

Statewide ITS Architecture

Operational Concept Stakeholder Meeting



May 24, 2016

Agenda

- Introductions and Welcome
- Stakeholders Review
- Operational Concepts
- Elements
- Projects / Future Efforts
- Agreements
- Customized Service Packages
 - All Stakeholders Involved
 - Transportation and PSAPs
 - Transportation only
 - Transit
- Schedule/Next Steps

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Stakeholders Review



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Who is a Stakeholder?

- Technical Definition:
 - Someone that sends or receives transportation information to/from other stakeholders either directly or with their systems.
- Institutional Definition:
 - Someone who builds, operates or maintains ITS equipment.

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Statewide Stakeholders

Stakeholder Name	Stakeholder Abbreviation
Hawaii Department of Transportation –	HDOT-HWY
Hawaii Department of Transportation – Public	HDOT-DIR-P
Hawaii Department of Transportation – Highways Division, Oahu District	HDOT-HWY-O
Hawaii Department of Transportation – Highways Division, Hawaii District	HDOT-HWY-H
Hawaii Department of Transportation – Highways Division, Kauai District	HDOT-HWY-K
Hawaii Department of Transportation – Highways Division, Maui District	HDOT-HWY-M
Hawaii Department of Transportation – Highways Division, Planning Branch	HDOT-HWY-P
Hawaii Department of Transportation – Highways Division, Traffic Branch, Safety Section	HDOT-HWY-TS
HDOT Highways, Motor Vehicle Safety Office	HDOT-HWY-V

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Statewide Stakeholders

Stakeholder Name	Stakeholder Abbreviation
Hawaii Department of Transportation – Airports Division	HDOT-AIR
Hawaii Department of Transportation – Airports Division, Kauai District	HDOT-AIR-K
Hawaii Department of Transportation – Airports Division, Maui District	HDOT-AIR-M
Hawaii Department of Transportation – Airports Division, Oahu District	HDOT-AIR-O
Hawaii Department of Transportation – Harbor Division	HDOT-HAR
Hawaii Department of Transportation – Harbor Division, Hawaii District	HDOT-HAR-H
Hawaii Department of Transportation – Harbor Division, Kauai District	HDOT-HAR-K
Hawaii Department of Transportation – Harbor Division, Maui District	HDOT-HAR-M
Hawaii Department of Transportation – Harbor Division, Oahu District	HDOT-HAR-O

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Statewide Stakeholders

Stakeholder Name	Stakeholder Abbreviation
County of Hawaii Department of Public Works	County of Hawaii DPW
City & County of Honolulu Department of Transportation Services	City and County of Honolulu DTS
City & County of Honolulu Department of Information Technology	City and County of Honolulu DIT
County of Maui Department of Public Works	Maui DPW
Hawaii County Mass Transit Agency	HCMTA
Honolulu Authority for Rapid Transportation	HART
Kauai County Transportation Agency	Kauai Bus
County of Maui Department of Transportation	Maui Bus
Hawaii Emergency Management Agency	HIEMA
County of Hawaii – Civil Defense Agency	County of Hawaii CDA
County of Kauai – Civil Defense Agency	Kauai CDA
County of Maui – Civil Defense Agency	Maui CDA
City & County of Honolulu Department of Emergency Management	City and County DEM
Hawaii Tourism Authority	HTA

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Operational Concepts

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Operational Concepts

- Defines roles and responsibilities of stakeholders in providing the ITS services
- Organized by
 - Stakeholder
 - Service Area
 - Emergency Management
 - Incident Management
 - Information Dissemination
 - Traffic Signal Control
 - Transit Management
 - Commercial Vehicle Operations

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Operational Concept Example

Stakeholder	Service Area	Role and Responsibility Description	Status
Hawaii Department of Transportation - Highways Division (HDOT-HWY)	Freeway Management	Coordinate traffic information and traffic control with the City and County of Honolulu Traffic Management Center.	Future
		Obtain traffic images and traffic flow data through CCTV's and field sensors, and maintain operational control of its own field equipment.	Existing
		Operate changeable speed limit signs, including collecting traffic count information from the devices.	Existing
	Connected Vehicle Management	Coordinate with private vehicles to enable connected vehicle applications for safety and mobility.	Future

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Elements

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ITS Inventory

- A list of ITS elements and the elements that interface with them
- And an ITS element is:
 - The name used by stakeholders to describe high level parts of an ITS system.
- Types of Elements:
 - Centers – Traffic, Emergency, Transit
 - Field Devices – Traffic, Maintenance
 - Traveler Interfaces – Websites, Smart Phones
 - Data Systems – Planning, Archives
 - Vehicles – Transit, Emergency

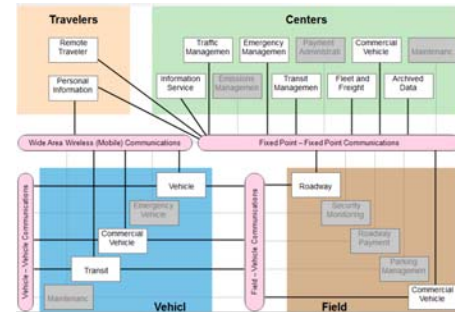
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Statewide ITS Inventory

- Review current and planned elements
 - Owner
 - Status
 - Definition
 - Entity Type

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Statewide ITS Inventory: Subsystems



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Statewide ITS Inventory

- Let's go to the inventory....

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Statewide ITS Projects

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Review ITS Projects

- ITS projects identified from stakeholder interviews with key
- For each project consider
 - Name, Description
 - Key Stakeholders
 - Timeframe
 - Near-Term: Within the next 5 years
 - Long-Term: More than five years
 - Mapping to Architecture

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ITS Projects

- Will input ITS projects into the Turbo Architecture database.
- Ability to generate outputs to create a systems engineering analysis and functional requirements for each project.

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Highlighted projects

- Hanalei Flood Warning System
- Jet Fuel Tank Relocation

- Let's go to Project List.....

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Agreements

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Potential Agreements

- Did we identify any agreements??

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ITS Services

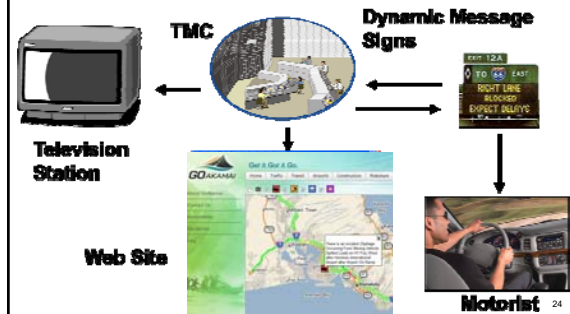
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ITS Services Cover

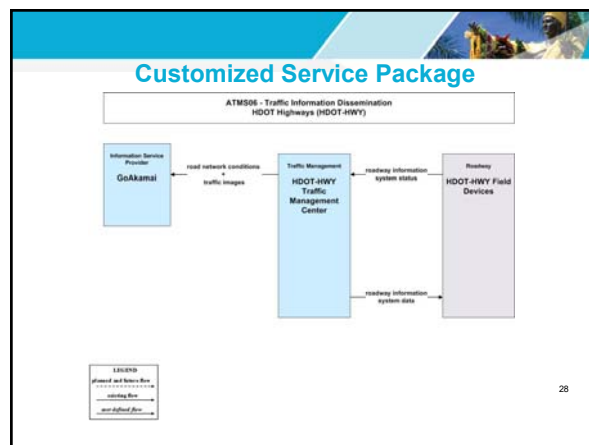
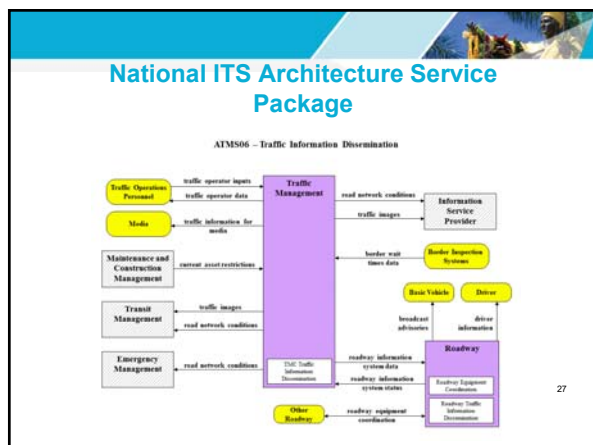
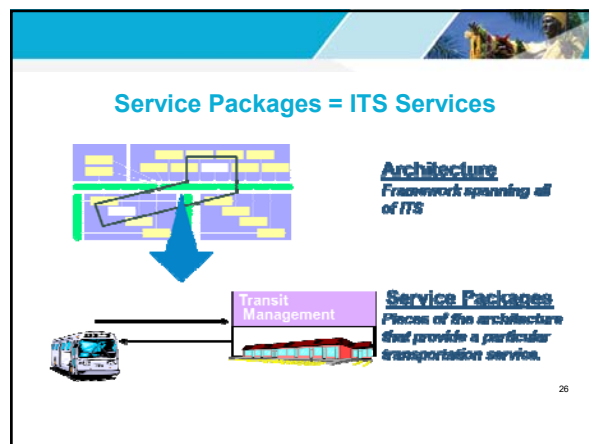
- Traffic Management
- Traveler Information
- Transit Management
- Emergency Management
- Commercial Vehicle Operations
- Maintenance and Construction
- Archived Data Management
- Advanced Vehicle Safety

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ITS Service: Traffic Information Dissemination



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Schedule

- Jan. 2015: Identify Stakeholders
- Feb. – April 2015: Maui Stakeholder Interviews
- May – July 2015: Maui Architecture Development
- June – Sept. 2015: Kauai Stakeholder Interviews
- Oct. '15 – Feb. '16: Kauai Architecture Development
- Jan. – March 2016: Hawaii Statewide Interviews
- April – July 2016: Hawaii Statewide Architecture Development
- Aug. – Sept. 2016: Final Architecture

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Thank you!

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