

**SUBMITTAL TO THE BOARD OF SUPERVISORS  
COUNTY OF RIVERSIDE, STATE OF CALIFORNIA**

370



**FROM:** Riverside County Information Technology Department

**SUBMITTAL DATE:**  
July 6, 2011

**SUBJECT:** PSEC Omnibus Report

**RECOMMENDED MOTION:** Receive and file the attached PSEC Omnibus Report

**BACKGROUND:**

PROJECT BUDGET STATUS

In 2005, the County began the process of replacing its current public safety radio system by establishing the Public Safety Enterprise Communication (PSEC) Project Team (Sheriff, Fire and RCIT staff) and the PSEC Project Steering Committee (consisting of the Sheriff's Department, Fire Department, Facilities Management, RCIT and the Executive Office). In 2007, the County entered into a contract with Motorola to design and install a new radio system that would provide 95% coverage countywide. The County also established a project budget of \$148.3 million. Once implemented, the PSEC system will be the first system in the nation that utilizes multiple frequencies, including 700MHz, 800MHz, VHF and the latest in Motorola land mobile radio technology.

(CONTINUED)

*Nathan Colodney*  
Nathan Colodney,  
Chief Information Officer

**FINANCIAL  
DATA**

Current F.Y. Total Cost:	\$ N/A	In Current Year Budget:
Current F.Y. Net County Cost:	\$ N/A	Budget Adjustment:
Annual Net County Cost:	\$ N/A	For Fiscal Year:

**SOURCE OF FUNDS:** N/A

Positions To Be Deleted Per A-30	<input type="checkbox"/>
Requires 4/5 Vote	<input type="checkbox"/>

**C.E.O. RECOMMENDATION:**

APPROVE

CEO letter and supplemental staff report are attached.

BY: *Christopher M. Hans*

County Executive Office Signature Christopher M. Hans

- Policy
- Policy
- Consent
- Consent

Dep't Recomm.:  
Per Exec. Ofc.:

3.59

Departmental Concurrence

June 14, 2011

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**SUBJECT: PSEC Enhanced Coverage Sites Detail Design and Contract Amendments**

**BACKGROUND: (Continued)**

The Board of Supervisors, Executive Office, Sheriff's Department, County Fire, Riverside County Information Technology (RCIT), EDA/Facilities Management, and key stakeholders made a commitment to resolving the County's 800 MHz radio coverage challenges.

The Board of Supervisors approved a Program Environmental Impact Report (PEIR) for the project on September 2, 2008. The PEIR imposed a number of standard mitigation measures that were applicable to all of the sites. However, at the time of the PEIR's adoption, certain design details and a final location for a number of the sites had not been finalized. To provide for such a contingency, the PEIR prescribed mitigation measures to be implemented if a site or its supporting components (access roads, power alignments, etc.) were to be relocated to an area that had not been assessed and/or surveyed as part of the PEIR. This programmatic approach was adopted to allow modifications and expansion of the project's design without the need for recirculation of the PEIR. Specific measures prescribed in the PEIR required the County to determine if the impacts associated with the proposed modification/addition were consistent with the analysis and findings of the PEIR. Specific performance measures were adopted to identify the analysis necessary to make this determination.

Subsequently, the Board approved the PSEC detail design and system implementation on March 31, 2009 (MO 3.33). At the end of the detail design for the original communication sites the County received a new coverage prediction map. The predicted coverage was less than the geographic coverage expected by the County. The areas of concern included some highly traveled roads and highways. Motorola and the County negotiated an agreement to add additional sites that would increase the geographic coverage in the areas lacking radio coverage. As part of the agreement Motorola would be responsible for providing the radio equipment and engineering services for these sites. The County would acquire the sites; perform all environmental assessments; provide commercial power and road grading. The integration of the additional sites into the original group of sites is known as the Enhanced Coverage. As such, the County undertook to implement the mitigation prescribed in the PEIR that was required in the event of site relocation and/or network expansion. Pursuant to CEQA Section 15164, the attached addendum to the PEIR was prepared.

On March 31, 2009 the Board also approved the development of the detail design for the enhance coverage - and directed the PSEC Team to return to the Board for approval to proceed with integrating the enhanced coverage sites into the PSEC implementation. The Enhanced Coverage will include the proposed sites listed below located in more remote/ unique areas of the county. When implemented, these sites will increase coverage throughout the county. If approved, the additional proposed sites would be fully implemented by January 2013.

Following is a list of the proposed Enhanced Coverage Sites and the general vicinity where they will provide additional coverage:

1. Billy Goat; will provide coverage in the Sage, Anza Cahuilla IR, HWY 79 and Hwy 371 area.
2. Box Canyon; will provide primary coverage along Box Canyon Road in the City of Mecca.
3. Lake Hemet; will provide coverage in the Lake Hemet campgrounds, Garner Valley, Hurkey Creek Park and surrounding trails and campgrounds.

4. Midland; will provide coverage in the Midland areas.
5. Palen McCoy; will provide coverage in the Palen McCoy area.
6. Palo Verde; will provide coverage in the southeastern portion of the county.
7. Road 62; will provide coverage in the HWY 62 at Road 177 and surrounding areas.
8. Toro Peak; will provide coverage in the Santa Rosa mountains.
9. Snow Peak; will provide coverage in at San Jacinto Peak, HWY 243 and nearby valleys and canyons.

Approval of the implementation of Enhanced Coverage sites will require an expenditure of \$1.7 million for land acquisition activities.

The annual operational cost for these proposed sites is estimated at \$709,000 and will be incorporated into the new FY12/13 radio system operation support costs (backbone costs) paid by the user departments.

The Steering Committee recommends approval of Enhanced Coverage sites to provide portable radio coverage to the greatest degree possible achievable throughout Riverside County.

### Project Schedule

<b>EC Milestones</b>	<b>Planned Start</b>	<b>Planned Completion</b>
Site Acquisition	Dec 2008	May 2011
Civil A&E	Aug 2009	May 2011
Complete Site Construction	Jun 2010	Dec 2011
Equipment Installation	Mar 2011	May 2012
Complete Acceptance Testing	Jun 2011	Aug 2012
Complete Implementation	Oct 2011	Dec 2012
Final Acceptance	Feb 2012	January 2013

June 14, 2011

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**SUBJECT: PSEC Enhanced Coverage Sites Detail Design and Contract Amendments**

**Summary:**

The members of the PSEC Executive Steering Committee and the PSEC Project Team have worked diligently to finalize a design that will meet all the operational needs of the departments, and remains committed to completing all aspects of the project within the budget and timelines. The PSEC Project Team will continue to provide bi-monthly status reports and quarterly updates to the Board on the project.



**Bill Luna**  
County Executive Officer

**Jay E. Orr**  
Assistant County Executive Officer

*Executive Office, County of Riverside*

The Honorable Board of Supervisors  
County of Riverside  
Robert T. Anderson Administrative Center  
4080 Lemon Street, 5<sup>th</sup> Floor  
Riverside, California 92501-3651

June 28, 2011

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Subject: PSEC Project

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Board Members:


In the Mid-Year Budget Report, I presented the concerns of the Executive Office with respect to the PSEC project and the growth of the original project scope. I directed the Information Technology department to prepare an overview of the PSEC project with full disclosure of the project status and cost impacts. That report is before you today, as well as a supplemental Staff Report from my office.

The project now has exceeded the original cost and scope. However, our cash on hand appears to be close to fund the project up to its completion date, which is projected to be in January 2013. We have identified other sources to offset the cost of system enhancements.

Although the Board has already made a significant investment in the PSEC project, we now must plan for funding operations. Modifications to the long-range budget starting in fiscal year 2012-13 may be needed to fund six months of the PSEC operating budget, as well as its ongoing operations of roughly \$13 million going forward.

As with all other budget priorities, the Board maintains the discretion to earmark funds to sustain the PSEC project. Those will be forthcoming in the FY 2012/13 budget process.

Respectfully Submitted,

  
\_\_\_\_\_  
Bill Luna  
County Executive Officer



# MEMORANDUM

EXECUTIVE OFFICE, COUNTY OF RIVERSIDE

**Bill Luna**  
County Executive Officer

**Jay E. Orr**  
Assistant County Executive Officer

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## EXECUTIVE OFFICE SUPPLEMENTAL STAFF REPORT PSEC PROJECT

July 7, 2011

Executive Office staff performed a detailed analysis of the PSEC project budget status of the original PSEC obligation of \$148,300,000 before confirming the financial impacts of the remaining project costs in Table 1 of the PSEC Budget and Contract Amendments F-11, as submitted by the Department. Staff has reviewed F-11 and has found that:

- The PSEC Team did not prepare a detailed accounting of the current budget status to determine the actual contingency balance.
- Staff has calculated the revised PSEC budget to be \$154.4 million, based on a detailed accounting of the current budget status and the remaining project expenses provided by the PSEC Team. This does not include the potential additional cost of \$4.9 million in contract changes, currently under negotiation.
- The net cost over the original PSEC budget appears to be about \$6 million, with a potential additional cost of \$4.9 million in contract changes, currently under negotiation.
- NCC for the PSEC operating budget was reduced for FY 11-12. The PSEC contingency will be used to "backfill" \$4,000,000. This was not included in the remaining draws on contingency.
- No NCC is budgeted for the PSEC operating budget in FY 12-13. The PSEC contingency will be used to fund \$2,000,000 towards the PSEC operating budget in FY 12-13 until project completion in January 2013. This was not included in the remaining draws on contingency. No funds have been identified for the remainder of the PSEC operating budget for FY 12-13.
- Staff has calculated cash on hand within the range to completely fund the PSEC project up to January 2013.
- There are still unknown, unfunded costs for the six months PSEC operating budget in FY 12-13. A source of funding will need to be identified for the remaining six months of PSEC operations in FY 12-13.
- PSEC debt service has been budgeted in the FY 11-12 budget; however, funding for the \$13,000,000 ongoing PSEC operating costs has not been identified. The majority of costs are for public safety departments. This is an increase in NCC needed.

**Public Safety Enterprise Communications  
(PSEC)  
Project Status Report**



**PUBLIC SAFETY ENTERPRISE COMMUNICATION**

*Creating the Next-Generation Communication System  
To Better Serve the County of Riverside.*

**June 2011**

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## OVERVIEW

The following is an omnibus report of the Public Safety Enterprise Communication (PSEC) project from its origination, to current status, and projected completion. This report contains a chronology of Board actions. Other discussion items include the current status of the project budget and updated project schedule, with the anticipated implementation date.

The PSEC project is a cooperative effort Riverside County Sheriff, Riverside County Fire, Riverside County EDA, Executive Office, and Riverside County Information Technology – the project lead agency. Motorola is the vendor contracted both to provide equipment and to integrate the system. The PSEC Steering Committee includes representation from each of the county departments involved in the project and meets monthly to review project activities, provide direction, and authorize expenditures within approved budget.

On September 27, 2005 (M.O. 3.44a, b & c), the Board took action on three items:

- 1) The Board established the PSEC Project Team and authorized funding for the team's administrative and operational expenses to complete the RFP evaluation, select a vendor, negotiate and award a contract, and implement the new radio system
- 2) The Board approved a sole source legal service to support the evaluation, contract development and negotiations for the project. The Board also approved a contract amendment for RCC Consulting to augment staff support for the completion of the RFP evaluation and contract negotiations
- 3) The Board granted in-principle approval to seek lease space in the City of Riverside for the project team

On January 30, 2007 (M.O. 3.42b), the Board of Supervisors approved the agreement with Motorola Inc, in the amount of \$104,438,000; established the project start date as March 7, 2007; directed the project team to present the final design plan for the system with documentation demonstrating CEQA compliance, and, authorized EDA/Facilities Management to initiate in-principle efforts to acquire the sites and easements. The original Motorola timeline was 44-months to complete.

The project budget was established as follows:

Vendor Contract	\$104.4M
Land Acquisition	\$8.6M
Contract and Land Contingency (10%)	\$11.3M
PSEC Team Operations (4 yrs)	\$24M
<b>Estimate of Total System Cost</b>	<b>\$148.3M</b>

In the time since the Motorola contract was first approved, the vendor and PSEC Project Team have faced numerous unexpected challenges. Foremost has been the difficulties encountered when negotiating with government entities to either lease or purchase essential sites to place new radio towers. The project continues to make progress while working through identified risks, such as acquiring commercial power from SCE and the smaller power providers within the county. Other risks include environmental compliance; there are nesting bird surveys to contend with, Multiple Species Habitat Conservation requirements, paleontology and archeological assessment; tribal consultations, and National Environmental Policy Act. Another high risk item is site acquisition covered later in this report. The greatest challenge is working through acquisition requirements of the Federal Agencies.

The project team has made considerable progress. Radio sites and Master sites are being energized. By April of 2011 thirty-five of sixty-eight sites were energized making the new radios functional and available for testing. By June of 2011 the microwave link between Alessandro and Blythe will be operational. Five Sheriff vehicles and two Fire vehicles have Motorola APX mobile radios installed. This installation has allowed the team to validate the installation and develop guidelines in preparation for installing over 3,000 mobile radios.

### **Schedule**

Due to not all sites being acquired, the schedule has been revised. If all sites are in construction by June of 2011 Motorola and the County believe the following timeline can be achieved. The schedule plans for the smaller County departments to begin using the system by November of 2012 and the Sheriff to begin using the system by December 2012. If the enhanced coverage sites are adopted they will be integrated into the system based on the completion of acquisition.

<b>Milestone</b>	<b>Complete</b>
<b>Equipment Installations</b>	<b>10/30/2012</b>
<b>End user radio training and key technical training</b>	<b>12/30/2012</b>
<b>System Acceptance Testing</b>	<b>11/02/2012</b>
<b>System Implementation</b>	<b>12/31/2012</b>
County Departments	11/26/2012
Sheriff	12/31/2012
<b>Punch list / Finalize/Documentation</b>	<b>01/21/2013</b>
<b>Radio Technical Training</b>	<b>08/30/2013</b>

## **Conclusion**

The Steering Committee is also preparing for post implementation by authorizing a cost and governance sub-committee to plan for the integration of other law enforcement and first responder agencies who have expressed interest in participating in the system. RCIT is concurrently developing cost models that will assist in establishing system fees as the information is processed through the sub-committee and a recommendation presented to the Steering Committee.

The PSEC project team objectives are to complete the acquisition of the final two sites, work with the commercial power providers to energize the sites; complete the site implementation; perform acceptance testing; and deploy the system to public safety first responders. Staffing reorganization and redeployment is being considered to meet the demands of a new regional Public Safety Enterprise Communication System. The Steering Committee will recommend a cost, governance, and support solution for the Board's approval. Following the adoption of this report the PSEC project team will continue bi-monthly status reports to the Board and the Steering Committee will resume quarterly updates with the Board sub-committee, Supervisor's Ashley and Tavaglione.

## CHRONOLOGY OF BOARD ACTIONS

October 7, 2003

⇒ On October 7, 2003 (M.O. 3.57), the Sheriff and Supervisor John Tavaglione instructed the Executive Officer to work with the Sheriff's Department, Information Technology and Purchasing to secure the services of a communications consultant to review and analyze the current 800 MHz public safety system for effectiveness, coverage and safety.

⇒ January 2004

On January 2004, RCC Consultants was awarded consulting services to study the coverage and operational concerns associated with the current radio system, develop an RFP for submittal to industry vendors that would provide a fix for the problems identified in the study, and assist the county in the selection of a qualified vendor to redesign and implement a solution that will resolve the coverage and operational issues document in the study and RFP.

During the reviewing and editing of the draft RFP, additional radio data network requirements were added to the RFP to support the data transmission requirement of County Fire. Dr. Richter of the Richter Group was hired to validate the findings of RCC and to assist the County in the finalization of the RFP. The RFP was the final compilation of all the requirements identified by RCC Consulting, Sheriff, Fire, Purchasing, County Counsel, RCIT and the Richter Group.

⇒ April 12, 2005

On April 12, 2005 (M.O. 3.19), the Board authorized the Purchasing Agent to release the RFP to solicit proposals from qualified vendors to resolve the radio coverage and operation issues associated with the County's 800 MHz radio system. The Project Steering Committee was formed with membership from the Sheriff's Department, Fire Department, Facilities Management, RCIT and the Executive Office to monitor the new Radio Project's progress, and to make high-level decisions required to keep the project on track.

⇒ September 27, 2005

On September 27, 2005 (M.O. 3.44a, b & c), the Board took action on three items:

1. The Board established the PSEC Project Team and authorized funding for the team's administrative and operational expenses to complete the RFP evaluation, select a vendor, negotiate and award a contract, and implement the new radio system. The team was composed of staff from the Sheriff's Department, County Fire, EDA/Facilities Management and Information Technology (RCIT). The project team reports to the Steering Committee. RCIT was tasked with the responsibility of ensuring commitment, coordination and follow through of assignment from all project team participants. The Board was advised that after the new radio system was installed and certified, the project team members would return to their respective departments.

2. The Board approved a sole source legal service to support the evaluation, contract development and negotiations for the project. The Board also approved a contract amendment for RCC Consulting to augment staff support for the completion of the RFP evaluation and contract negotiations.

3. The Board granted in-principle approval to seek lease space in the City of Riverside for the project team.

During this time period, two Board of Supervisors members began meeting regularly with Sheriff, Fire, and RCIT staff for project progress reports.



May 2, 2006

In the May 2, 2006, FY05/06 Third Quarter Budget Report to the Board, the Board was advised that the PSEC Project Team operational budget for FY06/07 was estimated at \$5 million to support the various County staff involved in the successful implementation of a new radio system. It was also reported that maintaining and operating the radio system would be incorporated into RCIT's operations and that new backbone rates along with radio replacement rates would have to be developed based on the new system's operational cost.



January 30, 2007

On January 30, 2007 (M.O. 3.42b), the Board of Supervisors approved the agreement with Motorola Inc, in the amount of \$104,438,000; established the project start date as March 7, 2007; directed the project team to present the final design plan for the system with documentation demonstrating CEQA compliance, and, authorized EDA/Facilities Management to initiate in-principle efforts to acquire the sites and easements. Two vendors responded to the RFP that was released in April 2005, and after completing an extensive formal evaluation of the RFP responses, including revised vendor responses, and subsequent dual contract negotiations, the PSEC Project Team presented their recommendation to the Executive Steering Committee. The Executive Steering Committee reviewed the recommendation and concurred that Motorola, Inc. was the best qualified vendor and submitted the best proposal to meet the County's requirements. The original Motorola timeline was 44-months to complete.

The project budget was established as follows:

Vendor Contract	\$104.4M
Land Acquisition	\$8.6M
Contract and Land Contingency (10%)	\$11.3M
PSEC Team Operations (4 yrs)	\$24M
<b>Estimate of Total System Cost</b>	<b>\$148.3M</b>

⇒ January 30, 2007  
Minute Order 3.42a of January 30, 2007, issued \$90 million in Lease Anticipation Notes (LANs) through CORAL. The Executive Office reported that the combination of the LANs and \$25 million in Designated Fund Balance for the Project would be sufficient to award a contract.

⇒ August 20, 2008  
On August 20, 2008 (M.O. 3.52) the Board adopted a resolution related to CEQA and the Program Environmental Impact Report (EIR). Shortly after project initiation it was determined that a programmatic process was best suited to comply with CEQA. This process required an impact review that encompassed the project as a whole, as opposed to individual sites. It allowed for movement of the proposed sites and the addition of sites not identified in the Motorola proposal. Site acquisition could not begin until the EIR was adopted by the Board, resulting in a twelve month delay in site acquisition and construction. Sites in Western Riverside County are also subject to Multiple Species Habitat Conservation review adding to the delays.

The Federal component to the environmental assessment is the National Environmental Policy Act, or NEPA. The NEPA environmental assessment is required for all federally controlled property where PSEC proposes to erect a radio site. Each of the Federal agencies opted to perform their own NEPA compliance assessment. The assessment includes paleontology and archeological assessment; tribal consultations; and in some instances a consultation with the California Office of Historic Preservation. The NEPA duration was dependent upon the availability of resources within each agency and prioritized with all other agency land activities. Therefore, timelines to complete the work by Federal agencies created additional delays to the project timeline.

⇒ March 31, 2009  
On March 31, 2009 (M.O. 3.33), the Board of Supervisors approved the **First Amendment** to the Motorola contract to accommodate change orders in the net amount of \$7,457,300 to implement the initial design provided by Motorola. The change orders included a number of credits to the County. Additionally, the first amendment included rough order magnitude construction estimates for eight existing sites. Motorola would provide final pricing as soon as final engineered sites designs were complete. The new contract amount for Motorola is \$111,895,079. On the same date, the Board of Supervisors approved the **Second Amendment** to the Motorola contract to commence work on the detailed design for the portable radio coverage enhancement phase of the project.

During the Detail Design analysis the PSEC Project Team identified areas in the proposed design where changes were required to meet the operational specifications of the County. The following proposed changes were presented to and accepted by the PSEC Executive Steering Committee for final approval.

- Increasing the tower height at select radio sites to meet the coverage objectives.

- Expansion of selected radio site shelters to meet the needs and contractual obligations of government agency partners. (Grant funding and contributions from agencies offset this cost by \$1,032,472).
- Modifications to proposed system components to reduce long term operational costs.
- 700MHz for aviation.
- Two additional dispatch consoles and call logger recorder.
- Purchase of additional network routers and switches to improve system operations. PSEC was able to purchase this equipment using the County's discount which is greater than can be obtained through Motorola.
- Some locations required aesthetic changes such as block walls or special fencing; road construction; and changes to the commercial power source.

The recommended changes required an increase in the Motorola contract by \$7,457,300. The project's financial planning was adequate to cover these change costs within the current project budget of \$148.3 million.

While the final coverage design provided by Motorola during the detail design phase exceeded the County's mobile (in car) coverage objectives, it did not meet the County's requirements for portable (on hip) radio coverage. To enhance the portable radio coverage, both the Motorola and the PSEC Project Teams reconvened and developed a solution that did meet the portable radio coverage objectives of the County.

The PSEC Executive Steering Committee requested a mid-course schedule adjustment to the project plan to extend the original project schedule of October 2010 by an additional 12 months to October 2011. The portable radio coverage enhancements originally consisted of twelve sites and after analyzing the coverage contribution three sites were eliminated. The completion of the nine is expected to be twelve months Board acceptance. The additional sites are known as the "Enhanced Coverage" phase.

The PSEC Executive Steering Committee was to return to the Board for approval to proceed with the portable radio coverage Enhanced Coverage effort once the detail design for this activity was complete, and all cost and schedule impacts were fully defined. The PSEC Project Team and the Executive Steering Committee recommended maintaining any realized budget savings in the project contingency to address any potential unforeseen costs.



February 2010

In February 2010 minute order, the Board of Supervisors executed the **Third Amendment** with Motorola increasing the contract amount from \$111,895,079 to \$114,057,692 to accommodate project revisions and modify contract milestone payment dates. The Board also reaffirmed the total system cost at \$148.3 million and approved a budget realignment to move \$4.1 million to the project's contingency fund.

The PSEC Project Team, working from the Detail Design, identified additional change orders (including credits) to reconcile equipment needs, and modify proposed technology to better meet the County's requirements. The proposed changes were reviewed and recommended by the PSEC Executive Steering Committee for final approval:

- Increasing the tower height and building modifications at select radio sites to meet coverage objectives.
- A credit from Motorola for the reconciliation of proposed vs. actual equipment order, as well as modifying the equipment order to utilize newer and more flexible wireless technologies.
- The reconciliation of road and power costs due to radio site location changes.
- Increased expense to account for the 1% increase in California sales tax (This was later resolved during the project)
- Adding the Paradise Site at the southern end of Norco to achieve required coverage.

The recommended changes required a \$2,162,613 increase to the Motorola contract. The contract total cost was changed from \$111,895,079 to \$114,057,692.

At this point in time, the PSEC Project Team's operating expenses and the land acquisition costs were projected to be \$4.1 million less than originally estimated. The PSEC Project Team and the Executive Steering Committee recommended reallocating these funds to the project's contingency to fund the change orders in Amendment #3, and also to maintain enough contingency balance to address potential unforeseen costs. The Board approved the request and the budget was realigned with a contingency amount of \$6,437,819, and remained within the total system cost estimate of \$148.3 million.



June 15, 2010

On June 15, 2010 (M.O. 3.20), the Board approved the **Fifth Amendment** with Motorola decreasing the contract amount from \$114,057,692 to \$99,876,977.91, approved the lease agreement with Motorola for the lease purchase of mobile and portable radio equipment, and directed RCIT to manage the County lease arrangement for all county mobile and portable radio units to ensure radio equipment life-cycle replacement.

During the project, Motorola advised the county of a new leasing option for the purchase of portable and mobile radios. Under a lease purchase option, county departments could enter into a 10-year, fixed-rate lease with a dollar buyout for the radios; including radios they had on hand at the start of this project in 2007 (total of 3200), as well as for the growth in units since that time (reported as 1507 units originally). The project budget did not account for the cost of the increase in units which has been adjusted to 1,380 units and amounts to \$8.9 million.



The advantage to the lease purchase option was that departments could budget for a set monthly payment, rather than being faced with large capital outlays for replacement units, or for additional units over time. Also, as surrounding municipalities opted to utilize the county's radio system, the lease option provided for a financing option to do so without a large capital outlay. This provided a keen advantage when promoting interoperability. However, the most immediate obvious advantage was the cost avoidance of \$ 8.9 million in additional costs to the project.

Lease purchasing equipment is a technology best practice that ensures life-cycle replacement of aging equipment – without the need for a large capital outlay. As such, the PSEC Steering Committee, with Executive Office concurrence, recommended lease purchasing of all radios to ensure the continual replacement of equipment to support public safety and other critical governmental services.

By entering into a lease agreement, the overall PSEC project implementation contract with Motorola was reduced by \$14,180,714.09 for the original 3,200 units and moved the responsibility of the radio purchase for these units as well as the additional growth in units through the lease arrangement. It was reported that of the ten departments that would participate in the lease through Motorola, the monthly budgeting of replacement equipment currently occurs within the Sheriff's department and RCIT; for the other eight departments, the monthly lease was to be a new cost. The Sheriff currently pays approximately \$136,000 each month into the radio replacement fund.

The total lease cost was reduced by \$5.6 million from the forthcoming rebanding credit from Sprint Nextel, as well as the discount credit offered by Motorola in February 2010. The Motorola lease agreement commenced upon execution, however the lease payments to county departments will begin in FY12/13, when the radios become fully operational. This provided for two years of advanced planning for departments that are not accustomed to budgeting for life-cycle replacements. As part of the deferral of the lease payments until FY12/13, the county is required to pay \$1,130,168 to Motorola. This amount will be applied to the lease and will reduce the total lease cost. The interest rate was fixed at 4.07%.

It was agreed that RCIT would handle the master lease purchase agreement with Motorola and pass-through the direct lease costs to the departments. The lease payment would be a separate RCIT charge to the department and will not be included in the radio system operational support fee. This allows for transparency of actual equipment lease costs and keeps separated the costs associated with supporting the entire radio system (the backbone support).

CHA	101	40	7,225	General Fund
CHA	4	92	5,174	General Fund
Clerk of the Board	2		100	General Fund
District Attorney	97	188	18,092	General Fund
Fire	27	33	3,968	General Fund
Parks		11	595	Non-General Fund
Probation		1	54	General Fund
TLMA - Code Enforcement	54	2	2,815	General Fund
Waste Management	2		81	Non-General Fund
RCIT	95	145	14,873	ISF Rates
<b>Total</b>	<b>2681</b>	<b>2026</b>	<b>\$217,057</b>	

\*A portion of the radio costs are recovered through contract cities fees.

Note: as a pass-through cost, no RCIT administrative or overhead fee is included in the direct lease cost.



October 19, 2010

On October 19, 2010 (M.O.) 3.41 the Board approved the purchase of radio equipment from awarded vendors in order to migrate county VHF/UHF radio systems to narrowband frequencies as mandated by the FCC; and, approved allocating \$1.5 million from the PSEC fund to cover Fire's cost for narrowbanding. The FCC directed that all VHF/UHF radio systems must migrate to new frequencies. County Fire, Community Health Agency (CHA) and RCIT opted to migrate to the narrowband solution while other department opted to migrate to another radio system.

The cost for CHA to migrate was \$5,000 and \$14,283 for RCIT; both departments allocated funds for the effort. The total migration cost for Fire was \$2,989,933. Fire offset \$1,389,933 from grants and prior year savings, but sought funding assistance for the remaining \$1.5 million. Since the FCC requirement was associated with public safety radio for Fire, the PSEC Steering Committee on July 13, 2010 approved the use of PSEC contingency funds to pay for Fire's remaining cost of \$1,500,000.



February 15, 2011

On February 15, 2011 (M.O. 3.36), the Board of Supervisors approved the Frequency Reconfiguration Agreement (FRA) between the County, Sprint Nextel, and the Federal Communications Commission – Transition Administrator. There is also a Reconfiguration Planning and Implementation Agreement (RPIA) with Motorola. The FRA includes a commitment from Sprint Nextel to "buy back" specific 800 MHz MACOM subscriber equipment upon completion of the PSEC project. The FCC will receive the 800MHz frequencies currently licensed to the County. The approved **Fourth Amendment** between the county and Motorola, directed the Auditor-Controller to make the necessary budget adjustments.

During this multi-year project, the Federal Communication Commission (FCC) mandated rebanding of 800 MHz frequencies due to interference from commercial cellular transmitter sites – specifically Sprint Nextel. Rebanding is the process of realigning the 800MHz frequency band. The reallocating of the frequencies mandates a physical change to all subscriber units and hilltop radio equipment. The FCC then further discovered a shortage of 800 MHz spectrum and strongly encouraged PSEC be reengineered and redesigned using the newly allocated 700 MHz frequency band, which included spectrum reserved for public safety. As a result, Sprint Nextel was obligated to pay for Motorola reengineering expenses and County staff time. Sprint Nextel was also to pay for Riverside County's Office of Education 800MHz rebanding. Additionally, Sprint Nextel was to reimburse the County for the value of the MACOM radios that will no longer operate under the new 700 MHz frequency band. These radios must be relinquished to Sprint Nextel once the PSEC system is operational and the MACOM system is decommissioned. The 800 MHz frequencies will then be returned to the FCC.

It was recommended that the \$6 million in funds received from Sprint/Nextel reimburse PSEC staff time and attorney's fees associated with the rebanding activity and the balance designated for project costs associated with the county's public safety enterprise communication system. This recommendation was consistent with prior project recommendations to keep funding available for the project.

### **ENHANCED COVERAGE DETAIL DESIGN**

The PSEC Executive Steering Committee was to return to the Board for approval to proceed with the portable radio coverage enhancement effort once the detail design was complete, and all cost and schedule impacts were fully defined (See March 31, 2009 M.O. 3.33) Board approval of the implementation of Enhanced Coverage sites will require an expenditure of \$1.7 million for land acquisition activities and \$936,001 paid to Motorola for diesel generators at the remote sites. This will increase the Motorola contract from \$99,876,978 to \$100,628,441.

The original estimated cost for commercial power to the sites was \$4.97million. The impact to the environment is significant, requiring the installation of over 1,400 power poles. By converting five sites to diesel power the expense to the county for commercial power is now estimated at \$1.0 million and avoids the environmental impact associated with installation of 1,400 power poles. There are no additional known Motorola contract increases associated with the implementation of Enhanced Coverage sites; all related Motorola work is within the current contract obligation for enhanced coverage.

The annual operational cost for these nine sites is estimated at \$779,334 and will be incorporated into the new FY12/13 radio system operation support costs (backbone costs) paid by the user departments.

**Enhance Coverage Sites:**

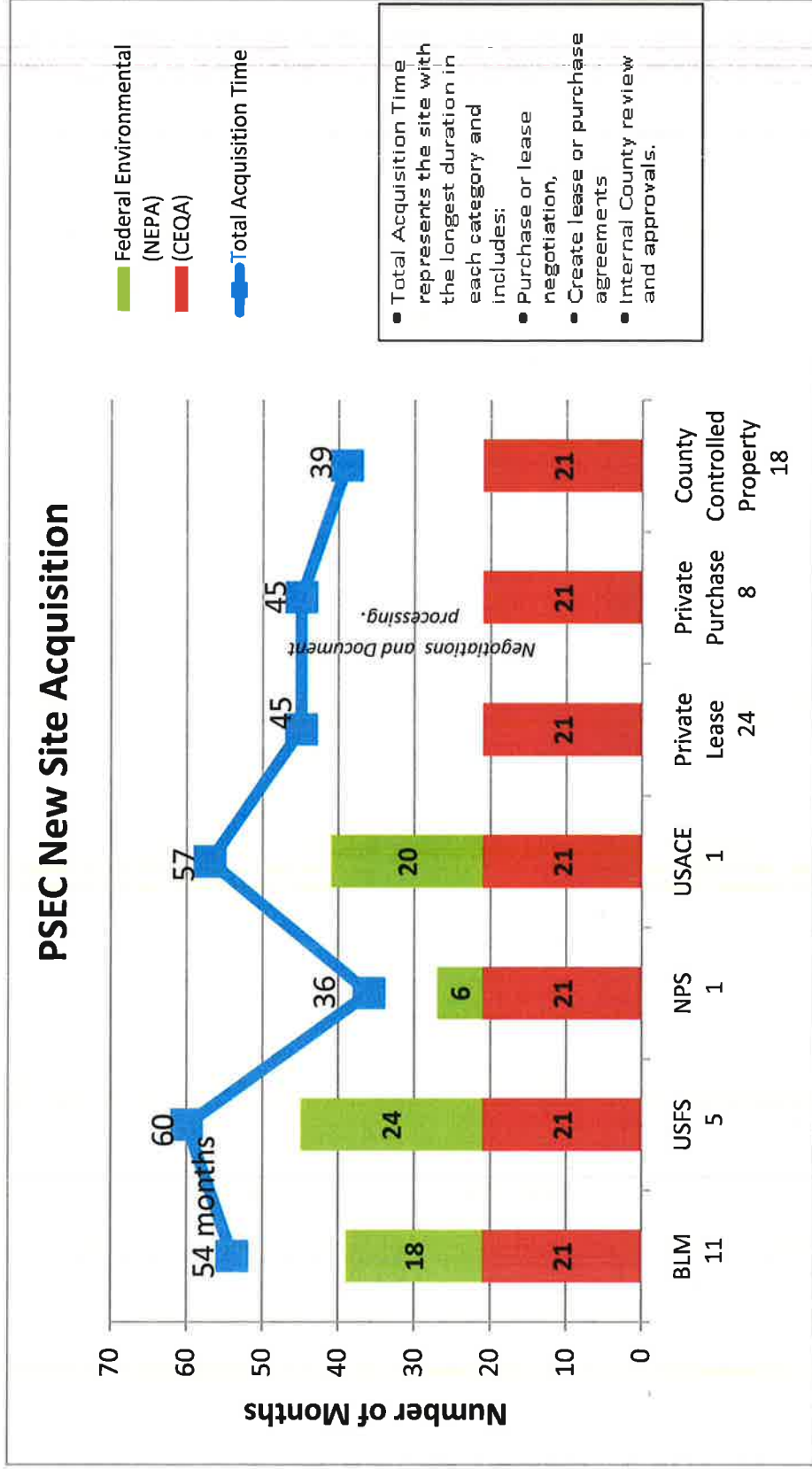
Following is a list of the Enhanced Coverage Sites and the general vicinity where they will provide additional coverage:

1. Billy Goat; will provide coverage in the Sage, Anza Cahuilla IR, HWY 79 and Hwy 371 area.
2. Box Canyon; will provide primary coverage along Box Canyon Road in the City of Mecca.
3. Lake Hemet; will provide coverage in the Lake Hemet campgrounds, Garner Valley, Hurkey Creek Park and surrounding trails and campgrounds.
4. Midland; will provide coverage in the Midland areas.
5. Palen McCoy; will provide coverage in the Palen McCoy area.
6. Palo Verde; will provide coverage in the southeastern portion of the county.
7. Road 62; will provide coverage in the HWY 62 at Road 177 and surrounding areas.
8. Toro Peak; will provide coverage in the Santa Rosa mountains.
9. Snow Peak; will provide coverage in at San Jacinto Peak, HWY 243 and nearby valleys and canyons.

The Steering Committee recommends approval of Enhanced Coverage sites to provide portable radio coverage to the greatest degree possible achievable throughout Riverside County. There will be a Form 11 on a future Board agenda seeking approval for these items.

**OUTSTANDING ISSUES AND RISKS**

Site acquisition has been a risk to the project from the onset. The chart below depicts the length of time required to acquire sites by category of ownership. The Federally controlled sites have by far been the most difficult to acquire.



### **Site Acquisition:**

- Caspers Park in Orange County is the alternative site for Rancho Carrillo. The Rancho Carrillo community placed a great amount of pressure on the Forest Service to deny the county request for a site on Forest Service land adjacent to their community. Caspers Park is delayed while we go through the Orange County Parks right of entry and site lease process. The first meeting with Orange County Parks was September 2010. The EDA real estate team provided the information requested by OC Parks needed for a decision. During a follow up meeting in March 2011 OC Parks has not acted on the request. Instead, they are asking for additional information. Park staff is showing very little interest in cooperating with the EDA Team.
- Due to projected delays resulting from legal actions and subsequent additional legal fees associated with the condemnation of the preferred Timoteo site, PSEC is pursuing a long term lease of an adjacent parcel. The alternate site is 100 feet lower in elevation than the preferred site. There will be additional expense for increasing the tower height at the new location, but less than the legal fees and the project will continue as scheduled.
- Big Maria, an existing radio site in the hills above highway 95 north of Blythe. The original plans were a remodel of this site, replacing the 30 year old shelter, and strengthen the existing tower. The site is leased from the BLM and due to archeological concerns raised by Native American tribes in the area the BLM will not allow the construction activities needed to remodel the site. A site has been located in Arizona on land owned by the CRIT. They have tentatively agreed to a lease agreement. There will be additional expense for this relocation; the final costs are being developed.
- Environmental impacts continue to delay construction at several sites.
- Commercial power providers have very bureaucratic processes that must be followed in order to bring power to sites.

Appendix A provides a list of 68 radio sites that will ultimately support the PSEC system.

**CHANGE ORDERS:**

In November of 2010 the Steering Committee approved change orders for a total of \$872,267. Following is a breakdown of the costs:

<b>Description</b>	<b>Cost</b>
Installation of ground connection shields	\$22,648
Additional Bollards on outside of propane tank at Banning. Building code requirement.	\$21,295
San Bernardino permit fees for Joshua Tree	\$16,498
Modify propane tank enclosure at Corona	\$10,021
Ranger Peak dullyfing of the tower, shelter, and fence. Required by Forest Service.	\$16,408
Redesign Cajalco site required by MWD.	\$9,147
Pavement of Line road required by CALTrans.	\$74,785
Dullyfing tower, fence and shelter at Red Mountain. Required by the Forest Service.	\$13,254
Blue Mountain power re-routing required by SCE.	\$100,126
Providing power at Temescal	\$99,515
Temporary fence at Rice requested by BLM to protect land on other side of road	\$4,234
Gray microwave dishes required by Forest Service.	\$15,390
Vaquero retaining wall constructed as a requirement of the water district.	\$63,088
Glen Avon retaining wall as required by the water district.	\$94,633
Diesel fuel tank at Glen Avon requirement of JCSD.	\$81,505
Diesel fuel tank at Sunnyslope, a requirement of JCSD.	\$81,505
Belle Mountain Tower painting/acid wash, requirement of the National Park Service.	\$24,319
TLMA road grading credits	
Leona	(\$299)
Morongo	(\$12,865)
Temescal	(\$2,288)
Vaquero	(\$22,195)
Mt David	(\$10,942)
Spring Hill	(\$16,592)

Santa Rosa Pk	(\$3,310)
Elsinore Pk	(\$63,535)
Step down transformer for Vaquero Site due to SCE power distribution 240 vs 207 AC	\$4,179
Redesign of Beacon Hill for new site location, to satisfy the Norco city Counsel.	\$37,253
Cable Tray and grounding at Colorado River Dispatch	\$2,618
Margarita site redesign	\$29,688
Box Springs- staff time for the Power outage.	(\$625)
Additional Radio licenses for supplemental APX radios (license for additional radios financed with lease agreement)	\$20,106
Monopole replacement and site move of 100 ft at Sunnyslope	\$162,701
Total	\$872,267

The Steering Committee also approved the following change orders in January of 2011:

Description	Cost
North Mountain site design services	\$10,212
Quail Valley additional drive through gate, required by JCSD.	\$14,269
Snow Peak Permit Fees	\$17,000
Sunnyslope road redesign and gate move, required by JCSD.	\$6,313
Step up transformer for Mead Valley Site due to SCE power distribution 240 vs 207 AC	\$18,252
Margarita site redesign, location of site moved.	\$35,553
Step down transformer for Sunnyslope Site due to SCE power distribution something higher down to 240 AC	\$4,179
CRIT permit fees for Quail Mesa	\$10,781
Blythe power changes	\$9,025
Red Mtn Power change	\$25,218



Repair of Cactus City ceiling after exploratory opening to validate design details (details were incorrect so decision was made to change direction)	\$2,316
Credit for change back from block wall to fence at Marshall, Arlington, and Lake Mathews	(\$88,904)
Generator Exhaust pipe extension as required by EDA Design and Construction.	\$10,550
BCTC ground trenching	\$10,539
Chuckwalla tower foundation rock anchor cost	\$28,443
Chuckwalla tower foundation requiring sock anchors for holes 3 and 4	\$25,858
Hidden Valley site redesign twice extra	\$ 95,408
Credit for Windows 7 license purchase for fire 4.9 computers	(\$13,000)
Path surveys for 10 sites that towers moved	\$ 51,000
Dulify El Cariso tower required by Forest Service.	\$ 9,815
Timoteo tower extension required by move to new location.	\$ 281,818
	\$564,647

**Site Construction Cost Increase:**

Motorola did not have an opportunity to thoroughly assess the work effort at the listed in the table below. Seven of the eight sites are controlled by a Federal Agency. At the time the County did not have a right-of-entry necessary to conduct a complete inspection. Therefore, the sites were presented in amendment 1 with “rough order magnitude” ROM pricing. By agreement, Motorola would provide final pricing when the sites were available for review.

<b>EXPANSION SITE COST SUMMARY</b>			
<b>Site Name</b>	<b>ROM Price in Amendment 1</b>	<b>Forecast at Complete Discounted Price</b>	<b>Variance</b>
Belle Mountain	\$488,550	\$578,428	\$89,878
Big Maria	\$640,548	\$646,296	\$5,748
Blythe	\$734,526	\$954,997	\$220,471
Mount David	\$429,660	\$629,333	\$199,673
Red Mountain	\$546,239	\$773,538	\$227,299
Santa Rosa Peak	\$930,333	\$1,825,867	\$895,534
Santiago Peak	\$743,852	\$1,235,854	\$492,002
Whitewater	\$440,889	\$578,984	\$138,095
<b>ROM Total</b>	<b>\$4,954,597</b>	<b>\$7,223,297</b>	<b>\$2,268,700</b>

**12-Month Contract Extension Costs:**

The table below represents Motorola's request for reimbursement for the twelve month project extension. The negotiated value represents Motorola's concession for delays caused by their inability to provide the VHF frequencies for the sites located in the southwest corner of the County. The details of the concessions are captured in a future contract amendment.

The original value of the Motorola request was \$13M and the negotiated value is currently at \$4.9M. The final amounts will be presented to the Board for approval in a future report.

Types of Cost Impact	Net Extended Schedule Price to Motorola	Cost Incurred by March 1, 2011
Staffing extension for initial 9 months delay	\$2,655,518.13	\$2,389,966.31
Staffing extension for additional 3 months delay	\$2,543,937.50	\$1,695,958.33
Administrative	\$399,981.81	\$399,981.81
Subcontractor Impact	\$604,553.68	\$604,553.68
Warranty	\$1,451,678.50	\$0.00
Software	\$250,000.00	\$0.00
Risk of loss to idle sites	\$0.00	\$0.00
Loss of efficiency	\$0.00	\$0.00
<b>Total Extended Schedule Price</b>	<b>\$7,905,669.62</b>	<b>\$5,090,460.14</b>

\$12,996,129.76

**Negotiated value:**

**\$4,965,053**

As a result of the project extension the schedule has been revised. If all sites are in construction by June of 2011 Motorola and the County believe the following timeline can be achieved. The project is subject to further delays if change orders are not processed in a timeline manner.

The schedule calls for the smaller County departments to begin using the system by November of 2012 and the Sheriff to begin using the system by December 2012. If the enhanced coverage sites are adopted they will be integrated into the system based on the completion of acquisition. The following milestones reflect the enhanced coverage sites adopted by April 2011.

Milestone	Start	Complete
<b>Equipment Installations</b>	<b>03/10/2011</b>	<b>10/30/2012</b>
<b>End user radio training and key technical training</b>	<b>12/26/2011</b>	<b>12/30/2012</b>
<b>System Acceptance Testing</b>	<b>11/07/2011</b>	<b>11/02/2012</b>
<b>System Implementation</b>	<b>11/05/2012</b>	<b>12/31/2012</b>

Smaller County Departments	11/02/2012	11/26/2012
Sheriff	11/27/2012	12/31/2012
<b>Punch list and Finalize Documentation</b>	<b>01/01/2013</b>	<b>01/21/2013</b>
<b>Radio Technical Training</b>	<b>01/15/2013</b>	08/30/2013
<b>Enhanced Coverage 9 site phase</b>	<b>03/22/2011</b>	<b>01/21/2013</b>
<b>Acceptance Test</b>	<b>06/29/2012</b>	<b>11/02/2012</b>
<b>Cut-Over</b>	<b>11/05/2012</b>	<b>12/31/2012</b>
<b>Finalize</b>	<b>01/01/2013</b>	<b>01/21/2013</b>

All issues and costs described above will come before the Board for individual approval as the negotiations with Motorola and further opportunities to bring costs down are exhausted.

#### PROJECT BUDGET:

In June of 2010, The Board of Supervisors approved the PSEC Steering Committee recommendation to lease purchase all radios to ensure the continual replacement of equipment to support public safety and other critical governmental services. By entering into a lease agreement, the overall PSEC project implementation contract with Motorola was reduced by \$14,180,714.09 and this money was moved to the PSEC contingency fund at the direction of the Chief Financial Officer. Additionally, the project avoided a net increase of \$9.2 million for the additional needed radio units.

The result of entering into the lease agreement set the financial obligation for the radios directly to the subscribers (users) and brought an immediate cash relief to the overall project. This cash savings can be used to address the issues as list above.

Following is a chart of anticipated expenses and expense paid through March 31, 2011. The final dollar amounts will be presented to the Board for approval in a future report. The chart also shows available cash balance to support the project.

<b>Estimate of Total System Cost</b>	\$148,300,000
<b>Subscriber Lease</b>	\$14,180,714①
<b>Undesignated Project Funds</b>	(\$14,180,714)
Site Acquisition Delay Costs	\$351,858
Motorola Contract Extension	\$4,965,053②
Enhanced Coverage	\$2,656,001
Additional Radio Lease Payments	\$7,322,229

Change Orders	\$5,997,850
Narrowbanding for Fire Department	\$1,500,000
Public Safety InterOP Comm. Grant Fund	(\$604,089)
911 Communication upgrades	\$1,666,667
911 Communication Upgrades	\$833,333
Verizon Circuit Costs	\$189,170
Additional Contingency Recommended	<u>\$2,100,000</u>
<b>Net Budget Activity Increase/(decrease)</b>	<b>\$12,797,358</b>

**Revised Project Budget** **\$161,097,358**

**Cash Available**

GF Designated FY11/12	\$1,565,275
GF PSEC Contingency	\$25,078,607
2007A Bond Proceeds	\$34,593,636
Nextel Rebanding Cash Credit	\$3,057,805
Nextel Rebanding Cash Credit Pt. 2	\$2,500,000
DIF Enhanced Coverage Radio Sites	\$2,656,001
Radio Replacement Fund	<u>\$6,325,707</u>
	<b>\$75,777,031</b>

❶ The original Motorola contract value of \$104.4M was reduced by entering into a lease agreement for the subscriber radios. The overall PSEC project implementation contract with Motorola was reduced by \$14,180,714.09 for the original 3,200 units and moved the responsibility of the radio purchase for these units as well as the additional growth in units through the lease arrangement. It was reported that of the ten departments that would participate in the lease through Motorola, the monthly budgeting of replacement equipment currently occurs within the Sheriff's department and RCIT; for the other eight departments, the monthly lease was to be a new cost. The Sheriff currently pays approximately \$136,000 each month into the radio replacement fund.

❷ The original value of the Motorola request was \$13M and the negotiated value is currently at \$4.9M. The final amounts will be presented to the Board for approval in a future report.

### **Radio System Operational Support Costs**

The current MACOM radio system includes 26 radio sites that support both voice and data using an older technology circuit board switch system. The new Motorola system will include 68 new or remodeled radio and high performance data sites; 76 total locations with two master sites and dispatch centers; 101 Fire facilities, 52 high priority buildings. The PSEC system will be comprised of two separate networks (voice and data) and is based upon state of the art computing platforms (servers) to make calls, route data, and provide interoperability.

The PSEC system will be the first system operational in the nation that utilizes multiple frequencies, including 700MHz, 800MHz, VHF and the latest in Motorola land mobile radio technology. There are no other governmental agencies that have implemented a system of the size and scope of Riverside County's – due to the sheer size of our county's boundaries and the technology being deployed.

The PSEC Team has formed a Cost and Governance working group to identify the various cost models and options for managing the PSEC system once implemented. The governance group has been working with other agencies who have implemented similar radio systems to compile a list of best practices. The current MACOM radio system was designed to support Riverside County Sheriff exclusively and is solely supported by County radio engineers and technicians; the new PSEC system will provide regional support for Riverside County and many of the law enforcement agencies within the county. PSEC will also expand the interoperability between neighboring Counties. When complete the PSEC system will require the effort of many other technical staffs for support. The team is working to identify all anticipated costs to support the system.

Identifying new support costs for the new system first entails identifying the base operation cost for the voice, data, and microwave support. Then integrating costs for new services such as middleware and 4.9 wireless. Base costs include all communications site expenses such as leases, utilities, fuel and fuel delivery charges, HVAC maintenance, building infrastructure maintenance, road access, emergency generator maintenance, UPS maintenance, EDA technical support costs, bio-hazard mitigation, AQMD and EPA annual fees, perimeter and access security, weed/brush abatement, and system reporting services.

Base costs also include maintenance and support for the county's Alcatel MDR-8000 microwave network that will continue to exist, vehicle fleet costs, maintenance and support for conventional and interoperability radio network, Radio IP support, dispatch console support, and maintenance and support for all electronic equipment in County vehicles and patrol cars, to include mobile data computers, HPD modems, 4.9 GHz modems, data cellular modems, mobile radios and GPS devices.

These base costs exist with the current radio system in place and will continue when the new system goes live. From this base, the costs and support of the new system will be built upon.

County staff will be required to support the base operations, however support of the new system components could be provided by county staff, Motorola, or a combination thereof. The team is evaluating all options to identify the most cost efficient support of the new system. During FY11/12, a new rate will be established through the Cost and Governance Working group to support the new system and presented to the PSEC Steering Committee. The rate will then be submitted to the Auditor Controller and the Executive Office for review and approval. Departments will be advised as soon as possible of the magnitude of the rate. The new radio system operational support rates will be implemented in FY12/13 when the radios become fully operational.

### **ACCOMPLISHMENTS**

The project team has completed the following milestones:

- Radio equipment for the original 70 sites was staged and tested at the Motorola Schaumburg, IL facility.
  - The list of equipment includes:
    - Microwave systems
    - Radio systems
    - High Performance Data systems
    - 4.9 wireless hotspots
  - All mobile and portable subscriber units have arrived at the Motorola warehouse.
    - Mobile and portable subscriber unit definitions have been developed
    - Sheriff deputy focus group evaluated new subscriber unit definitions and have accepted the design
    - Vehicle mobile radio installation requirements with antenna placement are complete
    - Vehicle radio installation sites identified and reserved
  - Completed the construction of forty-four sites
  - Radio equipment is installed and optimized at forty-four sites
  - The two master sites are operational

- Infrastructure Equipment is installed at five dispatch locations
  - Microwave and radio antenna are installed at forty-four locations
- Completed the installation of all 130 4.9 wireless hotspots at Fire Stations and Sheriff Stations.
- Completed Enhanced Coverage Sites Design Review
- Completed three years of Rebanding negotiations with Sprint Nextel, the FCC, and Motorola resulting in a \$6,085,525 credit to the County.
- Completed four year negotiations with the Bureau of Land Management, Forest Service, and USACE
- Radio basics training course complete and training started

APPENDIX A

PSEC Radio Site List

	Site Name	Current Owner	Purchase/Lease
1	Cactus City	BLM	Lease
2	Chuckwalla	BLM	Lease
3	Indio Hill	BLM	Lease
4	Whitewater	BLM	Lease
5	Avocado Flats	BLM	Lease
6	Black Jack	BLM	Lease
7	Corn Springs	BLM	Lease
8	Rice	BLM	Lease
9	Road 177	BLM	Lease
10	Vidal Junction	BLM	Lease
11	Wiley's Well	BLM	Lease
12	Alessandro	COR	County Owned
13	Banning	COR	County Owned
14	Black Rock	COR	County Owned
15	Box Springs	COR	County Owned
16	Hemet	COR	County Owned
17	Indio Prime	COR	County Owned
18	Mount David	COR	County Owned
19	Perris	COR	County Owned
20	Riverside CAC	COR	County Owned
21	Santa Rosa Peak	COR	County Owned
22	Arlington	COR	County Owned
23	Blythe	COR	County Owned
24	Brookside	COR	County Owned - TLMA
25	Homeland	COR	County Owned
26	Leona	COR	County Owned
27	Mead Valley	COR	County Owned
28	Mecca Landfill	COR	County Owned
29	Menifee	COR	County Owned
30	Big Maria (Quail Mesa)	Lease	CRIT
31	Edom Hill	Lease	Tower Mgmt Co
32	Marion Ridge	Lease	PCWD
33	North Mountain	Lease	Lease from Private
34	Paradise	Lease	Crown Castle
35	Black Eagle	Lease	Kaiser
36	Cajalco	Lease	MWD



37	Corona	Lease	CNUSD
38	Estelle Mountain	Lease	RCHCA
39	Glen Avon	Lease	JCSD
40	Green River	Lease	CORPS
41	Hidden Valley	Lease	CRIT
42	Iron Mountain	Lease	MWD
43	Joshua Tree	Lease	ATC
44	Lake Matthews	Lease	WMWD
45	Line	Lease	Homes 4 Less, Inc.
46	Margarita	Lease	Lease from Private
47	Redondo Mesa	Lease	RCWD
48	Spring Hill	Lease	Navy
49	Sunnyslope	Lease	JCSD
50	Timoteo	Lease	Lease from Private
51	Vaquero	Lease	RCWD
52	Winchester	Lease	Lease from Private
53	Belle	NPS	NPS
54	Rancho Carrillo (Caspers Park)	OC Parks	Lease
55	Beacon Hill	Purchase	County Owned
56	Blue Mountain	Purchase	Purchase
57	Clinton Keith	Purchase	Purchase
58	Lake Riverside	Purchase	Purchase
59	Marshall	Purchase	Purchase
60	Morongo	Purchase	Purchase
61	Quail Valley	Purchase	Purchase
62	Ridge Road	Purchase	Purchase
63	Temescal	Purchase	Purchase
64	Elsinore Peak	USFS	USFS - Cleveland
65	Red Mountain	USFS	USFS - SB
66	Santiago Peak	USFS	USFS - Cleveland/ATC
67	El Cariso	USFS	USFS - Cleveland
68	Ranger Peak	USFS	USFS - SB

## Enhanced Coverage Sites

<b>1</b>	<b>Billy Goat</b>	Lease	Private
<b>2</b>	<b>Box Canyon</b>	BLM	BLM
<b>3</b>	<b>Lake Hemet</b>	Lease	LHWD
<b>4</b>	<b>Midland</b>	BLM	BLM
<b>5</b>	<b>Palen McCoy</b>	BLM	BLM
<b>6</b>	<b>Palo Verde</b>	BLM	Private
<b>7</b>	<b>Road 62</b>	BLM	BLM
<b>8</b>	<b>Snow Peak</b>	Lease	Private
<b>9</b>	<b>Toro Peak</b>	Lease	Tribal