

California **BROADBAND COUNCIL**

October 17, 2019

Agenda

Updates

- Public Safety
- AB 1549 (Chapter 505, Statutes of 2016)

Task Force Updates

Overview

2019

- Bill of Rights
- Strategic Corridors
- State Contracts

2018

- Long Term Goals
- Tribal
- Surplus Equipment



Public Safety

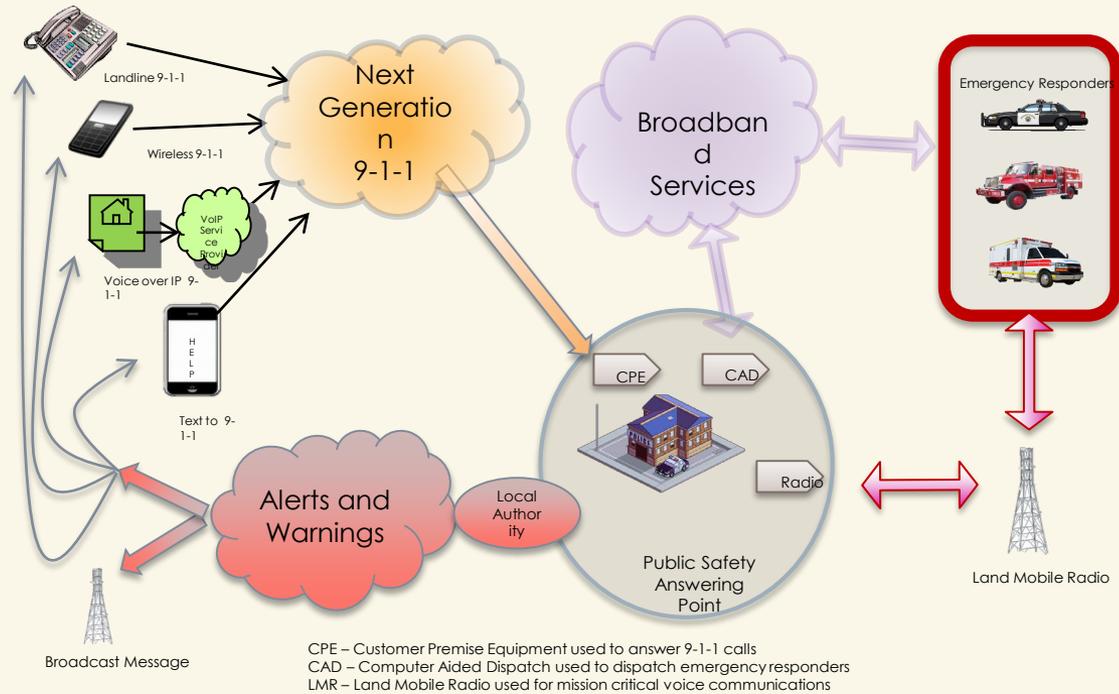
Budge Carrier

California Office of Emergency Services

Briefing Overview

- Importance of Next Gen 9-1-1
- The RFP and Contract Award Process
- Overview of Next Gen 9-1-1 in California
- Next Gen 9-1-1 and integration with other communications at Public Safety Answering Point (PSAP)

Connecting the Technology



Importance of Next Gen 9-1-1

- **Next Generation 9-1-1 will:**

- Increase resiliency by hardening the system to withstand disasters
- Allow agencies to re-route 9-1-1 calls to each other during disasters
- Reduce 9-1-1 system downtime. Outages in the current 9-1-1 system are an ongoing problem with the aging infrastructure currently being used in California
- Allow the NG 9-1-1 system to be used as a common delivery system for Alerts and Warnings at little additional expense, saving local agencies funding individual systems
- Ensure emergency calls are quickly and accurately delivered
- Support text to 9-1-1 delivery into the dispatch center and text from 9-1-1
- Deliver increased location accuracy for all 9-1-1 calls
- Provide the ability to integrate other 9-1-1 technologies over secure IP connections

Next Gen 9-1-1 Partners

Deployment Timeline

- Statewide Prime – **Aug 2019 – Mar 2021**
- Northern Region – **Aug 2019 – Apr 2021**
- LA Region – **Aug 2019 – Jun 2021**
- Southern Region – **Aug 2019 – Jul 2021**
- Central Region – **Aug 2019 – Aug 2021**
- All selective routers decommissioned - **2022**



The RFP Process

- Competitive bid process used to select qualified Next Gen 9-1-1 service providers
- A total of 8 Bidders participating in the RFP process
- Bidders were required to file Next Gen 9-1-1 tariffs
- Cal OES established Not to Exceed pricing to ensure bids were at or near cost
- Bidders were required to comply with functional requirements needed to ensure project success
- Bidders submitted narrative responses that were evaluated and scored
- Only qualified bidders with NENA i3 compliant Next Gen 9-1-1 solutions were selected
- All four regions have a capable, qualified NG 9-1-1 Service Provider
- Winning bidders were notified at 9-1-1 Advisory Board on August 20, 2019

Next Gen Vendor POC

- **Atos (Statewide Prime)**
 - Cal OES Project Manager: Anne Leal-Abdallah; Anne.Leal-Abdallah@CalOES.ca.gov; (916) 657-9152
 - NG9-1-1 Project Coordinator : Jennifer Sebastian; jennifer.sebastian@atos.net; (804) 281-5010
- **Century Link (Southern Region)**
 - Cal OES Project Manager: Curt Guillot; Curt.Guillot@CalOES.ca.gov; (916) 657-9600
 - NG9-1-1 Project Coordinator: Earl Luhn; Earl.Luhn@CenturyLink.com; (703) 387-9099
- **Synergem (Northern Region)**
 - Cal OES Project Manager: Angela Chen; Angela.Chen@CalOES.ca.gov; (916) 657-9177
 - NG9-1-1 Project Coordinator: Danny McGinnis; dmcginnis@synergemtech.com; (206) 310-3369

Next Gen Vendor POC

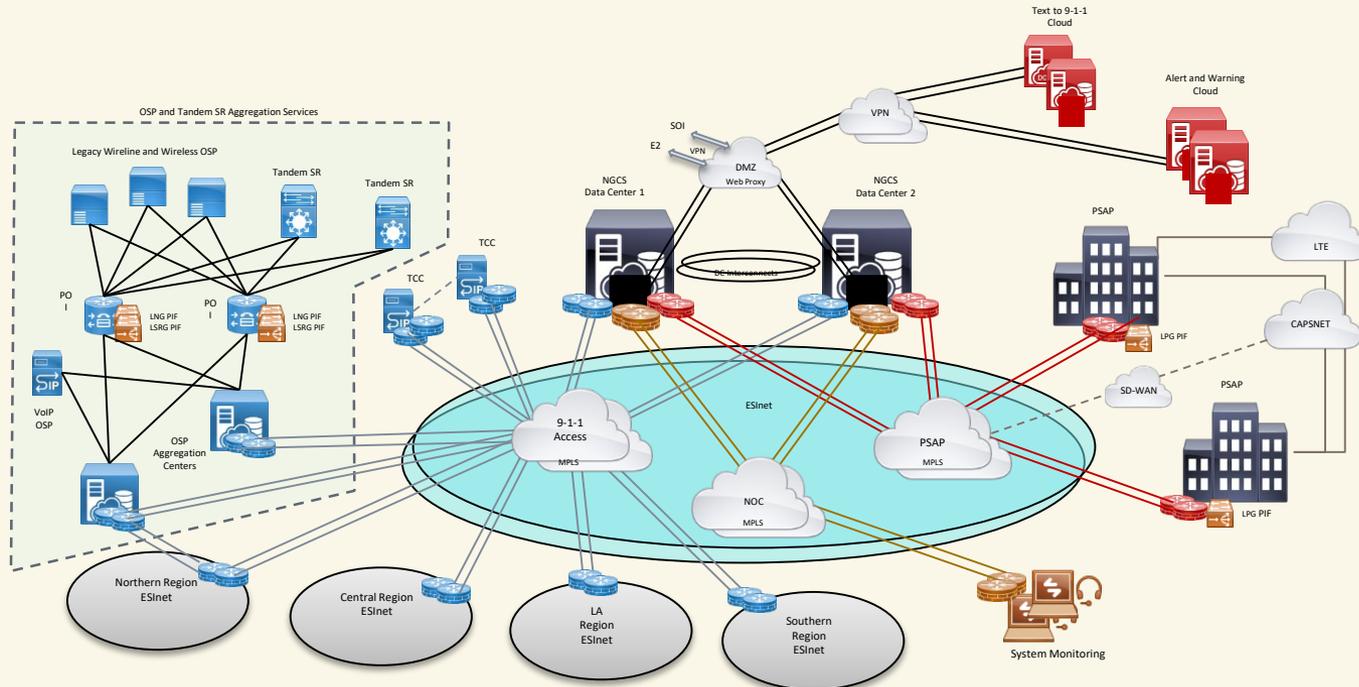
- **NGA 911 (Central Region)**

- Cal OES Project Manager: Tiffany Howard;
Tiffany.Howard@CalOES.ca.gov; (916) 657-9233
- NG9-1-1 Project Coordinator: Alicia Caddy;
Alicia.Caddy@NGA911.com; (951) 551-8405

- **NGA 911 (L.A. Region)**

- Cal OES Project Manager : Chereise Bartlett;
Chereise.Bartlett@CalOES.ca.gov; (916) 657-9235
- NG9-1-1 Project Coordinator: Kim Aleman;
Kim.Aleman@NGA911.com; (916) 213-8091

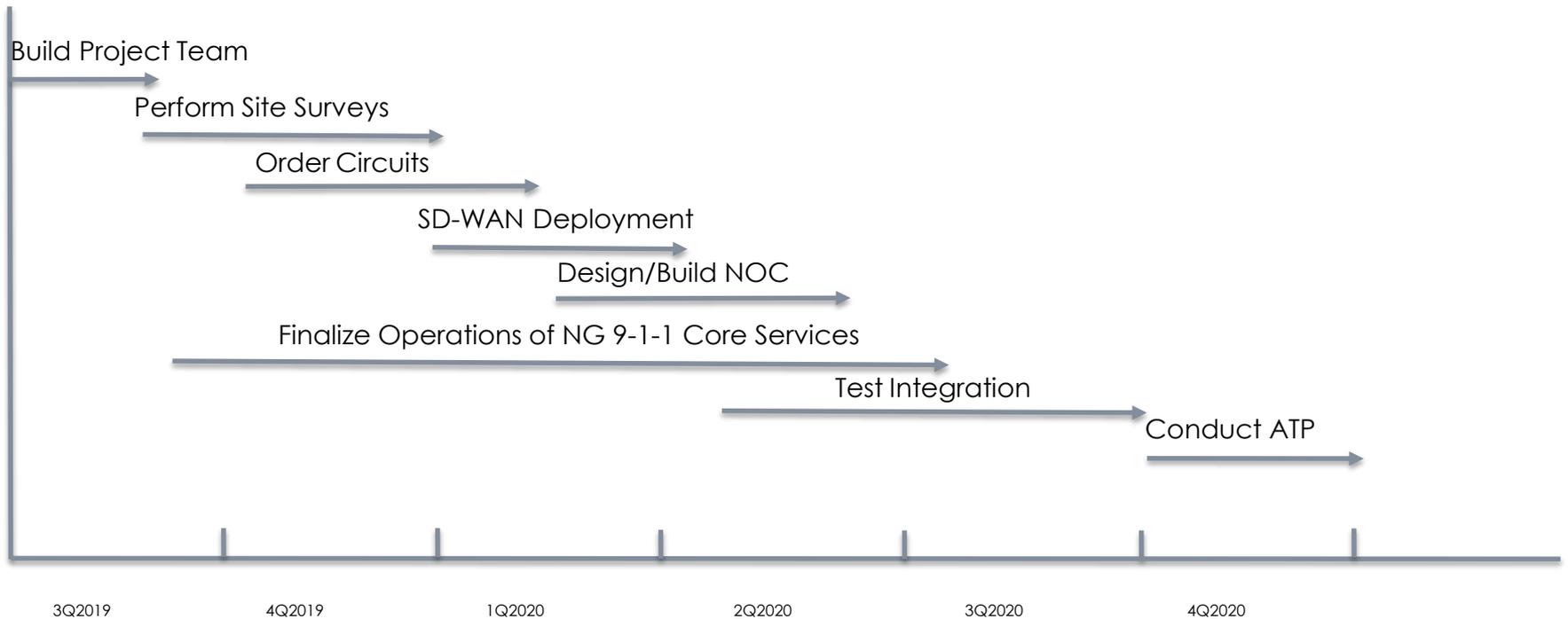
Next Gen 9-1-1 Overview



Next Gen 9-1-1 Project Status

- Project Initialization meetings, Sept 4-11, 2019
 - Established priorities, meeting schedules, and clarified roles & responsibilities
- Cal OES Project Managers will be your main point of contact
- Continue to work with your PSAP Advisors
- Cal OES is conducting town hall meetings in Sept – Oct 2019
- Cal OES will send coordinating instructions via email by Oct 18
- Expect PSAP site surveys to begin in November
 - Both Atos (Prime) and your region vendor will be surveying each PSAP

Optimistic Next Gen 9-1-1 Timeline



Project Risks

- Availability of network connectivity to each PSAP
 - Demark location will be important
 - These connections are needed to deliver 9-1-1 calls
 - After system acceptance IP will replace the existing 9-1-1 trunks
- Available space in PSAP equipment room
 - Anticipate 1 rack of additional equipment
 - Atos (Prime) and your regional vendor will label rack space allocations in each PSAP
- PSAP coordination
- Input and concerns from local IT personnel
 - NG 9-1-1 will not interface with existing IT infrastructure
- Connections to Originating Service Providers

Alert and Warning Integration

- Provide a common technology platform that can be used by local agencies to issue alerts and warnings
- Shall be fully integrated with IPAWS (including WEA) and the California Earthquake Early Warning system.
- Shall be fully integrated with the NG 9-1-1 core services
 - Leverage NG 9-1-1 data and information
 - Ensures Alert and Warning database remains current and secure
 - Facilitates developing, implementing and training for best practices to support the statutory requirements outline in SB 833
- Shall support the ability to import data from locally managed commercial Alert and Warning system
- Delivered at no cost to local agencies

Cloud Computing

- FedRAMP certified systems
 - The Federal Risk and Authorization Management Program (FedRAMP) enables agencies to rapidly adapt from old, insecure legacy IT to mission-enabling, secure, and cost effective cloud-based IT.
 - Developed using experts from GSA, NIST, DOD, and NSA
- High Availability
 - Multiple instances of software across multiple datacenters
 - Each instance supports 100% of the need
 - Active / Active deployment of each Instance with automatic failover
 - Secure network connections with logical and physical diversity
- Dedicated and Secure
 - Private, closed network for each region
 - Highest level of cyber security, actively deployed in over 3000 government agencies

Moving Toward Newer Technologies

- CPE and Cloud / Data Center Model
 - Moving away from per position costs and toward call volume pricing
 - Equipment for positions will still be provided by Cal OES
 - Developing RFP for cloud-based or data center solutions
 - Cal OES will release pre-solicitation (RFP) in winter 2019
 - We need your input on functional requirements
 - Example: Functional versus technical requirements
 - Contract should be awarded by June 2020

First Cloud-based Implementation: Location Accuracy Project

- Contract awarded to RapidDeploy
 - Software solution uses device based data from Google and Apple, provided by RapidSOS
- RapidDeploy software at no cost to PSAP will provide:
 - RapidSOS supplemental device based location to PSAP via web interface
 - Automatic location updates for RapidSOS wireless 9-1-1 calls with ANI/ALI
 - Ability to display both ANI/ALI data and RapidSOS data via a web interface
 - Map data & GIS layers across jurisdictions
 - Additional situational awareness tools (RapidSOS additional data: Uber, and other RapidDeploy data: weather, traffic, etc.)
 - Cal OES will provide the IP connection for web interface

Why a Location Accuracy Project?

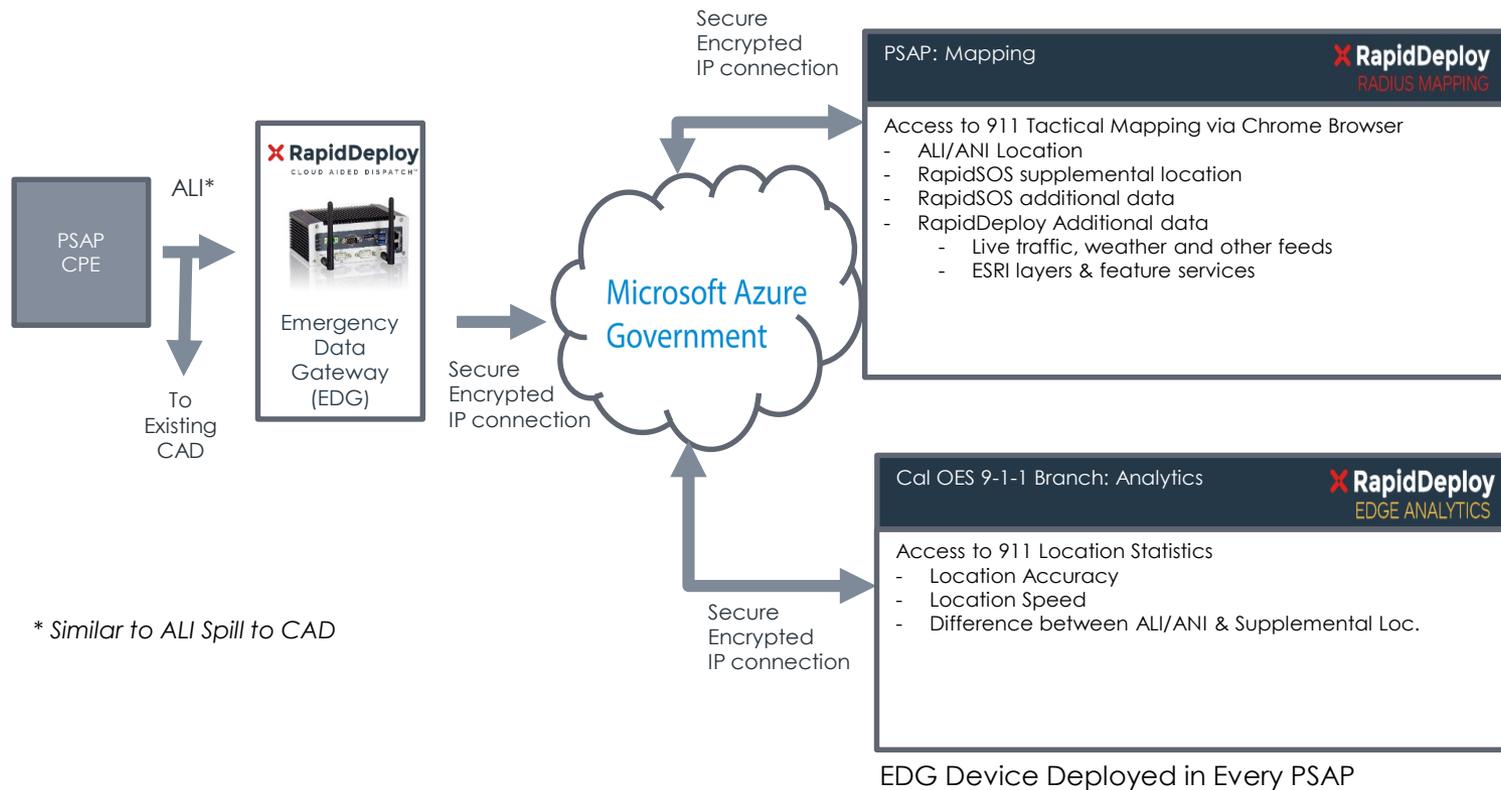
“This morning we received a 911 call from a male that had crashed into a ditch that had water in it and it was filling up his car and he could not get out. Long story short he was diabetic and his blood sugar was low. He did not know where he was at and was disoriented and could not tell us where he was at. Since it was a 911 call RapidDeploy pinged his location within 5 meters and we were able to get him help and get him out of the car. This no doubt saved his life but only because of the location accuracy of RapidDeploy.

So for the PSAP's that think this is one more thing that they have to monitor or use,

it's worth it. We are here to serve the public and get them the help that they need and if I have one more thing to monitor that's ok that is what we are here for.”

Source: Wave 1 PSAP, September 2019

RapidDeploy Solution Overview



* Similar to ALI Spill to CAD

Next Gen 9-1-1 Components

- **ESRP** - Emergency Services Routing Proxy essentially replaces the selective routers in NG 9-1-1.
- **ECRF** - Emergency Call Routing Function is the functional element where caller location and routing information for that call is stored.
- **PRF** – The Policy Routing Function is where default, alternate, contingent, and emergency routes are located. The PRF is the specific functionality regarding how those routes are changed.
- **ALI DB service** - The Automatic Location Information DataBase is being used to route calls in a legacy system
- **LDB** – Location DataBase server retains all of the current information, functionality, and interfaces of today's ALI and can utilize the new protocols required in an NG 9-1-1 deployment

Next Gen 9-1-1 Components

- **LIS** – Location Information Server will transition the AII database transition into the ESInet / NG 9-1-1 core
- **LVF** - The ECRF connects to the LIS to determine location and validates it through a Location Validation Function (LVF).
- **LSRG** – Legacy Selective Router Gateway
- **LNG** – Legacy Network Gateway
- **LPG** – Legacy PSAP Gateway



AB 1549

Chris Schmidt

California Department of Transportation



Task Forces

Overview

Bill of Rights

Long Term Goals

Stephanie Tom

California Department of Technology



Strategic Corridors

Trish Kelly
Regional Consortia

Strategic Broadband Corridors

PARTNERS

- Regional Broadband Consortia;
- CalCOG (California Associations of Councils of Governments);
- CaFWD (California Forward);
- CETF (California Emerging Technology Fund);
- California State University, Chico; and
- CBC/State agencies.

Project Status

- Updated report/maps with 3 priority corridors per region delivered to Caltrans (9/1/2019);
- CalCOG provided SHOPP project list, aligned to strategic corridors (74);

Project Status

- Stakeholder meeting convened (9/20/2019) — Consortia, CalCOG, ISPs, and state agencies discussed issues and challenges; and
- Follow-up call with rural transportation planning agencies (9/27/2019) — discussion of policy, funding, and joint-use planning issues

Issues for Consideration

- Adoption of “Dig Once/Joint-Use” policies and coordinated planning, easements for future projects;
- Eligibility for transportation funding to be used for broadband infrastructure deployment;

Issues for Consideration

- Permitting challenges and variations across Caltrans districts; and
- Overall funding availability/constraints with PUC funding, including last mile, household eligibility requirements.

Next Steps

- Regional consortia coordinating with Caltrans and CPUC on next level of project mapping overlays;
- Several regions continuing to refine corridor project priorities with their Caltrans district offices and local transportation planning agencies;

Next Steps

- CalCOG + Valley Vision facilitating connections b/w broadband consortia and transportation agencies.
- Consultation with the CBC and state agency partners on addressing policy issues, clarifying transportation funding eligibility, and getting to action;

Next Steps

- Seeking alignment with other state infrastructure investments;
- Identifying federal “dig-once” and other policies, and potential funding sources;
- Presentation to California Economic Summit.

State Contracts

Rhonda Smith

Department of General Services

Tiffany Angulo

Department of Technology

State Contracts Task Force Key Initiative:

- Leverage the State's buying power to promote broadband deployment in unserved and underserved areas
 - Multi-departmental collaboration
 - Target applicable IT/Telecom solicitation categories/programs

Multi-departmental Collaboration:

- Department of General Services (DGS)
 - Oversight authority for Delegated IT projects, IT commodities and services
- California Public Utilities Commission (CPUC)
 - Regulates telecommunications services and utilities
- Department of Technology (CDT)
 - Oversight authority for Non-Delegated IT projects, and Telecommunications

Potential Programs/Categories:

- DGS
 - Statewide Contracts
 - PC Goods – Desktops, Laptop, Tablets, Monitors, Printers
 - California Multiple Award Schedules (CMAS)
 - Cooperative Agreements
 - IT Goods and Services

Potential Programs/Categories:

- CPUC Existing Programs
 - California Advanced Services Fund
 - Non-discriminatory access
- CDT
 - California Network and Telecommunications (CalNET) contracts
 - Other Telecommunications commodity/services contracts
 - Non-delegated IT Projects



Broadband Access & State Contracts

Proposed Approach:

1. Develop policy
2. Solicit industry input



Tribal

Matthew Rantanen

**Southern California Tribal Chairmen's
Association**

Tribal Advisory Group



109 Federally recognized Tribes in CA.

You can see the distribution of reservations on this map.

Tribal Advisory Group



A rough overview of California's Fiber infrastructure.

Tribes are where there are no black lines.

Tribal Advisory Group



Tracing the lines of the fiber, and overlaying it on the Tribal distribution map, we see the lack of intersection.

Missing **1312** middle-miles to get backhaul to reservations

Study done by Tribal International Carrier [Umoya]

Tribal Advisory Group

This situation forces Tribes to rely on wireless technologies to serve their communities to gain backhaul to the rest of the Internet.



Tribal Advisory Group



Many of the locations that need to be used to perform these functions are far outside the normal reach of the power grid.

Remote Locations



Remote Locations



Tribal Advisory Group

Steps to Include Tribes in California's Connectivity Efforts

- (a) Finalize the connectivity information from each of the tribes. Quantify the missed opportunities
- (b) Identify projects being designed and deployed by Tribes to share as reference for others to use as inspiration/template/success stories.
- (c) Align Tribes with the expansion of Communication Corridors within California's Buildout.
- (d) Continue to Present the pertinent information to the California Broadband Council so that the Governor's Office has proper resources for future planning

Surplus Equipment

Seth Hubbert
TechExchange

Purpose

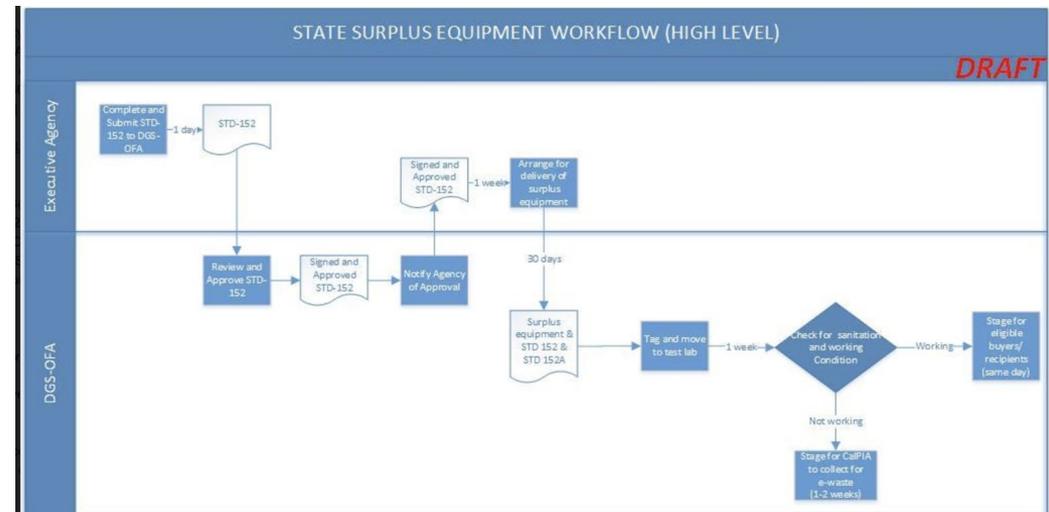
Develop processes and partnerships to utilize the State of California's surplus IT assets to best support digitally under-connected residents in underserved communities.



Policy and Workflow

Task Force Review:

- Surplus Equipment Policy
- Department of General Services Processes
- Eligible Recipients List
- Equipment transfer workflow



Community Distribution Pilot Project

Community Tech Fair in Oakland

Distributed 150 computers to community members, along with affordable Internet signup and community resources



COMMUNITY TECH FAIR

Join us for a fun and rewarding event!

WHEN

Saturday, Oct. 20, 2018
11:00am to 2:00pm

WHERE

La Clinica Fruitvale Village
3451 East 12th Street
Oakland, CA 94601

- Free refurbished desktop computers
- \$10/month Internet
- Community service providers resource fair

Explore education technology learning tools with your family. Sign-up for low-cost internet, interact with local tech programs, and walk-away with a free refurbished desktop computer. *Find out how the power of technology access can change your life!*



Tech Exchange



La Clinica
a California EBB Center



EBB
Center for Broadband Commerce



CETF
California Emerging Technology Fund



California
DEPARTMENT OF TECHNOLOGY

California
BROADBAND COUNCIL



DGS
GENERAL SERVICES



GET CONNECTED
— OAKLAND —

Outreach and Partnerships

Strategic outreach to:

State Agencies to contribute surplus equipment

Educational institutions to renew and build eligible recipients list

Community-focused computer **refurbishers**



Resource Development

Identify potential funding sources to resource the refurbishment and distribution of surplus computers.

Aligned funding strategies:

Digital Inclusion

Environment

EPA Electronic Reuse Benefit Calculator:

1:1 expense-to-environmental benefit



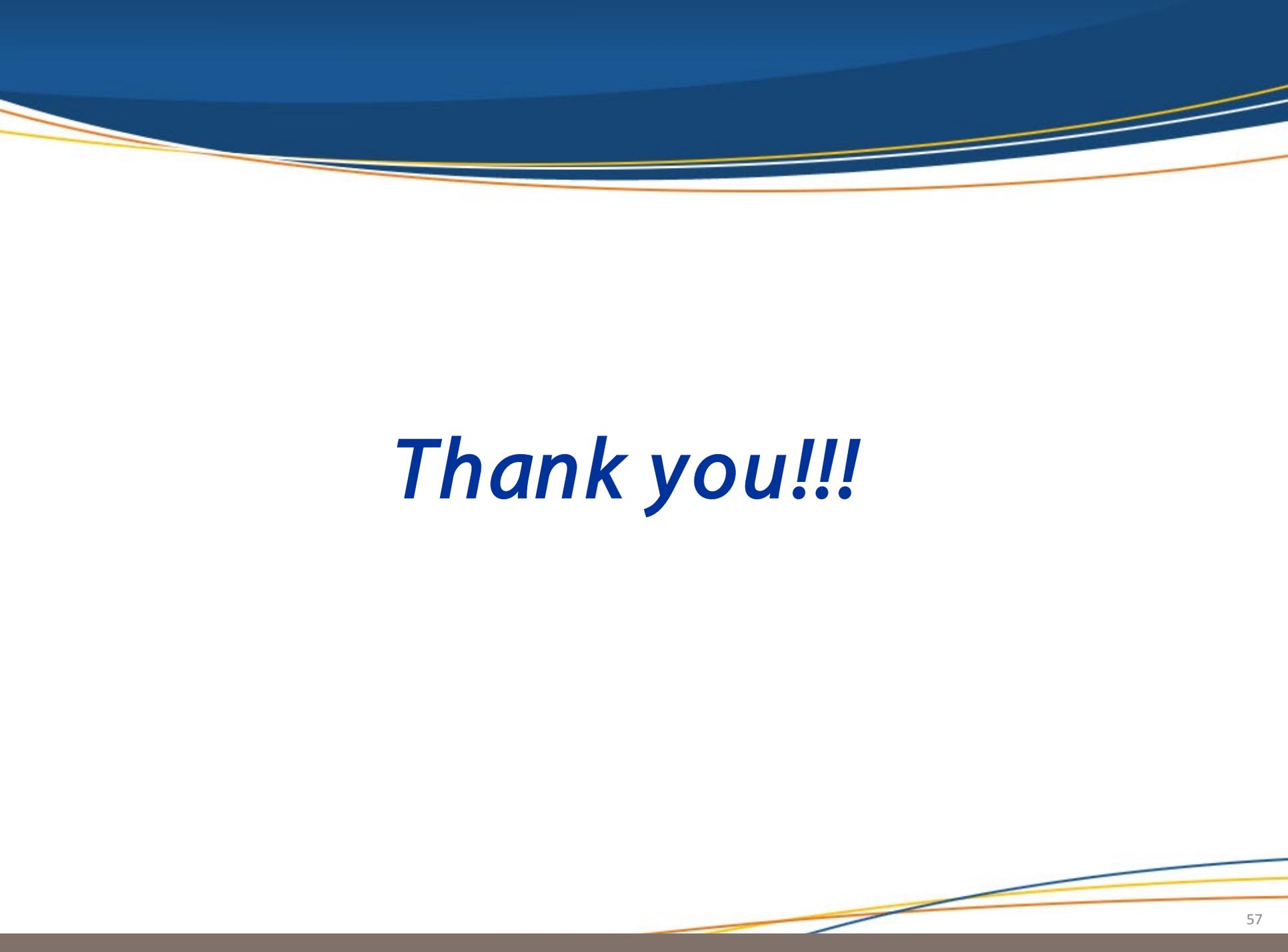
Task Force to Program

Momentum build through Task Force

Transition to Program administered by Department of General Services



Public Comment



Thank you!!!