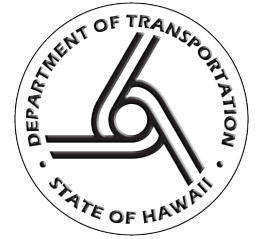# Hawaii Statewide ITS Architecture

Statewide Concept of Operations Workshop

meeting summary

Attendees:

Hawaii Department of Transportation:
Neal Honma, Highways, Traffic Branch
Kristine Pascua, Highways, Traffic Branch
Jan Higaki, Highways, Traffic Branch
Tim Sakahara, Public Information Officer
Sterling Chow, Hawaii District

Consultant Team:
Shevaun Low, ICx
James Takase, ICx
Bruce Eisenhart, ConSystec
John Baker, ConSystec
Cami Kloster, G70

State of Hawaii:
Noriko Sloan, **Hawaii Tourism Authority**
Torrey Ho, **Hawaii Emergency Management Agency**
Barbara Okamoto, **Hawaii Visitors and Convention Bureau**

City & County of Honolulu:
Ty Fukumitsu, **Dept. of Trans. Services**
Andy Yip, **Dept. of Information Tech.**
Jon Nouchi, **Honolulu Authority for Rapid Transportation (HART)**
Jeffery Siehien, **HART**
Whitney Birch, **HART**

County of Kauai:
Celia Mahikoa, **Kauai County Transit**
Elton Ushio, **Kauai Civil Defense**

Date:	Tuesday, May 24, 2016
Time:	10:00 – 3:00 PM
Place:	Honolulu International Airport, Interisland Terminal
	7th Floor, Interisland Terminal Conference Rooms
Purpose:	*To present the Hawaii Statewide ITS Architecture Concept of Operations, roles and responsibilities and customized service packages.*

1. Welcome and Introductions

Attendees were welcomed to the meeting and asked to introduce themselves. It was noted that, during the workshop, each stakeholder will be asked for feedback about how they should be represented in the architecture, including their roles and responsibilities, their projects and how they are shown in the customized service packages.

2. Stakeholders Review

A brief overview of ITS Architecture was provided, along with a definition of stakeholders for the purposes of ITS Architecture. Attendees were provided with a list of stakeholders along with a definition for each. In addition, the handouts include the ITS elements associated with each stakeholder.

Action Description	Responsibility	Due Date
• Provide comments on Stakeholders List to Shevaun.Low@icxtg.com	Attendees	June 13, 2016

3. Operational Concepts

The Operational Concepts of the ITS architecture, which describe the roles and responsibilities of stakeholders, were reviewed. These roles and responsibilities have been organized by stakeholder, and then by service area, as they relate to surface transportation. It was noted that many of the roles and responsibilities are existing but may not use ITS. These are future opportunities for ITS projects.

Discussion/Comments:
- HDOT-HWY and the City and County of Honolulu DTS currently share traffic information. The Operational Concept for HDOT-HWY will be changed from 'future' to *Coordinate traffic information and traffic control with the City and County of Honolulu Traffic Management Center* to 'existing'. A similar change will be made for the City and County of Honolulu DTS.
- HIEMA noted that Hawaii unions may have concerns in using AVL for tracking vehicles via connected vehicle applications.
- HART had a question about multiple agencies sharing information. Specifically, HART is interested in receiving real-time incident information on highways or roads that could travel times to the airport. The service packages involving traveler information will be reviewed and updated to reflect providing incident information to Honolulu International Airport travelers. [*Afternote: This may be a regional service for Honolulu/Oahu rather than a statewide service*.]
- In reviewing the handout, HIEMA asked whether the operational concepts for HIEMA marked as 'existing' should be marked as 'planned'.   The handout will be updated to add a note that this information is currently shared, but not electronically.
- HIEMA is currently pushing to house WEB EOC in the cloud so it could be accessed by multiple agencies. A project will be added to the list of projects; and the service packages will be updated to reflect this, as appropriate. HIEMA is hosting a WEB EOC training that other agencies may attend.

Action Description	Responsibility	Due Date
• Update Operational Concepts for HDOT-HWY based on above comments.	Project Team	Complete
• Update HIEMA Operational Concepts from "existing" to "planned", where appropriate.	Project Team	Complete
• Provide comments on the Operational Concepts to Project Team (shevaun.low@icxtg.com).	Stakeholders	June 13, 2016

4. Elements

ITS elements may include traffic and transit centers, emergency management centers, field element and vehicles as well as data archiving systems.

Discussion/Comments:

- The *HDOT DIR-P Communications Network* represents multiple avenues of electronic communication to travelers in Hawaii, including but not limited to press releases, social media updates, website content, etc.
- In addition to kiosks, HART may also utilize a retail vending network for electronic payment.
- HIEMA recommend that the project team reach out to Hawaii State ETS (Enterprise Technology Services), the state ITS department to ensure that the requisite communications (i.e., fiberoptic cable, microwave, etc.) are in place to support ITS throughout the State of Hawaii.

Action Description	**Responsibility**	**Due Date**
- Update Elements based on comments. - Provide comments on the Elements to the Project Team (shevaun.low@icxtg.com).	Project Team Stakeholders	Complete June 13, 2016

5. Projects / Future

All projects and future systems were reviewed. It was noted that the projects do not have funding tied to them and represent an agency's desires for the future. These projects will be mapped to the relevant portions of the ITS Architecture for the purposes of creating system engineering analyses to meet FHWA eligibility requirements for highway trust funds for ITS.

Discussion/Comments:

ID(s)	Project Name	Description	Comment	Action
S-19	Hawaii Joint EOC	This project will develop a Joint EOC, housing both the HIEMA Hawaii State EOC and the City and County of Honolulu EOC. This project will also include a connection with the HDOT-HWY TMC and the City and County of Honolulu's Traffic Management Center.	HIEMA: Recent plans presented to HIEMA show that there is insufficient space in the proposed Joint EOC to meet HIEMA requirements. As such, this project is no longer viable and will be removed.	Remove project from the list.
S-22	HTA Update of GoHawaii.org Website	This project will update the GoHawaii.org website to include real time information on weather as well as emergency information.	GoHawaii.com, not GoHawaii.org.	Update the description.

ID(s)	Project Name	Description	Comment	Action
NEW	HIEMA Web EOC Upgrade	This project will upgrade HIEMA's Web EOC capabilities to include hosting information in the cloud. This upgrade will allow multiple agencies outside of the Hawaii State EOC to access information on Web EOC.		This project will be added to the project list.
NEW	HDOT Website Update	This project will redesign the HDOT statewide website for highways, airports and harbors.		This project will be added to the project list.

Action Description	Responsibility	Due Date
• Update Projects based on comments. • Provide comments on the project list to Shevaun.Low@icxtg.com.	Project Team Stakeholders	Complete. June 13, 2016

6. Agreements

Potential agreements that should be considered in order to successfully deploy the ITS systems contained in the Hawaii Statewide ITS Architecture were highlighted. These include:

- Data sharing agreements
  - The City and County of Honolulu and HDOT-HWY might require a data sharing agreement for the Honolulu JTMC.
  - HIEMA may utilize agreements in the future for sharing or accessing cameras and data from other agencies.
- Traffic Signals
  - There is an agreement between HDOT and the City and County of Honolulu for operations and maintenance of signals by the City and County Honolulu.
  - An agreement is in place between the HDOT and the County of Hawaii for the COH for operations and maintenance of signals and streetlights by the County of Hawaii.
  - An agreement is in place between the HDOT and the County of Kauai for the HDOT, Kauai District, to operate and maintain signals on the island of Kauai.
- Transit
  - HART and the City and County of Honolulu will likely have an agreement defining roles, responsibilities, cost and data sharing at the Honolulu JTMC.
  - HART has an existing MOU with all other City and County of Honolulu departments to work together.
  - Fare Payment
    - An agreement is under development between HART and the City and County of Honolulu's DTS and DIT for the revenue sharing of the fare payment/collection system.
    - In the future, there may be additional agreements for the neighbor island counties to join the HART/DTS/DIT fare payment system.

- o There is an MOU between the City and County of Honolulu DTS, City and County of Honolulu DIT, and HART for operations of HART.
  - o There is a service level agreement between HART and the City and County of Honolulu DTS that includes trip planning information.
- Media
  - o The City and County of Honolulu has an agreement with media for use and attribution of CCTV images and traffic information.
  - o While there is no agreement between HDOT-HWY H3 and the media, an agreement may be developed in the future when HDOT moves to the JTMC.

7. Customized Service Packages

Service packages are pieces of the ITS Architecture that provide a particular transportation service. A series of service packages customized for Hawaii Statewide elements were reviewed and discussed. Key changes/ comments from the discussion are given below. [*Aside: All comments have been addressed and circulated to stakeholders for review and comment*.]

Discussion/Comments:

Service Package	Comment	Action
Emergency		
EM07	Connections between HDOT-AIR and HDOT-HAR have been changed to planned. Weather connections are through a voice broadcast via FEMA – these are still via voice and video. Added City and County of Honolulu TMC to traffic management. HDOT-HWY-H would send information through the County of Hawaii EOC as well as through the HDOT-HWY TMC.	None [changes made at the workshop].
EM08	Connections between HDOT-AIR and HDOT-HAR changed to *planned*.	None.
EM09	Connections between HDOT-AIR and HDOT-HAR changed to *planned*. There is no connection between state and transit – this is done at the county level.	None.
EM10	INFORMER is an indoor warning device provided and controlled by the state that provide indoor sirens or voice messages as part of disaster awareness. The project team will add this to the architecture. Interfaces from the Hawaii State EOC to the media were added as *existing*.	None.
Traffic Management		
ATMS07	Changed the connection between HDOT-HWY TMC and City and County of Honolulu Traffic Management Center to *existing*.	None.
Traveler Information		
ATIS01	Added the City and County of Honolulu TMC feeding traveler information to GoAkamai.	None.
ATIS01	Added the City and County of Honolulu TMC feeding traveler information to GoAkamai.	None.

Service Package	Comment	Action
Archived Data		
AD2	Archives for crash data and pavement data should be shown. Added two service package diagrams showing (1) the HWY-TS crash data connections to the County police department data; and (2) the HWY-P connections to the HWY districts for pavement data collection.	None.
Transit Management		
APTS04-3	TheBus and HART elements should be separated. Separate boxes for TheBus and HART elements.	None.
APTS04	This service package should be updated to add open payment instrument package – this should show travelers managing an account through personal devices, and mobile payment instruments being accepted by the buses and station equipment. The team will use the name "Open Payment Instrument" to cover devices or credit cards equipped with open payment chips. The Open Payment Instrument connects to the back office.	None.

Action Description	Responsibility	Due Date
• Update service packages to reflect comments.	Project Team	Complete
• Provide comments on the service package diagrams to Shevaun.Low@icxtg.com.	Stakeholders	June 13, 2016

8. Schedule

The project schedule for development of the Hawaii Statewide ITS Architecture was reviewed. The timeline for the remaining project is as follows:

- June 10, 2016: Stakeholder comments on the workshop notes due
- July 31, 2016: Incorporate comments and complete the draft architecture website
- August 2016: Stakeholder review of the draft architecture
- Fall 2016: Finalize Hawaii Statewide ITS Architecture

These action items were recorded by Cami Kloster of Group 70, John Baker of ConSysTec and Shevaun Low of ICx; it will be assumed to be complete and correct unless any comments and/or discrepancies are brought to ICx's attention no later than Friday, June 13, 2016.