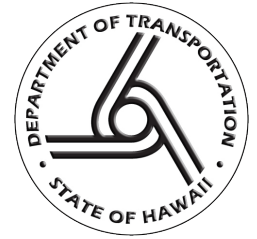


Hawaii Statewide ITS Architecture

Maui Concept of Operations Workshop



meeting summary

Attendees: Anna Foust, CDA
Bruch Eisenhart, ConSysTec
John Baker, ConSysTec
Marc Takamori, DOT Transit
Jacob Verkerke, DoM IT Services
Duane Kim, DOT Harbors
Fred Cajjgal, DOT Highway
Neal Honma, DOT Highway

Nolly Yagin, DPW
Glen Fromm, ICx Transportation
Shevaun Low, ICx Transportation
Cami Kloster, Group 70
Edward Taomoto, Fire
Lt. William Gannon, Police
Sgt. Lance Kaupalolo, Police

Date: Wednesday, May 14, 2015
Time: 10:00 – 3:00 PM
Place: Hawaii DOT, Highways Division, Maui District Office (650 Palapala Dr., Kahului 96732)
Purpose: *To present the Maui Regional ITS Architecture Concept of Operations, roles and responsibilities and customized service packages.*

Highlights

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, 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.

Discussion/Comments:

- Stakeholder names are abbreviated.
- Maui MPO is expected to be in operation by the end of the year.
- Vendors/Contractors will be referred to generically because they may change in the future.
- The spreadsheet includes architecture elements (covered in detail on a separate handout).
- The Maui County Department of Management Services, IT Services Division ('IT Services') will be added as a stakeholder in the ITS architecture because they have a key role in developing and monitoring IT equipment and communications networks.

Action Description	Responsibility	Due Date
<ul style="list-style-type: none"> Update Maui ITS Architecture to include IT Services as a stakeholder. 	Project Team	June 30, 2015
<ul style="list-style-type: none"> Provide comments on Stakeholders List to Project Team (shevaun.low@icxtg.com) 	Stakeholders	July 31, 2015

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:

- Fire has signal preemption but only for some signals. In the Operational Concept this is just yes or no; therefore, listed as yes (existing).
- The role and responsibility for the Maui MPO to collect transportation data were added, as many MPOs have this responsibility for data collection. In the future, once the MPO is fully functional, data collection could be automated.
- The roles and responsibilities provide a high level view of each stakeholders place in the Architecture and can serve as a check against the more detailed parts of the Architecture.
- Roles and responsibilities for IT Services will be added to the ITS architecture.
- Maui Police coordinates incident response with Fire and EMS. Maui Police is responsible for dispatching Police, Fire, and EMS.
- Maui Police are currently uploading crash records data to HDOT.

Action Description	Responsibility	Due Date
<ul style="list-style-type: none"> Update the Operational Concepts to reflect IT Services roles and responsibilities 	Project Team	June 30, 2015
<ul style="list-style-type: none"> Provide comments on the Operational Concepts to Project Team (shevaun.low@icxtg.com). 	Stakeholders	July 31, 2015

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:

- IT Services asked if the connecting systems (Wi-Fi, communications, etc.) are represented – are they subsystems in the ITS Architecture?
 - ConSysTec answered that the communications layer is an underlying layer to the architecture. The communication layer exists, but does not show directly on the transportation layer that is the primary output of the architecture. How the services are communicated doesn't show up on service package diagrams.

- When we talk about projects, some of those are communications related. What we usually do is map the communications projects to the services they enable. Some of these communications related projects were discussed in the interviews with stakeholders.
- Maui County IT Services expressed concern that the ITS architecture will not properly consider the communications and networking issues inherent in the ITS projects, moreover, that we will not properly consider the strategic view of communications and networking.
- Maui Police DOC (Departmental Operations Center) is the proper name for the Maui PD center system that is separate from the 911 center. The DOC is activated in emergencies and when the Maui CDA EOC is activated.
- The project team will investigate and assign a proper stakeholder for Pacific Disaster Center. This could be assigned to the University of Hawaii or to the PDC itself.
 - Maui County EOC uses their disaster aware system. They do not issue warnings, but instead it is a situational awareness tool.
- For the Pacific Tsunami Warning Center, the National Oceanic and Atmospheric Association (NOAA) should be shown as the stakeholder. Another element that should be included in the Architecture is the National Weather Service (NWS).
- The Maui County IT Services 'Event Management System' is the center that monitors and maintains IT equipment and communications for the county. The center checks that everything is running the way it is supposed to be running and predicts impending failures. This element should be called the Maui County IT Services Event Management System. Technical infrastructure is part of their responsibilities.
- Maui County DPW maintenance is dispatched via phone call or through radio. Maintenance is a different division from traffic operations.

Action Description	Responsibility	Due Date
● Add Maui Police Departments' DOC.	Project Team	June 30, 2015
● Determine nomenclature for Pacific Disaster Center.	Project Team	June 30, 2015
● Add NOAA as stakeholder of Pacific Tsunami Warning Center and add NWS as an element.	Project Team	June 30, 2015
● Add IT Services' Event Management System.	Project Team	June 30, 2015
● Differentiate DPW Maintenance Division from DPW Engineering Division.	Project Team	June 30, 2015
● Provide comments on the Elements to the Project Team (shevaun.low@icxtg.com).	Stakeholders	July 31, 2105

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
M-4 & M-16	HDOT-HWY-M Traffic Control Center (TCC) Maui County DPW TCC	These two projects will create separate TCCs from which State and County traffic signals and other ITS equipment will be monitored.	HDOT-HWY-M would like to pay Maui County DPW to operate and maintain its signal system.	Separate TCCs will be shown in the Architecture. This does not preclude the State and the County from joining together to have a single TCC in the future. Add IT Services as a participating agency, supporting County TCC.
M-5	HDOT-AIR-M Dynamic Message Signs (DMS)	This project will deploy variable or dynamic message signs (VMS/DMS) to tell drivers leaving the airport about road closures or other relevant data.	HDOT-HWY-M confirmed that it would operate and maintain the DMS since it is in the Highways right-of-way. HDOT-AIR-M would coordinate with HWY-M for messaging.	None.
M-8	HDOT-HAR-M Traffic Control	This project will install CCTV cameras and traffic signals on the roadways.	Depending on the roadway leading into the Harbor, either DPW or HDOT-HWY-M would be responsible for the installation of CCTV and signals.	Add Maui County DPW and HDOT-HWY-M as participating agencies.
M-13	Maui County DPW Fiber	This project will add spare capacity to conduit for Fiber Optic Cables.	This project is not specific to fiber.	Rewrite project description to focus on adding conduit to DPW construction projects. Add a new project to address communications infrastructure.
M-20	Maui Police Department Archived Motor Vehicle Crash Data Archive	This project will archive motor vehicle crash data. The data will be electronically provided to HDOT every Monday at 3AM. (Currently, this information is provided in hard copy.)	Although some of this data is being archived by a third party company, Maui PD is planning on improving this solution.	Some aspects of the capability are deployed and will be shown in the architecture as existing, but since there will likely be improvements in the future, this project will remain in the project list.

ID(s)	Project Name	Description	Comment	Action
M-21	Maui Police Department Computer Aided Dispatch (CAD) Expansion	This project will expand the CAD capabilities so that alerts and notifications may automatically be sent to select agencies in Maui County.	Maui Police already provides alerts to the public via email and text messages to smart phones/devices. They would like to enhance their alerting system.	This project will change the service provided to existing, but continue to show the project as part of the project list.
M-22	Maui Fire Mobile Data Terminals (MDT)	This project will install MDTs in Maui Fire vehicles.	This project is a joint effort between IT Service/Fire/PD. A link to the CAD system would be part of this project.	Add IT Services and Maui Police as participating agencies.
M-25	Maui Fire Wearable GPS	This project will add wearable GPS devices for fire personnel.	Wearable GPS may not be required as the P25 radio system upgrade has GPS capability.	Keep project on the list.
M-26 & M-27	Maui EMS AVL (Automated Vehicle Location) & Maui EMS Mobile Data Terminal (MDT)	This project will add AVL to all Maui EMS vehicles to access the Fleet Eyes system. This project will install MDTs in Maui EMS vehicles.	Maui EMS is provided by a vendor (i.e., AMR) that is contracted through the State Department of Health. If this project was to be deployed it is unclear about how it will happen. This project would need to be a joint effort between IT Service/EMS/PD. A link to the CAD system would be part of this project.	Add State Department of Health, Maui County IT Services and Maui Police as participating agencies.
M-31	Maui Bus Transit Signal Priority	This project will deploy Transit Signal Priority on routes that are prone to delays. Transit signal priority will be deployed to remedy these delays.	Transit Signal Priority is dependent on not only signal upgrades but on software for Maui County.	Add IT Services, Maui DPW and HDOT-HWY-M as participating agencies.
M-33	Maui Bus Transit Hubs	This project will create three new bus hubs in South Maui, West Maui and Central Maui. The hubs will include electronic signs with next bus information.	The timeframe for this project should be changed from 'Near-Term' to 'Long-Term'.	Change timeframe to 'Long-Term'.

ID(s)	Project Name	Description	Comment	Action
M-39	Maui CDA and Maui PD Coordination	This project will work with the Maui PD to add a permanent CAD (Computer Aided Dispatch) console in the Maui EOC.	Maui PD has determined that it is more cost-effective to provide a laptop computer when the Maui EOC is activated.	Remove this project from the list.
S-1	HDOT-HAR-M Maritime Wireless Project	This project will create a monopole for each port allowing wireless communications.	This is an ongoing project that is currently being implemented. The monopole at the Kahului Harbor is current enabled.	Keep project on the list.
S-2	Maui Police Department /University of Hawaii Fiber Optic Upgrade	MPD is partnering with the University of Hawaii to upgrade the network infrastructure improvements (adding fiber optic cable).	Maui PD radio shop handles communications for Maui County PD. The PD radio shop operates fair amount of communications infrastructure, including microwave. This is currently blending with the Maui County IT Services network. They are cooperating together to utilize both communications systems.	Add IT Services as a participating agency.
S-3	Electronic Fare Collection	Working with transit agencies in the State of Hawaii, this project will procure and deploy an electronic fare collection system. The system will allow agencies to track boardings and compile information for performance monitoring, as required by FTA.	Maui Bus is probably not deploying electronic payment themselves. The state is coordinating a statewide deployment and this project is dependent on that.	Revisit this service package in the development of the Statewide ITS Architecture.

Action Description

- Update project list to reflect comments and actions.
- Provide comments on the project list.

Responsibility

- Project Team
- Stakeholders

Due Date

- June 30, 2015
- July 31, 2015

6. Schedule

HDOT is currently reprioritizing projects, and that may affect both the schedule for the overall State ITS Architecture initiative, as well as the timeline for Maui. *[After note: HDOT confirmed that the Maui ITS Architecture will continue as scheduled. Revised dates:*

- *June 2015: Update and incorporate comments from workshop into Maui ITS Architecture*
- *July 2015: Stakeholder review of Maui ITS Architecture]*

Discussion/Comments:

CDA noted that there is an upcoming planning process for a Hazard Mitigation Plan. Some of the projects from ITS could go in and be eligible for future funds e.g. signs could go in but not traffic signals.

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 Maui elements were reviewed and discussed. Key changes/ comments from the discussion are given below:

Discussion/Comments:

Service Package	Comment	Action
Incident Management		
ATMS 08-1	Maui County has two major events – the Maui County Fair (Maui Fair Alliance) and Halloween. Maui PD sets up some electronic capability for arrests.	Keep ‘Event Generators’ in this service package.
ATMS 08-1	Maui PD mines social media as part of NG 911.	Add this capability to the architecture.
ATMS 08-4	The architecture is missing a connection between the Maui PD DOC and Police Vehicles.	Add an existing connection between the Maui PD DOC to Police Vehicles.
EM 01-2	Police vehicles have AVL. In addition, the Maui PD DOC should be represented in this service package.	Add AVL capability, as well as a connection with the Maui PD DOC to this service package.
EM 03-1	This service is more likely to be implemented once First Net is built out.	None
Disaster Management		
EM 06-1	NWS should be represented as providing weather information in this service package.	Add the NWS to this service package.
EM 06-1	The Visitors Bureau of Hotels and Lodging has a seat at the EOC and is a key component of disaster management in Maui.	Add the Visitors Bureau of Hotels and Lodging to this service package, as well as other relevant disaster management service packages, including EM10.
EM 06-1	The Red Cross may have a function in this diagram.	Consider adding the Red Cross to this service package.
EM 08-1	The Inter-island Data Network (IDN) is not in the EOC but in the CDA offices (which is co-located). The NWS and Tsunami warnings are pushed through that system, which also gets pushed out to devices.	Consider whether the IDN needs to be specifically represented in this service package.

Service Package	Comment	Action
EM10-2	This service package represents Everbridge, as well as iPause, the National Emergency Alert system and the Emergency Alert System.	None
Traveler Information		
ATIS 01-2	Media should be represented in this diagram.	Add media to this diagram.
ATIS 01-2	Maui County should be represented in traveler information. The public can subscribe to alerts through the Maui County Website, but the alerts cannot be customized. This is different from Everbridge. Everbridge can be customized, but does not include road information. Road closures are posted on the Maui County Website.	The Maui County Website will be added to this service package, as well as related traveler information service packages. An ATIS02 service package for the Maui County Website that includes subscriptions will be added. EM 10-2 will include Everbridge.
Traffic Management		
N/A		
Maintenance and Construction		
MC 01	Maui County DPW Vehicles have GPS and vehicle diagnostics. The information is sent back to the Motor Pool and Maintenance Dispatch.	Consider whether this constitutes an existing connection in the ITS architecture.
MC 02	HDOT maintenance yards communicate through cell phones. The vehicles have GPS but they are not tracked for maintenance purposes.	Consider whether this constitutes an existing connection in the ITS architecture.
Transit Management		
APTS 01-1	Paratransit has GPS in the cabinets that are on the paratransit vehicles. The center can track buses and compare to their schedule.	Add GPS functionality to this service package.
APTS 02-1	Fixed routes have radio communications only. Drivers have GPS on their phones, but no schedule information. Maui Bus will have a pilot program from TRANSLOPE beginning in two weeks. If the pilot is successful the initiative will be expanded. Customers will be able to text a code and find out when the next bus is arriving.	None
APTS 03-1	Paratransit operations plans to have an online reservation system in the next 10 years. Paratransit currently has automated calls going to clients to remind them of reservations.	Update this service package to represent online reservations in the future.
APTS 04-1	Electronic fare management would be implemented as part of a statewide initiative.	Revisit this service package after the development of the statewide ITS architecture.

Action Description

- Update service packages to reflect comments.
- Provide comments on the service package diagrams.

Responsibility

Project Team
Stakeholders

Due Date

June 30, 2015
July 31, 2015

8. Open

- MFD has mutual aid agreements with DLNR, the Hawaii Volcanoes National Parks, HDOT Airports and Coast Guard.

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 6, 2015.