State 9-1-1 Program Updates

APCO/NENA Quarterly Meeting - DPSST

March 7, 2018

“New”
Program Update Structure & Process

Updates align within major 9-1-1 Program focus areas improving overall communications and progress reporting:

- **Program Process Improvement** *& Activities*
- **Stakeholder Engagement** *(PSAP, State Partners, Vendor Community)*
- **Technology Strategy** *(Program, PSAP Priorities, NG9-1-1)*
- **Funding** *(All Program Areas)*

Program Staffing Update

Program Process Improvement Activities

Hardware and Software Lifecycle Management

Benefits:

- Maximize value of hardware and software
- Predictable upgrade path and plans for future CPE upgrades
- Data to validate vendor future offerings *(i.e., Hosted CPE)*
- Data to better predict/validate cost benefits of new CPE capabilities
- Lower total cost of ownership

Activities:

- Program staff developing data collection model
- Working with vendors to provide regular data extracts/reporting to support lifecycle management processes

GIS Vendor Process Management

VESTA Map GIS Data Updates

Status

- 24 PSAPs currently using VESTA Map
- 14 Quarterly updates performed
- Airbus working through channel partners (CL and FTR)

GIS Vendor Process Management

Challenges

Procedural:

- staff turnover/reassignment
- role definition
- scheduling

Technical:

- LAN/server access
- network connectivity
- site-specific configuration

GIS Vendor Process Management

Roles

OEM:

- Scheduling
- Coordination between PSAP, GIS maintainer, and Airbus
- Database preparation

Airbus:

- Map Package configuration
- Delivery of database to VESTA Map servers
- Testing

GIS Vendor Process Management

VESTA Map Site	Q1	Q2	Q3	Q4	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT	NOV	DEC	JAN	FEB
METCOM						X			X			X			X		
Lincoln City PD						X			X			X			X		
Toledo						X			X			X			X		
Harney County Sheriff						X			X			X			X		
Umatilla County SO						X			X			X			X		
Milton Freewater						X			X			X			X		
Newberg-Dundee Communications						X			X			X			X		
Coos Bay PD	Jan-17						X			X			X				
Coos County SO	Jan-17						X			X			X				
West Lane County - Florence PD							X			X			X			X	
South Lane							X			X			X			X	
Wasco County Communications	Apr-17						X			X			X				
Hood River County Dispatch Center	Apr-17						X			X			X				
Brookings PD	Apr-17						X			X			X				
Curry County 911	Apr-17						X			X			X				
Wallowa County Sheriff	May-17							X			X			X			
Klamath								X			X			X			X
Union County Communications	May-17	Aug-17						X			X						
Lake Oswego								X			X			X			X
John Day PD	Oct-17							X			X			X			
South Clatsop County Communications	Jan-17	Jan-18						X			X						
Frontier Regional	Feb-18				X			X			X			X			
Astoria PD	Jan-17	Jan-18						X			X						

Automating Routine Tasks for Data Updates and Quality Checks

- Why it is important to automate some routine processes
- GIS updates and Quality Checks (QC) overview
- GIS data standardization and preparation overview

Reasons for Automating Tasks

- Save time and resources
  - Tasks can be completed in minutes rather than hours
  - Click a button and the computer does the rest
  - Anyone can do it, not just a GIS person with specific knowledge
- Lessen chance for errors
- Remove hurdles or barriers of data processing and update procedures

Data Quality Checks and Updates

Automated procedures that prepare, measure and report data quality for MSAG, ALI and GIS Data based on predefined sets of criteria

- Macros – Prepare MSAG and ALI Tables for QC Process
- Python Toolbox
  - *Updates GIS Data to a master GeoDatabase*
  - *Updates Locators*
  - *Runs QC Process*
- QC processing, tracking and reporting

Data Quality Checks and Updates (continued)

QC tracking and reporting

- Reports how in sync data is with each other
  - Such as GIS Data to MSAG or ALI or to other GIS Data
- Reporting and tracking outputs
  - *Summary Report of unmatched records*
  - *Export of all unmatched records with all fields*
- A goal is to, over time, increase, maintain and report quality standards

GIS Data Standardization and Preparation Overview

- Goal is to translate GIS Data into a common field naming convention
  - So it can be used in applications and other uses
  - Fields are translated from original source to an empty layer schema
- Data validation
  - ALL CAPS, No NULL values, No extra spaces, Field lengths/types
- *Data conversions and definitions*
  - Layer type
    - Not multi-point, single-point ONLY
    - Layer projection/coordinate system

Summary: Automating Tasks

- Automating routine tasks is essential for the health of some systems
- Removes barriers that impede data update procedures
- Less need for knowledge specific staff

9-1-1 Jurisdiction Plan Update

Stakeholder Engagement Activities

PSAP Planning for Success Workshop!

Workshop Purpose

- Bringing the statewide PSAP community together on a voluntary basis for the development of a prioritized baseline for the improvement and modernization of 9-1-1 services and technology throughout Oregon

PSAP Representation

- 27 participants represented 15 of the 43 statewide PSAPs
- PSAPs of all sizes and geographic areas throughout Oregon were represented
- Attendees included PSAP Directors, Managers, Operations, Technical, Telecommunication Staff

Activities

- PSAP Operational Issue & Need Identification

- NG9-1-1 Vision & Definition Work

- Priority Voting

General Observations

See final report for additional information

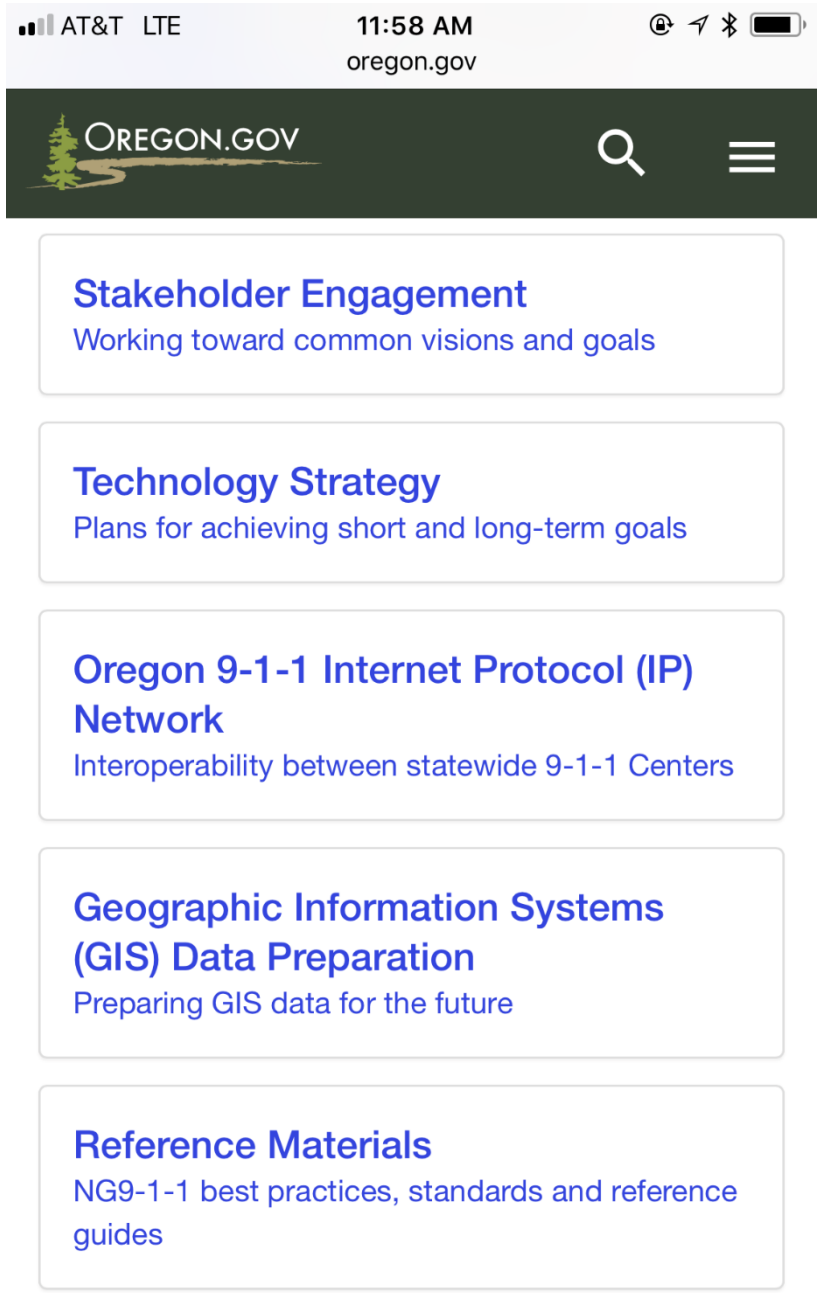
- Themes identified were determined to apply to or benefit all statewide PSAPs
- Improved location for wireless 9-1-1 calls – (#1 priority)
- Security (#2 priority)
- Funding accountability and funding level placed #3 and #4 in priority
- NG9-1-1 dependency did not appear until priority #5 theme
- Interest was expressed regarding the value of the workshop and hosting this type of event annually

PSAP Participation/Experience

Next Steps

See final report for additional information

- Provide Advisory Committee with post-workshop report for review and use
- Post-workshop report available on the OEM NG9-1-1 Web Page



Updated NG9-1-1 Web Page

- More user and mobile device friendly
- Defined categories to better assist with locating information and documents
- Aligns with 9-1-1 Program Focus Areas

Technology Strategy Activities

Portfolio Management (9-1-1 Program)

(PSAP Quarterly Meeting – May 2017)

Increase Project Success

Adapted from Project Management Institute, Standard for Portfolio Management – Third Edition, PMI Newton Square Pennsylvania, 2013, p/8

Management of Program Activities & Projects

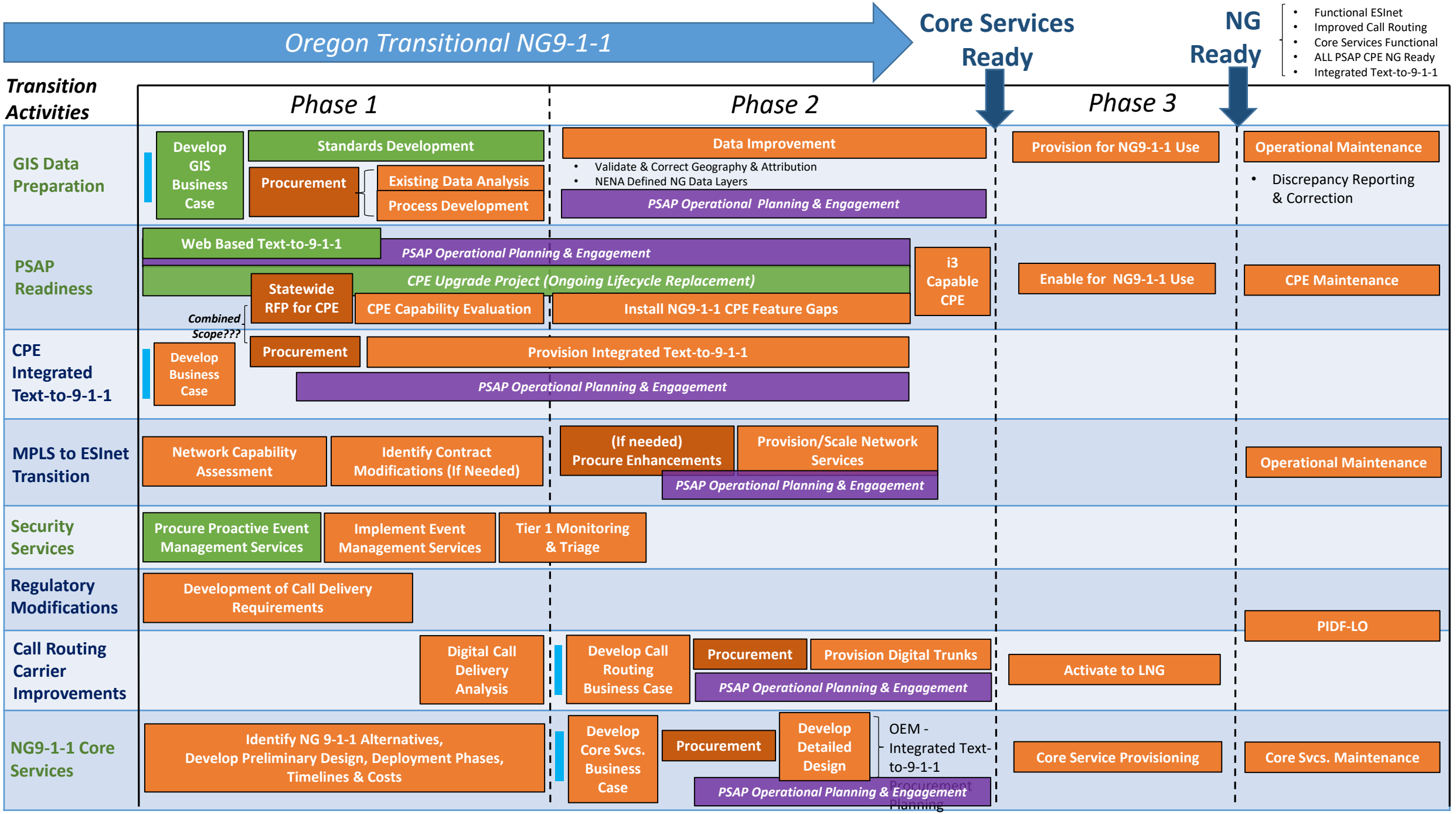
(PSAP Quarterly Meeting – May 2017)

OEM 9-1-1 Program

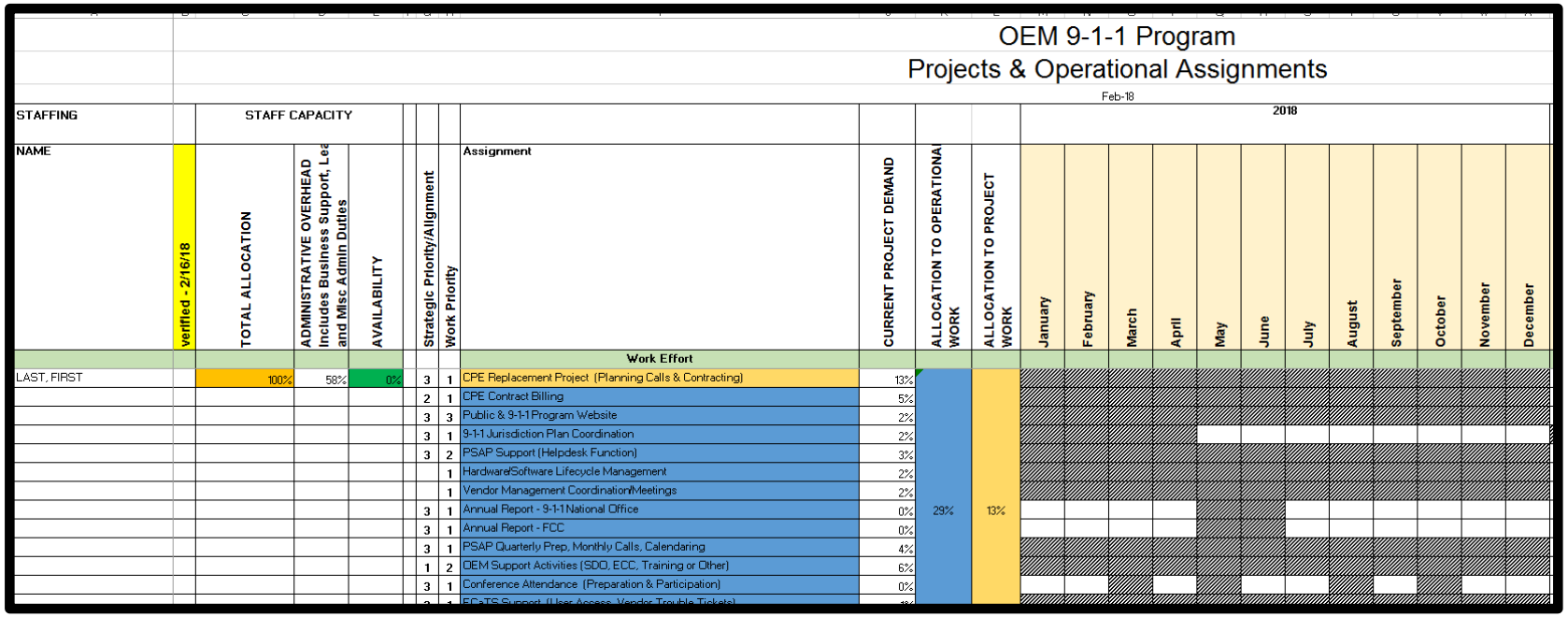
Projects & Operational Assignments

Feb-18

STAFFING		STAFF CAPACITY																							
															2018										
NAME	verified - 2/16/18	TOTAL ALLOCATION	ADMINISTRATIVE OVERHEAD Includes Business Support, Lea and Misc Admin Duties	AVAILABILITY		Strategic Priority/Alignment	Work Priority	Assignment	CURRENT PROJECT DEMAND	ALLOCATION TO OPERATIONAL WORK	ALLOCATION TO PROJECT WORK	January	February	March	April	May	June	July	August	September	October	November	December
								Work Effort																	
LAST, FIRST		100%	58%	0%		3	1	CPE Replacement Project (Planning Calls & Contracting)	13%															
						2	1	CPE Contract Billing	5%															
						3	3	Public & 9-1-1 Program Website	2%															
						3	1	9-1-1 Jurisdiction Plan Coordination	2%															
						3	2	PSAP Support (Helpdesk Function)	3%															
							1	Hardware/Software Lifecycle Management	2%															
							1	Vendor Management Coordination/Meetings	2%															
						3	1	Annual Report - 9-1-1 National Office	0%	29%	13%													
						3	1	Annual Report - FCC	0%															
						3	1	PSAP Quarterly Prep, Monthly Calls, Calendaring	4%															
						1	2	OEM Support Activities (SDO, ECC, Training or Other)	6%															
						3	1	Conference Attendance (Preparation & Participation)	0%															
								ECaTS Support (User Access, Vendor Trouble Tickets)																


Oregon Transitional NG9-1-1
Core Services Ready
NG Ready
Functional ESInet
Improved Call Routing
Core Services Functional
ALL PSAP CPE NG Ready
Integrated Text-to-9-1-1
Transition Activities
Phase 1
Phase 2
Phase 3
GIS Data Preparation
Develop GIS Business Case
Standards Development
Procurement
Existing Data Analysis
Process Development
Data Improvement
Validate & Correct Geography & Attribution
NENA Defined NG Data Layers
PSAP Operational Planning & Engagement
Provision for NG9-1-1 Use
Operational Maintenance
Discrepancy Reporting & Correction
PSAP Readiness
Web Based Text-to-9-1-1
PSAP Operational Planning & Engagement
CPE Upgrade Project (Ongoing Lifecycle Replacement)
Statewide RFP for CPE
CPE Capability Evaluation
Install NG9-1-1 CPE Feature Gaps
i3 Capable CPE
Enable for NG9-1-1 Use
CPE Maintenance
Combined Scope???
CPE Integrated Text-to-9-1-1
Develop Business Case
Procurement
Provision Integrated Text-to-9-1-1
PSAP Operational Planning & Engagement
MPLS to ESInet Transition
Network Capability Assessment
Identify Contract Modifications (If Needed)
(If needed) Procure Enhancements
Provision/Scale Network Services
PSAP Operational Planning & Engagement
Operational Maintenance
Security Services
Procure Proactive Event Management Services
Implement Event Management Services
Tier 1 Monitoring & Triage
Regulatory Modifications
Development of Call Delivery Requirements
PIDF-LO
Call Routing Carrier Improvements
Digital Call Delivery Analysis
Develop Call Routing Business Case
Procurement
Provision Digital Trunks
PSAP Operational Planning & Engagement
Activate to LNG
NG9-1-1 Core Services
Identify NG 9-1-1 Alternatives, Develop Preliminary Design, Deployment Phases, Timelines & Costs
Develop Core Svcs. Business Case
Procurement
Develop Detailed Design
OEM - Integrated Text-to-9-1-1
PSAP Operational Planning & Engagement
Core Service Provisioning
Core Svcs. Maintenance
In Progress
Not Started
State CIO Stage Gate Initiation
PSAP Operational Planning & Engagement
October 11, 2017

Summary of Program Focus Area Activities



OEM 9-1-1 Program
Projects & Operational Assignments

Feb-18

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Program Process Improvement

- Operational Tasks
- Projects

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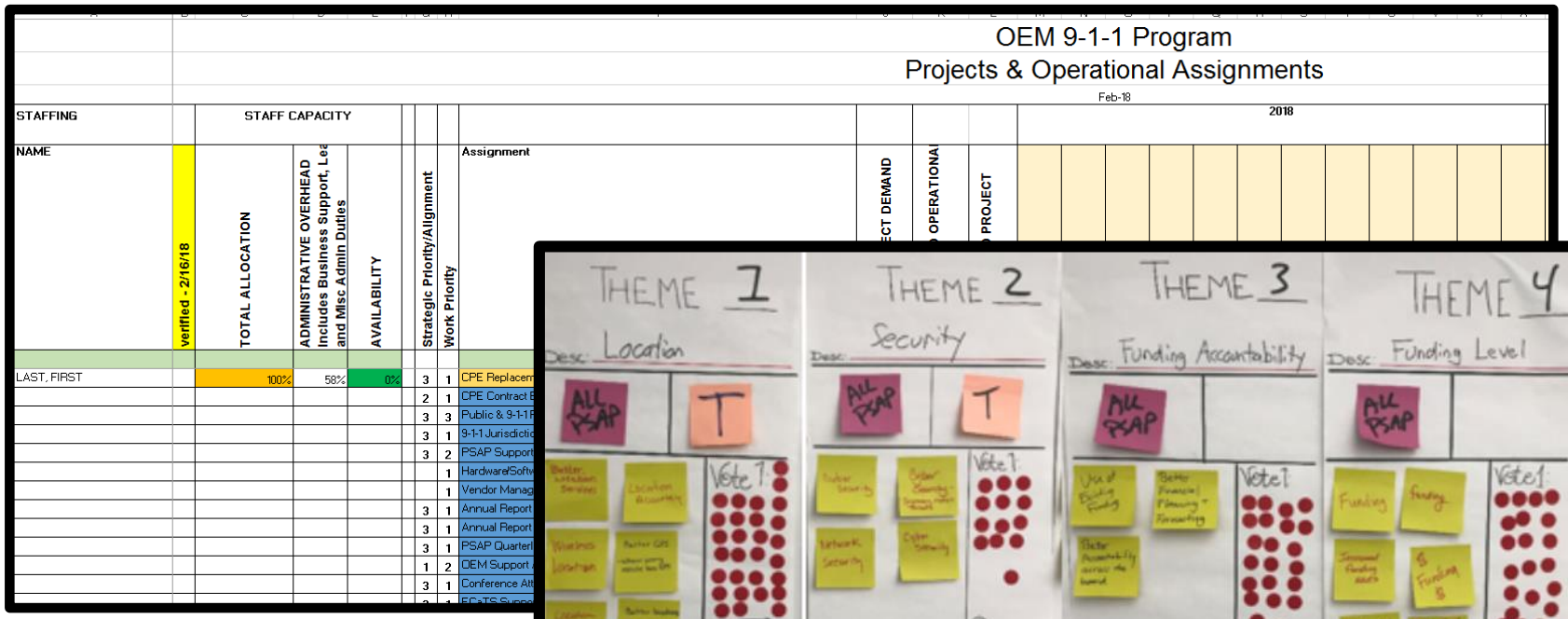
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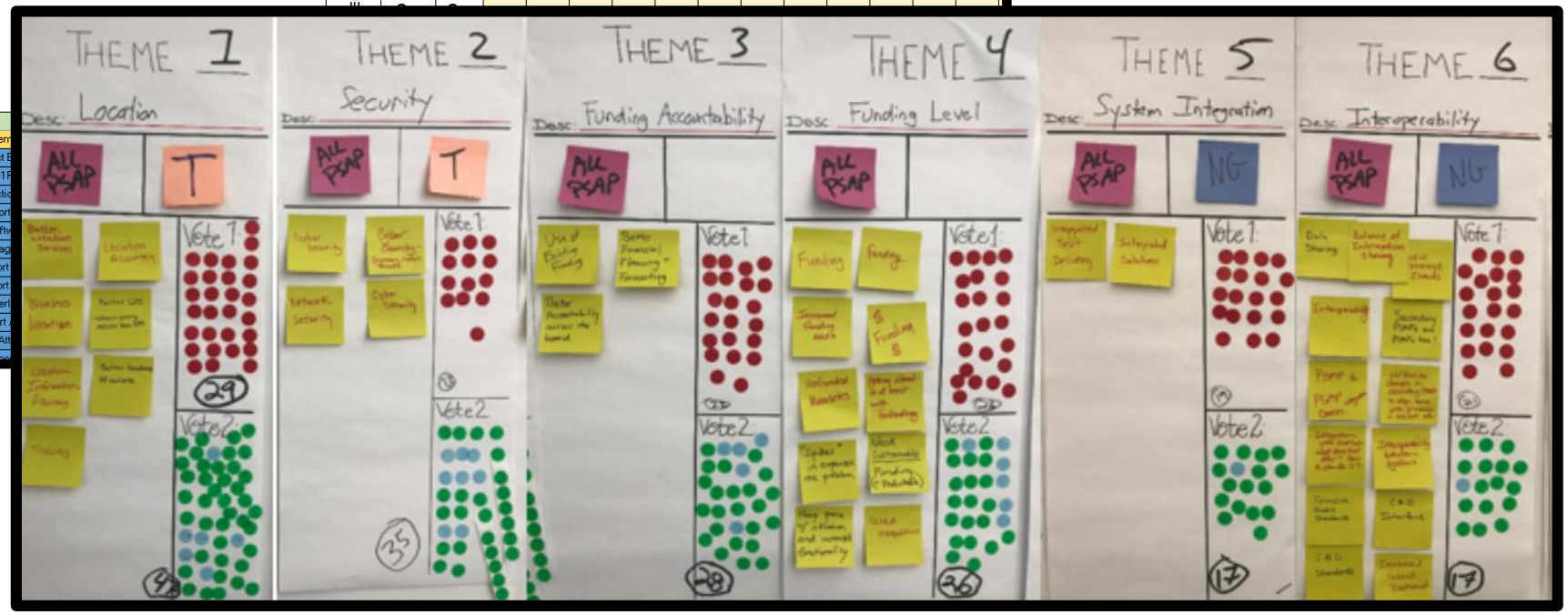
Program Process Improvement

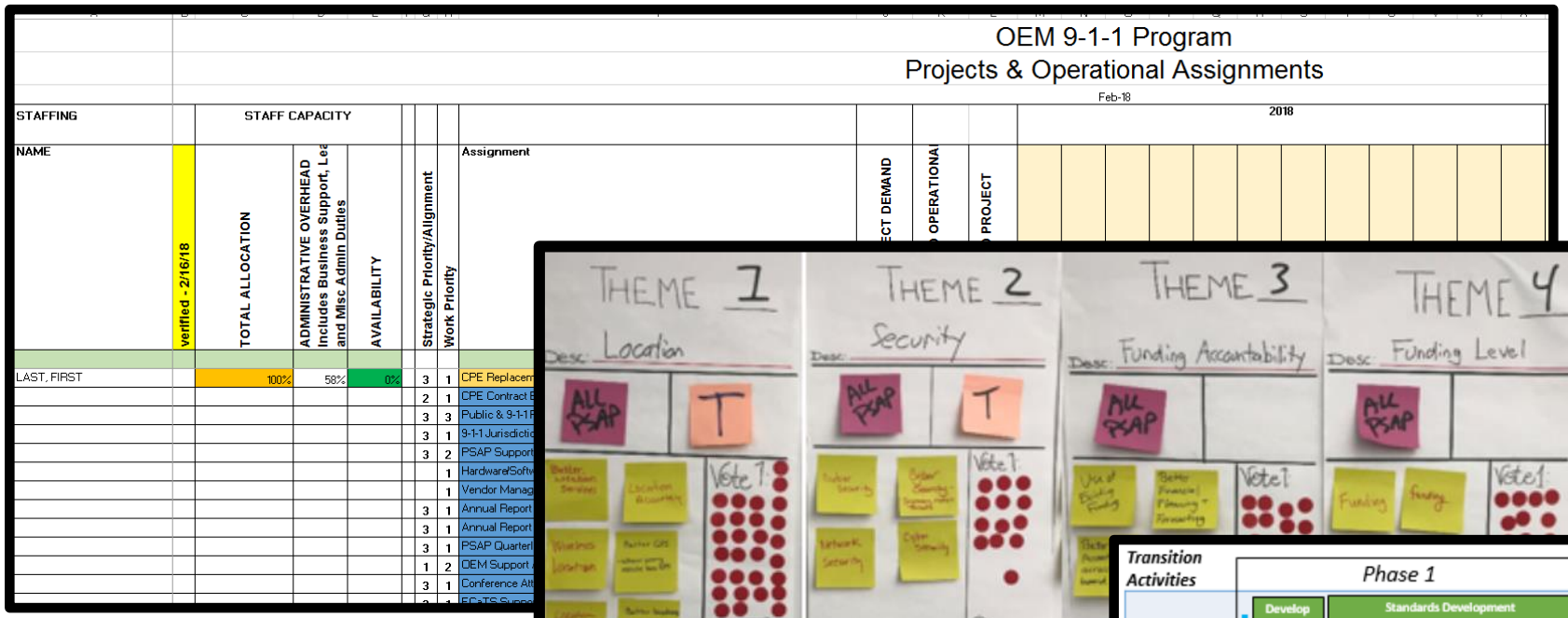
- Operational Tasks
- Projects



Stakeholder Engagement

- PSAP Needs & Priorities

Summary of Program Focus Area Activities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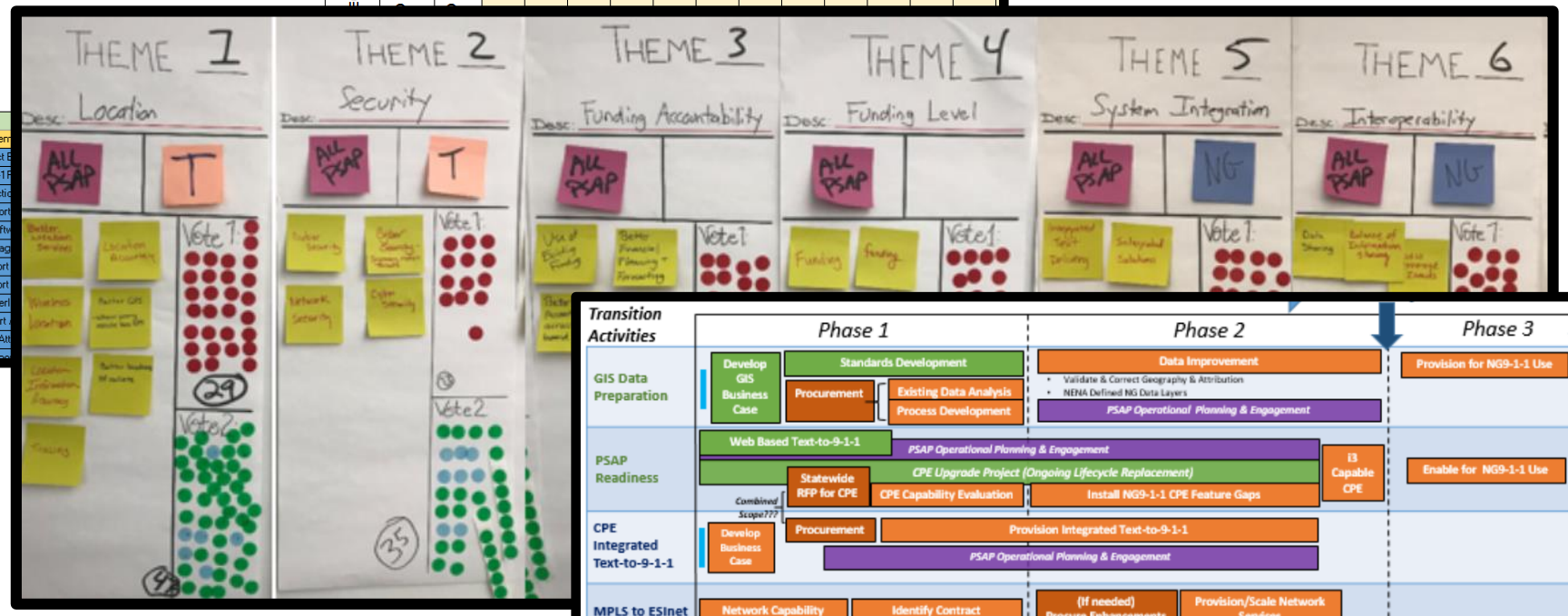
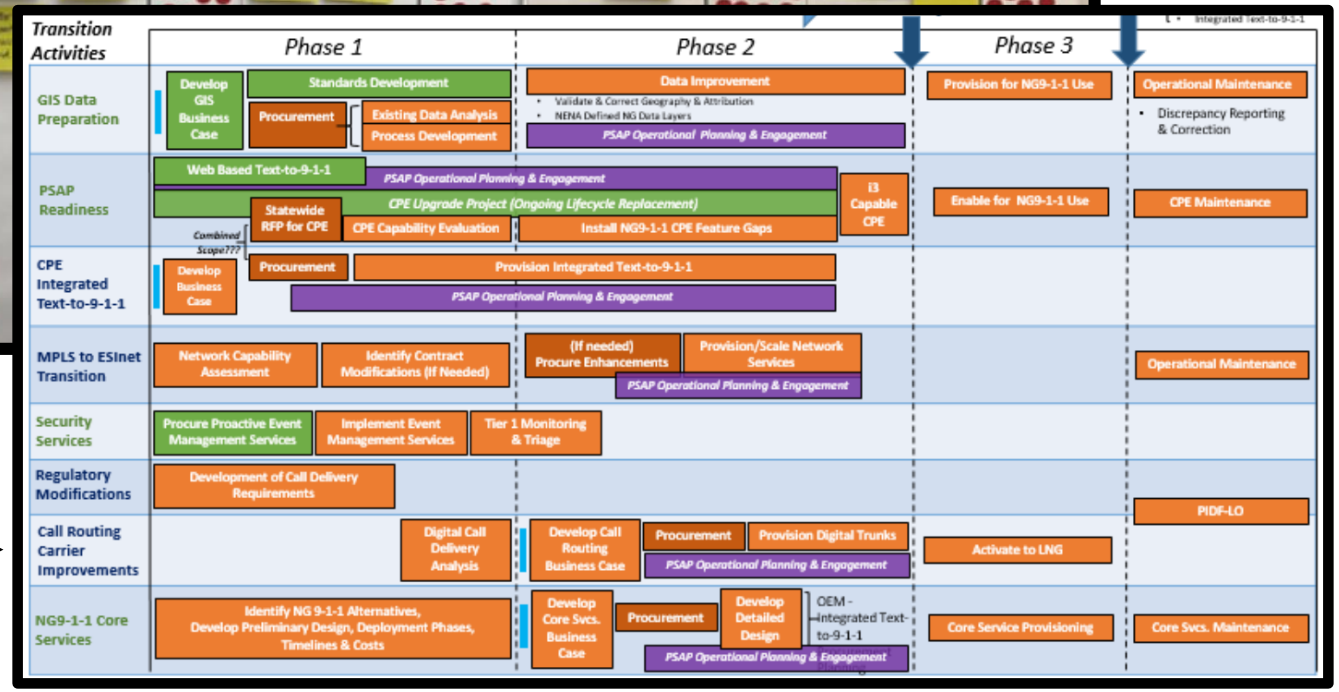
Program Process Improvement

- Operational Tasks
- Projects



Stakeholder Engagement

- PSAP Needs & Priorities



Technology Strategy

Foundational Approach
NG9-1-1 Projects

IBM Managed Services Contract Update

- IBM contract term does not end until March 31st, 2019
- State partner agencies are continuing to develop procurement plans
- An update will be provided at May quarterly meeting

Program Funding

Funding Updates

- Pause hiring vacant FTE
- Pause in CPE replacements

  (Lifecycle management activities key component)
- Grant opportunities

Questions