



REPORT TO MAYOR AND CITY COUNCIL

AGENDA ITEM

TO: THE HONORABLE MAYOR
AND CITY COUNCIL

DATE: March 3, 2009

SUBJECT: Yolo County Communications Agency Strategic Plan Implementation
and Financial Strategy

Report in Brief

Police and Fire dispatch services for the City of Woodland are provided by the Yolo Emergency Communications Agency (YECA). YECA provides similar services to the cities of West Sacramento, Winters, and the County of Yolo. YECA was created by a Joint Powers Authority (JPA) agreement enacted by member agencies (Woodland, West Sacramento, Winters, and the County of Yolo) in 1988, and amended in 2007. The agency is responsible for the infrastructure, software, hardware and personnel necessary to receive 911 emergency calls from the public and communicate with public safety responders.

Staff recommends that the City Council review and provide comment on the YECA Strategic Plan and Financial Strategy.

Background

The Yolo Emergency Communications Agency has provided a consolidated 911 public safety answering point (PSAP), and Police and Fire dispatch services since 1988. Consolidated dispatch services provide greater efficiency through shared infrastructure and human resources, and improved coordination during multi-agency incidents. The Agency also provides after hour dispatch services to other departments such as the City of Woodland Public Works Department. When originally created, the Agency included an Office of Emergency Services. In 2006, Yolo County opted to remove the County Office of Emergency Services from YECA. The Agency no longer provides emergency management services to the member agencies.

The JPA is governed by a four member board. Each member agency appoints one member to the Board. The City of Woodland has designated the Police Chief as the primary board member and the Fire Chief as the alternate member. Through the JPA, YECA has much of the same authority as its member agencies to enact fees, secure debt, pursue grants, and expend funds. In FY 2008-2009, YECA's total operating budget is \$4.9 million dollars. YECA funding comes primarily from its member agencies based on a use formula. The Agency receives some funding through state 911

equipment fees, and by providing contract services to non-member agencies. The Agency has 46 authorized positions among three divisions: Administration, Operations and Support Services. Operations is the largest division with dispatchers staffing a 10-position center, each position equipped with call-taking and radio dispatch capabilities.

Discussion

911 PSAP operations provide an essential lifeline to our community. Similarly, emergency dispatching provides a lifeline for first responders. In order to maintain these lifelines and to provide the most effective emergency response possible, it is critical that the communications network be well designed, maintained, and managed. Recognizing this vital role communication has in providing quality public safety services to our communities, the YECA Board has worked over the years to identify the resources needed to these services. The Board has undertaken several initiatives to quantify needed resources. The Board retained a firm to conduct a staffing study for the agency in 2004, and had it updated in 2006. The staffing study provided the Agency with a staffing target and performance standards. Subsequent actions by the Board have worked towards implementing the study's recommendations.

In 2006 the YECA Board began to develop a strategic plan. After publishing a request for proposals the Board selected a consultant, the Alta Vista Group, to facilitate development of a strategic plan. Plan development included stakeholder interviews, focus group meetings, on-site observations, and comparative analysis of other agencies. The strategic plan identified deficiencies in the Agency's infrastructure and facilities. These deficiencies are summarized in the remainder of this section.

Radio System: Upon formation of the JPA in 1988, the agency utilized radio infrastructure that was already in-place and had been used by the member agencies prior to consolidation. Much of this infrastructure is still in use today, far exceeding the recommended service life for such equipment. The agency utilizes both 800 MHz and VHF public safety radio systems to dispatch police and fire agencies. The 800 MHz systems are used by West Sacramento and are part of the Sacramento Regional Radio Communications System (SRRCS). SRCCS owns and maintain the 800MHz radio infrastructure. Ownership of the VHF infrastructure has been transferred to YECA through the years. This infrastructure owned by YECA includes the VHF radio towers, antennas, transmitters, receivers, along with all of the dispatch consoles and other radio infrastructure necessary to get a radio communications to Police, Fire, and other users in the field. YECA does not own or maintain the mobile units that are installed in member agencies' vehicles.

The strategic plan identified divided radio system improvements into two phases. The first phase is to update and reinforce existing radio infrastructure. This includes tower sites and locations, microwave and other communication links between sites, emergency power, and grounding of the existing sites. Phase I improvements will enhance current radio communications and provide a solid foundation for future enhancements. The estimated costs for phase I radio improvements is approximately \$2.04 million. Phase I improvements are planned to begin in FY 08-09.

Phase II improvements will secure a new radio communication platform. The shift will move our radio communications from the current VHF band to the 700 MHz band, or beyond. Shifting bands will allow the Agency to create a digital trunked system. Such a system provides “multiple channels” for communications while requiring fewer radio frequencies. This is extremely important for Woodland since there is currently only one frequency/channel for police communications. A trunked system is not possible using the current wide span of frequencies currently allocated to the Agency. This band shift is also consistent with the Federal Communications Commission desire to move public safety radio communications to specific bands and enhance radio interoperability. The estimated costs for phase II radio improvements are approximately \$4.1 million. The total does not include any required end-user equipment, such as mobile radios installed in vehicles and hand held radios.

CAD/RMS/Mobile: Public safety communications increasingly relies on software programs and databases known as Computer Aided Dispatch (CAD) to input calls for service, track field units, and record details of responses. YECA last purchased CAD software in 1996. When purchased the CAD software was a well tested program, and was customized to meet YECA’s needs. Such software systems have a service life of 7-10 years. YECA’s CAD is no longer supported by the vendor. Additionally, the CAD database has a proprietary database which means any repairs or modification needed require substantial expenditures.

YECA also hosts components of a Records Management System (RMS) and Mobile Computer Terminal Software (MCT). Integrated CAD, RMS, and MCT packages are common place where dispatch service and field services are part of the same agency. These agencies generally want to deal with a single software provider. However public safety software has evolved and is now built on platforms which facilitate information sharing. These new software options should allow YECA and member agencies to selectively purchase CAD, RMS, and MCT software that is needed and best suited for integrated systems to be used by YECA and its member agencies. The costs for the CAD and other technology improvements are estimated at \$3 million. This total does not include any required end-user equipment.

The Facility: YECA operates from a county owned facility located at 35 N. Cottonwood Street, Woodland. The Agency leases the facility from the County. The facility was built in 1985. It is located in the Yolo area flood plain. The facility is scheduled to be de-commissioned by the county in or about 2014. The existing facility has approximately 5,867 square feet of usable space and due to its location and construction type has limited ability to expand. Through the strategic plan, the Agency needs approximately 11,000 square feet to accommodate projected staffing. The estimated cost to build/acquire a new facility is \$10 million. The strategic plan anticipated beginning the facility project in FY 10-11.

Fiscal Impact

Implementation of the YECA strategic plan will cost approximately \$19.2 million to complete. This amount has been updated to reflect 2008 costs. Recognizing the significant financial impact of these initiatives, the YECA Board engaged Government Financial Strategies to develop in financial plan.

Government Financial Strategies worked with the Board and Agency staff to develop a financial plan that would implement the major components of the strategic plan by 2014 and estimate the expenditures/member contributions over 30 years. The plan modeled various borrowing methods and their repayment. The repayment periods in the plan varied with the longest being the borrowing for the facility at 25 years. Government Financial Strategies recognized the service life of various components would be exceeded during the 30 year period and therefore accounted for replacements at appropriate intervals.

The financial plan produced by Government Financial Strategies estimated member agency contributions, including the capital costs for strategic plan initiatives, over the 30 year period. The strategic plan costs will mostly be split among member agencies based on variable formulas. The formula for radio infrastructure is different than other components. This difference in the radio infrastructure costs is due to the City of West Sacramento being a part of the Sacramento Regional Radio Communications System. The current formula used in the financial plan to allocate radio infrastructure costs is:

West Sacramento	4.00%
Winters	8.27%
Woodland	27.28%
Yolo County	50.15%
Contract Agencies	10.30%

The other components of the strategic plan are fully used by all member agencies and therefore the formula to determine the members' share will mirror the formula for determining operational costs: The current formula is:

West Sacramento	32.78%
Winters	4.33%
Woodland	30.75%
Yolo County	32.14%
Contract Agencies	0.00%

The financial plan includes assumptions for increased costs of staffing, operations and maintenance, capital expenditures, and debt payments over the 30 year period. It then applies the formulas above to the strategic plan initiatives to calculate each member agencies' share for each year of the plan. While it varies year to year, the annual increase in contributions for the City of Woodland ranged from 4.14% to 8.57% over the 30 year plan. The average increase is 5.54%.

The City has prepared to implement the YECA Strategic Plan by including the projects in the 10 year Capital Budget. Capital funding for phase I radio improvements and the CAD/RMS/MCT replacement were approved by the City Council on January 20, 2009 as part of the adjusted FY 09-11 Capital Budget. The YECA Board and member agencies are considering a strategy to self-fund these first projects. This will save approximately \$40,000 in costs of issuance for the borrowing, plus interest. Woodland's share for phase I radio improvements and CAD/RMS/MCT will be

approximately \$1,390,196. The 3-year Capital Budget approved by Council has \$1,378,624 budgeted over for these projects over FY 09-11.

In addition, YECA has sought grant funding for strategic plan projects. YECA has secured a portion of a regional Public Safety Interoperable Communications (PSIC) grant that will provide \$647,478. The PSIC grant will require a 20% match from YECA. The grant funds will purchase equipment and services needed to upgrade microwave links between radio towers which is part of the phase I radio improvements. On behalf of YECA the Woodland Fire Department applied for and appears close to being awarded Assistance to Firefighters Grant (AFG) through the U.S. Office of Homeland Security. The grant will provide \$804,425 and also require a 20% match. The AFG funds will also fund phase I radio projects. Member agency contributions for these capital projects will provide the 20% match for these grants, but the grant funds do reduce the overall project costs.

Recommendation for Action

Staff recommends that the City Council review and provide comments on the YECA Strategic Plan and Financial Strategy.

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Chief of Police

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City Manager

Attachment: YCCESA Strategic Plan
Government Financial Services Financial Strategy

*YOLO COUNTY COMMUNICATIONS EMERGENCY SERVICE
AGENCY*



**YCCESA COMMUNICATIONS SYSTEMS
& FACILITY STRATEGY**

**RECOMMENDATIONS & CONCLUSION
REPORT**

By



SUBMITTED MARCH 16, 2007

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EXECUTIVE SUMMARY

Introduction

This draft report is the fifth document submitted as part of this project. It presents the Recommendations and Conclusion for CAD, RMS, Mobile, Radio and Facility.

The first draft report delivered for this project was The Initial Findings report. It was comprised of the kick-off presentation, evaluation of current systems, conducting interviews/walkthroughs, project management meetings, collecting systems information, conducting focus group meetings and development of initial requirements.

The second draft report was the Alternative Analysis report where we evaluated several options, which were examined in relation to how each would facilitate solutions. The analysis discussed the advantages and disadvantages of various alternatives for YCCESA to consider. The outcome of which was to cost a stand-alone Communications facility, consider radio build out/upgrades, and issue an Request for Information (RFI) to develop CAD, RMS and Mobile cost estimates.

The third draft report was the Facility and Radio Cost Analysis report which presented the estimated costs for constructing a stand-alone Communication facility and the upgrade and build out of the current public safety radio system.

The fourth draft report was the Computer Aided Dispatch (CAD), Records Management Systems (RMS) and Mobile Systems Cost Analysis which presented the estimated one-time and five year total cost of ownership costs for procuring a new CAD, RMS, and Mobile solution. All these prior reports have been distributed to member agencies, core team and steering committee members. The draft reports are available at the YCCESA FTP site <FTP://ftp.yccesa.org/>. The site requires user account and password. For site access information please contact Marianne Wolf, YCCESA Project Director.

This fifth report contains the final recommendations and conclusion. The next steps in the project are to review the recommendations and conclusion with the YCCESA Board and develop a Conceptual Implementation Plan for the proposed Communication Systems and Facility. The Conceptual Implementation Plan will be completed after the meeting with the YCCESA Board planned for April 4, 2007 and submitted as part of the final report which will consolidate all the prior draft reports into the Public Safety Communications and Facility Final Report.

Background

As part of this study, The Altavista Group has prepared this fifth draft report submitted as part of Phase V. This phase is comprised of the development of the consultant recommendations and conclusion. The consultants plan to be on-site at Woodland PD - Community Room, on Thursday, April 26, 2007 at 10:00 AM to conduct a presentation of the CAD, RMS, Mobile, Radio and Facility Recommendations and Conclusion draft report with the YCCESA core and steering committee members. At this time, we will review our report and ask for committee members' comments and feedback on this draft version.

This project is comprised of the following phases:

◆ **Phase I – Establish the Baseline & Access Current Communications Systems**

Phase I Deliverables:

- Project Planning and Project Management Methodology (conducted weekly meetings)
- Team Structure Document (submitted 7/31/06)
- Kick-off Presentation (conducted 8/14/06)
- Survey Tool and Baseline Configuration of Communication Systems and Facility (attached as Appendix C in the Initial Findings Draft Report)
- Submittal of Initial Findings Report and document (submitted 9/25/06)

◆ **Phase II – Conduct Focus Group Meetings**

Phase II Deliverables:

- Completion of on-site focus group meetings facilitated by consultants (completed 9/15/06)
- User functional requirements (attached as Appendix D in the Initial Findings Draft Report)

◆ **Phase III – Conduct Alternative Analysis & Develop Communications Vision**

Phase III Deliverables:

- Written advantages and disadvantages of each alternative (submitted 10/30/06)
- Communication Vision for YCCESA (Initial draft submitted 01/05/07)
- Submittal of a draft report and document containing Phase III deliverables (submitted 10/30/06)

◆ **Phase IV – Develop RFI and Cost Analysis**

Phase IV Deliverables:

- Develop a Request For Information (RFI) document (submitted 12/14/06)
- Submittal of a draft report and document containing Phase IV cost analysis
 - ◇ Part I - Facility Cost Analysis (submitted 12/22/06)
 - ◇ Part I - Radio Cost Analysis (submitted 01/05/07)
 - ◇ Part II - CAD, RMS, Mobile Cost Analysis (submitted 01/29/07)

◆ **Phase V – Conclusion & Recommendations**

Phase V Deliverables:

- Conclusions & Recommendations
- Submittal of a draft report and document containing Phase V deliverables (submitted 03/16/07)

◆ Phase VI – Prepare Implementation Plan

Phase VI Deliverables:

- Development of an conceptual implementation plan document
- Final Public Safety Communications Systems & Facility Strategy Document
- The final report containing all prior phase deliverables will be incorporated into one final document (planned delivery of 04/20/07)

The kick-off presentation and delivery of project planning documents for Phase I was completed on August 14, 2006. The delivery of the Initial Findings draft report occurred on September 25, 2006. Comments and feedback were incorporated from the participating agencies which were concluded on October 17, 2006 - this completed Phase II.

We submitted the Phase III draft report on October 30, 2006. We have received feedback, questions and comments on this draft document and have worked with the Core team to assemble formal responses. The Project Director has distributed the written questions and responses to the stakeholder and project participants on December 22, 2006. With the final approval of the Communications Statement, this completed Phase III deliverables on January 5, 2007.

We submitted the Phase IV, Part I, draft report on December 22, 2006 and Phase IV, Part II, draft report on January 05, 2007, which met the deliverable for the first part of required work for Phase IV. The second part of Phase IV deliverable is contained in this report - the RFI & CAD, RMS, and Mobile Cost Analysis. The second part of Phase IV was delivered on January 29, 2007 – this concluded Phase IV deliverables.

The final report containing all prior phase deliverables will be incorporated into one final document with a planned delivery of April 20, 2007.

Report Summary

This draft Recommendations and Conclusion report can be summarized as follows:

Our recommendations are presented in three phases. Phase I describes those planning tasks which need to begin immediately in order to establish a funding mechanism to procure the new systems and facility. It is estimated these planning task will be implemented within six to twelve months. Based on the outcome of Phase I tasks, then Phase II projects are funded and YCCESA can proceed with procurement. Phase II describes those projects which once the Board has approved funding can be procured through a competitive bid process. Phase III describes implementation and deployment with the use of independent quality assurance (QA) resources. The QA resources are to assist YCCESA by providing oversight and project implementation assistance during both Phase II procurement and Phase III deployment.

At the end of this report we have presented a high level Conceptual Implementation Plan which depicts a timeline from April 2007 through January 2013. We have intentionally omitted project durations in the text of the Phases listed below, until we have reviewed the recommendations with the JPA Board. Upon discussions of our recommendations with the JPA Board our goal is to update the Conceptual Implementation Plan and add estimated durations and assumptions to each of the proposed Phases.

We now present our recommendations in summary format:

RECOMMENDED PROJECT – RADIO UPGRADE:

This project procures and implements the following:

- Site upgrades
- Backbone upgrades
- Network consolidation

Benefits Include:

- Spread investment over a reasonable period of time
- Minimize disruption to existing systems and operations; and
- Make sound investments in core civil infrastructure that will survive (and even appreciate) with technological evolution

Cost Assumptions:

	Low Estimate	Median	High Estimate
Capital Expenditures	\$ 1,390,000	\$ 1,850,000	\$ 2,310,000
Operating Expenditures (5 years)	\$ 750,000	\$ 1,000,000	\$ 1,250,000
5 YEAR TOTAL	\$ 2,140,000	\$ 2,850,000	\$ 3,560,000

RECOMMENDED PROJECT – RADIO LONG-TERM MIGRATION PLAN:

The long term migration plan would move YCCESA’s user to next generation digital trunked systems at a point where the investment would achieve the highest benefit versus risk, i.e. the point where the technology marketplace can deliver what users require at a reasonable cost and with reasonable probability of technological stability over a 10 to 15 year life-cycle.

To address the longer term migration, YCCESA should enter into discussions with SRRCS to determine the feasibility and cost effectiveness of the expansion of the next generation SRRCS system into Yolo County. This is likely a five-year initiative due to SRRCS’s own technology life-cycle timing. This period of time will also allow YCCESA to evaluate and consider the impact of external initiatives such as the proposed national 700 MHz public safety radio network and consider the development of new technologies such as the 700 MHz mobile broadband systems.

Benefits Include:

- Minimize the risk of premature investment in new technology before the marketplace has stabilized;
- Capitalize on new initiatives and new technologies once they are well established in the marketplace

Cost Assumptions:

Trunked System Costs (Incremental to site and backbone upgrade costs)	Low Estimate	Median	High Estimate
Capital Expenditures	\$ 3,430,000	\$ 4,580,000	\$ 5,720,000
Operating Expenditures (5 years)	\$ 1,720,000	\$ 2,290,000	\$ 2,860,000
5 YEAR TOTAL	\$ 5,150,000	\$ 6,870,000	\$ 8,580,000

RECOMMENDED PROJECT – CAD, RMS AND MOBILE REPLACEMENT:

This project procures and implements the following:

- Computer Aided Dispatch with associated interfaces

- INTERFACES -	
AVL/GPS	CAD Public Awareness Messaging
CLETS / NCIC	Computer Telephony
Digital Paging	DOJ Journaling Application
E911	EMD
Emergency Notification – Reverse 911	FAX Server

GIS/Mapping	Mobile Data Computer
Radio System – PTT	Document Scanning
Station Alerting	Time Synchronization
TTY	Voice Logging
3 rd party Records Management System	
Ø SunGard-Tiburon	Ø Versaterm
Ø Sun Ridge	Ø VisionAIR
Ø Fire House	Ø SunPro
Ø Fire Point	Ø DataWorks Mugshot System
Ø CalMug Mugshot System	Ø Jail Management System
Ø Judicial / AOC System	
Interfaces	
3 rd party Emergency Management System	3 rd party Computer Aided Dispatch System
3 rd party Property & Evidence System	

- Law Enforcement Records Management System
- Mobile Data

Benefits Include:

- Improved Interoperability between CAD, RMS and Mobile
- Our proposed phased approach will allow YCCESA to implement these new systems in a planned and coordinated manner.
- Implementing an integrated solutions and technology should improve communications on incidents, increase availability of critical information, automate status updates and enhance access to CAD and RMS database information. In addition, this should reduce radio traffic thereby decreasing the voice channel congestion. All these factors enhance productivity and also increase officer and firefighter safety.

Cost Assumptions:

Five Year Cost	Low	High	Average
First Year	\$1,709,518	\$5,443,693	\$3,576,605
Second Year	\$247,812	\$794,049	\$520,930
Third Year	\$255,246	\$817,871	\$536,558
Fourth Year	\$262,903	\$842,407	\$552,655
Fifth Year	\$270,791	\$867,679	\$569,235
Five Year Total Cost	\$2,746,270	\$8,765,698	\$5,755,984

RECOMMENDED PROJECT – NEW COMMUNICATIONS FACILITY DESIGN AND BUILD OUT:

This project is for the design and construction of a new Communications facility as follows:

- 11,927 Square foot Communications Facility

Benefits Include:

- Allows YCCESA to select an ideally suited location out of the flood plain
- This is an opportunity to design the ideal communications facility
- YCESA will utilize design professionals to conduct an initial schematic design, and then design development will occur followed by construction. This will allow for funds to be expended on a sequential process for the design and build-out of a new facility
- A new facility could have a positive impact on employee morale. Employees react more optimistically when their work environments are safe, clean, attractive, and spacious

Cost Assumptions:

Facility Hard and Soft Costs	SF Area	Low End	Median	High End
Unescalated Cost Estimate	11,927	\$7,102,049	\$8,579,157	\$10,180,303

RECOMMENDATIONS

Through our prior analysis of alternatives, proposed costs and evaluation of current Facility, legacy CAD, RMS, Mobile and Radio systems, we have developed what we believe is the best approach for Yolo County Communications Emergency Service Agency (YCCESA) to pursue in implementing new Public Safety Communications Systems and Facility.

The recommendations contained in this report are intended to provide for enhanced public safety systems for YCCESA stakeholders including all Yolo County citizens while improving PSAP operation and service delivery to member agencies. The recommendations presented by The Altavista Group are critical for YCCESA to maintain proper Communications/Dispatch operations and in planning for its future.

Implementing the recommendations will be a long and arduous undertaking, requiring extensive planning, funding, resources, training and time. Because this Communications' and Facility project involves multiple stakeholders, there will be different views for replacing and providing new systems, technology and facility. Therefore, the purpose of our recommendations is to provide a phased approach to enable YCCESA the greatest opportunity for success while leveraging its internal and member agencies resources (physical, monetary and technical infrastructure).

Our recommendations are presented in three phases. Phase I describes those planning tasks which need to begin immediately in order to establish a funding mechanism to procure the new systems and facility. It is estimated these planning task will be implemented within six to twelve months. Based on the outcome of Phase I tasks, then Phase II projects are funded and YCCESA can proceed with procurement. Phase II describes those projects which once the Board has approved funding can be procured through a competitive bid process. Phase III describes implementation and deployment with the use of independent quality assurance (QA) resources. The QA resources are to assist YCCESA by providing oversight and project implementation assistance during both Phase II procurement and Phase III deployment.

At the end of this report we have presented a high level Conceptual Implementation Plan which depicts a timeline from April 2007 through January 2013. We have intentionally omitted project durations in the text of the Phases listed below, until we have reviewed the recommendations with the JPA Board. Upon discussions of our recommendations with the JPA Board our goal is to update the Conceptual Implementation Plan and add estimated durations and assumptions to each of the proposed Phases. We now present our recommendations.

Phase I Recommendations – Planning & Funding Summary

- Develop Project Governance
- Create Financial Advisory Committee
- Create Radio Advisory Committee
- Create Building Advisory Committee
- Create CAD, RMS & Mobile Advisory Committee

- Develop A Formal Back-up/Business Continuity Plan For Dispatch Operations
- Develop Strategy To Bridge The Digital Divide With CAD/RMS/Mobile Systems
- Determine Feasibility of Performing a Fit-Gap Analysis on the current RMS/Mobile Vendor's CAD System

Phase II Recommendations – Procurement Summary

- Select Quality Management Firms
- Facility Procurement
- Issue Radio Upgrade RFP
- Issue CAD/RMS/Mobile Systems Request For Qualification/Proposal (RFQ/P)

Phase III Recommendations – Deployment Summary

- Implement Radio Upgrades
- Implement CAD/RMS/Mobile Systems
- Facility Construction and Occupancy
- Develop Radio System Replacement Strategy

Phase I Recommendations – Detail

DEVELOP PROJECT GOVERNANCE

TAG recommends that YCCESA develop a formal Project Governance Plan. This would include development of the following:

1. An assigned Project Director with comparable experience in large-scale project implementation
2. An experienced core team supplemented by outside experts
3. Clearly defined roles and responsibilities among the Project members
4. Well-defined project plans for each technology project approved by the Board
5. A rigorous quality assurance process
6. Open, honest communications
7. A process for keeping the Core and Advisory teams as well as the users energized and motivated
8. A committed Board member/Project Sponsor with the time and energy to be the project's champion
9. Ensure stakeholder buy-in

It is always people who make the project work. If the people are not committed to the project, to getting the right things done and working together, no amount of new technology can make the project succeed. Also, the Project Sponsor must be a people-oriented person first and foremost. If they are able to work well with technology issues, that is added value. The Project Sponsor must be an inside coach, constantly promoting the positive aspects of the project(s) to the team as well as helping other executives, Board members and agencies understand how the new technologies and facility will benefit them.

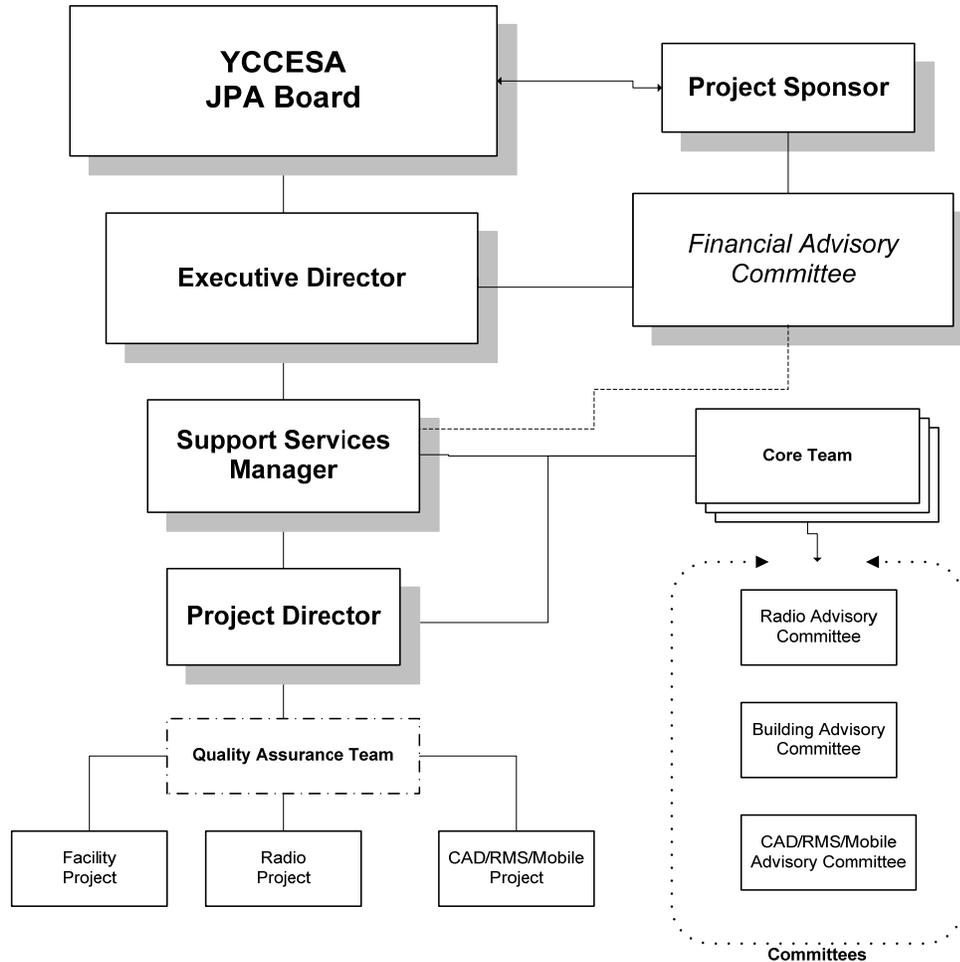
YCCESA stakeholders (JPA Board, Executive Management, Member Agencies, Staff and the Public) must be kept abreast of the timeframe for legacy replacement and the objectives for procuring new systems, technology and facility. As YCCESA moves from strategic considerations to tactical implementation, information must flow to the stakeholders so that risks, costs, tradeoffs and decisions are properly relayed and disclosed. As YCCESA moves towards procurement and implementation the users should be involved in the process to achieve buy-in and project success.

It is envisioned that the assigned Project Director would have the Radio, Facility and CAD/RMS/Mobile Advisory Committees assisting the Core Team with the planning, procurement and deployment of these systems and the new facility. We believe these Committees will be a conduit to allow information to flow to the stakeholders. Additionally, Committee members can assist by providing procuring, contractual and implementation expertise and further assist with monitoring project progress and performance.

The JPA Board must consider staff augmentation for YCCESA during Phase II and Phase III. It is anticipated that YCCESA will need additional technical support/staff which will assist the Project Director through procurement and deployment phases. For radio, YCCESA may consider the use of an “Owner’s Engineer” who will provide needed technical and project management expertise. In the governance model below we propose the Project Director work with the selected quality assurance contractor(s) to would provide the needed technical and oversight capabilities to successfully complete the projects. Once the projects are completed, the Project Director and any associated technical engineering positions would terminate.

Below is a chart to depict the project governance and reporting relationships.

YCCESA PROJECT GOVERNANCE MODEL



CREATE FINANCIAL ADVISORY COMMITTEE

This Advisory Committee shall report to the YCCESA Executive Director in assisting the JPA Board with developing a budget, capital expenditures and funding for the acquisition of the Public Safety Communications Systems. The Financial Advisory Committee should consist of the SUG and JPA board members, County and City administrators, YCCESA financial advisor, elected officials, private sector business leader(s), YCCESA Executive Director and any other stakeholders who have expertise and experience with funding large capital projects. The Financial Advisory Committee and JPA Board should immediately begin to execute the following:

- Secure Funding Source for One-time Costs and Operating Costs For:
 - ✓ Radio
 - ✓ CAD/RMS/Mobile
 - ✓ Facility

The responsibilities of the Financial Advisory Committee (FAC) are to develop a financial plan to achieve the following goals:

- Identify way to finance the Communications Systems and Facility construction through public and private financing
- Make maximum use of pay-as-you-go mechanisms
- Make use of grants and governmental debt financing mechanisms
- Consider utilizing existing City, County and potential program funding to the extent possible
- Build in financing flexibility to allow for market conditions, and
- Consider the use creative financing such as developer funding for facility

The FAC is intended to assist YCCESA develop long-term economic viability to ensure that critical public safety communication needs are addressed by a strong and secure financial plan. The FAC will be an avenue through which the JPA Board will hear the voices of all concerned stakeholders before making financial decisions.

CREATE RADIO ADVISORY COMMITTEE

TAG recommends that YCCESA develop a formal Radio Advisory Committee. This Committee would report to the Project Director and provide planning and oversight of the Radio System Upgrade Initiative and Long Term Migration Plan. The Radio Advisory Committee should consist of YCCESA member agency users representing each discipline (law enforcement, Fire, Medical), Volunteer Fire District, YCCESA Dispatch, Radio Project Manager, YCCESA administrator, and any other stakeholders who will be involved in providing ongoing guidance and direction on the following:

- Priority setting for system improvement activities
- Development of capital and operating budgets for radio systems and user equipment
- Procurement activities for both user and system equipment
- Selection of technologies to support user requirements for mobile voice and data
- Development of standards and specifications for radio user equipment purchase, configuration and maintenance
- Development of radio protocols and training programs
- Definition of interoperability requirements and procedures

- Encourage the broadest participation by the County's public safety and non-public safety agencies
- Develop site remediation program to upgrade facilities for retained infrastructure and in anticipation of upgraded radio communications
- When required authorize targeted studies to identify and mitigate any remaining noise and interference sources, and incorporate appropriate measurements and analysis to consider interference in replacement system designs
- Participate in the bidding, selection, award and management of contractors for advisory, implementation and maintenance services

The responsibilities of the Radio Advisory Committee (RAC) are to guide YCCESA in ensuring that YCCESA's radio systems are designed, implemented and maintained to well established and accepted performance standards. The RAC should facilitate opportunities for local and regional radio initiatives while ensuring that investments in radio infrastructure and technology are appropriately balanced between long life-cycle investment and the quick operational pay-back gained by investment in current generation technology.

The RAC will be an avenue through which the JPA Board will hear the voices of all concerned stakeholders when faced with major radio initiatives.

CREATE BUILDING ADVISORY COMMITTEE

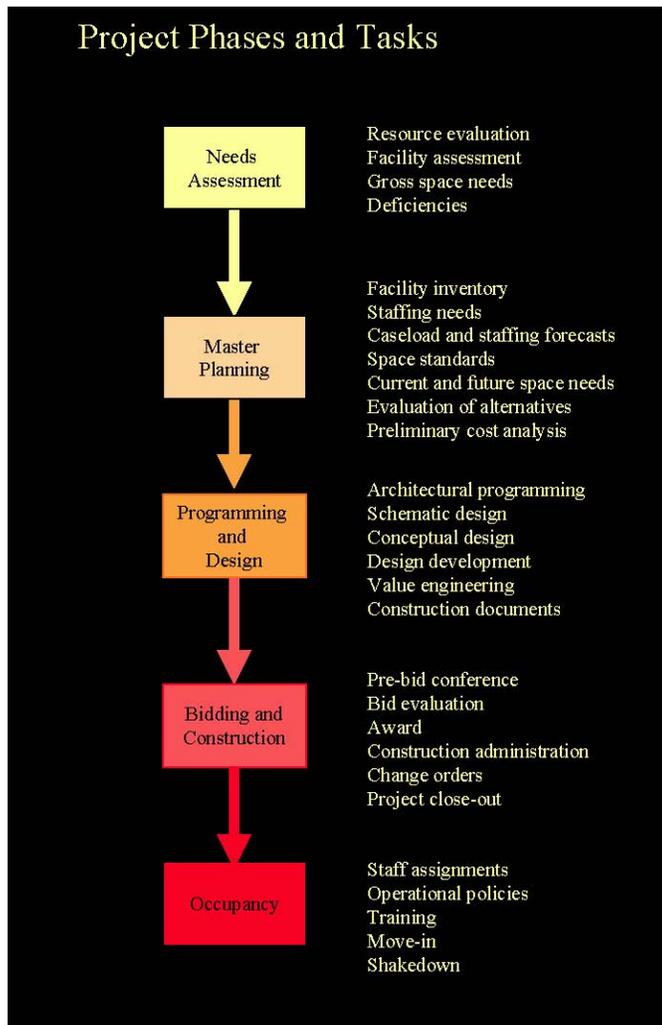
The Altavista Group recommends that YCCESA develop a formal Building Advisory Committee which reports to the Project Director. The Building Advisory Committee should consist of YCCESA users, administrators, county planners, member agencies and other any other planned users of the building.

The committee would assist in providing the following:

- To assist in developing the facility requirements
- To obtain expert opinions on various options from consultants as needed (engineers, contractors, architects, surveyors)
- To gather public opinion and input from community and user groups on options
- To develop preliminary architectural design
- To ascertain preliminary cost based on the conceptual design
- To develop a financial plan for defraying the total cost.
- To continue with the building process until completion of the project as outlined in the plan
- To report to the JPA Board on the building progress

TAG also recommends that the Building Committee follow a traditional design-bid-build development process, which incorporates five distinct phases: (1) Needs Assessment, (2) Master Planning, (3) Programming and Design, (4) Bidding and Construction, and (5) Occupancy. The actual process YCCESA uses will be dependant upon the selected QA design/build consultant and Architectural and Engineering firm(s) engaged in the project.

As an example of a design-bid-build process, see attached diagram below.



CREATE CAD, RMS & MOBILE ADVISORY COMMITTEE

The Altavista Group recommends that YCCESA develop a formal CAD, RMS & Mobile Advisory Committee which reports to the Project Director. This Advisory Committee should consist of YCCESA users, member agencies, subject matter experts, Information Technology (IT) and regional GIS staff.

The committee would assist in providing the following:

- Assist in developing functional and operational requirements
- Participate in the procurement and selection process
- Train, test and assist with deploying selected solutions and products
- Assist with tasks as outlined in any QA plan
- Report to the Project Director on project tasks, progress and performance

DEVELOP A FORMAL BACK-UP/BUSINESS CONTINUITY PLAN FOR DISPATCH OPERATIONS

With the City of Davis migrating to a new CAD and RMS system, all three PSAPs in the County now utilize different CAD systems. If circumstances occurred where the YCCESA PSAP was forced to evacuate, the Communication Specialists would contact the City of Davis's PSAP and have the City of Davis's Communication Specialist use the switch that all YCCESA 9-1-1 calls would be re-routed and answered at the City of Davis PSAP. The Altavista Group recommends that YCCESA develop a formal Disaster and Business Continuity Plan that addresses the following objectives:

- Re-evaluate the current back-up and emergency operations plan to determine adherence to operational continuity and quick recovery for all critical systems impacted by a natural, terrorist or technology related disaster event
- Ensure that back-up and disaster recovery program maintains an orderly process for operational resumption and systems recovery
- Ensure that back-up and disaster recovery activities and strategies are continually tested and revised as needed
- Ensure that radio sites to dispatch provide a level of redundancy for dispatch operations, allowing a remote, or even mobile command center to tie into the backhaul network, either wired or wirelessly, at any of the sites and thus control the entire network independent of the primary communications facility
- Ensure that sufficient funding and resources are properly allocated to achieve the proposed business continuity objectives.

BRIDGE THE DIGITAL DIVIDE WITH CAD/RMS/MOBILE STRATEGY

Current law enforcement and fire RMS systems are not integrated with the CAD system which limits the police and fire records software applications from seamlessly sharing data. Users require the ability to analyze data in real-time and generate ad-hoc reports. The purchasing of a new CAD system will be an opportunity for YCCESA to improve interoperability with the procurement of a new law enforcement RMS application, Mobile and message switch. The Altavista Group recommends member agencies come to agreement that as the consolidated regional JPA Agency YCCESA procure an integrated CAD, RMS and Mobile system. YCCESA and the participating agencies will agree to fund and support a service level agreement which:

- Promotes distribution of IT resources and solutions across all agencies to eliminate the digital divide between urban, rural and (law enforcement / Fire) agencies, thus ensuring the ability to share information and guaranteeing the quality of the information
- Promote Technology Interoperability Among Information Technology Systems

DETERMINE FEASIBILITY OF PERFORMING A FIT-GAP ANALYSIS ON THE CURRENT RMS/MOBILE VENDOR'S CAD PRODUCT

In the alternative analysis section, The Altavista Group discussed the potential to conduct a fit-gap analysis to determine the extent and viability of the current RMS/Mobile vendor's CAD product providing an integrated or "enterprise" CAD, Mobile, Message Switch, Mapping and RMS solution. This was a consideration because the vendor currently provides law enforcement RMS and mobile data for member agencies.

The determination of whether to pursue this analysis should only occur based on the following suppositions:

- The outcome of the planning and funding phase in which the JPA Board determines the overall direction and priorities, radio and facility place a strain on funding, or
- The current legacy CAD vendor twilight the current CAD product and offers no support option to YCCESA, and
- Should this be pursued, the Board will provide sufficient funding so that an unbiased analysis is conducted and subsequent findings presented to the Board.

The Altavista Group only recommends that YCCESA consider conducting a Fit-Gap analysis if the above assumptions prove true. Prior to conducting any fit-gap analysis YCCESA will be required to develop detailed operational and functional requirements in order to conduct its evaluation. YCCESA shall also create a clearly defined scoring / evaluation criteria to validate if the CAD is a viable replacement system for YCCESA.

Phase II Recommendations - Detail

SELECT QUALITY MANAGEMENT FIRMS

Quality management refers to the **Quality Assurance (QA)** process used to create the project deliverables. QA assurance activities focus on the processes being used to manage and deliver the solution, and is typically performed by independent third-party contractor. One of the processes used by a QA consultant is **Quality Control**. This refers to the activities associated with the creation of project deliverables. It is used to verify that deliverables are of acceptable quality and that they meet the completeness and correctness criteria established in the quality planning process. Quality Control is conducted continually throughout a project and is the responsibility of team members and the Project Manager. An independent project reviewer will be able to assist the YCCESA project team determine if the project deliverables are acceptable based on approved processes, methodology, testing and expertise. The QA consultant should develop a **Quality Plan** with YCCESA, its solution provider(s) and stakeholders to incorporate a well defined quality control methodology at the beginning of the project.

It is envisioned that YCCESA would utilize the QA firm to assist with the selection of the Project Director. The QA firm would provide oversight and assistance to the Project Director, selected vendors and YCCESA during procurement and implementation. Because

of the unique expertise required with the Radio, Facility and Public Safety Communications systems there may be a need to use more than one QA firm or QA contractor. The Altavista Group recommends that YCCESA utilize its selected Quality Assurance firm and or contractors to provide, at a minimum the following:

- Degree Of Attainment Of Business Objectives For:
 - ✓ Radio
 - ✓ CAD/RMS/Mobile
 - ✓ Facility
- Degree Of Attainment Of Budget Objectives
- Degree Of Adherence To Schedule
- Degree Of Satisfaction Of User Requirements
- Degree Of Realization Of Anticipated Benefits
- Degree Of Productivity - Experienced
- Degree Of Delivery – Project Deliverables
- Transition Development Plan From Operations To Maintenance

FACILITY PROCUREMENT:

The Altavista Group recommends that YCCESA utilize its selected Quality Assurance firm to assist with developing its facility procurement strategy. Working with the YCCESA Building Advisory Committee the QA contractor will manage and provide oversight on the following facility procurement tasks:

- Facility Strategy
 - ✓ Issue RFP for Architectural and Engineering (A&E)
 - ✓ Score Proposals and Select A&E Firm
 - ✓ Negotiate Contract
- Facility Site Plan
 - ✓ Assist With Schematic Design
 - ✓ Assist With Design Development
- Facility Bidding
 - ✓ Conduct Pre-Bid Conference
 - ✓ Assist With Bid Evaluation
 - ✓ Assist With Award Notification
 - ✓ Negotiate Contract(s)

ISSUE RADIO UPGRADE RFP:

The Altavista Group recommends that YCCESA utilize its selected Quality Assurance firm to assist with developing its Radio Upgrade strategy. Working with the YCCESA Radio Advisory Committee the QA contractor will manage and provide oversight on the following facility procurement tasks:

- Upgrade Strategy
 - ✓ Issue RFP for Radio Upgrades
 - ✓ Score Proposals and Select Radio Vendor
 - ✓ Negotiate Contract
- Procurement
 - ✓ Conduct Pre-Bid Conference
 - ✓ Assist With Bid Evaluation
 - ✓ Assist With Award Notification
 - ✓ Negotiate Contract(s)

ISSUE CAD/RMS/MOBILE SYSTEMS REQUEST FOR QUALIFICATION (RFQ) / REQUEST FOR PROPOSAL (RFP)

The Altavista Group recommends that YCCESA utilize its selected Quality Assurance firm to assist with managing and providing oversight on the following CAD/RMS/Mobile Systems procurement tasks:

- Issue RFQ and Qualify Most Comprehensive Bid Proposal/Vendor
- Conduct Technical Bidder Demos/Evaluations
- Score Bidder Proposals, Demos, References
- Issue RFP to Top Three Qualified Bidders from RFQ Process
- Score Bidder Pricing
- Award Notification
- Contract Negotiations

ADDITIONAL CAD/RMS/MOBILE PROCUREMENT RECOMMENDATIONS

To ensure a high level of system integration, The Altavista Group recommends that YCCESA conduct a competitive procurement for a multi-jurisdictional, multi-agency, multi-discipline CAD, RMS and mobile data system. Because a Request For Information (RFI) was issued during the Cost Analysis phase of this project, TAG recommends that YCCESA follow the **RFI, RFQ & RFP** development process. This allows the development of procurement documents incorporating best practices and lessons learned from other agencies and the consultants. A request for qualification (RFQ) should be developed that includes functional specifications for the systems listed above. The RFQ process will allow

YCCESA to better manage the procurement process and incorporate the technical evaluation of specific functional and operational criteria within the RFQ, as well as begin the development of a detailed statement of work with the most qualified bidder. Only those bidders who score high on the technical evaluations are allowed to proceed to the request for proposal (RFP) stage. The RFP will incorporate pricing and costing of products, services, training and equipment from those bidders who are scored. Based on the results of the RFP scoring an award is made to the bidder to enter into contract negotiations with YCCESA.

It is important to structure the RFQ/P to solicit bids that provide YCCESA with the highest degree of control, flexibility and procurement strategy. Therefore, we recommend the following:

- **A Single Prime Contractor Relationship Should Be Solicited** - A single software vendor can provide a regional solution. Ideally, YCCESA should establish a relationship with a single prime contractor - capable of integrating all systems. This would minimize the potential “finger pointing” commonly found during multiple-vendor implementations.

It is important that a high level of integration between systems be achieved. Therefore, it is important to determine the level of experience and expertise that system vendors have in all areas. For example, it is worth noting whether or not CAD vendors have experience in implementing and integrating a regional system - such as exists within Yolo County; and that its message switch provides specific interfaces such as AVL, CLETS, etc.

Therefore, The Altavista Group recommends that the RFQ/P be structured to allow YCCESA maximum flexibility. Responses should be solicited from potential vendors on procuring an integrated system; however, YCCESA should clearly state that it retains the option to select and implement any or all of the systems proposed by the vendors, based on its sole discretion, and future funding.

- **Employ a Structured Evaluation Criteria and Scoring Methodology** - The Altavista Group strongly recommends that YCCESA define and establish its evaluation and scoring methodology in advance of releasing an RFQ. The establishment of a well defined and structured proposal evaluation and scoring methodology – which can be incorporated within the RFQ/P, can greatly reduce the potential of a procedural or award protest, and ensures that the responding vendors are aware of those areas which are being given the highest degree of consideration in YCCESA’s selection of a system provider.
- **D.O.L.F. (Demonstration Of Licensed Functionality)** - One of the most critical aspects after issuance and selection of a technology system is providing a methodology in which the client and vendor can establish an initial process to begin implementing technology systems in partnership.

Upon award, most public safety technology companies take the lead, offering their methodology for evaluating and monitoring the initial elements involved in a project - such as the implementation of an integrated CAD and mobile system. This approach covers the design, implementation, and subsequent maintenance of a technology system. It must be stressed that to implement a system within an organization, it is essential that

the end users accept the need for the system. A well-designed system will fail during implementation if user buy-in is not achieved. Because much of the CAD/RMS/Mobile project will involve new technology and integration, it is critical that a viable approach be utilized to provide the best chance of success, and to ensure that YCCESA's specific functional, operational, administrative, and system needs are met.

The Altavista Group believes that by using the DOLF process, that this will increase the potential for success of implementation with the vendor and YCCESA in partnership. Integrating technology is the ability to make new technology work with the other technical components utilized within the project. For example, the CAD and RMS or telephony systems must "talk" with each other. When integrating new technologies, it is critical to make sure that the project begins on the right path – understanding that the ultimate goal is to achieve the seamless integration and most efficient operation of the systems.

Below is a summary of the DOLF process approach:

- **Fit Gap Analysis** – When implementing systems it is important to determine up front how well the application product meets the RFP requirements. One way to accomplish this is through trial and error, or through an analysis and demonstration of how the product matches or "fits" the requirements. Where there are gaps, these are identified up front. This would require a prototyping of the product by the vendor with YCCESA's staff, subject matter experts and management.
- **Functional Specification Development** - One of the keys to a successful implementation is to understand and develop functional specification with defined acceptance criteria for external interfaces, operating environments and testing programs. Most of the requirement tasks begin immediately following the project kickoff and prior to implementing any software interfaces.
- **Data Modeling** - With a conceptual data model structure, YCCESA can begin to understand naming conventions, field organization, database specifications and report requirements. Without going through this process with the vendor, it will become difficult for the end user to perform ad hoc reporting and understand the system configuration as it relates back to the various agencies operations and business rules.
- **Business Process Reengineering (BPR) vs. Customization** – Today most software companies provide a Commercial-Off-The Shelf (COTS) solution. In every RFQ/P there are mandatory and desirable specifications which are difficult to validate. One way to overcome this is by utilizing the Fit/Gap analysis and functional specification development. There is also a point where software modifications and technology changes will not improve the work process. Sometimes the change needs to be one of a cultural or business process - in which case YCCESA has to weigh the cost and time in either transforming the "code" (customizing the software) or reengineering the business process. IT projects such as the procurement of an integrated CAD/RMS/Mobile should use a "best practices" approach to achieve the most beneficial combination of tools, technology, and personnel available within the public safety industry.

CONDUCT CAD/RMS/MOBILE SYSTEMS CONTRACT NEGOTIATIONS

The Altavista Group recommends that during contract negotiations YCCESA consider using a lead negotiator to finalize its technology contract:

- Use lead negotiator - By utilizing an experienced lead negotiator, YCCESA can derive the benefit of negotiation expertise based on a technical knowledge of public safety/high availability, mission critical systems, 9-1-1 operations, industry trends, government contracts, support service agreements and cost allocations. The intent would be to capitalize on the negotiation, operational and technical expertise of the lead negotiator, while incorporating this with the YCCESA-specific requirements and legal review provided by YCCESA and County resources.
- Utilize legal counsel - It is important that YCCESA maintain legal counsel representation to provide legal review and insight of all negotiated terms. Compliance with applicable local, county, state and federal law is essential to the success of the long-term project objectives and on-going relationship of the member agencies.
- Develop negotiation issues and positions - As part of its contract negotiation effort, it is important for YCCESA to develop a negotiation strategy to bring the vendor and itself to the negotiation table as equal partners. Part of this strategy requires the development of specific issues and positions (negotiating points) so that definitive action(s) can be taken regarding committee decisions, delegated responsibilities, contractual terms, and defined consequences for failure to provide timely compliance; thereby ensuring the negotiations will move the parties forward.

These negotiation strategies would include:

- ✓ YCCESA contractual terms and conditions
- ✓ Establish system / data ownership and access rights (source code)
- ✓ Establish limitations of liability and indemnification
- ✓ Establish an escalation process for resolving issues
- ✓ Address the automatic renewal policy
- ✓ Performance bonds, holdbacks, damages
- ✓ Binding arbitration
- ✓ Software licensing and ownership
- ✓ Ownership if divested
- ✓ Contract administration, etc.

Phase III Recommendations - Detail

IMPLEMENT RADIO UPGRADE

The Radio System Upgrade initiative is primarily focused on fixing or improving existing systems using the same core radio technology, i.e. VHF conventional analog. The VHF Radio System Upgrade should, wherever feasible, reuse existing serviceable assets, including the newer generation Tait repeaters purchased for the current simulcast project and Motorola Digitac voting comparators.

The radio upgrade initiative consists of five core activities:

- **Site Upgrades** – Improvements to site facilities and civil infrastructure
- **Backbone Upgrades** – Replacement of existing leased circuits and narrowband UHF links with low capacity redundancy-protected Ethernet microwave. The implied order of the upgrade for the major network elements (i.e. site facilities, backhaul, VHF network) is as follows:
 - 1.) Upgrade site facilities;
 - 2.) Implement wireless backhaul network; and finally
 - 3.) Upgrade VHF networks.

However, the detailed design process can consider the appropriate process of implementation as well as the order of procurement and the level of integration between elements. It is possible and advantageous to procure all three elements in a single procurement and work with a single vendor who is tied to performance of an integrated solution. However, the sequence described will also allow purpose-specific procurement of the major elements and may support greater competition for provision each element. The separate procurement approach entails additional management overhead to manage three procurement and implementation projects and places much of the integration risk on YCCESA.

- **Network Consolidation** – Reconciliation of current disparate Law and Fire radio systems to common technology and locations and implementation of well designed simulcast/voter systems
- **Radio Continuity For Dispatch Operations** - Ensure that radio sites to dispatch provide a level of redundancy for dispatch operations, allowing a remote, or even mobile command center to tie into the backhaul network, either wired or wirelessly, at any of the sites and thus control the entire network independent of the primary communications center
- **Remediation of selected sites** – YCCESA and its selected QA contractor will work in tandem with its selected radio vendor from prior procurement phase to address the specific sites listed below:
 - ✓ All Sites
 - Install site monitoring system for monitoring access, power, HVAC, temperature, fire, antenna VSWR

- Upgrade backup power systems for 8 hours for specific radio configuration.
 - ◇ The detailed engineering phase should identify the specific amount of backup power requirement (in amp-hours of capacity) for each of the sites. Backup power requirements will increase at all sites due to the proposed increase in channels and backhaul network. It should be noted that backup power systems will not be expected to carry HVAC loads at the sites
 - ◇ It is expected that HVAC systems will be needed at all sites due to temperature ranges experienced at the sites and that not all elements of the recommended approach are available in environmentally robust configurations. While much of the radio transmitter equipment is designed to operate across a wide range of temperatures - router, VoIP and some other elements are designed for operation in a temperature and humidity controlled environment
- Survey tower facilities for loading and safety
- ✓ Bald Mountain
 - Replace HVAC (this would be a request to the site owner)
 - Site cleanup and reconciliation, i.e. remove unused equipment and antennas.

Alternative: Explore feasibility, costs and coverage trade-offs for moving to one of two alternate sites on Bald Mountain
- ✓ Capay Valley (Guinda FS)
 - Upgrade backup power to 8 hours for three channel receive and link.
 - Replace tower with 60' tower
 - No other actions assumed – detailed site survey against standards should be conducted.

Alternative: Identify and develop new high-elevation site above Rumsey
- ✓ Putah Creek
 - Replace site with secure shelter and 60' tower; assumed same location, connection by leased circuits, including backup power and HVAC

Alternative: Identify and develop alternate site on ridge 2 miles east of current site
- ✓ Cache Creek
 - Upgrade backup power to 8 hours for four channel receive and link.
 - Future upgrade will require additional shelter
- ✓ Winters Cingular
 - Upgrade backup power to 8 hours for four-channel transmit/ receive and link.

- Future upgrade will require additional shelter
- ✓ Winters Fire Station
 - Decommission, can be used for site redundancy and local simplex
- ✓ Arbuckle Fire Station
 - Upgrade backup power to 8 hours for three-channel receive and links.
- ✓ Knights Landing Fire Station
 - Upgrade backup power to 8 hours for three channel receive and link
- ✓ West Sacramento (Broderick)
 - Decommission – move equipment to Port of Sacramento site
- ✓ Port of Sacramento
 - New shelter at bottom of grain elevator, including HVAC
 - Upgrade backup power to 8 hours for three channel transmit/receive and link
- ✓ Clarksburg Fire Station
 - Upgrade backup power to 8 hours for three channel receive and link

IMPLEMENT CAD/RMS/MOBILE SYSTEMS

YCCESA and its QA contractor will implement the selected vendor's CAD, RMS and Mobile solutions.

- ✓ Install Regional CAD / RMS /Mobile Systems
 - Interfaces (NCIC, 9-1-1, Time Synch, Paging, Toning, etc)
- ✓ Integrate Existing Fire Records Management Systems
- ✓ Integrate Regional and External Agency Database Systems
- ✓ Other interfaces
 - Automatic Vehicle Location (AVL)
 - Geographic Information Systems (GIS)

FACILITY CONSTRUCTION AND OCCUPANCY

YCCESA and its QA contractor will follow a facility construction and occupancy plan for build out of a stand-alone Communications Facility as follows:

- Construction administration
- Change Orders
- Project Close-out
- Staff Assignments

- Operational Polices
- Training
- Move-in
- Shake down

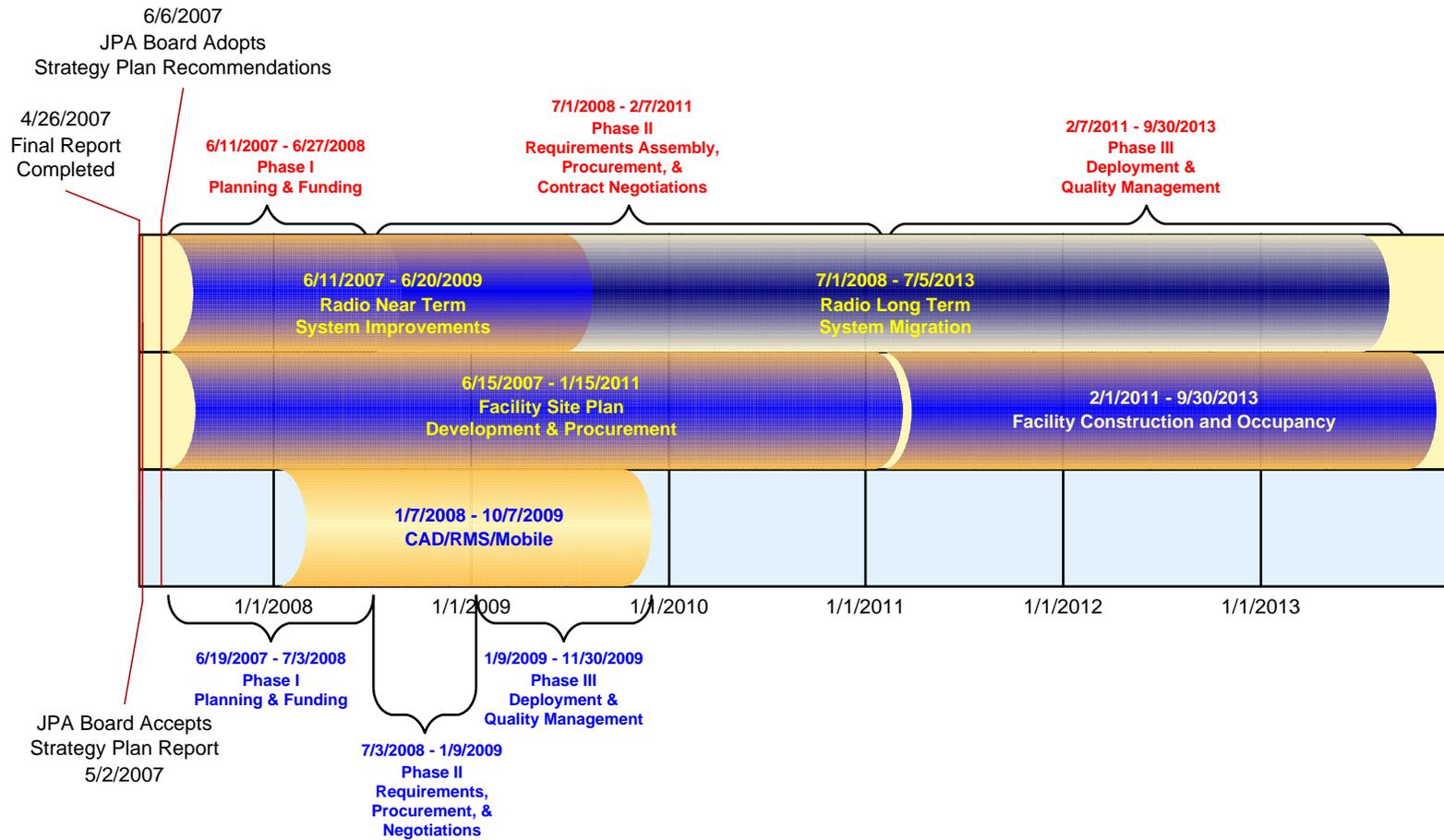
DEVELOP RADIO SYSTEM REPLACEMENT STRATEGY

The Altavista Group recommends that YCCESA should enter into discussions with SRRCS to determine the feasibility and cost effectiveness of the expansion of the next generation SRRCS system into Yolo County. This is likely a five-year initiative due to SRRCS's own technology life-cycle timing. This period of time will also allow YCCESA to evaluate and consider the impact of external initiatives such as the proposed national 700 MHz public safety radio network and consider the development of new technologies such as the 700 MHz mobile broadband systems.

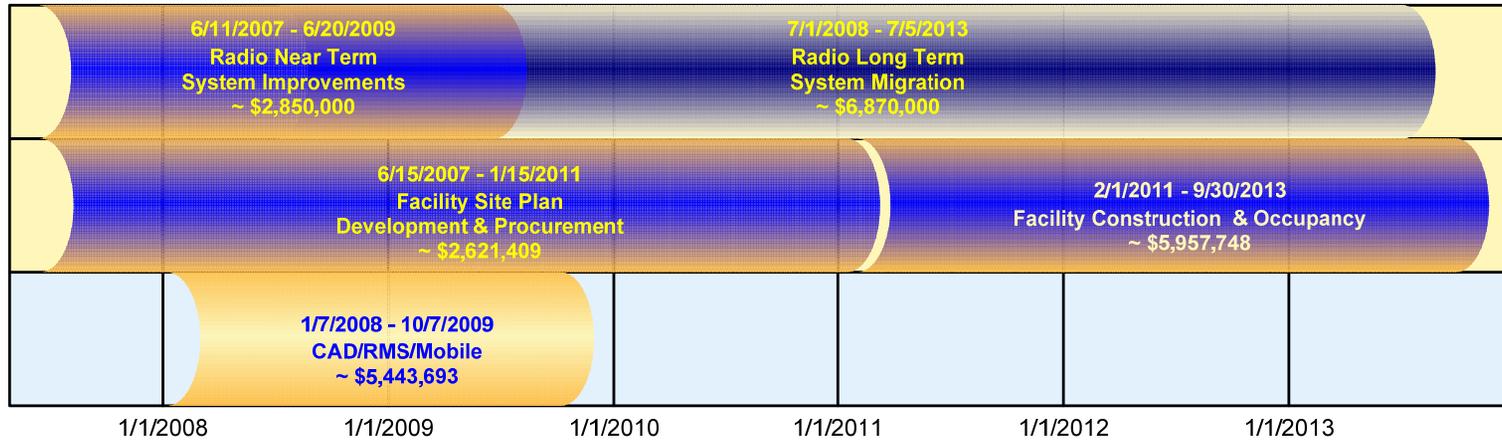
In the next section of our report we have presented a high level Conceptual Implementation Plan which depicts a timeline from April 2007 through January 2013. We have intentionally omitted project durations in the text of the Phases listed above, until we have reviewed the recommendations with the JPA Board. Upon discussions of our recommendations with the JPA Board our goal is to update the Conceptual Implementation Plan and add estimated durations and assumptions to each of the proposed Phases.

CONCEPTUAL IMPLEMENTATION PLAN

The following graph illustrates a high level conceptual implementation plan that depicts the estimated project durations. The intent of this graph is to facilitate discussion with the JPA Board members at the April 4th JPA Board Meeting.



This graph illustrates the projected funding outlay during various phases of the project. It is simply meant to illustrate the estimated cost based on the cost analysis presented in Phase IV.



CONCLUSION

Based on our review and assessment of the current radio, facility, CAD, RMS, and Mobile systems, YCCESA should immediately put into place the Phase I recommendations to begin funding the replacement of its technology systems and upgrading its current radio investment. YCCESA must also begin to formalize its project governance in order to meet the challenges it will confront by planning, procuring and deploying new systems and facility. By following The Altavista Group's recommendations, YCCESA will be able to follow a phased approach in providing an integrated solution for its member agencies to better meet the overall regional public safety goals within Yolo County.

The JPA Board and its member agencies are encouraged to conduct a review of this Communications Strategy and Facility Plan, seek input, update the cost analysis, reorder priorities and modify the timeline as it deems necessary. The Plan should be considered a living document to be updated by YCCESA, its staff and third party Quality Assurance Team.

GLOSSARY OF ACRONYMS

A&E	Architectural and Engineering
AVL	Automatic Vehicle Location
BPR	Business Process Reengineering
CAD	Computer Aided Dispatch
CLETS	California Law Enforcement Telecommunications System
COTS	Commercial Off The Shelf
DOJ	Department of Justice
EMD	Emergency Medical Dispatch
FAC	Financial Advisory Committee
GIS	Geographic Information System
GPS	Global Positioning System
HVAC	Heating, Ventilation, & Air Conditioning
IT	Information Technology
JPA	Joint Power Authority
MHz	Megahertz
NCIC	National Crime Information Center
QA	Quality Assurance
RAC	Radio Advisory Committee
RFI	Request For Information
RFP	Request For Proposal
RFQ	Request For Qualification
RMS	Records Management System
SF	Square Footage
SRRCS	Sacramento Regional Radio Communications System
SUG	Super User Group
TAG	The Altavista Group
TTY	Telephone-Text-Device
UHF	Ultra High Frequency

VHF	Very High Frequency
VoIP	Voice over Internet Protocol
VSWR	Voltage Standing Wave Ratio
YCCESA	Yolo County Communications Emergency Service Agency

Yolo Emergency Communications Agency



Data and Assumptions

Inflators

Annual Salary & Benefits Inflator:	6.00%	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Annual "Non-Labor Costs" Inflator:	3.00%	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
"Additional" Annual Operations Inflator:	3.00%	(estimate provided by Agency - May 21, 2008)
Annual Building Cost Inflator:	4.00%	(estimate provided by Agency - May 21, 2008)
Annual Radio Replacement Cost Inflator:	3.00%	(estimate provided by Agency - May 21, 2008)
Annual Non-Radio Equipment Replacement Cost Inflator:	3.00%	(estimate provided by Agency - May 21, 2008)

Initial Operations Costs

Radio (year 2009-10):	\$53,000	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Radio (year 2010-11 - 2011-12):	\$106,000	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Radio (year 2012-13):	\$292,000	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Technology (beg. year 2011-12):	\$230,000	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Facilities (beg. year 2013-14):	\$127,000	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)

Replacement Costs (in 2008 dollars)

Radio Equipment:	\$2,048,254	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Non-Radio (RMS & Tech.) Equipment:	\$3,000,000	(estimate provided by Agency - November 3, 2008)

Facilities Costs

Land (in 2008 dollars):	\$1,500,000	(estimate provided by Agency May 21, 2008)
Building (in 2008 dollars):	\$8,500,000	(estimate provided by Agency May 21, 2008)
	\$10,000,000	

Equipment Useful Life:

Radio Equipment Useful Life:	15 years	(estimate provided by Agency - May 21, 2008)
Non-Radio Equipment Useful Life:	7 years	(estimate provided by Agency - May 21, 2008)

Radio Cost Allocation:

West Sacramento	4.00%	(allocation used by Agency in Radio Systems - 10 Yr Financial Plan.xls)
Winters	8.27%	(allocation used by Agency in Radio Systems - 10 Yr Financial Plan.xls)
Woodland	27.28%	(allocation used by Agency in Radio Systems - 10 Yr Financial Plan.xls)
Yolo Co.	50.15%	(allocation used by Agency in Radio Systems - 10 Yr Financial Plan.xls)
Contract Agencies	10.30%	(allocation used by Agency in Radio Systems - 10 Yr Financial Plan.xls)
Total	<u>100.00%</u>	

Facilities and Non-Radio Equipment Cost Allocation:

West Sacramento	32.78%	(allocation used by Agency in BSHR2-07.xls)
Winters	4.33%	(allocation used by Agency in BSHR2-07.xls)
Woodland	30.75%	(allocation used by Agency in BSHR2-07.xls)
Yolo Co.	32.14%	(allocation used by Agency in BSHR2-07.xls)
Contract Agencies	0.00%	(allocation used by Agency in BSHR2-07.xls)
Total	<u>100.00%</u>	

1st Borrowing

RMS & Tech. Systems in 2008 \$ (2008/09 - 2010/11):	\$3,000,000	(estimate provided by Agency - November 3, 2008)
Radio System Costs (2008/09 - 2010/11):	\$1,714,429	(estimate used by Agency in YCCA 10_yr Financial Plan.xls)
Total:	<u>\$4,714,429</u>	

2nd Borrowing

Facility (2010/11 - 2012/13): \$10,693,600 (Based on estimate provided by Agency, adjusted for inflation)

3rd Borrowing

Radio Systems (2011/12 - 2012/13): \$4,137,645 (Based on estimate provided by Agency, adjusted for inflation)

4th Borrowing

Technology Systems Replacement (2017): \$3,914,320 (Based on estimate provided by Agency, adjusted for inflation)

5th Borrowing

Radio Systems (First Phase) Replacement (2020): \$2,920,320 (Based on estimate provided by Agency, adjusted for inflation)

6th Borrowing

Technology Systems Replacement (2024): \$4,814,119 (Based on estimate provided by Agency, adjusted for inflation)

7th Borrowing

Technology Systems Replacement (2031): \$5,920,760 (Based on estimate provided by Agency, adjusted for inflation)

8th Borrowing

Radio Systems (First Phase) Replacement (2035): \$4,549,764 (Based on estimate provided by Agency, adjusted for inflation)

9th Borrowing

Technology Systems Replacement (2038): \$7,281,787 (Based on estimate provided by Agency, adjusted for inflation)



Annual Expenditure & Pct. Change From Prior Year - Totals & By Agency (Excludes Subscriber Equipment)

Fiscal Year Beg. July 1:	2009	2010	2011	2012	2013	2014	2015
West Sacramento	\$2,172,168	\$2,296,724	\$2,492,067	\$2,152,333	\$2,600,626	\$2,752,328	\$2,917,081
		5.73%	8.51%	-13.63%	20.83%	5.83%	5.99%
Winters	\$291,173	\$311,737	\$337,799	\$431,415	\$415,539	\$441,301	\$468,720
		7.06%	8.36%	27.71%	-3.68%	6.20%	6.21%
Woodland	\$2,049,830	\$2,179,125	\$2,363,094	\$2,465,430	\$2,657,585	\$2,817,236	\$2,988,922
		6.31%	8.44%	4.33%	7.79%	6.01%	6.09%
Yolo Co.	\$2,154,376	\$2,301,007	\$2,494,018	\$2,988,045	\$2,979,016	\$3,161,881	\$3,357,138
		6.81%	8.39%	19.81%	-0.30%	6.14%	6.18%
Contract Agencies	\$5,459	\$10,918	\$11,246	\$195,542	\$95,591	\$103,192	\$110,704
		n/a	3.00%	1638.84%	-51.11%	7.95%	7.28%
Total	\$6,673,005	\$7,099,512	\$7,698,224	\$8,232,765	\$8,748,356	\$9,275,938	\$9,842,565
		6.39%	8.43%	6.94%	6.26%	6.03%	6.11%

	2016	2017	2018	2019	2020	2021	2022
West Sacramento	\$3,312,824	\$3,465,829	\$3,696,245	\$4,127,154	\$4,365,624	\$4,423,617	\$4,645,286
	13.57%	4.62%	6.65%	11.66%	5.78%	1.33%	5.01%
Winters	\$477,430	\$521,992	\$561,184	\$573,238	\$605,588	\$657,216	\$687,396
	1.86%	9.33%	7.51%	2.15%	5.64%	8.53%	4.59%
Woodland	\$3,227,620	\$3,445,108	\$3,687,790	\$3,955,512	\$4,181,717	\$4,369,730	\$4,580,331
	7.99%	6.74%	7.04%	7.26%	5.72%	4.50%	4.82%
Yolo Co.	\$3,484,872	\$3,780,252	\$4,058,376	\$4,212,812	\$4,451,619	\$4,771,015	\$4,993,652
	3.80%	8.48%	7.36%	3.81%	5.67%	7.17%	4.67%
Contract Agencies	\$52,705	\$85,092	\$96,721	\$36,990	\$38,099	\$96,594	\$97,771
	-52.39%	61.45%	13.67%	-61.76%	3.00%	153.53%	1.22%
Total	\$10,555,451	\$11,298,272	\$12,100,316	\$12,905,706	\$13,642,647	\$14,318,172	\$15,004,436
	7.24%	7.04%	7.10%	6.66%	5.71%	4.95%	4.79%

	2023	2024	2025	2026	2027	2028	2029
West Sacramento	\$4,875,211	\$5,105,965	\$5,346,180	\$5,595,669	\$5,852,615	\$6,284,582	\$6,570,394
	4.95%	4.73%	4.70%	4.67%	4.59%	7.38%	4.55%
Winters	\$718,694	\$750,129	\$782,842	\$816,810	\$851,793	\$866,833	\$905,694
	4.55%	4.37%	4.36%	4.34%	4.28%	1.77%	4.48%
Woodland	\$4,798,756	\$5,018,041	\$5,246,287	\$5,483,319	\$5,727,436	\$6,004,798	\$6,276,180
	4.77%	4.57%	4.55%	4.52%	4.45%	4.84%	4.52%
Yolo Co.	\$5,224,542	\$5,456,408	\$5,697,720	\$5,948,299	\$6,206,367	\$6,378,831	\$6,665,577
	4.62%	4.44%	4.42%	4.40%	4.34%	2.78%	4.50%
Contract Agencies	\$98,984	\$100,233	\$101,519	\$102,844	\$104,209	\$48,263	\$49,711
	1.24%	1.26%	1.28%	1.31%	1.33%	-53.69%	3.00%
Total	\$15,716,187	\$16,430,776	\$17,174,547	\$17,946,941	\$18,742,421	\$19,583,307	\$20,467,555
	4.74%	4.55%	4.53%	4.50%	4.43%	4.49%	4.52%

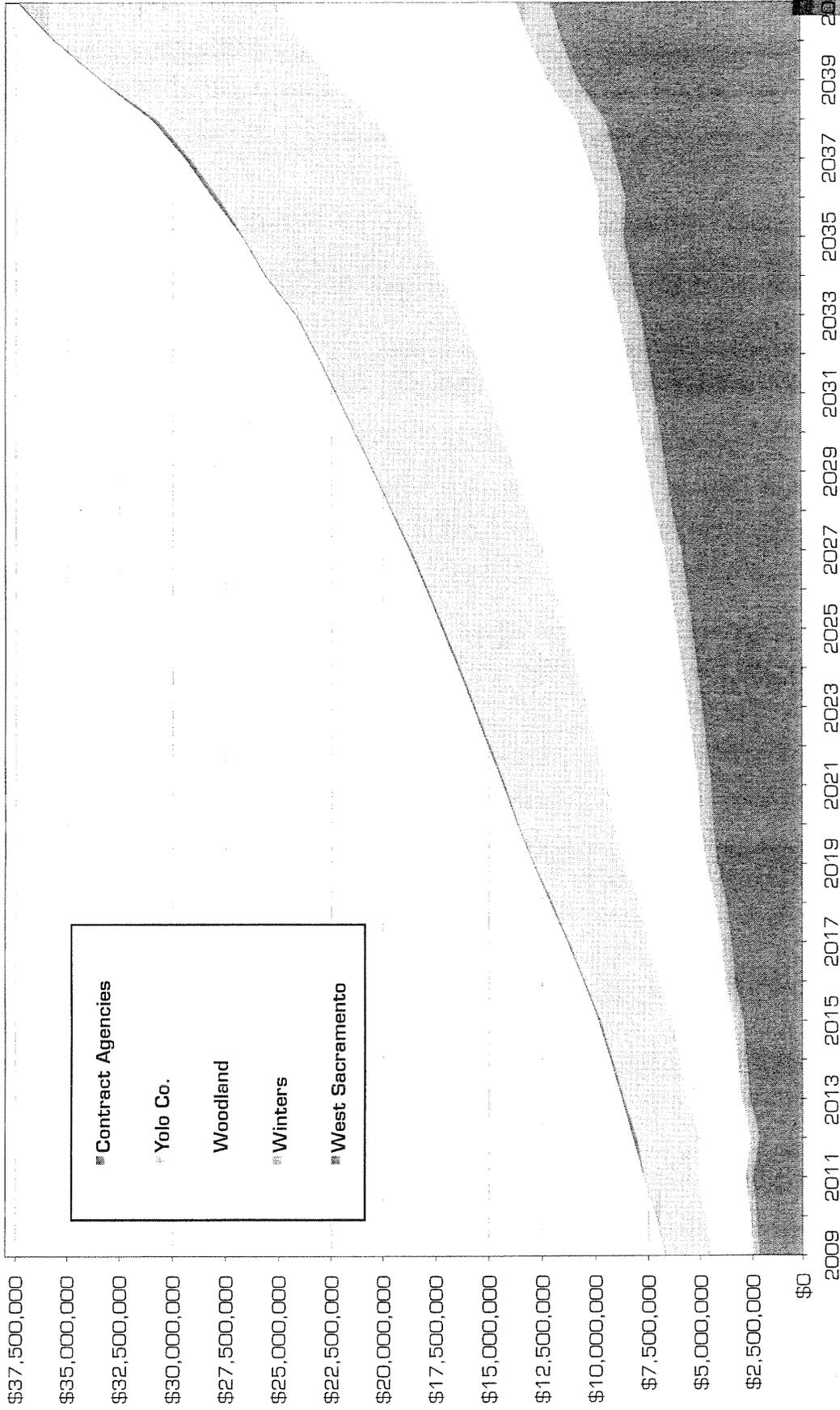
	2030	2031	2032	2033	2034	2035	2036
West Sacramento	\$6,867,758	\$7,151,768	\$7,450,494	\$7,760,652	\$8,233,569	\$8,582,141	\$8,472,276
	4.53%	4.14%	4.18%	4.16%	6.09%	4.23%	-1.28%
Winters	\$946,114	\$984,802	\$1,025,471	\$1,067,685	\$1,131,447	\$1,178,813	\$1,313,275
	4.46%	4.09%	4.13%	4.12%	5.97%	4.19%	11.41%
Woodland	\$6,558,495	\$6,828,388	\$7,112,189	\$7,406,821	\$7,854,222	\$8,185,110	\$8,534,862
	4.50%	4.12%	4.16%	4.14%	6.04%	4.21%	4.27%
Yolo Co.	\$6,963,844	\$7,249,219	\$7,549,229	\$7,860,663	\$8,331,905	\$8,681,449	\$9,463,373
	4.47%	4.10%	4.14%	4.13%	5.99%	4.20%	9.01%
Contract Agencies	\$51,202	\$52,738	\$54,321	\$55,950	\$57,629	\$59,358	\$257,580
	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	333.95%
Total	\$21,387,413	\$22,266,916	\$23,191,703	\$24,151,772	\$25,608,772	\$26,686,871	\$28,041,365
	4.49%	4.11%	4.15%	4.14%	6.03%	4.21%	5.08%

	2037	2038	2039	2040	2041	Total
West Sacramento	\$8,940,938	\$9,443,439	\$10,738,485	\$11,464,143	\$12,059,706	\$192,215,891
	5.53%	5.62%	13.71%	6.76%	5.19%	
Winters	\$1,364,568	\$1,432,397	\$1,469,391	\$1,566,799	\$1,647,059	\$27,602,341
	3.91%	4.97%	2.58%	6.63%	5.12%	
Woodland	\$8,942,086	\$9,417,716	\$10,224,646	\$10,909,847	\$11,473,163	\$186,971,392
	4.77%	5.32%	8.57%	6.70%	5.16%	
Yolo Co.	\$9,859,346	\$10,360,542	\$10,829,245	\$11,549,770	\$12,143,002	\$201,607,409
	4.18%	5.08%	4.52%	6.65%	5.14%	
Contract Agencies	\$243,417	\$245,306	\$66,807	\$68,812	\$70,876	\$2,926,381
	-5.50%	0.78%	-72.77%	3.00%	3.00%	
Total	\$29,350,356	\$30,899,401	\$33,328,575	\$35,559,371	\$37,393,806	\$611,323,413
	4.67%	5.28%	7.86%	6.69%	5.16%	Average 5.540176%

Yolo Emergency Communications Agency

Projected Total Expenditures by Agency (Excludes Subscriber Equipment)

Projected Expenditures



Fiscal Year Beginning July 1

Financial Plan Cash Flow

	2009	2010	2011	2012	2013	2014	2015	2016
Fiscal Year Ending June 30:								
Annual Expenditures								
Gross Labor Costs	\$3,850,420	\$4,164,445	\$4,500,312	\$4,948,331	\$5,337,230	\$5,847,464	\$6,296,312	\$6,876,091
	\$3,850,420	\$4,164,445	\$4,500,312	\$4,948,331	\$5,337,230	\$5,847,464	\$6,296,312	\$6,876,091
Non-Labor Costs	\$860,050	\$885,852	\$912,427	\$939,800	\$967,994	\$997,034	\$1,026,945	\$1,057,753
	\$100,000	\$103,000	\$106,090	\$109,273	\$112,551	\$115,927	\$119,405	\$122,987
	\$960,050	\$988,852	\$1,018,517	\$1,049,073	\$1,080,545	\$1,112,961	\$1,146,350	\$1,180,740
Other Expenditures	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
	\$53,000	\$106,000	\$109,180	\$292,000	\$300,760	\$309,783	\$319,076	\$328,649
	\$0	\$0	\$230,000	\$236,900	\$244,007	\$251,327	\$258,867	\$266,633
	\$0	\$0	\$0	\$0	\$127,000	\$130,810	\$134,734	\$138,776
	\$153,000	\$206,000	\$439,180	\$626,900	\$771,767	\$691,920	\$712,678	\$734,058
Accrued - Borrowing Net Debt Service	\$1,709,535	\$1,740,215	\$1,740,215	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$931,508	\$931,508	\$931,508	\$1,581,508
	\$0	\$0	\$0	\$1,606,461	\$627,306	\$692,084	\$755,716	\$189,053
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	\$1,709,535	\$1,740,215	\$1,740,215	\$1,606,461	\$1,558,814	\$1,623,593	\$1,687,225	\$1,764,551
Total Accrued - Borrowing Net Debt Service	\$6,673,005	\$7,099,511	\$7,699,224	\$8,232,765	\$8,748,356	\$9,275,938	\$9,842,565	\$10,555,451
Total Expenditures								



	2009	2010	2011	2012	2013	2014	2015	2016	
Fiscal Year Ending June 30:									
Annual Revenues Based on Expenditures									
Allocation %									
Operating Revenue	32.78%	\$1,576,879	\$1,689,259	\$1,809,081	\$1,965,958	\$2,103,757	\$2,281,638	\$2,439,716	\$2,641,042
Salary & Benefits	4.33%	\$208,398	\$223,249	\$239,085	\$259,817	\$278,029	\$301,537	\$322,428	\$349,035
Services & Supplies	30.75%	\$1,479,016	\$1,584,231	\$1,696,806	\$1,843,948	\$1,973,194	\$2,140,036	\$2,268,303	\$2,477,135
Existing Capital	32.14%	\$1,546,177	\$1,656,368	\$1,773,857	\$1,927,680	\$2,062,796	\$2,237,214	\$2,392,214	\$2,569,620
Contract Agencies	0.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Revenue	100.00%	\$4,810,470	\$5,153,257	\$5,518,829	\$5,997,403	\$6,417,775	\$6,950,425	\$7,442,662	\$8,056,831
New Capital Operations & Project Mgr. Costs									
New Radio Op Costs	4.00%	\$2,120	\$4,240	\$4,367	\$11,680	\$12,030	\$12,391	\$12,763	\$13,146
West Sacramento	8.27%	\$4,383	\$8,766	\$9,029	\$24,148	\$24,873	\$25,619	\$26,388	\$27,179
Winters	27.28%	\$14,458	\$28,917	\$29,784	\$79,658	\$82,047	\$84,509	\$87,044	\$89,655
Woodland	50.15%	\$28,580	\$53,159	\$54,754	\$146,438	\$150,831	\$155,356	\$160,017	\$164,817
Yolo Co.	10.30%	\$5,459	\$10,918	\$11,246	\$30,076	\$30,978	\$31,908	\$32,865	\$33,851
Contract Agencies	100.00%	\$53,000	\$106,000	\$109,180	\$292,000	\$300,760	\$309,783	\$319,076	\$328,649
Total New Radio Op Costs		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
New Tech. Op Costs	4.33%	\$0	\$0	\$75,394	\$77,656	\$79,986	\$82,385	\$84,857	\$87,403
West Sacramento	30.75%	\$0	\$0	\$9,964	\$10,263	\$10,571	\$10,888	\$11,215	\$11,551
Winters	32.14%	\$0	\$0	\$70,715	\$72,837	\$75,022	\$77,272	\$79,591	\$81,978
Woodland	0.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	100.00%	\$0	\$0	\$73,926	\$76,144	\$78,429	\$80,781	\$83,205	\$85,701
Contract Agencies		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Tech. Op Costs		\$0	\$0	\$230,000	\$236,900	\$244,007	\$251,327	\$258,667	\$266,633
Total New Facility Op Costs		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Project Mgr. Support	32.78%	\$32,780	\$32,780	\$32,780	\$32,780	\$32,780	\$32,780	\$32,780	\$32,780
West Sacramento	4.33%	\$4,332	\$4,332	\$4,332	\$4,332	\$4,332	\$4,332	\$4,332	\$4,332
Winters	30.75%	\$30,746	\$30,746	\$30,746	\$30,746	\$30,746	\$30,746	\$30,746	\$30,746
Woodland	32.14%	\$32,142	\$32,142	\$32,142	\$32,142	\$32,142	\$32,142	\$32,142	\$32,142
Yolo Co.	0.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	100.00%	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000	\$100,000
Total Project Mgr. Support		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue for Borrowing Debt Service		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Radio Equip. Allocation	4.00%	\$0	\$0	\$0	\$64,258	\$25,092	\$27,683	\$30,289	\$7,322
LPs - '11, '20 & '35	8.27%	\$0	\$0	\$0	\$132,854	\$51,878	\$57,235	\$62,498	\$15,138
West Sacramento	27.28%	\$0	\$0	\$0	\$438,243	\$171,129	\$186,801	\$206,159	\$49,937
Winters	50.15%	\$0	\$0	\$0	\$805,640	\$314,594	\$347,090	\$378,992	\$81,801
Woodland	10.30%	\$0	\$0	\$0	\$165,466	\$64,612	\$71,285	\$77,839	\$18,854
Yolo Co.	100.00%	\$0	\$0	\$0	\$1,606,461	\$627,306	\$692,084	\$755,716	\$183,053
Contract Agencies		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Radio Equip. Allocation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Non-Radio Equip. Alloc.	32.78%	\$560,388	\$570,445	\$570,445	\$0	\$0	\$0	\$0	\$0
LPs - '08, '17, '24, '31, & '38	4.33%	\$74,060	\$75,369	\$75,369	\$0	\$0	\$0	\$0	\$0
West Sacramento	30.75%	\$525,610	\$535,042	\$535,042	\$0	\$0	\$0	\$0	\$0
Winters	32.14%	\$549,477	\$559,338	\$559,338	\$0	\$0	\$0	\$0	\$0
Woodland	0.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	100.00%	\$1,709,535	\$1,740,215	\$1,740,215	\$0	\$0	\$0	\$0	\$0
Contract Agencies		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Non-Radio Equip. Alloc.		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Facilities Allocation	32.78%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
COP - '10	4.33%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
West Sacramento	30.75%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Winters	32.14%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Woodland	0.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	100.00%	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Facilities Allocation		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Annual Revenues		\$6,673,005	\$7,099,511	\$7,698,224	\$8,232,765	\$8,748,256	\$9,275,938	\$9,842,595	\$10,555,451
Annual Excess (Shortfall) of Revenues v. Expenses:		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual % Change in Expenditures/Revenues		6.39%	8.43%	6.94%	6.26%	6.03%	6.11%	7.24%	



	Fiscal Year Ending June 30:									
	2017	2018	2019	2020	2021	2022	2023	2024	2025	
Annual Expenditures										
Gross Labor Costs										
Salary & Benefits	\$7,494,656	\$7,944,336	\$8,420,996	\$8,926,256	\$9,461,831	\$10,029,541	\$10,631,313	\$11,269,192	\$11,945,344	
Total Gross Labor Costs	\$7,494,656	\$7,944,336	\$8,420,996	\$8,926,256	\$9,461,831	\$10,029,541	\$10,631,313	\$11,269,192	\$11,945,344	
Non-Labor Costs										
Services & Supplies	\$1,089,486	\$1,122,170	\$1,155,895	\$1,190,510	\$1,226,226	\$1,263,012	\$1,300,903	\$1,339,930	\$1,380,128	
Capital Expense Reserve	\$126,677	\$130,477	\$134,392	\$138,423	\$142,576	\$146,853	\$151,259	\$155,797	\$160,471	
Total Non-Labor Costs	\$1,216,163	\$1,252,647	\$1,290,287	\$1,328,934	\$1,368,802	\$1,409,866	\$1,452,162	\$1,495,727	\$1,540,599	
Other Expenditures										
Project Mgr. Support										
New Radio Systems Op-Costs	\$338,508	\$348,663	\$359,123	\$369,697	\$380,994	\$392,424	\$404,196	\$416,322	\$428,812	
New Technology Systems Op-Costs	\$274,632	\$282,871	\$291,357	\$300,098	\$309,101	\$318,374	\$327,925	\$337,763	\$347,896	
New Facilities Op-Costs	\$142,940	\$147,228	\$151,645	\$156,184	\$160,880	\$165,706	\$170,677	\$175,798	\$181,072	
Total Other Expenditures	\$756,080	\$778,762	\$802,125	\$826,189	\$850,974	\$876,504	\$902,799	\$929,883	\$957,779	
Accrued - Borrowing Net Debt Service										
2009 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2011 COP	\$1,343,749	\$1,175,341	\$1,923,781	\$1,657,331	\$1,375,817	\$1,151,568	\$1,192,954	\$1,199,016	\$1,261,886	
2012 Lease Purchase	\$487,625	\$590,375	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2018 Lease Purchase	\$0	\$356,854	\$468,577	\$903,338	\$703,938	\$880,149	\$980,149	\$980,149	\$0	
2021 Lease Purchase	\$0	\$0	\$0	\$0	\$556,810	\$556,810	\$556,810	\$556,810	\$556,810	
2025 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$912,130	
2032 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2036 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
2039 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Accrued - Borrowing Net Debt Service	\$1,831,374	\$2,124,571	\$2,392,358	\$2,561,269	\$2,636,565	\$2,688,526	\$2,729,913	\$2,735,974	\$2,730,626	
Total Expenditures	\$11,298,272	\$12,100,316	\$12,905,706	\$13,642,647	\$14,318,172	\$15,004,436	\$15,716,186	\$16,430,775	\$17,174,547	



Fiscal Year Ending June 30:
Annual Revenues Based on Expenditures

	2017	2018	2019	2020	2021	2022	2023	2024	2025
Operating Revenue									
Salary & Benefits	\$2,855,420	\$3,014,785	\$3,183,354	\$3,361,667	\$3,550,298	\$3,749,855	\$3,960,982	\$4,184,360	\$4,430,712
Services & Supplies	\$377,367	\$398,429	\$420,706	\$434,272	\$469,201	\$496,574	\$523,376	\$559,987	\$584,233
Existing Capital	\$2,878,208	\$2,827,683	\$2,965,790	\$3,153,037	\$3,329,961	\$3,517,133	\$3,715,157	\$3,924,672	\$4,146,356
Yolo Co.	\$2,799,624	\$2,956,096	\$3,121,373	\$3,296,214	\$3,481,173	\$3,676,844	\$3,883,660	\$4,102,869	\$4,334,640
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Revenue	\$8,710,819	\$9,196,993	\$9,711,223	\$10,255,189	\$10,830,633	\$11,439,407	\$12,083,475	\$12,764,919	\$13,485,942
New Capital Operations & Project Mgr. Costs									
West Sacramento	\$13,540	\$13,947	\$14,365	\$14,796	\$15,240	\$15,697	\$16,168	\$16,653	\$17,152
Winters	\$27,995	\$28,634	\$29,699	\$30,590	\$31,508	\$32,453	\$33,427	\$34,430	\$35,463
Woodland	\$82,345	\$85,115	\$87,969	\$100,908	\$103,935	\$107,053	\$110,265	\$113,573	\$116,980
Yolo Co.	\$169,762	\$174,855	\$180,100	\$185,509	\$191,068	\$196,800	\$202,704	\$208,786	\$215,049
Contract Agencies	\$34,866	\$35,912	\$36,990	\$38,099	\$39,242	\$40,420	\$41,632	\$42,881	\$44,168
Total New Radio Op Costs	\$338,508	\$348,663	\$359,123	\$369,897	\$380,994	\$392,424	\$404,196	\$416,322	\$428,812
New Tech. Op Costs									
West Sacramento	\$90,025	\$92,726	\$95,507	\$98,373	\$101,324	\$104,363	\$107,494	\$110,719	\$114,041
Winters	\$11,898	\$12,254	\$12,622	\$13,001	\$13,391	\$13,792	\$14,206	\$14,632	\$15,071
Woodland	\$84,438	\$86,971	\$89,580	\$92,267	\$95,035	\$97,886	\$100,823	\$103,848	\$106,963
Yolo Co.	\$86,272	\$90,390	\$93,648	\$96,457	\$99,351	\$102,331	\$105,401	\$108,563	\$111,820
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Tech. Op Costs	\$274,632	\$282,871	\$291,357	\$300,098	\$309,101	\$318,374	\$327,925	\$337,763	\$347,895
New Facility Op Costs									
West Sacramento	\$46,856	\$48,262	\$49,709	\$51,201	\$52,737	\$54,319	\$55,948	\$57,627	\$59,356
Winters	\$6,192	\$6,378	\$6,569	\$6,767	\$6,970	\$7,179	\$7,394	\$7,616	\$7,844
Woodland	\$43,948	\$45,266	\$46,624	\$48,023	\$49,464	\$50,948	\$52,476	\$54,050	\$55,672
Yolo Co.	\$45,944	\$47,322	\$48,741	\$50,204	\$51,710	\$53,261	\$54,859	\$56,505	\$58,200
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Facility Op Costs	\$142,940	\$147,228	\$151,645	\$156,194	\$160,980	\$165,706	\$170,677	\$175,798	\$181,072
Project Mgr. Support									
West Sacramento	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Winters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Project Mgr. Support	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue for Borrowing Debt Service									
Radio Equip. Allocation	\$19,505	\$23,615	\$0	\$0	\$22,272	\$22,272	\$22,272	\$22,272	\$22,272
LPs - '11, '20 & '35	\$40,327	\$48,654	\$0	\$0	\$46,048	\$46,048	\$46,048	\$46,048	\$46,048
West Sacramento	\$133,024	\$161,054	\$0	\$0	\$151,898	\$151,898	\$151,898	\$151,898	\$151,898
Woodland	\$244,544	\$296,073	\$0	\$0	\$279,240	\$279,240	\$279,240	\$279,240	\$279,240
Yolo Co.	\$50,225	\$60,809	\$0	\$0	\$57,351	\$57,351	\$57,351	\$57,351	\$57,351
Contract Agencies	\$487,625	\$590,375	\$0	\$0	\$556,810	\$556,810	\$556,810	\$556,810	\$556,810
Total Radio Equip. Allocation	\$0	\$117,593	\$153,600	\$296,312	\$230,752	\$321,294	\$321,294	\$321,294	\$298,989
Non-Radio Equip. Alloc.	\$0	\$15,548	\$20,300	\$39,160	\$30,496	\$42,462	\$42,462	\$42,462	\$39,515
LPs - '08, '17, '24, '31, & '38	\$0	\$110,332	\$144,067	\$277,923	\$216,431	\$301,354	\$301,354	\$301,354	\$280,441
West Sacramento	\$0	\$115,343	\$150,609	\$290,543	\$226,259	\$315,039	\$315,039	\$315,039	\$293,176
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Non-Radio Equip. Alloc.	\$0	\$358,854	\$468,577	\$903,938	\$703,938	\$980,149	\$980,149	\$980,149	\$912,130
Facilities Allocation									
COP - '10	\$440,483	\$385,279	\$630,618	\$543,276	\$450,995	\$377,466	\$391,052	\$393,039	\$413,649
West Sacramento	\$56,213	\$50,918	\$63,341	\$71,798	\$59,603	\$49,888	\$51,581	\$51,943	\$54,667
Winters	\$431,906	\$377,777	\$591,481	\$509,559	\$423,005	\$354,058	\$366,783	\$368,647	\$387,977
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$1,343,748	\$1,175,341	\$1,923,781	\$1,657,331	\$1,375,817	\$1,151,568	\$1,192,954	\$1,199,016	\$1,261,886
Total Facilities Allocation	\$1,221,298	\$1,010,316	\$1,205,706	\$1,042,647	\$844,318	\$700,436	\$715,166	\$716,186	\$743,547
Total Annual Revenues	\$11,299,272	\$12,100,316	\$12,905,706	\$13,642,647	\$14,318,172	\$15,004,436	\$15,716,186	\$16,430,775	\$17,174,547
Annual Excess (Shortfall) of Revenues v. Expenses:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual % Change in Expenditures/Revenues	7.04%	7.10%	6.66%	5.71%	4.95%	4.79%	4.74%	4.55%	4.59%



Fiscal Year Ending June 30:	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Expenditures									
Gross Labor Costs	\$12,662,064	\$13,421,798	\$14,227,095	\$15,080,721	\$15,985,564	\$16,944,698	\$17,961,380	\$19,039,063	\$20,181,407
Salary & Benefits	\$12,662,064	\$13,421,798	\$14,227,095	\$15,080,721	\$15,985,564	\$16,944,698	\$17,961,380	\$19,039,063	\$20,181,407
Total Gross Labor Costs	\$12,662,064	\$13,421,798	\$14,227,095	\$15,080,721	\$15,985,564	\$16,944,698	\$17,961,380	\$19,039,063	\$20,181,407
Non-Labor Costs	\$1,421,532	\$1,464,178	\$1,508,103	\$1,553,346	\$1,599,946	\$1,647,945	\$1,697,383	\$1,748,305	\$1,800,764
Services & Supplies	\$1,421,532	\$1,464,178	\$1,508,103	\$1,553,346	\$1,599,946	\$1,647,945	\$1,697,383	\$1,748,305	\$1,800,764
Capital Expense Reserve	\$185,285	\$170,243	\$175,351	\$180,611	\$186,029	\$191,610	\$197,359	\$203,279	\$209,378
Total Non-Labor Costs	\$1,586,816	\$1,634,421	\$1,683,453	\$1,733,957	\$1,785,976	\$1,839,555	\$1,894,742	\$1,951,584	\$2,010,132
Other Expenditures									
Project Mgr. Support	\$441,676	\$454,926	\$468,574	\$482,632	\$497,110	\$512,024	\$527,384	\$543,206	\$559,502
New Radio Systems Op-Costs	\$358,333	\$369,062	\$380,155	\$391,560	\$403,306	\$415,406	\$427,868	\$440,704	\$453,925
New Technology Systems Op-Costs	\$186,504	\$192,099	\$197,862	\$203,798	\$209,912	\$216,209	\$222,695	\$229,376	\$236,257
Total Other Expenditures	\$986,512	\$1,016,108	\$1,046,591	\$1,077,989	\$1,110,328	\$1,143,638	\$1,177,948	\$1,213,286	\$1,249,685
Accrued - Borrowing Net Debt Service									
2009 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2011 COP	\$1,242,608	\$1,201,164	\$1,714,036	\$1,662,758	\$1,593,414	\$1,426,694	\$164,551	\$185,366	\$105,566
2012 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2018 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2021 Lease Purchase	\$556,810	\$556,810	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2025 Lease Purchase	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130	\$0	\$0	\$0
2032 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$1,993,083	\$1,761,872	\$2,061,983
2036 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2039 Lease Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Accrued - Borrowing Net Debt Service	\$2,711,548	\$2,670,104	\$2,626,167	\$2,574,688	\$2,505,544	\$2,339,024	\$2,157,634	\$1,947,639	\$2,167,560
Total Expenditures	\$17,946,941	\$18,742,421	\$19,583,306	\$20,467,555	\$21,387,413	\$22,266,916	\$23,191,703	\$24,151,771	\$25,608,772

	2026	2027	2028	2029	2030	2031	2032	2033	2034
Annual Revenues Based on Expenditures									
Fiscal Year Ending June 30:									
Operating Revenue									
Salary & Benefits	\$4,670,805	\$4,935,448	\$5,215,502	\$5,511,877	\$5,825,538	\$6,157,507	\$6,508,867	\$6,880,766	\$7,274,420
Services & Supplies	\$617,285	\$652,260	\$699,271	\$729,440	\$769,893	\$813,765	\$860,200	\$909,350	\$961,374
Existing Capital	\$4,360,927	\$4,829,147	\$4,891,620	\$5,169,602	\$5,453,353	\$5,775,363	\$6,104,917	\$6,453,735	\$6,822,958
Yolo Co.	\$4,579,863	\$4,839,354	\$5,113,995	\$5,404,569	\$5,712,113	\$6,037,619	\$6,382,138	\$6,746,796	\$7,132,785
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Revenue	\$14,248,881	\$15,056,209	\$15,910,549	\$16,874,678	\$17,771,540	\$18,784,253	\$19,856,122	\$20,990,647	\$22,191,536
New Capital Operations & Project Mgr. Costs									
West Sacramento	\$17,667	\$18,197	\$18,743	\$19,305	\$19,884	\$20,481	\$21,095	\$21,728	\$22,380
Winters	\$36,527	\$37,622	\$38,761	\$39,914	\$41,111	\$42,344	\$43,615	\$44,923	\$46,271
Woodland	\$120,489	\$124,104	\$127,827	\$131,662	\$135,612	\$139,680	\$143,870	\$148,187	\$152,632
Yolo Co.	\$221,501	\$228,146	\$234,990	\$242,040	\$249,301	\$256,780	\$264,483	\$272,418	\$280,590
Contract Agencies	\$45,493	\$46,857	\$48,263	\$49,711	\$51,202	\$52,738	\$54,321	\$55,950	\$57,629
Total New Radio Op Costs	\$441,676	\$454,926	\$468,574	\$482,632	\$497,110	\$512,024	\$527,384	\$543,206	\$559,502
New Tech. Op Costs									
West Sacramento	\$117,462	\$120,986	\$124,615	\$128,354	\$132,204	\$136,171	\$140,256	\$144,463	\$148,797
Winters	\$15,524	\$15,989	\$16,469	\$16,963	\$17,472	\$17,996	\$18,536	\$19,092	\$19,665
Woodland	\$110,172	\$113,477	\$116,882	\$120,388	\$124,000	\$127,720	\$131,551	\$135,498	\$139,563
Yolo Co.	\$115,175	\$118,630	\$122,189	\$125,855	\$129,630	\$133,519	\$137,525	\$141,651	\$145,900
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Tech. Op Costs	\$358,333	\$369,092	\$380,155	\$391,560	\$403,306	\$415,406	\$427,868	\$440,704	\$453,925
New Facility Op Costs									
West Sacramento	\$61,136	\$62,970	\$64,859	\$66,805	\$68,809	\$70,874	\$73,000	\$75,190	\$77,446
Winters	\$9,080	\$9,322	\$9,572	\$9,829	\$10,094	\$10,367	\$10,648	\$10,937	\$11,235
Woodland	\$57,342	\$59,062	\$60,834	\$62,654	\$64,539	\$66,475	\$68,469	\$70,523	\$72,639
Yolo Co.	\$59,946	\$61,744	\$63,597	\$65,504	\$67,470	\$69,494	\$71,579	\$73,726	\$75,938
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Facility Op Costs	\$188,504	\$192,099	\$197,862	\$203,798	\$209,912	\$216,209	\$222,695	\$229,376	\$236,257
Project Mgr. Support									
West Sacramento	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Winters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Project Mgr. Support	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Revenue for Borrowing Debt Service									
Radio Equip. Allocation	\$22,272	\$22,272	\$0	\$0	\$0	\$0	\$0	\$0	\$0
LPs - '11, '20 & '35	\$46,048	\$46,048	\$0	\$0	\$0	\$0	\$0	\$0	\$0
West Sacramento	\$151,898	\$151,898	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Woodland	\$279,240	\$279,240	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$57,351	\$57,351	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$556,810	\$556,810	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Radio Equip. Allocation	\$298,998	\$298,998	\$298,998	\$298,998	\$298,998	\$298,998	\$298,998	\$298,998	\$298,998
Non-Radio Equip. Alloc.									
LPs - '08, '17, '24, '31, & '38	\$39,515	\$39,515	\$39,515	\$39,515	\$39,515	\$39,515	\$39,515	\$39,515	\$39,515
West Sacramento	\$280,441	\$280,441	\$280,441	\$280,441	\$280,441	\$280,441	\$280,441	\$280,441	\$280,441
Winters	\$293,176	\$293,176	\$293,176	\$293,176	\$293,176	\$293,176	\$293,176	\$293,176	\$293,176
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130	\$912,130
Contract Agencies	\$407,329	\$407,329	\$407,329	\$407,329	\$407,329	\$407,329	\$407,329	\$407,329	\$407,329
Total Non-Radio Equip. Alloc.	\$2,032,832	\$2,032,832	\$2,032,832	\$2,032,832	\$2,032,832	\$2,032,832	\$2,032,832	\$2,032,832	\$2,032,832
Facilities Allocation									
COP - '10	\$53,832	\$52,036	\$51,664	\$51,355	\$51,029	\$50,698	\$50,364	\$50,029	\$49,693
West Sacramento	\$362,049	\$369,307	\$374,435	\$379,515	\$384,541	\$389,515	\$394,435	\$399,307	\$404,129
Winters	\$399,398	\$386,077	\$369,924	\$353,442	\$336,907	\$320,441	\$303,973	\$287,506	\$271,039
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Yolo Co.	\$1,242,608	\$1,201,164	\$1,174,036	\$1,146,758	\$1,119,414	\$1,092,070	\$1,064,726	\$1,037,382	\$1,010,038
Contract Agencies	\$17,946,941	\$18,742,421	\$19,583,906	\$20,467,555	\$21,397,413	\$22,366,916	\$23,381,703	\$24,441,771	\$25,548,772
Total Facilities Allocation	\$17,946,941	\$18,742,421	\$19,583,906	\$20,467,555	\$21,397,413	\$22,366,916	\$23,381,703	\$24,441,771	\$25,548,772
Total Annual Revenues									
Annual Excess (Shortfall) of Revenues v. Expenses:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual % Change in Expenditures/Revenues	4.50%	4.43%	4.49%	4.52%	4.49%	4.41%	4.15%	4.14%	6.03%

	2035	2036	2037	2038	2039	2040	2041	Totals
Fiscal Year Ending June 30:								
Annual Expenditures								
Gross Labor Costs								
Salary & Benefits	\$21,392,291	\$22,675,828	\$24,036,378	\$25,478,561	\$27,007,275	\$28,627,711	\$30,345,374	\$453,011,268
Total Gross Labor Costs	\$21,392,291	\$22,675,828	\$24,036,378	\$25,478,561	\$27,007,275	\$28,627,711	\$30,345,374	\$453,011,268
Non-Labor Costs								
Services & Supplies	\$1,954,776	\$1,910,420	\$1,967,732	\$2,026,764	\$2,087,587	\$2,150,194	\$2,214,700	\$47,369,697
Capital Expense Reserve	\$215,659	\$222,129	\$228,793	\$235,657	\$242,786	\$250,008	\$257,508	\$5,507,784
Total Non-Labor Costs	\$2,070,435	\$2,132,549	\$2,196,525	\$2,262,421	\$2,330,293	\$2,400,202	\$2,472,208	\$52,877,482
Other Expenditures								\$500,000
Project Mgr. Support								\$500,000
New Radio Systems Op-Costs	\$576,287	\$593,576	\$611,363	\$629,725	\$648,616	\$668,075	\$688,117	\$14,160,201
New Technology Systems Op-Costs	\$467,543	\$481,569	\$496,016	\$510,896	\$526,223	\$542,010	\$558,270	\$11,500,616
New Facilities Op-Costs	\$243,345	\$250,645	\$258,165	\$265,910	\$273,887	\$282,104	\$290,567	\$5,742,794
Total Other Expenditures	\$1,287,175	\$1,325,790	\$1,365,564	\$1,406,531	\$1,448,727	\$1,492,189	\$1,536,954	\$31,903,611
Accrued - Borrowing Net Debt Service								
2009 Lease-Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,189,964
2011 COP	\$640,886	\$0	\$0	\$0	\$0	\$0	\$0	\$26,595,322
2012 Lease-Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$4,942,821
2018 Lease-Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,375,753
2021 Lease-Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$3,897,667
2025 Lease-Purchase	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$6,384,911
2032 Lease-Purchase	\$1,296,083	\$0	\$0	\$0	\$0	\$0	\$0	\$7,113,021
2036 Lease-Purchase	\$0	\$1,907,198	\$1,751,889	\$1,751,889	\$0	\$0	\$0	\$5,410,975
2039 Lease-Purchase	\$0	\$0	\$0	\$0	\$2,542,280	\$3,039,269	\$3,039,269	\$8,620,818
Total Accrued - Borrowing Net Debt Service	\$1,936,969	\$1,907,198	\$1,751,889	\$1,751,889	\$2,542,280	\$3,039,269	\$3,039,269	\$73,531,052
Total Expenditures	\$26,686,870	\$28,041,365	\$29,350,356	\$30,699,401	\$33,328,575	\$35,559,371	\$37,993,605	\$611,323,413

Fiscal Year Ending June 30:
Annual Revenues Based on Expenditures

	2035	2036	2037	2038	2039	2040	2041	Totals
Operating Revenue								
Salary & Benefits	\$7,691,118	\$8,132,224	\$8,599,186	\$9,093,536	\$9,616,900	\$10,170,998	\$10,757,654	\$165,831,109
Services & Supplies	\$1,016,444	\$1,074,740	\$1,136,453	\$1,201,765	\$1,270,952	\$1,344,181	\$1,421,712	\$21,915,940
Existing Capital	\$7,213,795	\$7,627,526	\$8,065,507	\$8,529,177	\$9,020,080	\$9,539,770	\$10,090,017	\$155,539,372
Yolo Co.	\$7,541,369	\$7,973,887	\$8,431,757	\$8,916,483	\$9,429,656	\$9,972,965	\$10,548,199	\$162,602,329
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Operating Revenue	\$23,462,726	\$24,808,377	\$26,232,903	\$27,740,962	\$29,337,568	\$31,027,913	\$32,817,582	\$505,888,749
New Capital Operations & Project Mgr. Costs								
New Radio Op Costs								
West Sacramento	\$23,051	\$23,743	\$24,455	\$25,189	\$25,945	\$26,723	\$27,525	\$566,408
Winters	\$47,659	\$50,561	\$52,078	\$53,641	\$55,260	\$56,927	\$58,607	\$1,171,049
Woodland	\$157,211	\$161,927	\$166,785	\$171,789	\$176,943	\$182,251	\$187,718	\$3,862,903
Yolo Co.	\$289,008	\$297,678	\$306,609	\$315,807	\$325,281	\$335,040	\$345,091	\$7,101,341
Contract Agencies	\$59,358	\$61,138	\$62,972	\$64,862	\$66,807	\$68,812	\$70,876	\$1,458,501
Total New Radio Op Costs	\$576,287	\$593,576	\$611,393	\$629,725	\$648,616	\$668,075	\$688,117	\$14,160,201
New Tech. Op Costs								
West Sacramento	\$153,261	\$157,859	\$162,595	\$167,473	\$172,497	\$177,672	\$183,002	\$3,769,920
Winters	\$20,255	\$20,862	\$21,488	\$22,133	\$22,797	\$23,481	\$24,195	\$498,226
Woodland	\$143,750	\$148,062	\$152,504	\$157,079	\$161,791	\$166,645	\$171,645	\$3,553,952
Yolo Co.	\$150,277	\$154,785	\$159,429	\$164,212	\$169,138	\$174,212	\$179,439	\$3,696,518
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Tech. Op Costs	\$467,543	\$481,569	\$496,016	\$510,896	\$526,223	\$542,010	\$558,270	\$11,500,616
New Facility Op Costs								
West Sacramento	\$79,769	\$82,162	\$84,627	\$87,166	\$89,781	\$92,474	\$95,248	\$1,882,497
Winters	\$10,542	\$10,858	\$11,184	\$11,520	\$11,865	\$12,221	\$12,588	\$248,787
Woodland	\$74,818	\$77,063	\$79,379	\$81,756	\$84,209	\$86,735	\$89,337	\$1,765,666
Yolo Co.	\$78,216	\$80,562	\$82,979	\$85,468	\$88,033	\$90,674	\$93,394	\$1,845,844
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total New Facility Op Costs	\$243,345	\$250,645	\$258,185	\$265,910	\$273,867	\$282,104	\$290,567	\$5,742,794
Project Mgr. Support								
West Sacramento	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$163,901
Winters	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$21,661
Woodland	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$160,710
Yolo Co.	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Project Mgr. Support	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$500,000
Revenue for Borrowing Debt Service								
Radio Equip. Allocation								
West Sacramento	\$0	\$76,288	\$70,076	\$70,076	\$0	\$0	\$0	\$570,051
Winters	\$0	\$157,725	\$144,881	\$144,881	\$0	\$0	\$0	\$1,178,579
Woodland	\$0	\$520,284	\$477,915	\$477,915	\$0	\$0	\$0	\$3,887,745
Yolo Co.	\$0	\$956,460	\$878,572	\$878,572	\$0	\$0	\$0	\$7,147,008
Contract Agencies	\$0	\$196,441	\$180,445	\$180,445	\$0	\$0	\$0	\$1,467,880
Total Radio Equip. Allocation	\$0	\$1,907,198	\$1,751,889	\$1,751,889	\$0	\$0	\$0	\$14,251,263
Non-Radio Equip. Alloc.								
West Sacramento	\$424,858	\$0	\$0	\$0	\$633,363	\$996,277	\$996,277	\$10,714,019
Winters	\$56,148	\$0	\$0	\$0	\$110,136	\$131,666	\$131,666	\$1,415,945
Woodland	\$398,491	\$0	\$0	\$0	\$781,643	\$934,447	\$934,447	\$10,049,030
Yolo Co.	\$416,586	\$0	\$0	\$0	\$817,137	\$976,879	\$976,879	\$10,505,414
Contract Agencies	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Non-Radio Equip. Alloc.	\$1,296,083	\$0	\$0	\$0	\$2,542,269	\$3,039,269	\$3,039,269	\$32,684,467
Facilities Allocation								
COP - '10								
West Sacramento	\$210,083	\$0	\$0	\$0	\$0	\$0	\$0	\$6,717,987
Winters	\$27,764	\$0	\$0	\$0	\$0	\$0	\$0	\$1,152,153
Woodland	\$197,045	\$0	\$0	\$0	\$0	\$0	\$0	\$8,176,935
Yolo Co.	\$205,993	\$0	\$0	\$0	\$0	\$0	\$0	\$8,548,246
Contract Agencies	\$640,866	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Total Facilities Allocation	\$1,296,083	\$0	\$0	\$0	\$0	\$0	\$0	\$26,595,322
Total Annual Revenues	\$26,686,870	\$28,041,365	\$29,350,366	\$30,699,401	\$33,328,575	\$35,559,371	\$37,393,805	\$611,323,413
Annual Excess (Shortfall) of Revenues v. Expenses:	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Annual % Change in Expenditures/Revenues	4.21%	5.08%	4.67%	5.28%	7.86%	8.69%	5.16%	

Yolo Emergency Communications Agency

2009 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$4,714,429
 Costs of Issuance: \$40,000
 Debt to be Issued: \$4,754,429

Financing Assumptions
 Term of Financing: 3 years
 Borrowing Rate: 4.500%
 Dated Date: Feb. 1, 2009

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2009			
Aug. 1, 2009			
Feb. 1, 2010	(\$1,495,585)	(\$213,949)	(\$1,709,535)
Aug. 1, 2010			
Feb. 1, 2011	(\$1,593,567)	(\$146,648)	(\$1,740,215)
Aug. 1, 2011			
Feb. 1, 2012	(\$1,665,277)	(\$74,937)	(\$1,740,215)
	<u>(\$4,754,429)</u>	<u>(\$435,535)</u>	<u>(\$5,189,964)</u>



2011 COP - Analysis with Cash DSR & 2 Years Cap. Interest

Determination of Amount to be Borrowed

Amount for Projects:	\$10,653,600
Costs of Issuance:	\$150,000
Bond Insurance:	\$303,554
Capitalized Interest:	\$1,794,595
Debt Service Reserve:	\$1,264,807
Underwriting Discount:	\$255,000
Funding:	(\$1,556)
Debt to be Issued:	\$14,460,000

Financing Assumptions

Term of Financing:	25 years
Avg. Borrowing Rate:	6.823%
Underwriting Discount:	1.50%
Debt Service Reserve:	8.75%
DSR Investment Rate:	2.00%
Capitalized Interest Investment Rate:	2.00%
Bond Insurance:	1.00%
Dated Date:	Feb. 1, 2011
Capitalized Interest Term:	2 years

Debt Service Schedule

Date	Principal	Interest Rate	Interest	Gross Semi-Annual Debt Service	Gross Annual Debt Service	Draws from Debt Service Reserve Account	Debt Service Reserve Acct. Balance	Beginning Balance Cap Interest	Int. Earnings Cap Interest	Draws from Cap Interest	Ending Balance Cap Interest	Net Semi-Annual Debt Service	Net Annual Debt Service
Feb. 1, 2009													
Aug. 1, 2009													
Feb. 1, 2010													
Aug. 1, 2010													
Feb. 1, 2011													
Aug. 1, 2011													
Feb. 1, 2012		2.86%	(\$956,802)	(\$956,802)	(\$956,802)	\$25,549	\$1,264,807	\$1,794,595	\$17,946	\$0	\$1,812,541	\$0	\$0
Aug. 1, 2012			(\$478,401)	(\$478,401)	(\$478,401)	\$12,647	\$1,264,807	\$1,830,666	\$18,125	\$931,253	\$917,720	\$0	\$0
Feb. 1, 2013		3.90%	(\$478,401)	(\$478,401)	(\$956,802)	\$12,647	\$1,264,881	\$917,720	\$9,177	\$465,754	\$461,143	\$0	\$0
Aug. 1, 2013			(\$478,401)	(\$478,401)		\$12,647	\$1,264,881	\$461,143	\$4,611	\$465,754	\$0	(\$465,754)	(\$931,508)
Feb. 1, 2014	\$0	4.31%	(\$478,401)	(\$478,401)	(\$956,802)	\$12,647	\$1,264,881					(\$465,754)	(\$931,508)
Aug. 1, 2014			(\$478,401)	(\$478,401)		\$12,647	\$1,264,881					(\$465,754)	(\$931,508)
Feb. 1, 2015	\$0	4.61%	(\$478,401)	(\$478,401)	(\$956,802)	\$12,647	\$1,264,881					(\$465,754)	(\$931,508)
Aug. 1, 2015			(\$478,401)	(\$478,401)		\$12,647	\$1,264,881					(\$465,754)	(\$931,508)
Feb. 1, 2016	\$0	4.85%	(\$478,401)	(\$478,401)	(\$956,802)	\$12,647	\$1,264,881					(\$465,754)	(\$931,508)
Aug. 1, 2016			(\$478,401)	(\$478,401)		\$12,647	\$1,264,881					(\$465,754)	(\$931,508)
Feb. 1, 2017	(\$650,000)	5.04%	(\$478,401)	(\$1,126,401)	(\$1,606,802)	\$12,647	\$1,264,881					(\$1,115,754)	(\$1,581,508)
Aug. 1, 2017			(\$462,021)	(\$462,021)		\$12,647	\$1,264,881					(\$449,374)	
Feb. 1, 2018	(\$445,000)	5.26%	(\$462,021)	(\$907,021)	(\$1,369,042)	\$12,647	\$1,264,881					(\$694,374)	(\$1,343,748)
Aug. 1, 2018			(\$450,318)	(\$450,318)		\$12,647	\$1,264,881					(\$437,671)	
Feb. 1, 2019	(\$300,000)	5.52%	(\$450,318)	(\$750,318)	(\$1,200,635)	\$12,647	\$1,264,881					(\$737,671)	(\$1,175,341)
Aug. 1, 2019			(\$442,038)	(\$442,038)		\$12,647	\$1,264,881					(\$429,391)	
Feb. 1, 2020	(\$1,065,000)	5.77%	(\$442,038)	(\$1,507,038)	(\$1,949,075)	\$12,647	\$1,264,881					(\$1,494,391)	(\$1,923,781)
Aug. 1, 2020			(\$411,312)	(\$411,312)		\$12,647	\$1,264,881					(\$398,665)	
Feb. 1, 2021	(\$860,000)	5.99%	(\$411,312)	(\$1,271,312)	(\$1,682,625)	\$12,647	\$1,264,881					(\$1,258,665)	(\$1,657,331)
Aug. 1, 2021			(\$385,555)	(\$385,555)		\$12,647	\$1,264,881					(\$372,908)	
Feb. 1, 2022	(\$630,000)	6.23%	(\$385,555)	(\$1,015,555)	(\$1,401,111)	\$12,647	\$1,264,881					(\$1,002,908)	(\$1,375,817)
Aug. 1, 2022			(\$365,931)	(\$365,931)		\$12,647	\$1,264,881					(\$352,284)	
Feb. 1, 2023	(\$445,000)	6.43%	(\$365,931)	(\$810,931)	(\$1,176,862)	\$12,647	\$1,264,881					(\$798,284)	(\$1,151,568)
Aug. 1, 2023			(\$351,624)	(\$351,624)		\$12,647	\$1,264,881					(\$338,577)	
Feb. 1, 2024	(\$515,000)	6.59%	(\$351,624)	(\$666,624)	(\$1,218,248)	\$12,647	\$1,264,881					(\$653,577)	(\$1,192,954)
Aug. 1, 2024			(\$334,655)	(\$334,655)		\$12,647	\$1,264,881					(\$322,008)	
Feb. 1, 2025	(\$555,000)	6.69%	(\$334,655)	(\$889,655)	(\$1,224,310)	\$12,647	\$1,264,881					(\$677,008)	(\$1,199,016)
Aug. 1, 2025			(\$316,090)	(\$316,090)		\$12,647	\$1,264,881					(\$303,443)	
Feb. 1, 2026	(\$655,000)	6.76%	(\$316,090)	(\$971,090)	(\$1,267,180)	\$12,647	\$1,264,881					(\$658,443)	(\$1,261,886)
Aug. 1, 2026			(\$293,951)	(\$293,951)		\$12,647	\$1,264,881					(\$281,304)	
Feb. 1, 2027	(\$680,000)	6.83%	(\$293,951)	(\$973,951)	(\$1,267,902)	\$12,647	\$1,264,881					(\$611,304)	(\$1,242,608)
Aug. 1, 2027			(\$270,729)	(\$270,729)		\$12,647	\$1,264,881					(\$268,062)	
Feb. 1, 2028	(\$685,000)	6.88%	(\$270,729)	(\$955,729)	(\$1,226,458)	\$12,647	\$1,264,881					(\$643,062)	(\$1,201,164)
Aug. 1, 2028			(\$247,165)	(\$247,165)		\$12,647	\$1,264,881					(\$234,516)	
Feb. 1, 2029	(\$1,245,000)	6.93%	(\$247,165)	(\$1,492,165)	(\$1,739,330)	\$12,647	\$1,264,881					(\$1,479,516)	(\$1,714,036)
Aug. 1, 2029			(\$204,026)	(\$204,026)		\$12,647	\$1,264,881					(\$191,379)	
Feb. 1, 2030	(\$1,280,000)	6.98%	(\$204,026)	(\$1,484,026)	(\$1,688,052)	\$12,647	\$1,264,881					(\$1,471,379)	(\$1,662,758)
Aug. 1, 2030			(\$159,354)	(\$159,354)		\$12,647	\$1,264,881					(\$146,707)	
Feb. 1, 2031	(\$1,300,000)	7.04%	(\$159,354)	(\$1,459,354)	(\$1,618,708)	\$12,647	\$1,264,881					(\$1,446,707)	(\$1,593,414)
Aug. 1, 2031			(\$113,594)	(\$113,594)		\$12,647	\$1,264,881					(\$100,947)	
Feb. 1, 2032	(\$1,225,000)	7.13%	(\$113,594)	(\$1,338,594)	(\$1,452,188)	\$12,647	\$1,264,881					(\$1,325,947)	(\$1,426,894)
Aug. 1, 2032			(\$69,923)	(\$69,923)		\$12,647	\$1,264,881					(\$57,276)	
Feb. 1, 2033	(\$50,000)	7.17%	(\$69,923)	(\$119,923)	(\$189,845)	\$12,647	\$1,264,881					(\$107,276)	(\$164,551)
Aug. 1, 2033			(\$68,130)	(\$68,130)		\$12,647	\$1,264,881					(\$55,483)	
Feb. 1, 2034	(\$75,000)	7.20%	(\$68,130)	(\$143,130)	(\$211,260)	\$12,647	\$1,264,881					(\$130,483)	(\$185,966)
Aug. 1, 2034			(\$65,430)	(\$65,430)		\$12,647	\$1,264,881					(\$52,783)	
Feb. 1, 2035	\$0	7.24%	(\$65,430)	(\$65,430)	(\$130,860)	\$12,647	\$1,264,881					(\$52,783)	(\$105,566)
Aug. 1, 2035			(\$65,430)	(\$65,430)		\$12,647	\$1,264,881					(\$52,783)	
Feb. 1, 2036	(\$1,800,000)	7.27%	(\$65,430)	(\$1,865,430)	(\$1,930,860)	\$1,277,327	\$0					(\$588,103)	(\$640,866)
Aug. 1, 2036			\$0	\$0	\$0	\$0	\$0					\$0	\$0
Feb. 1, 2037		7.30%	\$0	\$0	\$0	\$0	\$0					\$0	\$0
Aug. 1, 2037			\$0	\$0	\$0	\$0	\$0					\$0	\$0
Feb. 1, 2038		7.32%	\$0	\$0	\$0	\$0	\$0					\$0	\$0
Aug. 1, 2038			\$0	\$0	\$0	\$0	\$0					\$0	\$0
Feb. 1, 2039		7.33%	\$0	\$0	\$0	\$0	\$0					\$0	\$0
Aug. 1, 2039			\$0	\$0	\$0	\$0	\$0					\$0	\$0
Feb. 1, 2040		7.34%	\$0	\$0	\$0	\$0	\$0					\$0	\$0
Aug. 1, 2040			\$0	\$0	\$0	\$0	\$0					\$0	\$0
Feb. 1, 2041		7.34%	\$0	\$0	\$0	\$0	\$0					\$0	\$0
	<u>(\$14,460,000)</u>		<u>(\$15,895,360)</u>	<u>(\$30,355,360)</u>	<u>(\$30,355,360)</u>	<u>\$1,897,276</u>			<u>\$68,167</u>	<u>\$1,862,761</u>		<u>(\$26,595,322)</u>	<u>(\$26,595,322)</u>

Yolo Emergency Communications Agency

2012 Lease-Purchase Analysis

Determination of Amount to be Borrowed

Amount for Projects: \$4,137,645
 Costs of Issuance: \$47,641
 Debt to be Issued: \$4,185,286

Financing Assumptions

Term of Financing: 7 years
 Avg. Borrowing Rate: 5.500%
 Dated Date: Feb. 1, 2012

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2012			
Aug. 1, 2012			
Feb. 1, 2013	(\$1,376,271)	(\$230,191)	(\$1,606,461)
Aug. 1, 2013			
Feb. 1, 2014	(\$472,810)	(\$154,496)	(\$627,306)
Aug. 1, 2014			
Feb. 1, 2015	(\$563,593)	(\$128,491)	(\$692,084)
Aug. 1, 2015			
Feb. 1, 2016	(\$658,223)	(\$97,494)	(\$755,716)
Aug. 1, 2016			
Feb. 1, 2017	(\$121,762)	(\$61,291)	(\$183,053)
Aug. 1, 2017			
Feb. 1, 2018	(\$433,031)	(\$54,595)	(\$487,625)
Aug. 1, 2018			
Feb. 1, 2019	(\$559,597)	(\$30,778)	(\$590,375)
	<u>(\$4,185,286)</u>	<u>(\$757,335)</u>	<u>(\$4,942,621)</u>

Yolo Emergency Communications Agency

2018 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$3,914,320
 Costs of Issuance: \$67,579
 Debt to be Issued: \$3,981,899

Financing Assumptions
 Term of Financing: 7 years
 Avg. Borrowing Rate: 7.000%
 Dated Date: Feb. 1, 2018

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2018			
Aug. 1, 2018			
Feb. 1, 2019	(\$80,121)	(\$278,733)	(\$358,854)
Aug. 1, 2019			
Feb. 1, 2020	(\$195,452)	(\$273,124)	(\$468,577)
Aug. 1, 2020			
Feb. 1, 2021	(\$644,495)	(\$259,443)	(\$903,938)
Aug. 1, 2021			
Feb. 1, 2022	(\$489,610)	(\$214,328)	(\$703,938)
Aug. 1, 2022			
Feb. 1, 2023	(\$800,093)	(\$180,055)	(\$980,149)
Aug. 1, 2023			
Feb. 1, 2024	(\$856,100)	(\$124,049)	(\$980,149)
Aug. 1, 2024			
Feb. 1, 2025	(\$916,027)	(\$64,122)	(\$980,149)
	<u>(\$3,981,899)</u>	<u>(\$1,393,854)</u>	<u>(\$5,375,753)</u>

2021 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$2,920,320
 Costs of Issuance: \$80,488
 Debt to be Issued: \$3,000,808

Financing Assumptions
 Term of Financing: 7 years
 Avg. Borrowing Rate: 7.000%
 Dated Date: Feb. 1, 2021

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2021			
Aug. 1, 2021			
Feb. 1, 2022	(\$346,753)	(\$210,057)	(\$556,810)
Aug. 1, 2022			
Feb. 1, 2023	(\$371,026)	(\$185,784)	(\$556,810)
Aug. 1, 2023			
Feb. 1, 2024	(\$396,998)	(\$159,812)	(\$556,810)
Aug. 1, 2024			
Feb. 1, 2025	(\$424,787)	(\$132,022)	(\$556,810)
Aug. 1, 2025			
Feb. 1, 2026	(\$454,523)	(\$102,287)	(\$556,810)
Aug. 1, 2026			
Feb. 1, 2027	(\$486,339)	(\$70,471)	(\$556,810)
Aug. 1, 2027			
Feb. 1, 2028	(\$520,383)	(\$36,427)	(\$556,810)
	<u>(\$3,000,808)</u>	<u>(\$896,859)</u>	<u>(\$3,897,667)</u>

2025 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$4,814,119
 Costs of Issuance: \$101,614
 Debt to be Issued: \$4,915,733

Financing Assumptions
 Term of Financing: 7 years
 Avg. Borrowing Rate: 7.000%
 Dated Date: Feb. 1, 2025

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2025			
Aug. 1, 2025			
Feb. 1, 2026	(\$568,029)	(\$344,101)	(\$912,130)
Aug. 1, 2026			
Feb. 1, 2027	(\$607,791)	(\$304,339)	(\$912,130)
Aug. 1, 2027			
Feb. 1, 2028	(\$650,336)	(\$261,794)	(\$912,130)
Aug. 1, 2028			
Feb. 1, 2029	(\$695,860)	(\$216,270)	(\$912,130)
Aug. 1, 2029			
Feb. 1, 2030	(\$744,570)	(\$167,560)	(\$912,130)
Aug. 1, 2030			
Feb. 1, 2031	(\$796,690)	(\$115,440)	(\$912,130)
Aug. 1, 2031			
Feb. 1, 2032	(\$852,458)	(\$59,672)	(\$912,130)
	<u>(\$4,915,733)</u>	<u>(\$1,469,178)</u>	<u>(\$6,384,911)</u>

2032 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$5,920,760
 Costs of Issuance: \$152,790
 Debt to be Issued: \$6,073,550

Financing Assumptions
 Term of Financing: 4 years
 Avg. Borrowing Rate: 7.000%
 Dated Date: Feb. 1, 2032

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2032			
Aug. 1, 2032			
Feb. 1, 2033	(\$1,567,934)	(\$425,148)	(\$1,993,083)
Aug. 1, 2033			
Feb. 1, 2034	(\$1,446,479)	(\$315,393)	(\$1,761,872)
Aug. 1, 2034			
Feb. 1, 2035	(\$1,847,844)	(\$214,140)	(\$2,061,983)
Aug. 1, 2035			
Feb. 1, 2036	(\$1,211,293)	(\$84,790)	(\$1,296,083)
	<u>(\$6,073,550)</u>	<u>(\$1,039,472)</u>	<u>(\$7,113,021)</u>



2036 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$4,549,764
 Costs of Issuance: \$192,894
 Debt to be Issued: \$4,742,658

Financing Assumptions
 Term of Financing: 3 years
 Avg. Borrowing Rate: 7.000%
 Dated Date: Feb. 1, 2036

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Debt Service</u>
Feb. 1, 2036			
Aug. 1, 2036			
Feb. 1, 2037	(\$1,575,212)	(\$331,986)	(\$1,907,198)
Aug. 1, 2037			
Feb. 1, 2038	(\$1,530,167)	(\$221,721)	(\$1,751,889)
Aug. 1, 2038			
Feb. 1, 2039	(\$1,637,279)	(\$114,610)	(\$1,751,889)
	<u>(\$4,742,658)</u>	<u>(\$668,317)</u>	<u>(\$5,410,975)</u>



2039 Lease-Purchase Analysis

Determination of Amount to be Borrowed
 Amount for Projects: \$7,281,787
 Costs of Issuance: \$229,740
 Debt to be Issued: \$7,511,527

Financing Assumptions
 Term of Financing: 3 years
 Avg. Borrowing Rate: 7.000%
 Dated Date: Feb. 1, 2039

Debt Service Schedule

<u>Date</u>	<u>Principal</u>	<u>Interest</u>	<u>Total Debt Service</u>
Feb. 1, 2039			
Aug. 1, 2039			
Feb. 1, 2040	(\$2,016,473)	(\$525,807)	(\$2,542,280)
Aug. 1, 2040			
Feb. 1, 2041	(\$2,654,615)	(\$384,654)	(\$3,039,269)
Aug. 1, 2041			
Feb. 1, 2042	(\$2,840,439)	(\$198,831)	(\$3,039,269)
	<u>(\$7,511,527)</u>	<u>(\$1,109,291)</u>	<u>(\$8,620,818)</u>

