

## Implementing WE9-1-1 Into The Local PSAP

Yolo County's Best Practices &  
"How To Guide"

Presented by:  
Marianne Wolf, YCCESA  
Robert Negrete, The Altavista Group

---

---

---

---

---

---

---

---




## Agenda

- Introduction
- What You Need To Know
- Planning Steps
- Implementation Steps
- GIS & Mapping
- Phase II Deployment
- Lessons Learned
- Best Practices
- Q & A

---

---

---

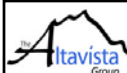

---

---

---

---

---

## First 6 Steps To Implement

- What you need to know
  - Potential PSAP wireless call volume
    - From CHP and assumptions based on current wire line call volumes. Rural, urban and metropolitan demographics
  - Does GIS expertise exist or how do we acquire
  - Does regional mapping exist or will it have to be created
  - Consider interim mapping solution

---

---

---


---

---


---

---

---



### First 6 Steps to Implement (con't.)



- What you need to know
  - Funding resources
    - State GIS, grant monies, capital reserves, other sources
  - Do we have resources in-house for PM or do we contract out

---

---

---

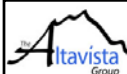
---

---


---

---

---



### Planning Steps



- Project Management
  - Assign PM resource & project team members
  - Participate in monthly state WE9-1-1 conference calls
  - Work with regional wireless coordinator
  - Identify project risks and develop mitigation strategies
  - Manage "scope creep"
- Funding
  - Develop GIS spending plan & alternative funding sources
- Technology
  - Verify compatibility of CPE & CAD equipment to accept new WE9-1-1 format (aka Format 04)
  - Perform GIS data scrub

---

---

---

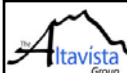
---

---


---

---

---



### Implementation Steps



- Issue GIS/Mapping RFP
- Prepare CPE Equipment To Receive '04 Format
  - State to facilitate reimbursement of additional network trunks & CPE upgrade costs as may be needed
  - Verify routing and ESN capabilities

---

---

---

---



---

---

---

---



## GIS & Mapping

- Develop Centerline Data
  - MSAG, ALI, Parcel Geodatabase
- Determine Map Layers Necessary To Meet PSAP Response Time Objectives
  - Mile markers, landmarks, CAD data
  - Hydrology, etc.
- Obtain Current Maps And Centerline Data
- Ensure Data Quality

---

---

---

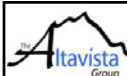

---

---

---

---

---

## GIS Considerations

- Sources for Map Data and Aerial Photography. (Off-the-Shelf maps may not have the accuracy or all the data necessary for 911 distress call mapping.)
- Address & Road Data
- Emergency Service Number Zones
- Law Enforcement/Fire Jurisdictions
- Municipal Boundaries
- Water Features, Railroad Crossings
- Accuracy Of Centerline And Address Data.
- Field Verified, Geo-referenced
- Data Maintenance
- Training (System Admin. & User)

---

---

---

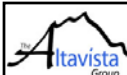

---

---

---

---

---

## Routing & Approval

Coordinate with CHP & WSP

- Identify which WSP are ready to deploy in your region
- Identify & approve routing sectors to PSAP
- Coordinate with Wireless Service Providers (WSP) for functional & operational testing
- Conduct a phased approach to WSP cutovers

---

---

---

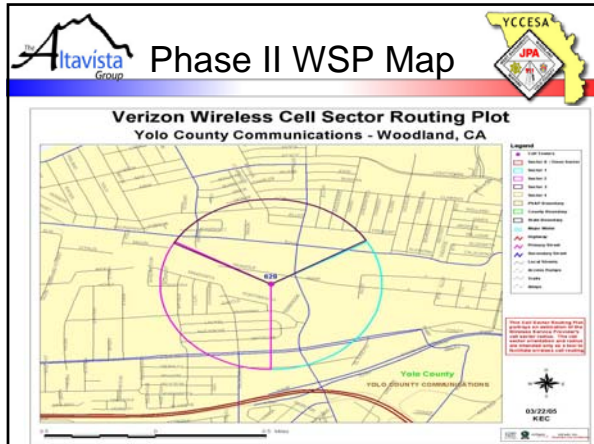
---

---

---

---

---




---

---

---

---

---

---

---

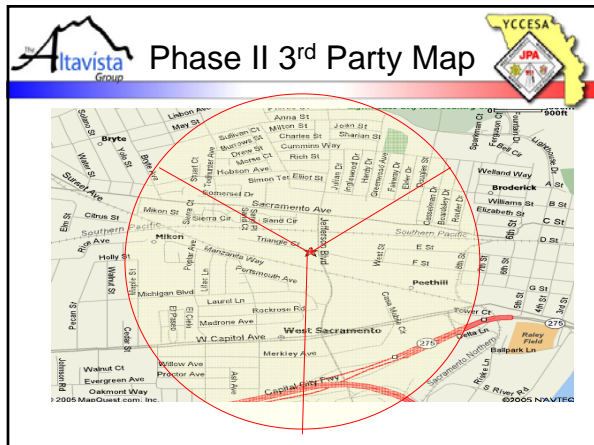
---

---

---

---

---




---

---

---

---

---

---

---

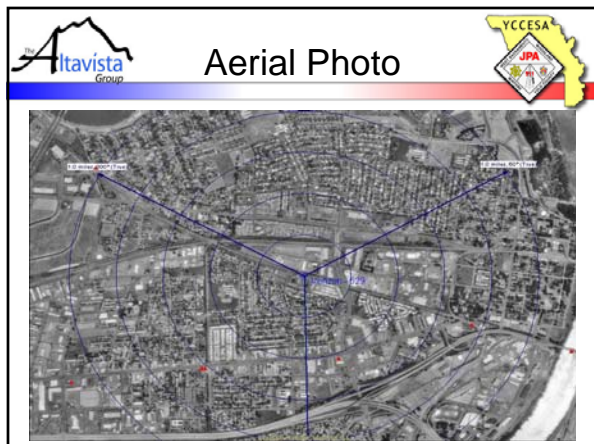
---

---

---

---

---




---

---

---

---

---

---

---

---



---

---

---

---



 **Summary** 

- **Lessons Learned**
  - Apprehension from Dispatchers regarding impact to workload
  - Call volume did not meet initial expectations

---

---

---

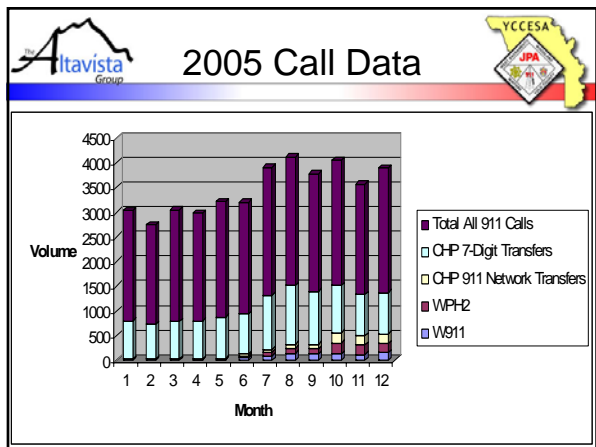
---

---

---

---

---




---

---

---

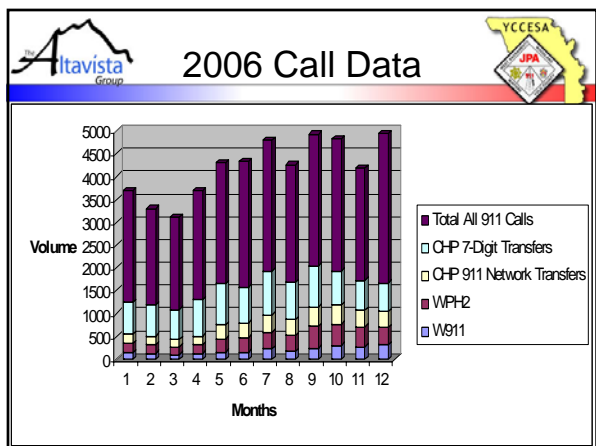
---

---

---

---

---




---

---

---

---

---

---

---

---



## Summary



- **Lessons Learned (con't.)**
  - Start with WSP with the fewest sites to PSAP
  - Need regional GIS assistance & cooperation that go beyond PSAP jurisdiction
  - Initial apprehension of regional GIS participants
  - Utilize maps that plot PSAP cell sector coverage

---

---

---

---

---

---

---

---



## Summary



- **Lessons Learned (con't.)**
  - Define Scope of Project With Mapping Vendor
  - Assign A Resource As The Project Manager
  - Identify & Monitor Risks to The Project
  - Scrub Data For GIS
  - Utilize Regional Approach For GIS
  - Utilize Interim Mapping Solution
  - Prepare FAQ's / SOP's
  - Develop Call Volume Metrics
  - Develop Sector Maps To Assist In Training
  - Utilize State Resources (Web Site) and County Wireless Coordinator

---

---

---

---

---

---

---

---



## Summary



- **Best Practices**
  - FAQ
  - WE9-1-1 Policies & Procedures
    - Dispatch Procedures On Handling Troubled Calls
      - Butt Calls, Re-bid
      - Misrouted Calls, Inadvertent & Dropped Calls
  - Wireless Training
  - Maps For Determining CHP vs. Local Routing
  - Public Education
    - PSA Announcements
    - State & Agency Web Site
  - Advantages Of A Dedicated PM

---

---

---



---

---

---

---

---

## Acknowledgements

- State
  - WE9-1-1 Program Staff
  - CHP
- Charlie Cullen, Palo Alto PD Communications
- Bill McMurray, Marin County Communications
- AT&T (formerly SBC), GeoComm, Altavista Group
- WSP's – Verizon, Sprint, Metro PCS, Nextel, SureWest, T-Mobile
- SACOG & Yolo GIS Cooperative

---

---

---

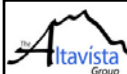

---

---

---

---

---

## Contact Info

- Marianne Wolf, Support Services Manager
 

YCCESA  
35 N. Cottonwood St.  
Woodland, CA 95695  
Email: [mwolf@yccesa.org](mailto:mwolf@yccesa.org)  
Phone: (530) 666-8910
- Robert Negrete, Consultant
 

The Altavista Group  
2143 Angel Camp Ct.  
Cool, CA 95614  
Email: [RNegrete@altavistagroup.com](mailto:RNegrete@altavistagroup.com)  
Phone: (530) 889-0565

---

---

---

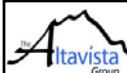

---

---

---

---

---

## WSP & Sectors

- Oct. 2004 – 1<sup>st</sup> WSP Verizon
  - 2 sites, 2 sectors
- Dec. 2004 – Verizon
  - Same sites, digital
- April 2005 – 2<sup>nd</sup> WSP Metro PCS
  - 1 site, three sectors
  - Verizon 1 site, two sectors
- May 2005 – 3<sup>rd</sup> WSP Nextel
- July 2005 – 4<sup>th</sup> WSP Sprint
  - 4 sites, 7 sectors

---

---

---

---

---

---

---

---



## Questions and Answers



---

---

---

---

---

---

---

---