazard Layers

Flood Hazard Zones (FEMA)
Hurricane Iniki Overwash Areas (OP)
Lava Flow Areas (DBEDT)
Tsunami Wave Heights (OP)
Tsunami Evacuation Zones (PDC)
Volcano Hazard Zones (OP/USGS)
Wildfire Risk Ratings (DLNR)

County Layers

Council Districts
Development Plan Areas
Fire Stations
Neighborhood Board Boundaries
Ohana Zoning
Parcels
Parks
Potable Water Mains
Public Facilities
Roads

Natural Resource Layers

Aquaculture
Aquifers (DLNR/DOH)
Bird Habitat Ranges (OP)
Body Surfing Sites (OP)
Coral Reefs (NOAA)
Critical Habitat (USFWS)
Fish Habitat Areas (DLNR)
Fishponds (DLNR)
Former Sugar Cane Lands (OP)
Former Pineapple Lands (OP)
Geothermal Resource Areas (DBEDT)
Important Agricultural Lands (OP/DOA)
Land Study Bureau Lands (OP/DOA)
Perennial Streams (OP/DLNR)
Rainfall (UH-Geography)
Rain Gages (UH-Geography)
Rare and Endangered Species (TNC)
Soils (NRCS)
Solar Radiation (OP/DBEDT)
Threatened and Endangered Plants (OP/DLNR)
Vegetation (USGS)
Watersheds (OP)
Wetlands (NWI)
Wind Energy Resources (DBEDT)

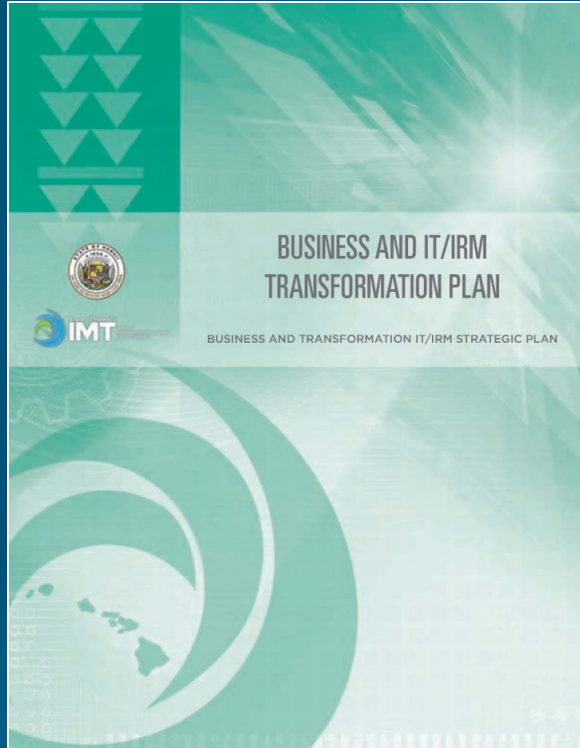
Other Data Available on State GIS

Digital Elevation Models (USGS)
Digital Raster Graphics (USGS)
IfSAR Elevation Data (NOAA)
Various aerial photography (Various)
WorldView2 Satellite Imagery (OP/USGS)

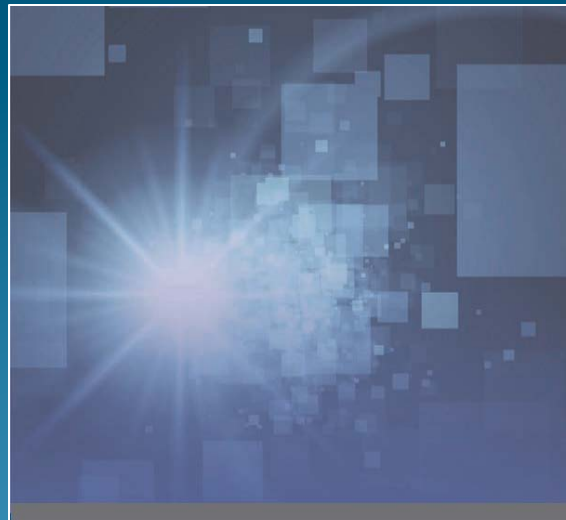
HAWAII DIGITAL GOVERNMENT SUMMIT



Who should drive it?



OIMT/OP/GIS
working group



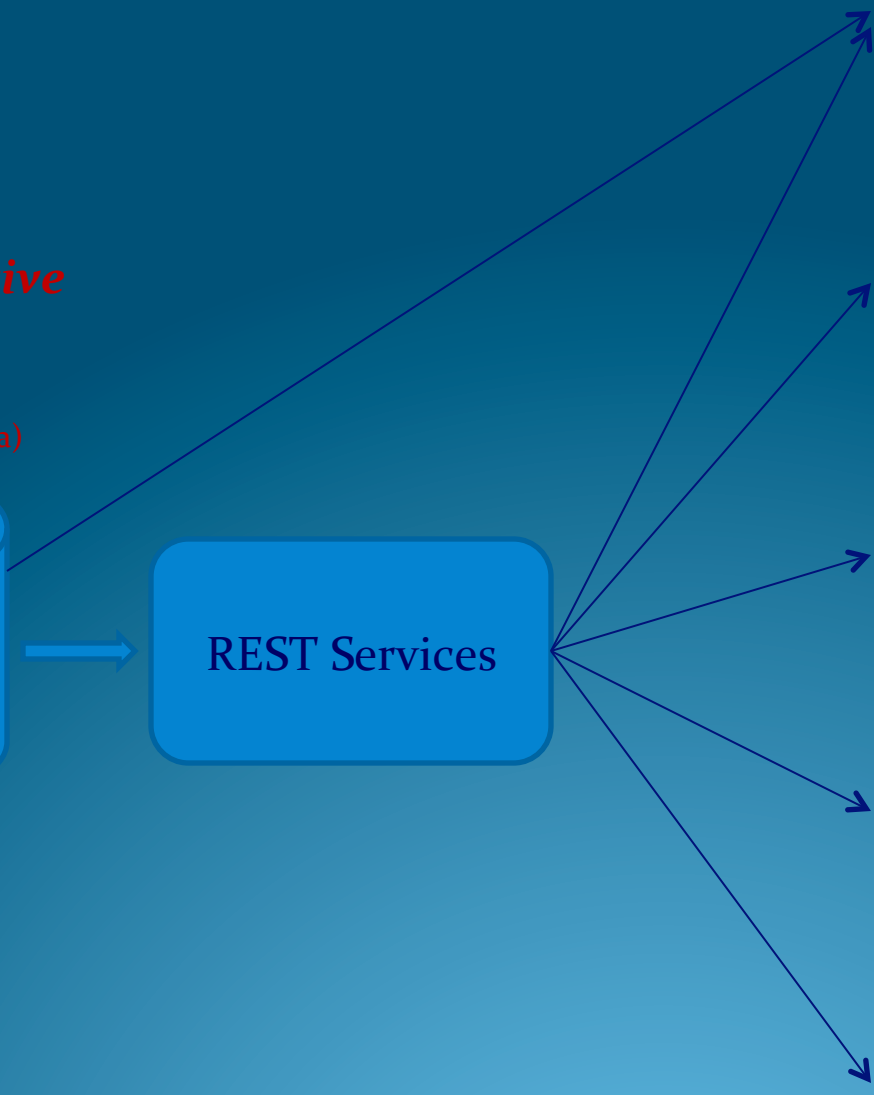
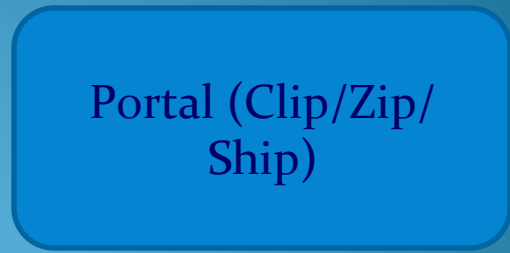
**ENTERPRISE ARCHITECTURE (EA) —
A BLUEPRINT FOR CHANGE**
**APPENDIX H
GEOSPATIAL INFORMATION SYSTEMS (GIS)**

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**One
Authoritative
Data
Source**
(with metadata)



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Providing data via download, REST services, ArcGIS Online services

<http://planning.hawaii.gov/gis/download-gis-data/>

The screenshot shows the 'NEW AND UPDATED LAYERS' section of the Hawaii Statewide GIS Program website. It lists 16 items, each with a title and a date. The items include:

- 1. Foreign Trade Zone -- Added 08/05/13
- 2. Census Urbanized Areas and Urban Clusters -- 2010 (016-Cultural and Demographic) -- Added 07/25/13
- 3. Banks and Credit Unions (005-Business and Economic) -- Added 07/17/13
- 4. LANDSAT Mosaic, Satellite Imagery (010-Imagery and Basemap) -- Added 07/11/13
- 5. 12 Nautical Mile Boundaries (014-Oceans and Estuaries) -- Added 05/23/13
- 6. County Council Districts (003-Admin and Political Boundaries) -- Added 05/17/13
- 7. Rooftop Solar Exposure (004-Atmospheric and Climatic) -- Added 05/06/13
- Updated:
- 1. Tsunami Evacuation Zones -- Updated 09/06/13
- 2. Special Management Area (SMA) -- Updated 08/26/13
- 3. Large Landowners (015-Cadastral and Demographic) -- Updated 06/19/13
- 4. Government Land Ownership (015-Cadastral and Demographic) -- Updated 06/19/13
- 5. Fire Response Zones (006-Human Health and Safety) -- Updated 7/25/13
- 6. Reserves (003-Administrative and Political) -- Updated 7/25/13
- 7. State Land Use Districts (015-Cadastral and Demographic) -- Updated 7/16/13
- 8. Color Hillshades (010-Imagery and Basemap) -- Updated 07/15/13
- 9. Soils (008-Geologic and Geophysical) -- Updated 2013
- 10. Maui County TMK Parcels (015-Cadastral and Demographic) -- Updated 07/05/13
- 11. Hawaii TMK Parcels (015-Cadastral and Demographic) -- Updated 06/07/13
- 12. Hawaii County Zoning (015-Cadastral and Demographic) -- Updated 04/29/13
- 13. Hawaii County LHPAG (015-Cadastral and Demographic) -- Updated 04/29/13
- 14. Oahu TMK Parcels and Plats (015-Cadastral and Demographic) -- Updated 04/26/13
- 15. Important Agricultural Lands (IAL) (001-Agriculture and Farming) -- Updated 04/04/13

The screenshot shows the ArcGIS REST Services Directory for Hawaii. The current version is 10.11. The view footprints are set to ArcGIS.com Map. The folders listed are Imagery and Utilities. The services listed include:

- Agriculture (FeatureServer)
- Agriculture (MapServer)
- Basemap (MapServer)
- Biological_Ecological (FeatureServer)
- Biological_Ecological (MapServer)
- Boundaries (FeatureServer)
- Boundaries (MapServer)
- Climatology (FeatureServer)
- Climatology (MapServer)
- Economy (FeatureServer)
- Economy (MapServer)
- Elevation (FeatureServer)
- Elevation (MapServer)
- Facilities_Structures (FeatureServer)
- Facilities_Structures (MapServer)
- Geoscientific (FeatureServer)
- Geoscientific (MapServer)
- Health_Safety (FeatureServer)
- Health_Safety (MapServer)
- Inland_Waters (MapServer)
- Location (FeatureServer)
- Location (MapServer)
- Ocean (FeatureServer)
- Ocean (MapServer)
- Planning_Cadastrre (FeatureServer)
- Planning_Cadastrre (MapServer)
- Runoff_Potential (FeatureServer)
- Runoff_Potential (MapServer)
- Socio_Demographic (FeatureServer)
- Socio_Demographic (MapServer)
- Solar_Potential (FeatureServer)
- Solar_Potential (MapServer)
- Transportation (FeatureServer)
- Transportation (MapServer)

<http://hstategis.maps.arcgis.com/home/search.html?q=hstategis&t=content&restrict=true&focus=layers>

The screenshot shows the search results for 'Feature and Map Services' in ArcGIS Online. The results are displayed in a table with columns for Title, Owner, Rating, Views, and Date. The results include:

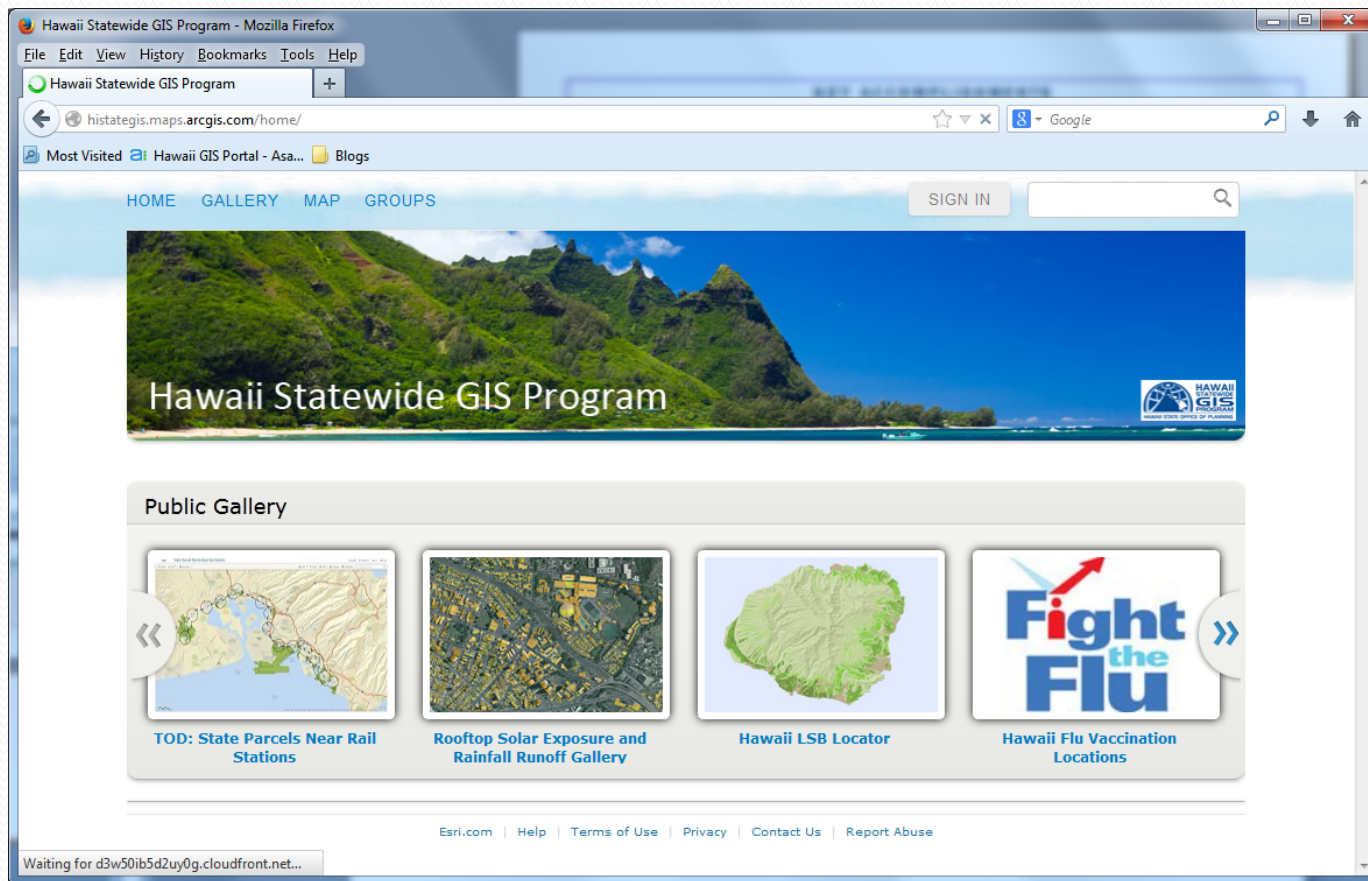
- Wetlands: This data set represents the extent, approximate location and type of wetlands and disperser habitats in Hawaii. Features by HawaiiStateGIS. Last Modified: July 29, 2013. (0 ratings, 0 comments, 16 views)
- Water Quality Monitoring Sites: Water Quality Monitoring Sites in Hawaii. Features by HawaiiStateGIS. Last Modified: July 29, 2013. (0 ratings, 0 comments, 2 views)
- Streams in Hawaii: Streams in Hawaii. Features by HawaiiStateGIS. Last Modified: July 29, 2013. (0 ratings, 0 comments, 1 views)
- State_Senate_Districts: State of Hawaii Senate District Boundaries as adopted by the State of Hawaii Reapportionment Commission in 2012. Features by HawaiiStateGIS. Last Modified: February 15, 2013. (0 ratings, 0 comments, 490 views)
- State_House_Districts: 2012 Hawaii State House of Representative District Boundaries. Features by HawaiiStateGIS. Last Modified: February 18, 2013. (0 ratings, 0 comments, 34 views)

<http://gis.hawaii.gov/arcgis/rest/services>

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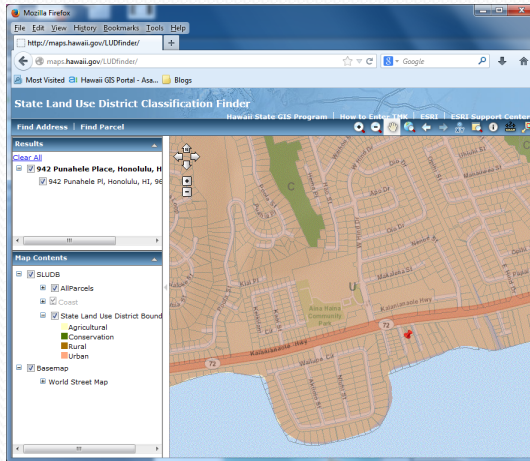
ArcGIS Online site for delivering content – web maps, web apps, data



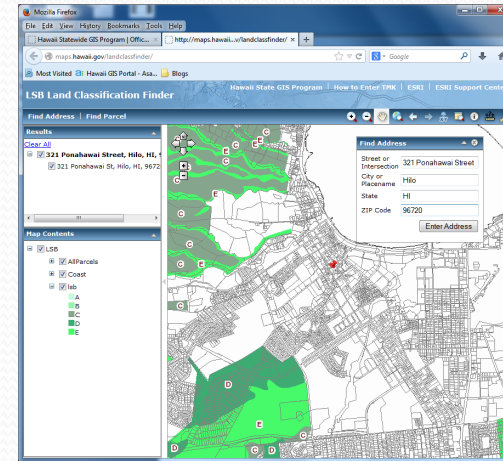
<http://histategis.maps.arcgis.com/home/index.html>

Locator Applications – SLUD, LSB, SMA, EZ

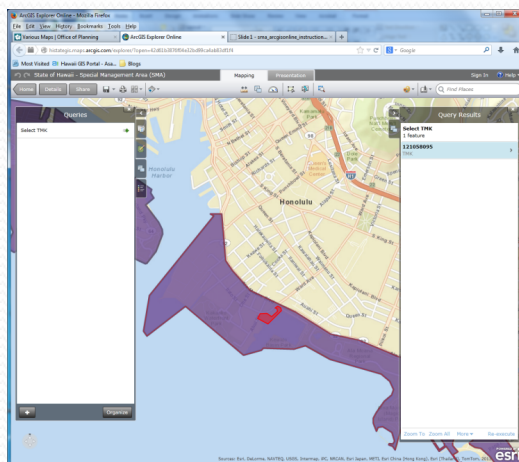
<http://maps.hawaii.gov/ludfinder/>



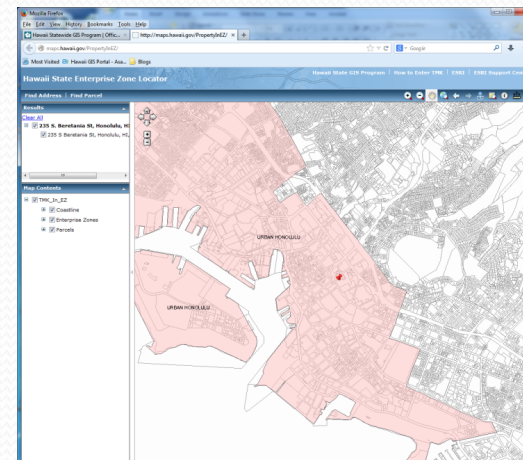
<http://maps.hawaii.gov/landclassfinder/>



<http://bit.ly/uDtNNc>



<http://maps.hawaii.gov/propertyinez/>

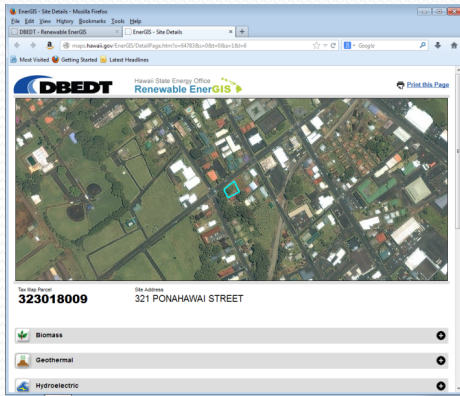




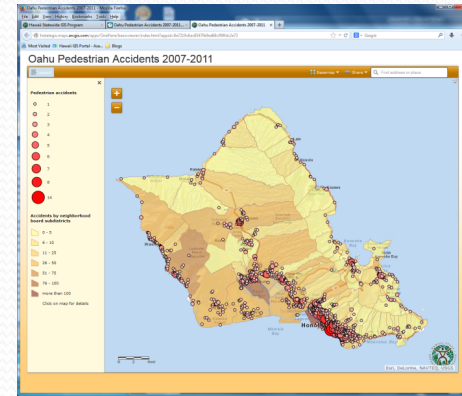
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Assisting State agencies

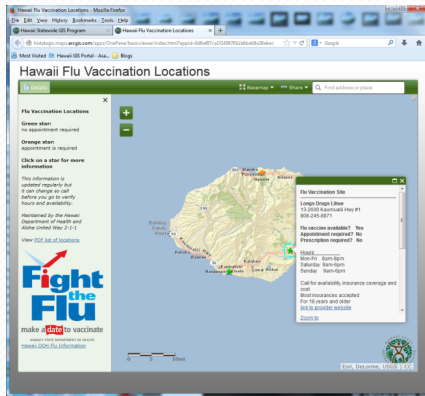
DBEDT – SID - EnerGIS (<http://maps.hawaii.gov/EnerGIS/>)



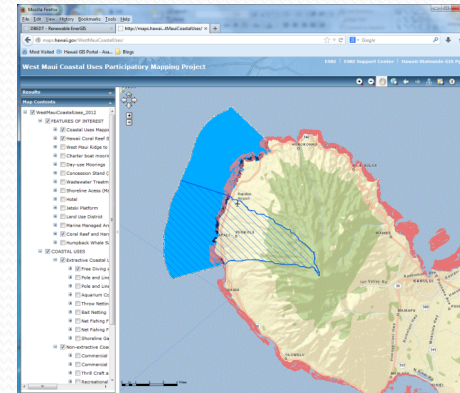
DOH – Pedestrian Accidents (<http://health.hawaii.gov/injuryprevention/pedestrian-accidents-2007-to-2011/>)



DOH – Vaccination Locations (<http://health.hawaii.gov/docd/flu-hawaii/vaccine-locator/>)



DLNR – Coastal Uses (<http://maps.hawaii.gov/WestMauiCoastalUses/>)





Open Data in the Office of Planning

2013 Hawaii Digital Government Summit

November 21, 2012



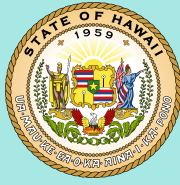
Jesse K. Souki, Director

<https://www.facebook.com/OfficeofPlanning.HIgov>

<https://twitter.com/PlanningHIgov>

<http://planning.hawaii.gov/gis>

gis@dbedt.hawaii.gov



Lorrin Kim

Chief, Office of Planning, Policy, and Program
Development, Department of Health, State of Hawaii



Public Health Data Governance Opportunities

Hawaii Digital Government Summit

November 21, 2013

Lorrin Kim

Chief, Office of Planning, Policy, and Program Development

Hawaii Department of Health

Today's Goals

- Describe public health data sources and systems
- Discuss strengths and opportunities affecting governance practices
- Discuss potential benefits and impacts to a well-governed, unified, and longitudinal public health data set

Key Concept

Hawaii Department of Health

- **§321-1 General powers and duties of the department.** (a) The department of health shall have general charge, oversight, and care of the health and lives of the people of the State.
- The mission of the Department of Health is to protect and improve the health and environment for all people in Hawai‘i.
- Centralized state public health agency model
- Over 3,000 employees and 75 programs
- Multiple systems and multiple funders
 - At least 8 major federal agencies

Foundations for Healthy Generations

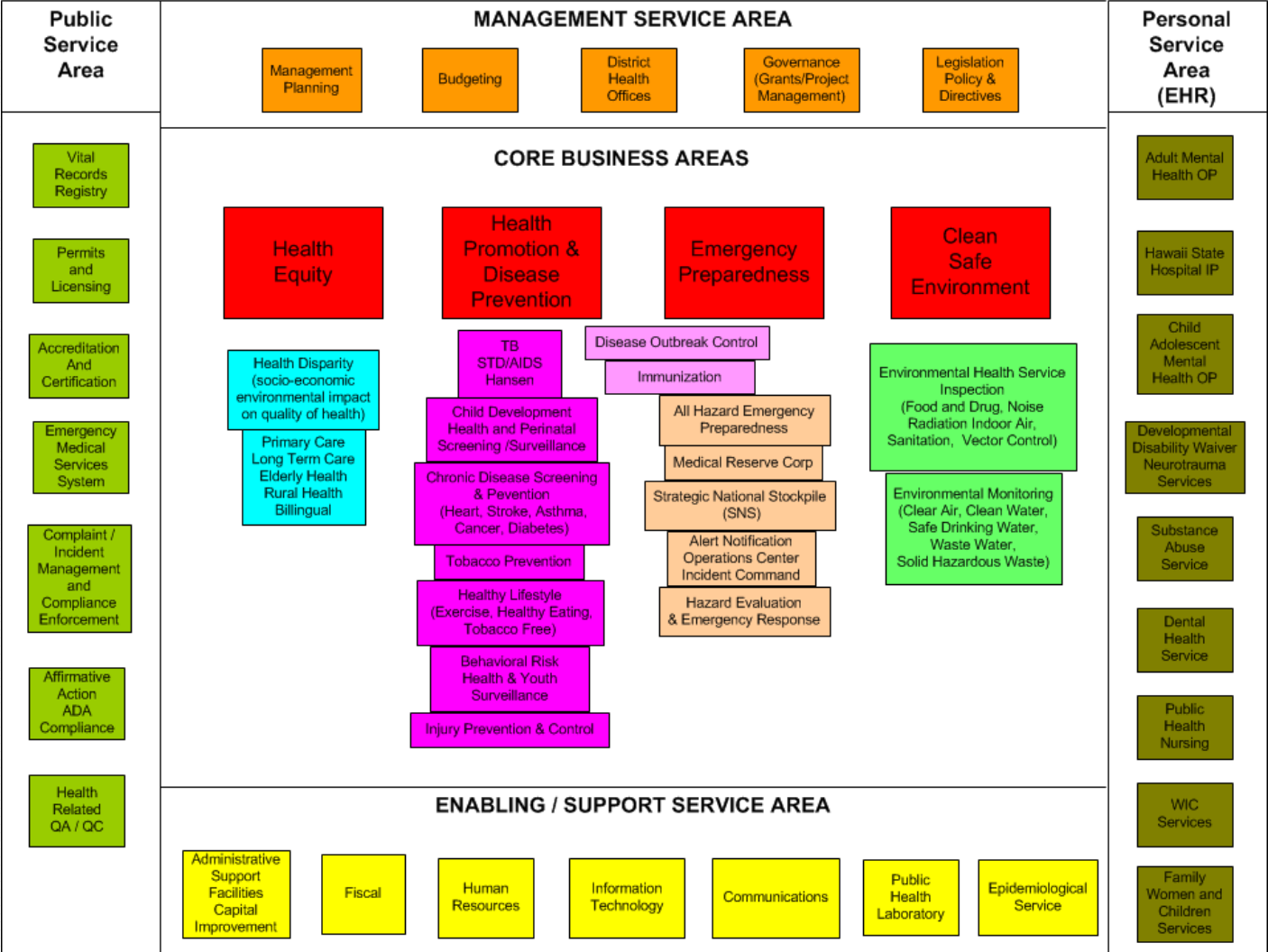
- Health Equity
- Health Promotion & Disease Prevention
- Emergency Preparedness
- Clean & Sustainable Environments
- Quality and Service Excellence



Four Administrations

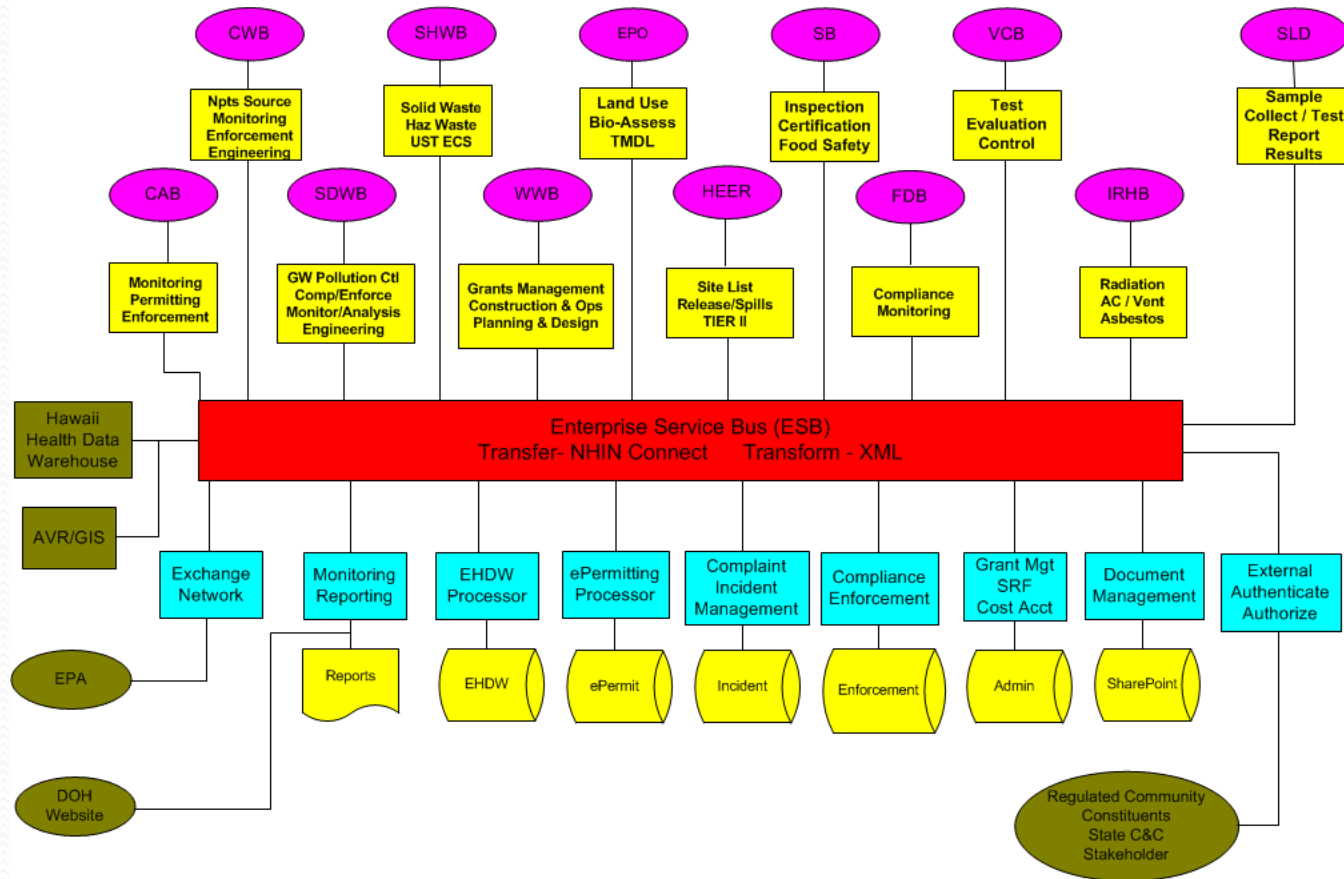
- General Administration
 - Shared platforms for fiscal and human resource functions
 - Vital records
- Behavioral Health
 - Direct outpatient clinical services, 24/7 psychiatric hospitals, contracted substance abuse services,
- Environmental Health
 - EPA enforcement, state regulations, business permits
- Health Resources
 - Direct outpatient clinical services
 - Epidemiology, disease registries, surveillance

DOH ENTERPRISE ARCHITECTURE (Business Reference Model)



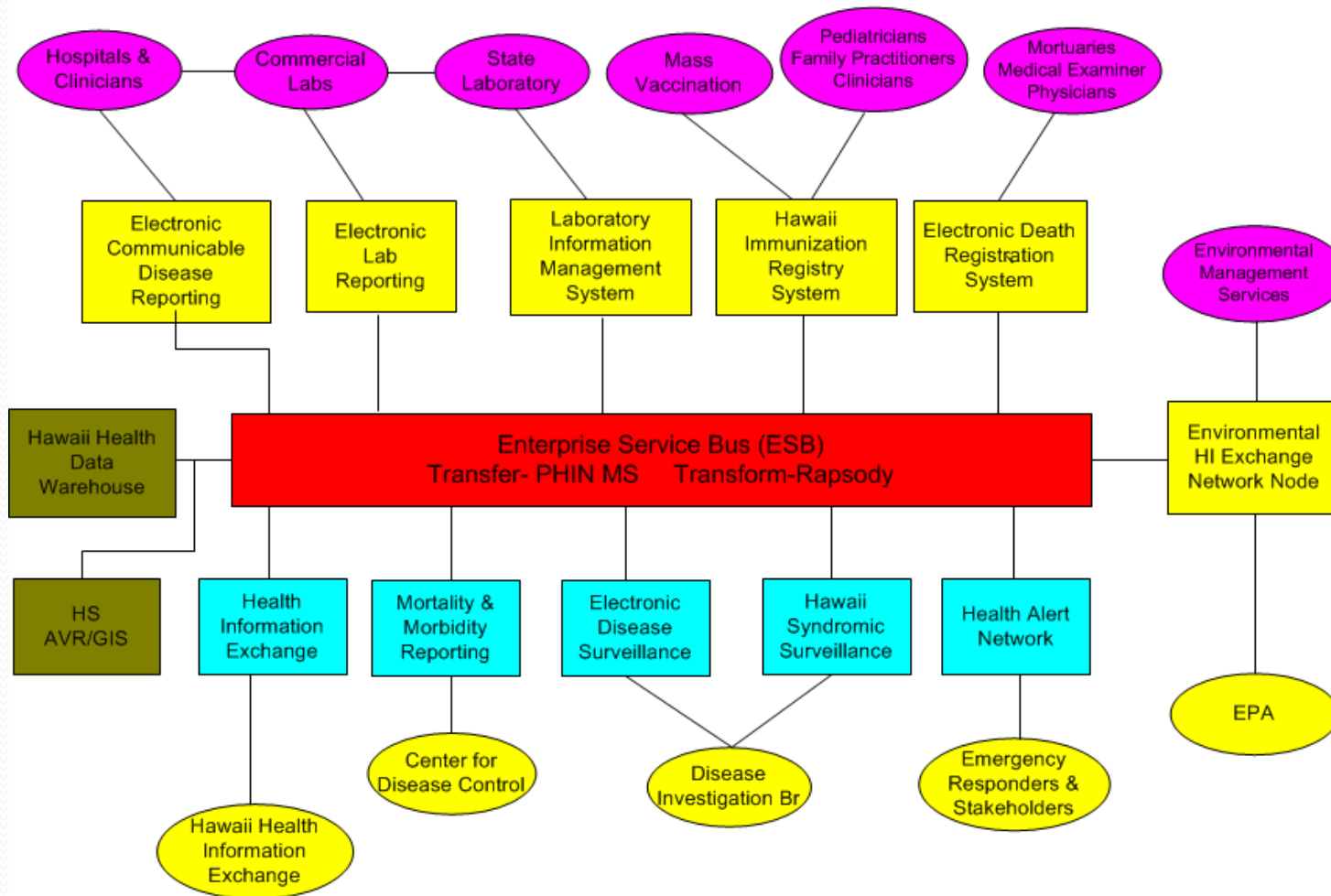
Administration Drill Down (Environmental Health)

5



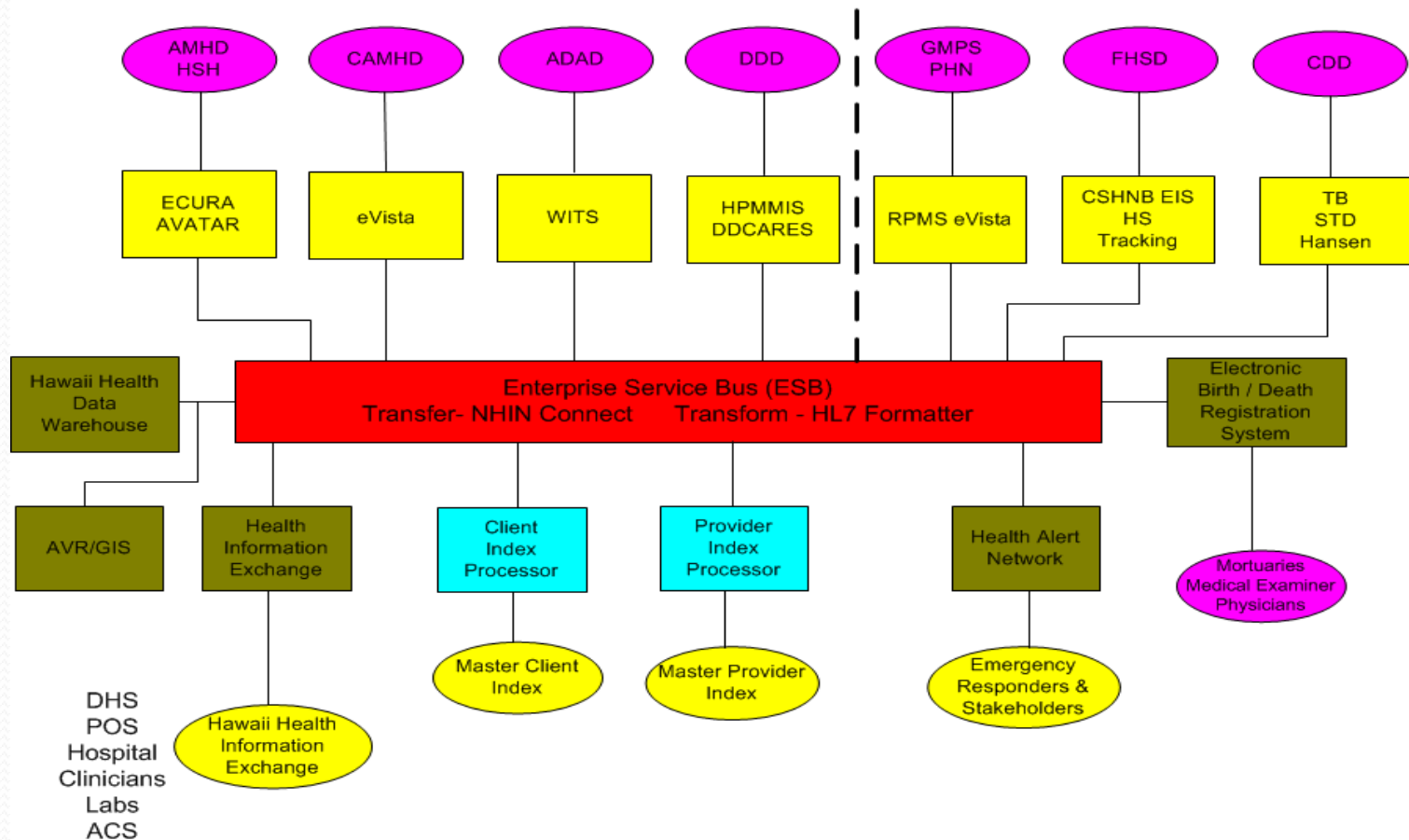
Division Function Drill Down (Disease Outbreak Surveillance)

1



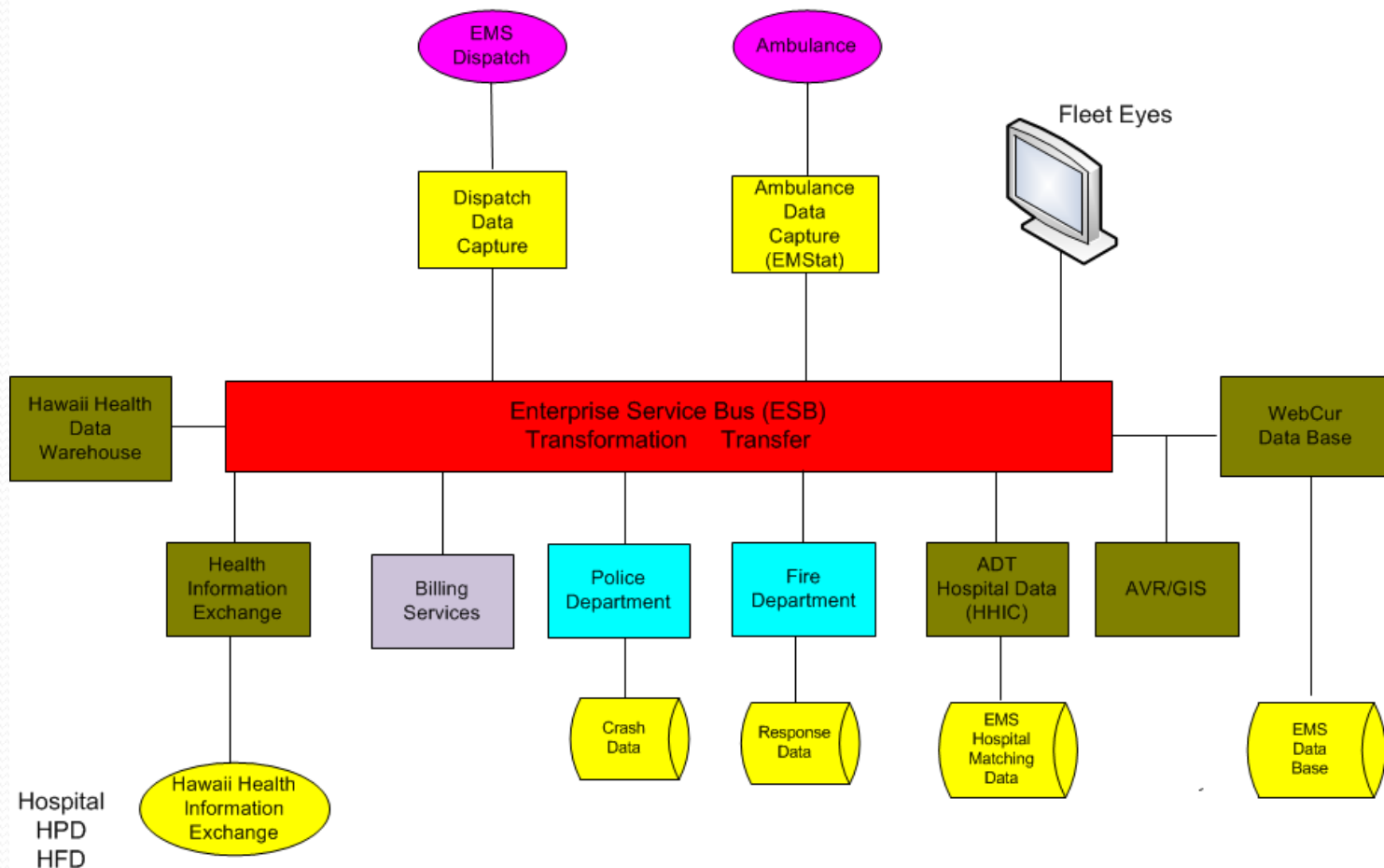
Clinical Service Delivery Drill Down (Electronic Medical Records)

2



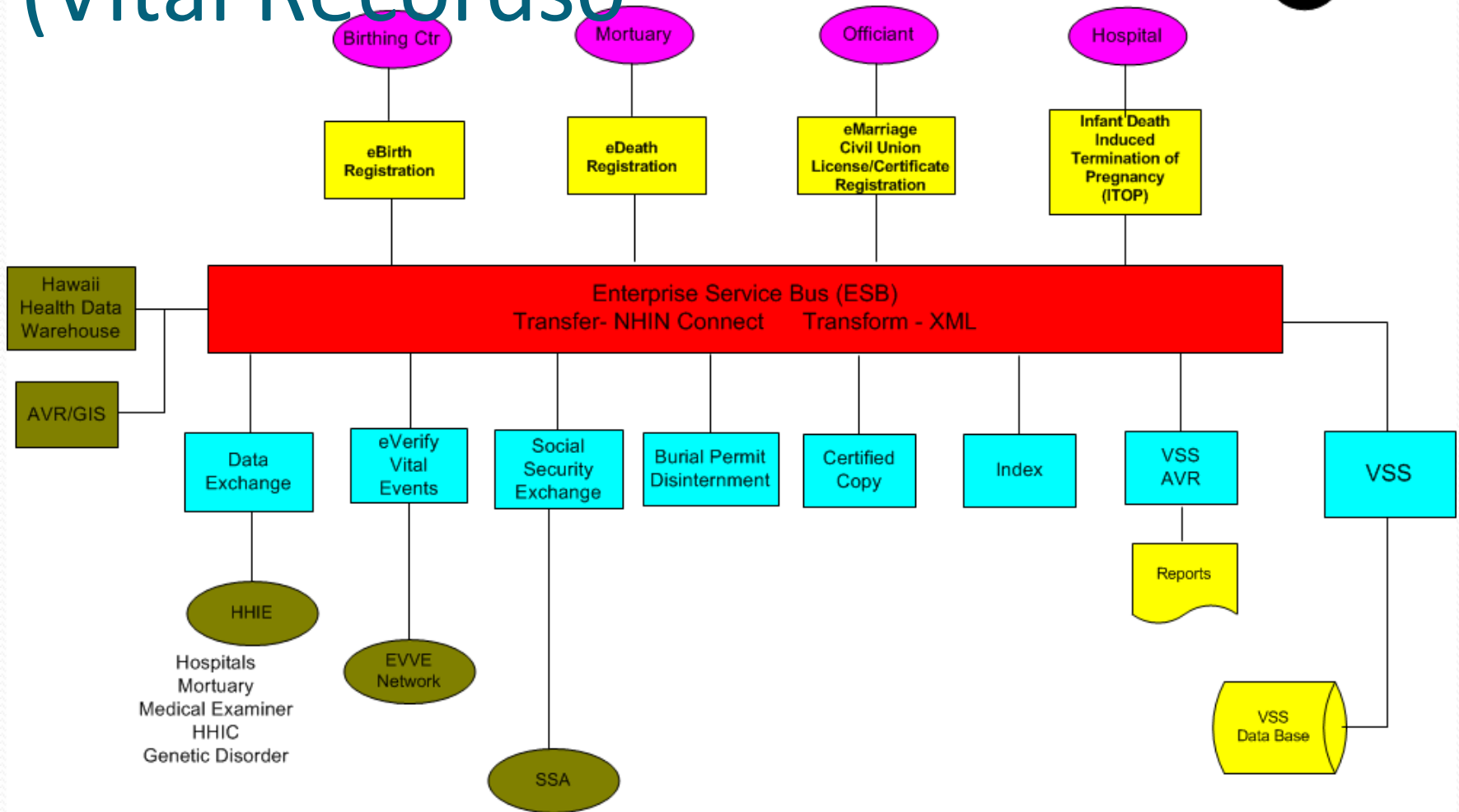
Multi-Jurisdictional Drill Down (Emergency Medical System)

06

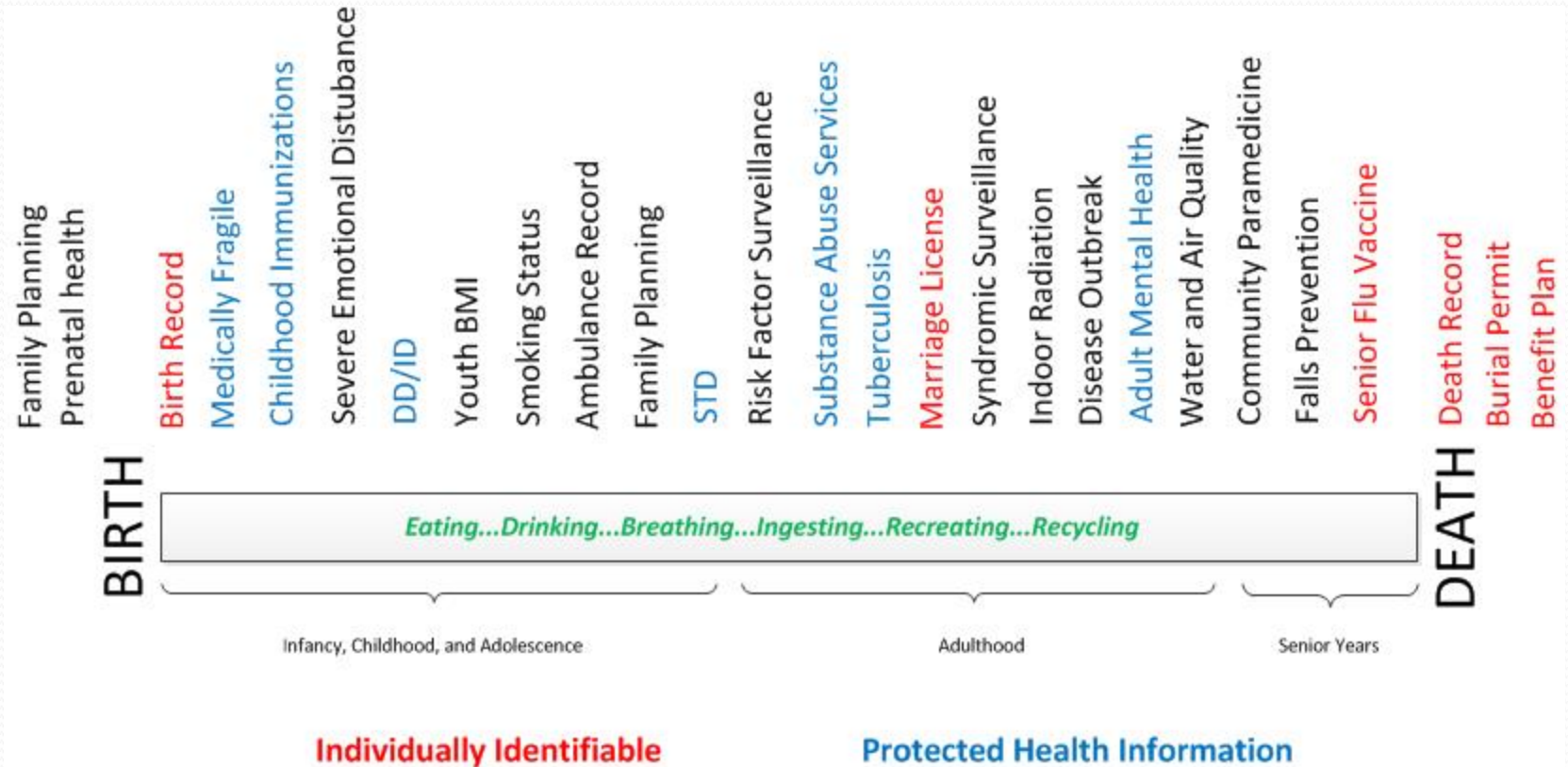


Public Document Drill Down (Vital Records)

3



The Life and Times of Kimo Q. Public



Organizing It All

- Strengths

- Consistent data sets years after year
- Mirrors national standards (CDC, EPA)
- Public good

What standards?

Who owns the data?

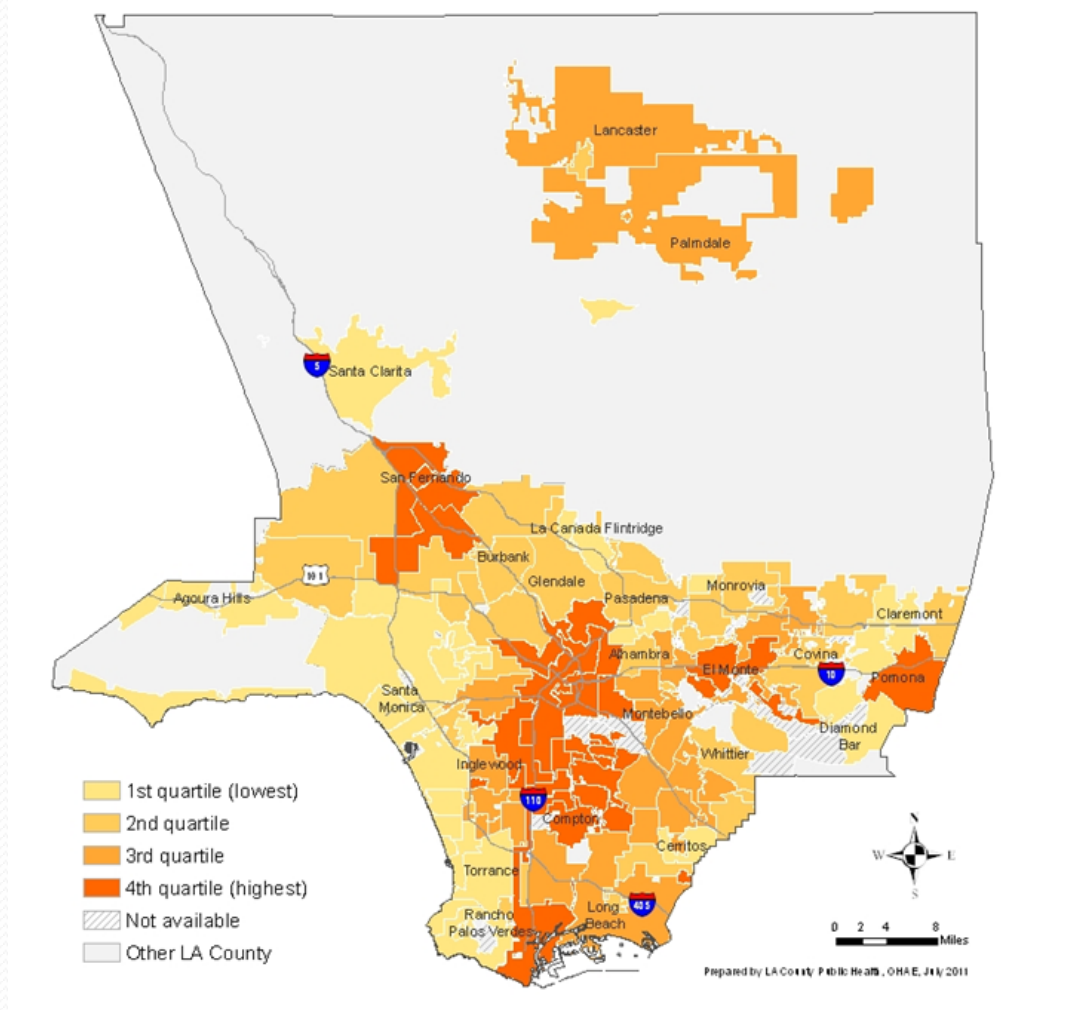
- Protected health data belongs to the individual
- Providers and agents are stewards of those records
- Strong legal protections (HIPAA, FERPA, HRS/Harmonization)

- Opportunities

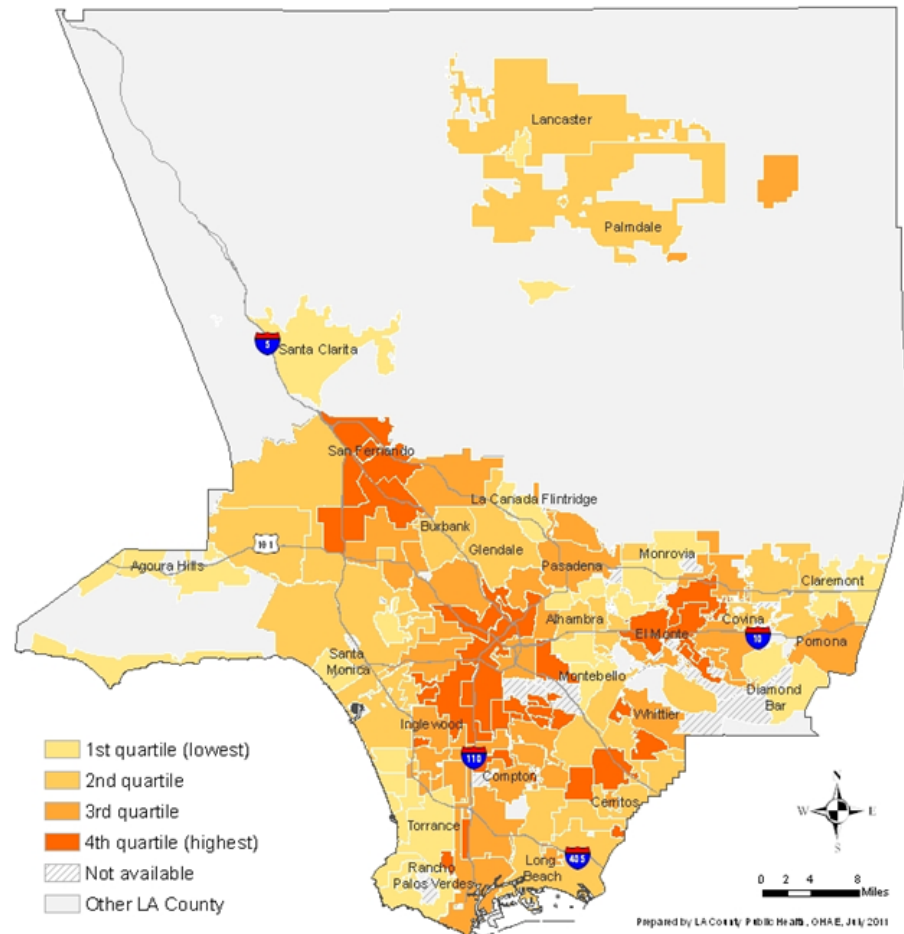
- Methodologies and guidelines change
- No MPI or unique identifiers
- Different funders (CDC, EPA)
- Health data relies of self-report
- Paper-based systems (facility inspections, sanitation inspections)
- Public sophistication and misuse of data (care homes)

How to secure it?

Why Try?



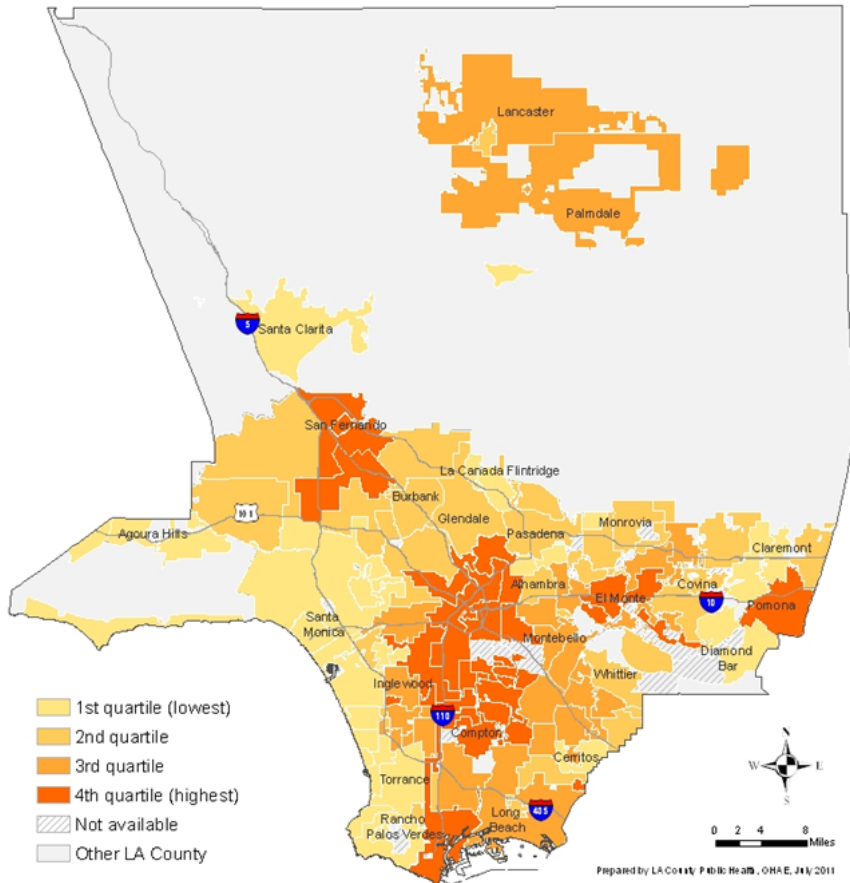
No Really, Why?



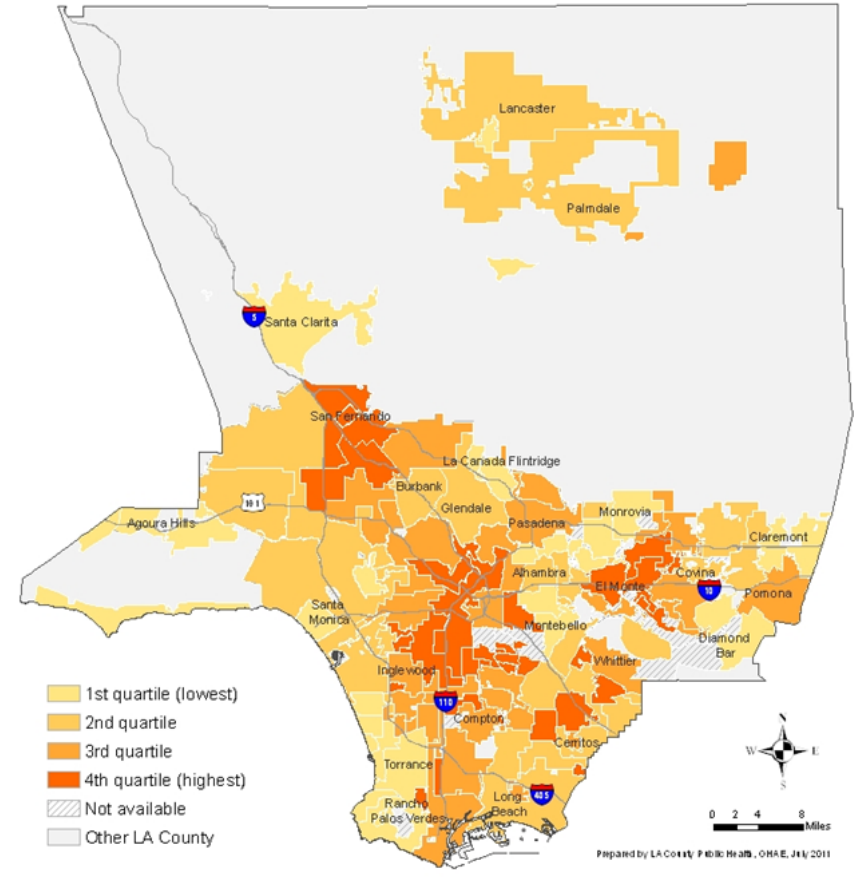
Social Determinants of Health, That's Why!

Source: Federal Reserve Bank

Economic Hardship Index by City/Community, Los Angeles County, 2000



Prevalence of Childhood Obesity by City/Community, Los Angeles County, 2005



Search

Home > Disparities Dashboard

Share | Facebook | Twitter | My | Email | RSS | Print

Disparities Dashboard

Search All Indicators

Region: [Honolulu](#) | [Hawaii \(County\)](#) | [Kauai](#) | [Maui](#) | [Hawaii \(State\)](#)

Breakout By:

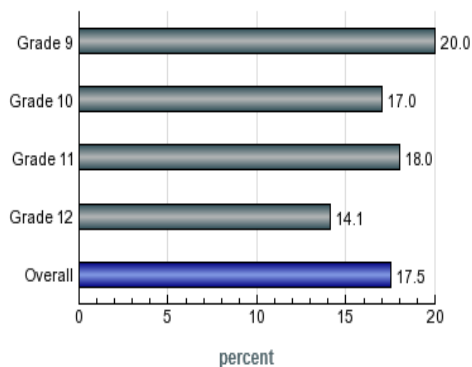
Indicators for State: Hawaii (Grade Level breakout)

Health

Exercise, Nutrition, & Weight

- Teen Fruit and Vegetable Consumption

Teen Fruit and Vegetable Consumption by Grade Level



- Teens who are Obese

Teens who are Obese by Grade Level



Success stories!

Search

Home > Community Dashboard

Share | Facebook | Twitter | My | Email | RSS | Print

Community Dashboard

Search All Indicators

Region: [Honolulu](#) | [Hawaii \(County\)](#) | [Kauai](#) | [Maui](#) | [Hawaii \(State\)](#)

Breakout By: Order By:

Indicators for County: Kauai

[View the Legend](#)

Health

Access to Health Services

- Adults with a Usual Source of Health Care (2003-2010) Comparison: Prior Value



- Adults with a Usual Source of Health Care (2011+) Comparison: PAN Plan Tracker

- Adults without Health Insurance (2003-2010) Comparison: U.S. Value



- Children without Health Insurance Comparison: Prior Value



- Number of Practicing Doctors of Osteopathy **NEW** Comparison: Prior Value



- Number of Practicing Medical Doctors **NEW** Comparison: Prior Value



- Number of Practicing Nurse Practitioners **NEW** Comparison: Prior Value



- Number of Practicing Physician Assistants **NEW** Comparison: Prior Value



- Persons with Health Insurance Comparison: Prior Value



Cancer

- Colorectal Cancer Death Rate (2003-2010) Comparison: Prior Value



- Breast Cancer Death Rate Comparison: Prior Value



- Breast Cancer Incidence Rate Comparison: U.S. Counties



- Cervical Cancer Incidence Rate Comparison: U.S. Counties



- Colon Cancer Death Rate Comparison: Prior Value



70

The Promise of Big Data

- First steps – Governor’s Dashboard
- Clinical health information exchange and EMR
 - Patient safety and quality
- Epidemiological unified, longitudinal, and interactive data systems
 - All Payer Claims Database
 - Disease Registries
 - Calculate instead of estimate disease incidence and prevalence
- BI across agencies and jurisdictions – DOE, DoTAX, DHS
 - Public Policy
 - Health In All Policies

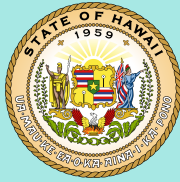
Current strategies.



Questions?

Lorrin Kim
Chief, Office of Planning, Policy, and Program Development
Hawaii Department of Health

586-4188
lorrin.kim@doh.Hawaii.gov



- **Summary**
 - Key Lesson(s) Learned and Best Practice(s) of Data Information Sharing within Government and To Public
 - Where do you start and who should drive it?
 - Who owns the data?
 - How do you keep it secure?
 - What standards should be used?
- **Next Steps**
 - How can you help?
 - Participate in the State of Hawaii Data Council
 - Participate in the Open Government Program
 - Who do you contact?
 - Blake Oshiro, Executive Sponsor and Deputy Chief of Staff, Office of Governor
 - Karen Higa, Open Gov Program Manager, Office of CIO, State of Hawaii