COUNTY OF SANTA BARBARA GENERAL SERVICES

# Public Safety Radio Network (PSRN) System Replacement



**GENERAL SERVICES** 

### PSRN Project Update – November 19, 2019

- Introduction
- Process Steps
- Project Costs
- Installation Timeline
- Cost Allocations
- Funding Options
- Next Steps



#### Introduction

#### Current State of the Public Safety Radio System

- Diverse radio communications environment
- Several different land mobile radio systems
  - VHF (Fire)
  - UHF (Sheriff)
  - 800 (PW)
- Equipment in different stages of their lifecycles, with varying technologies and capabilities
- Lack of redundancy
- Lack of backup dispatch location



#### **County and Other Users**

- Fire
- Sheriff including contract cities
- Public Health
  - Emergency Medical Services
  - Animal Services
- Public Works
- Probation
- Parks
- General Services
- District Attorney
- City of Goleta PW



#### **Major Systems**

✓ Land mobile radio (LMR) systems

 For communications between radio users and the Dispatch Center or other radio users

✓ Radio Backbone System

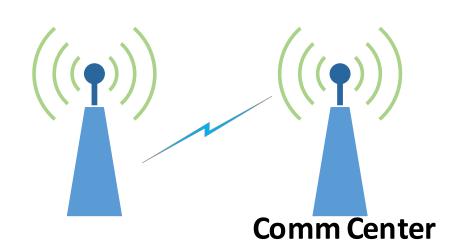
 Carry radio user voice signals between the LMR base station sites and the Communications (Comm) Center

#### ✓ Dispatch

 Allows voice communications between field units and dispatchers



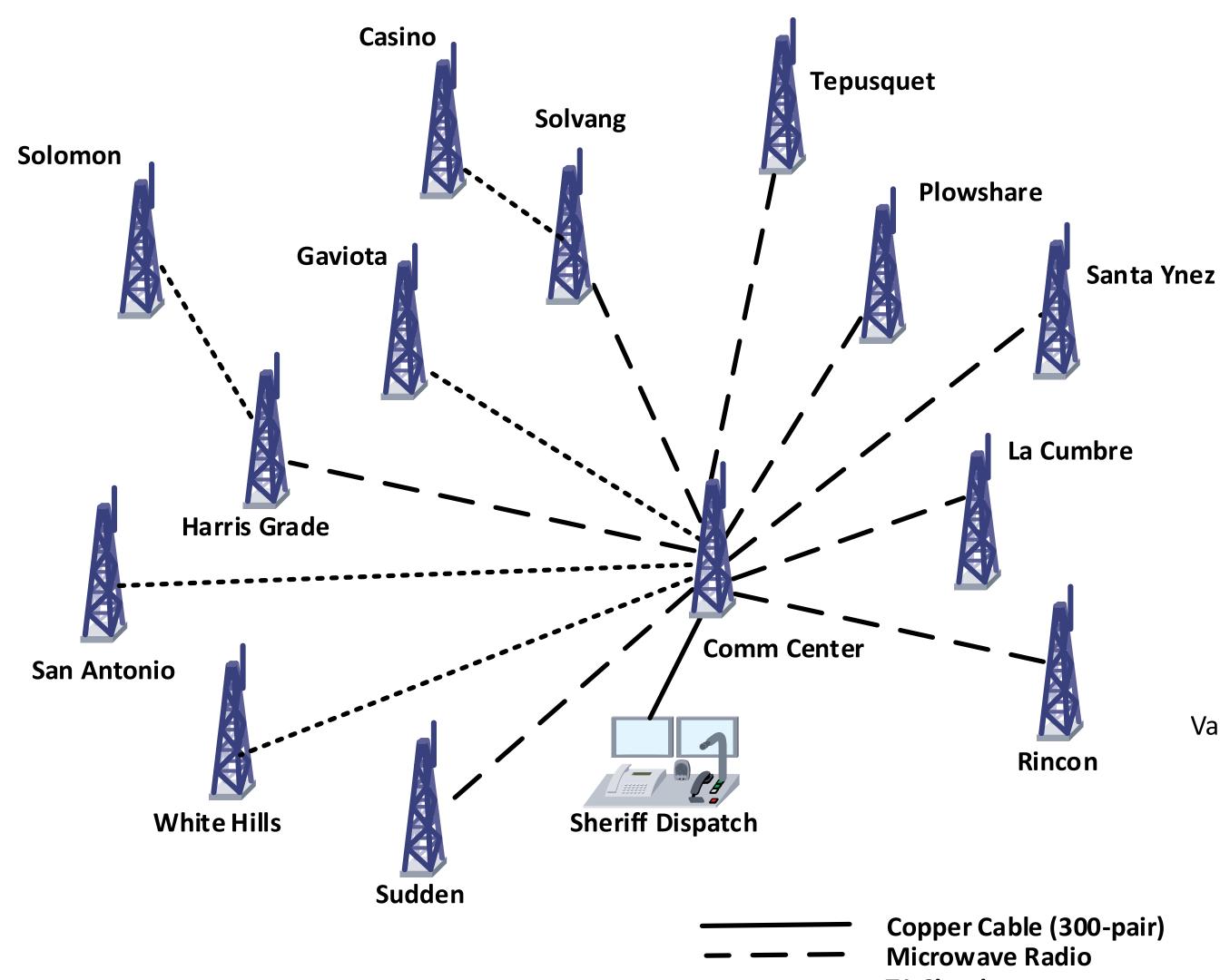






#### Dispatch Center







#### Coming online December 2019

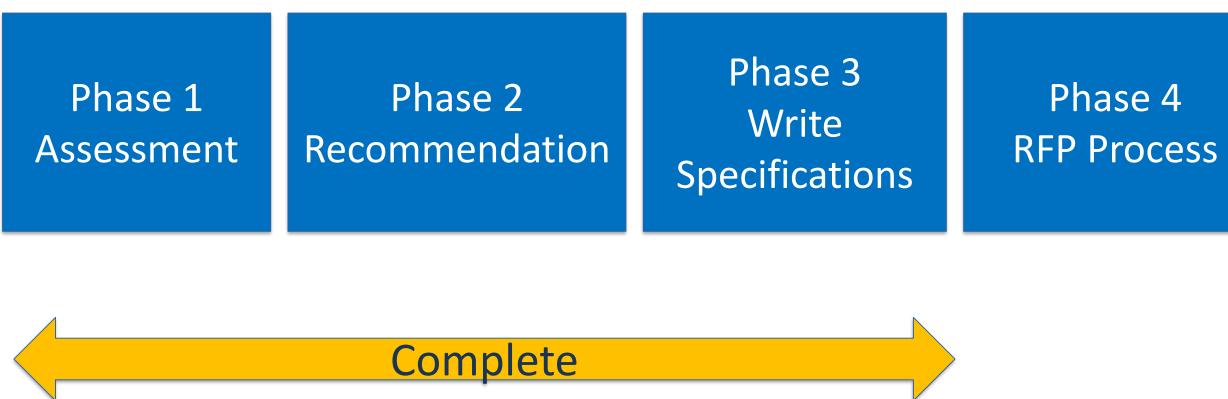
# T1 Circuit



- Upgrade the County's existing land mobile radio (LMR) and microwave radio systems
  - Improve voice communication services and reliability within the County
  - Deliver greater coverage
  - Provide robust radio communications for next 10 to 20 years
  - Replace varying technologies and capabilities which are end-of-life
    - Add digital mobile radio communications
    - Replace analog UHF radios
    - Add ability to transfer data as well as voice
    - Interoperability with other radio systems



#### **Process Steps**



#### Select Vendor and Finalize Funding

Phase 5 Procurement & Implementation



#### **Project Costs Breakdown**

| Material                              | \$2 |
|---------------------------------------|-----|
| Labor                                 | \$1 |
| Fees (FCC License & Site Acquisition) | \$2 |
| Sales Tax                             | \$2 |
| Total                                 |     |

Note: Project costs estimates are provided by Federal Engineering's Santa Barbara County - Phase 2 Report FINAL dated October 22, 2018, less funds approved by BOS for new Site Developments.

# 28,896,000

#### 1,237,750

### 1,960,675 \$45,351,375

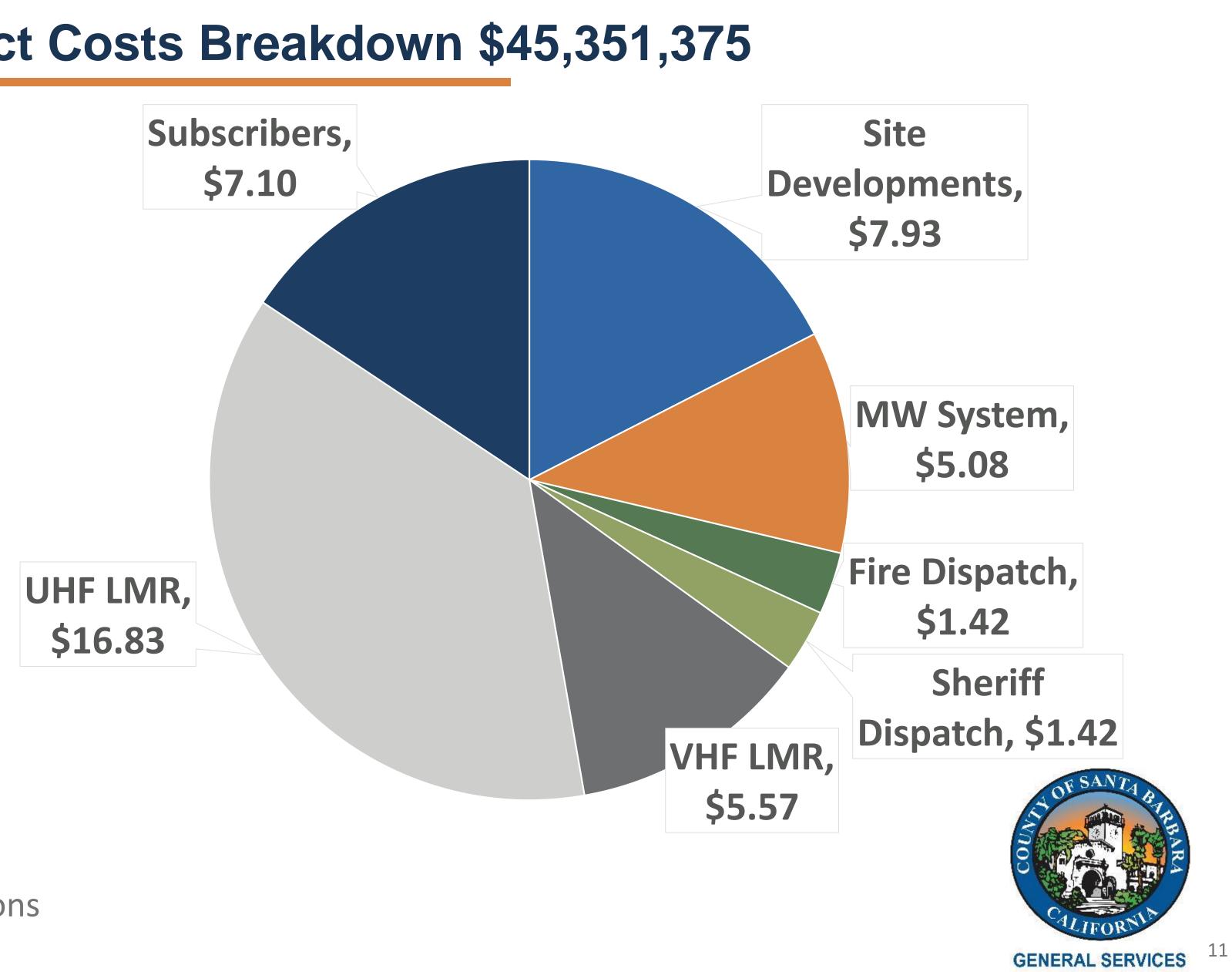


#### **Project Costs Breakdown**

- Site Developments
- MW System
- Fire Dispatch
- Sheriff Dispatch
- VHF LMR (land mobile radio) system
- UHF LMR
- Subscribers



#### Project Costs Breakdown \$45,351,375



In millions

### **Installation Timeline – 3 Years**

- First year site improvements and development
- Second and third years Split 50/50 for all elements



### **Cost Allocation Assumptions**

- Two major user groups
  - UHF Land Mobile Radios
  - VHF Land Mobile Radios



### **Cost Allocation Assumptions by Subscribers**

| Qty  | All Departments                   | All Dept % |
|------|-----------------------------------|------------|
| 13   | CEO - OEM                         | 0.72%      |
| 36   | Courts Bailiffs                   | 2.01%      |
| 26   | District Attorney                 | 1.45%      |
| 192  | Fire                              | 10.70%     |
| 47   | General Services                  | 2.62%      |
| 43   | Parks                             | 2.40%      |
| 158  | Probation                         | 8.81%      |
| 30   | Public Health - Animal Control    | 1.67%      |
| 27   | Public Health - EMS               | 1.51%      |
| 281  | Public Works                      | 15.66%     |
| 31   | City of Goleta - PW               | 1.73%      |
| 910  | Sheriff including contract cities | 50.72%     |
| 1794 | TOTAL                             | 100.00%    |

Portables, mobiles and control stations in use per inventory gathered in March, 2019 for the RFP specifications



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## **Cost Allocation Assumptions by UHF / VHF**

#### UHF

| Qty  | Department            | UHF %   |
|------|-----------------------|---------|
| 13   | CEO - OEM             | 0.83%   |
| 36   | Courts - Bailiffs     | 2.29%   |
| 26   | District Attorney     | 1.65%   |
| 47   | General Services      | 2.98%   |
| 43   | Parks                 | 2.73%   |
| 158  | Probation             | 10.03%  |
| 30   | Public Health -       | 1.90%   |
| 50   | Animal Control        | 1.9070  |
| 281  | Public Works - Floods | 17.84%  |
| 31   | City of Goleta - PW   | 1.97%   |
|      | Sheriff including     |         |
| 910  | contract cities       | 57.78%  |
|      |                       |         |
| 1575 | Total                 | 100.00% |



#### VHF

| Qty | Department | VHF %   |
|-----|------------|---------|
| 192 | Fire       | 87.67%  |
| 27  | EMS        | 12.33%  |
| 219 | Total      | 100.00% |



### **Cost Allocation Assumptions**

| Major Elements              | Shared Cost                     |
|-----------------------------|---------------------------------|
| Site Developments           | All Departments                 |
| MW System                   | All Departments                 |
| Fire Dispatch               | Fire & EMS                      |
| VHF LMR (land mobile radio) | Fire & EMS                      |
| system                      |                                 |
| Sheriff Dispatch            | ALL UHF users                   |
| UHFLMR                      | ALL UHF users                   |
| Subscribers                 | Cost based on dept. unit counts |



### **Cost Allocation by Departments**

|    | Department                                     | Cost Allocation |
|----|--|-----------------|
| 1  | CEO - OEM                                      | \$296,332       |
| 2  | District Attorney                              | \$592,665       |
| 3  | Public Health - Animal Control                 | \$683,844       |
| 4  | City of Goleta - PW                            | \$706,639       |
| 5  | Parks  | \$980,176       |
| 6  | General Services                               | \$1,071,355     |
| 7  | Public Health - EMS                            | \$1,165,017     |
| 8  | Probation \$3,601,577                          |                 |
| 9  | Public Works (Flood, Resource Recovery, Roads, |                 |
| 9  | Admin)   | \$6,405,336     |
| 10 | Fire   | \$8,284,563     |
| 11 | Sheriff including contract cities              | \$21,563,873    |



### **Cost Allocation by Fund / Departments**

|   | General Fund / Department         | <b>Cost Allocation</b> | Ave. Annual<br>Debt Service Over 20 Ye |
|---|-----------------------------------|------------------------|--|
| 1 | CEO - OEM                         | \$296,332              | \$22,317                               |
| 2 | District Attorney                 | \$592,665              | \$44,634                               |
| 3 | Public Health - Animal Control    | \$683,844              | \$51,501                               |
| 4 | Parks                             | \$980,176              | \$73,818                               |
| 5 | General Services                  | \$1,071,355            | \$80,684                               |
| 6 | Probation                         | \$3,601,577            | \$271,237                              |
| 7 | Sheriff including contract cities | \$21,563,873           | \$1,623,990                            |
|   | 63.48% of Total \$45,351,376      | \$28,789,824           | \$2,168,182                            |
|   | Non-General Fund / Department     |                        |  |
| 1 | Public Works                      | \$6,405,336            | \$482,390                              |
| 2 | Fire                              | \$8,284,563            | \$623,916                              |
| 3 | Public Health - EMS               | \$1,165,017            | \$87,738                               |
| 4 | City of Goleta - PW               | \$706,639              | \$53,217                               |
|   | 36.52% of Total 45,351,376        | \$16,561,552           | \$1,247,262                            |
|   |                                   |                        | GENERAL SERVICES                       |

### **Possible Funding Options**

- Vendor Lease/Purchase (15 Year Financing)
- Certificate of Participation
- Grants (Example: Homeland Security)



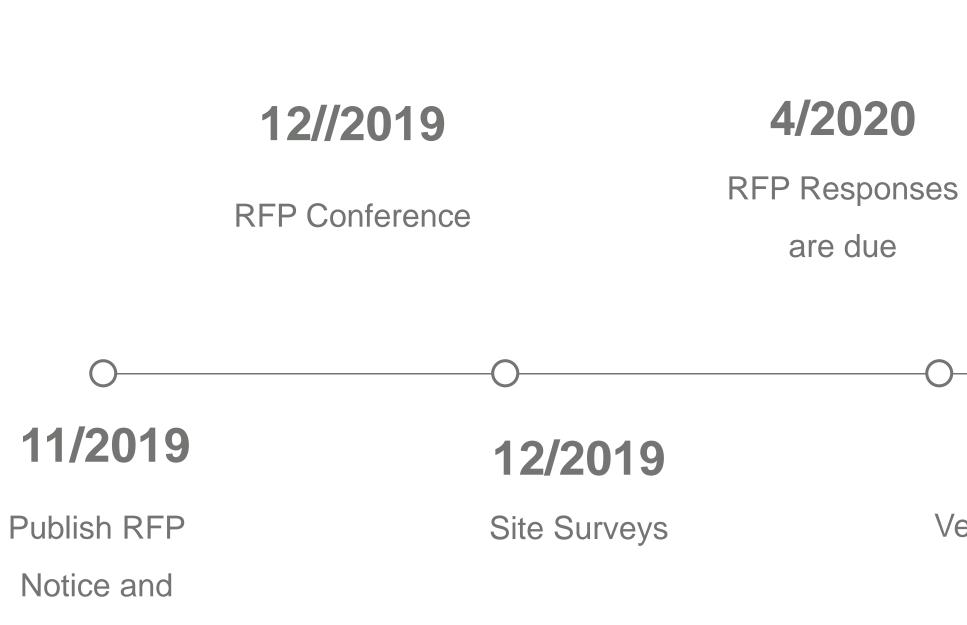


#### **Next Steps**

- Issue Request for Proposal
- Continue Developing Funding Options
- Update Internal and External Stakeholders
- Return to BOS with Vendor Selection and Financing Approval
- Begin Phased Implementation of Public Safety Radio Replacement



#### **RFP Timeline**



advertise

#### 7/2020

#### Selection and

#### Return to the

BOS



Vendor Interviews



## THANK YOU

# QUESTIONS?



