

MARIN EMERGENCY RADIO AUTHORITY

c/o Novato Fire Protection District

95 Rowland Way, Novato, CA 94945

PHONE: (415) 878-2690 FAX: (415) 878-2660

WWW.MERAONLINE.ORG

DATE: June 19, 2019

TO: Measure A Citizen's Oversight Committee

FROM: Dave Jeffries, Deputy Executive Officer for the Next Gen Project

SUBJECT: AGENDA ITEM B: Update on Status of Next Gen System Project and Budget

Recommended Action: Review, discuss and accept report.

Background:

We are currently in Customer Design Review (CDR) with Motorola. MERA is represented in these discussions by our Federal Engineering Project Manager, David Mortimer, MERA Operations Officer Ernest Klock and me, supported by additional County and Federal Engineering staff, as needed. We have also started the Environmental Review process. A few key issues:

- 1) Project Schedule – We anticipate a revised project schedule from Motorola following the CEQA process. Once the CEQA process has been completed, we should be able to more accurately identify schedule milestones. The CEQA process has provided us additional time to work through the remaining Customer Design Review items. Contract Change Order #11, described below, is anticipated to reduce the final project schedulable by approx. eight months.
- 2) California Environmental Quality Act (CEQA) – MERA has completed the CEQA Scoping Period. MERA is preparing a draft Subsequent Environmental Impact Report (SEIR) that will also be available for public comment. Following that comment period, a Final SEIR will be developed and provided for public comment followed by the MERA Governing Board considering the Final EIR later this year. At this point, we are reviewing the final draft sections of the Draft SEIR. We anticipate release of this document in July 2019.
- 3) Low Income Senior Homeowner Parcel Tax Exemption – We completed our annual process of advertising this exemption that is part of the Measure A Parcel Tax Measure. The first media release was distributed on 03/11/19 with additional releases in April and May 2019. This exemption, because it is income based, must be applied for annually by June 1.
- 4) MERA Media Updates – In March 2019, the Marin IJ published an article, editorial cartoon and editorial regarding the MERA Next Gen project. Those articles and the public comments that resulted are attached for the Citizen Oversight Committee's review and discussion. In addition, information provided to the MERA Boards regarding media contacts is also attached for review and discussion.

5) Overview of Change Orders to Date:

- a. Note – The only update to this list is an update on CCO#8, that is now scheduled for review by the NGPOC on 06/26/2019.

CCO#	Title / Description	Cost	Status	Timing
1	Fire Station Alerting	\$2,777,880	Approved 06/28/17	Project - \$1,912,000 SUA - \$888,888
2	Modify EOF Power Design	No Cost	Approved 09/27/17	N/A
3	Technician Training Modification	No Cost	Approved 09/27/17	N/A
4	New Motorola System Engineer	No Cost	Approved 09/27/17	N/A
5	Tiburon/Mill Valley Equipment, M3Core, PA Functionality	No CCO Cost, but \$700,000 in MERA costs.	Approved 10/24/18	No Payment Milestones
6	Sonoma Mountain and Site Readiness	\$501,615	Approved 10/24/18	Payment Milestones 20% - CDR Complete 45% - Shipment 25% - Installed 10% - Final System Acceptance
7	AES/DES Encryption, Radio Management, OTAP, Wi-Fi reprogramming	\$631,403	Approved 11/28/18	Payment Milestones 100% - Upon Delivery Est. Q2, 2022
8	Multi-Protocol Label Switching (MPLS) for Microwave	To Be Determined	NGPOC on 06/26/19	Not yet determined
9	Equipment Spares (7 Items) – UEM and Zone Watch Licenses, Redundant Voice Logger Equipment, Jail Repeater BDA Backup Power, Dispatch Console Speakers, Upgrade Pagers to TDMA, NAS Backup Server, Spare VMS Server	\$214,174	Approved 10/24/18	Payment Milestones 20% - CDR Complete 45% - Shipment 25% - Installed 10% - Final System Acceptance
10	Radio Accessories and Portable Chargers	\$3,528,384	Approved 12/06/18	Payment Milestones 100% - Upon Delivery Est. Q3, 2021
11	Early Mobile Radios	\$423,313	Approved 12/06/18	Payment Milestones 100% - Upon Delivery Est. Q3, 2021

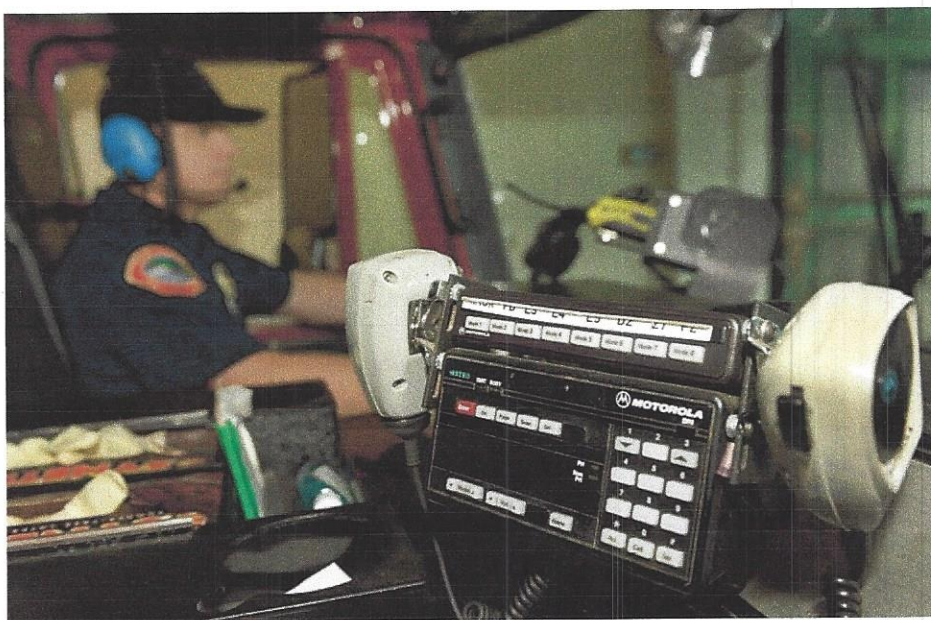
- 6) Project Budget – The MERA Budget and Expenditure Summary has been updated and is attached for your review.

ATTACHMENTS:

- 1) Marin IJ articles from March 2019 (13 pages)
- 2) MERA Media Contacts Update: 03/25/2019 (2 pages)
- 3) MERA Budget and Expenditure Summary, Updated 06/17/19 (1 page)

NEWS > LOCAL NEWS

Marin emergency radio project plagued by delays



A dash-mounted public safety radio used inside of San Rafael Engine 51. (Robert Tong/Marin Independent Journal) 2017

By **MATTHEW PERA** | mpera@marinij.com |

PUBLISHED: March 25, 2019 at 5:10 pm | UPDATED: March 25, 2019 at 6:27 pm

The planned \$40 million overhaul of Marin's outdated emergency radio system, which is set to close coverage gaps for firefighters in some of the county's wildlands, is at least three years behind schedule, officials said.

Rollout of the new system was initially scheduled for this year. But several setbacks have pushed the project's completion to 2022 at the soonest, said Richard Pearce, board president for the Marin Emergency Radio Authority and chief of the Tiburon Fire Protection District.

"We were very ambitious with our timeline," Pearce said. "But these delays have really caused us some issues."

The first setback came when a radio frequency oversight committee raised concerns about the project design. The committee, a regional adviser to the Federal Communications Commission, said some planned antennas could interfere with radio signals in other nearby jurisdictions.

Designers were forced to modify the project to address those concerns, which pushed the timeline back several months for the Marin Emergency Radio Authority, commonly known as MERA.

Initial plans called for 12 antenna sites, five of which would be new. The latest iteration of the design includes 10 existing sites and eight new ones. Five existing sites will be decommissioned.

[View this document on Scribd](#)

The radio authority hit another roadblock when a review of its contract with Motorola Solutions revealed several omissions. The contract was signed in 2017 with approval from the county Board of Supervisors. Motorola's design was the only one submitted when a request for proposals was sent out.

The signed contract included a cost for hundreds of new radios that will be used by emergency personnel. But the agreement made no mention of chargers for those radios.

"That was in dispute and had to be resolved by a change order," said Maureen Cassingham, the authority's executive officer.

The contract also assumed the radio authority would get the antenna sites ready for installation, pushing that work off Motorola's plate. But that was a discrepancy for the authority, among several others.

"I wouldn't call these misunderstandings, but disputes," Cassingham said. "We made a series of change orders to the contract that has required additional time to resolve these issues."

Changes to the Motorola contract increased the initial \$34.3 million cost by about \$5.3 million. The authority has also opted for an extended, 15-year warranty policy on the system, which will cost an additional \$9 million. But the project is still within its budget, according to Pearce.

The system will be paid for with money generated by a 20-year parcel tax that Marin voters approved in 2014. The tax, which costs about \$29 per household annually, is expected to generate more than \$60 million in revenue.

With the contract and a revised plan for antenna sites hammered out, the authority expects to release an environmental impact report for public comment next month, according to Cassingham.

Preparing the report, which was originally scheduled for release last year, took longer than anticipated, Cassingham said.

"This is a very extensive and very thorough (environmental impact report) that has to consider not just the reuse of existing sites but the new sites too," she said. "It's not your average report, where you go in and look at a very site-specific project."

Comments on the report will be accepted for 45 days following its release. The authority will then review any concerns raised and attempt to resolve them. Potential concerns could include impacts on plant and animal species surrounding antenna sites, aesthetics, health concerns related to radio frequencies and impacts on cultural sites.

'Second time around'

The radio authority was formed in 1998 to plan, finance, manage, own and operate the county's emergency radio system. It is governed by a 25-member board of directors appointed by stakeholder agencies throughout the county. The same year it was formed, the authority signed a contract with Motorola to design and build its current radio system. The project was met with numerous lawsuits, which for years tied it up in legal battles.

The authority installed its first radios connected to the new system at the San Rafael Police Department in January 2004, but at the time was still working through legal challenges to build some proposed antenna sites.

A state appeals court in August 2004 overturned a Marin Superior Court decision that granted Tiburon a stop-work order to halt construction of an antenna site on Mt. Tiburon. The Tiburon court case had been among the authority's greatest legal challenges.

Cassingham hopes what the radio authority calls its "next generation" system revamp won't meet the same resistance.

"I don't think this will happen the second time around," she said. "But I think it's possible that someone could pose a challenge to the (impact report)."

Officials hope the overhaul will be a long-lasting upgrade to an antiquated system. With the advent of new technologies, manufacturers are no longer making parts compatible with Marin's system, so fixing broken hardware in recent years has been a challenge. The radio authority has solicited parts from other jurisdictions that have upgraded their systems and sold off old equipment. Some have been purchased through eBay.

"It's like limping your cellphone along for that little extra period of time before you get a new one," said Jason Weber, chief of the Marin County Fire Department.

The new system, which will be controlled by software Cassingham describes as light years ahead of what the authority is currently using, is expected to address some inefficiencies that have been a challenge for emergency crews.

The current system has a capacity limit for users and, in extreme circumstances, gets overloaded with radio traffic. Officials have installed a backup system to combat the issue, but the new technology should eradicate the problem.

Though it won't be perfect, officials say the "next generation" radio will expand coverage for firefighters working in some of Marin's most heavily forested areas.

With the threat of wildfire in Marin growing increasingly worrisome for many residents in the wake of several deadly and destructive blazes tearing through nearby communities, fire officials are eager to get the new system in place. But Weber isn't sweating the delay.

"Instead of rushing us into something that might not meet our needs over the long term, we're taking the time to do it wisely and get it right," he said.

Tags: [MERA](#), [newsletter](#)



SPONSORED CONTENT

Bose Is Taking the Personal Listening Experience to a Whole New Level

By Bose

BOSE

These sunglasses have built-in Bose speakers for an immersive audio experience unlike any other.



Matthew Pera



ENGEL & VÖLKERS®

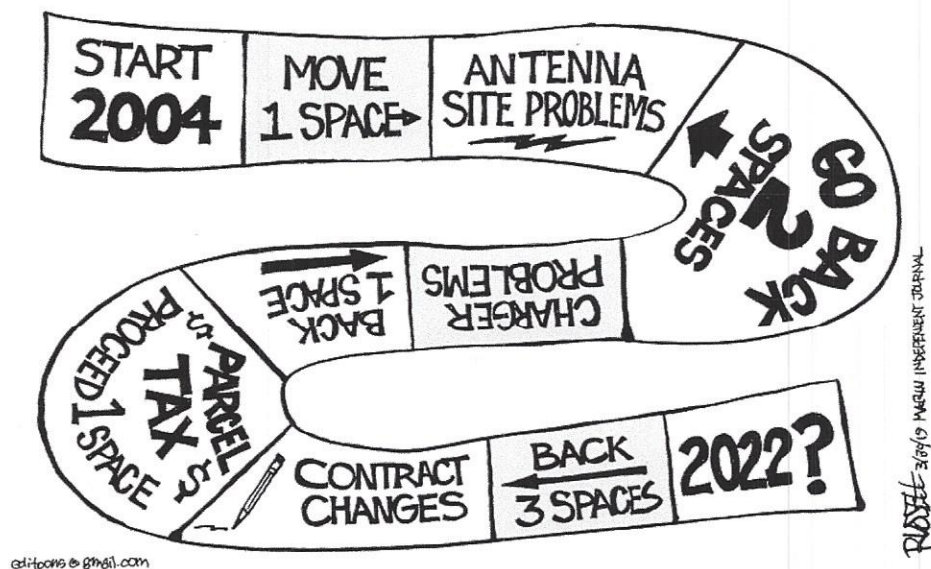
Personal touch. Global reach.

Sausalito | Mill Valley | Kentfield | Fairfax

OPINION

George Russell: MERA still trying to pass go

THE MARIN EMERGENCY RADIO GAME



Emergency radios have been a twisted game, cartoon by George Russell.

By **MARIN INDEPENDENT JOURNAL** |

March 31, 2019 at 10:00 am

The planned \$40 million overhaul of Marin's outdated emergency radio system, which is set to close coverage gaps for firefighters in some of the county's wildlands, is at least three years behind schedule, officials said. Roll-out of the new system was initially scheduled for this year. But several setbacks have pushed the project's completion to 2022 at the soonest. [Read more here.](#)

Tags: [Editorial Cartoons](#)



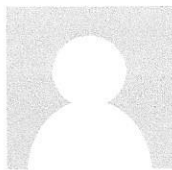
SPONSORED CONTENT

Top 5 Questions to Ask Before You Choose a Birth Center

By Sutter Health



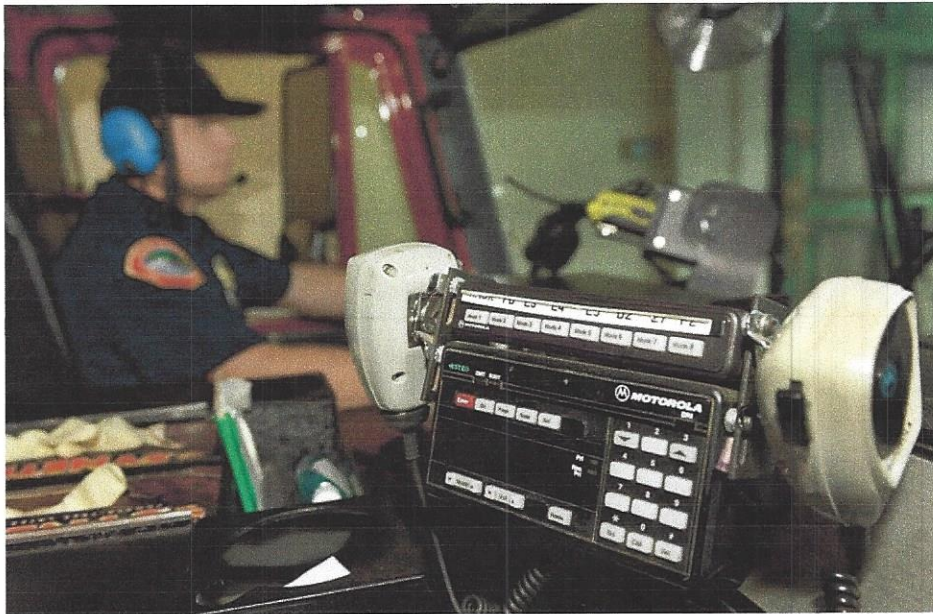
Long before your due date nears, it's a good idea to invest time to find the right birth center for your unique needs.



Marin Independent Journal

OPINION > EDITORIALS

Editorial: Let's hope MERA proceeds without further delay



A dash-mounted public safety radio used inside of San Rafael Engine 51. (Robert Tong/Marin Independent Journal) 2017

By **MARIN IJ EDITORIAL BOARD** |

March 31, 2019 at 10:00 am

MERA shouldn't be a bureaucratic acronym for Marin Eventual Radio Authority.

The emergency that the Marin Emergency Radio Authority advanced when it asked Marin voters to approve a special tax to pay for an overhaul of its emergency radio system seems to have been eclipsed by a series of costly delays.

Now, MERA's prediction to have the new radios in use possibly by 2020 has been postponed until 2022, at the earliest. Maybe 2023.

Officials leading the voter-approved move to install a new, dependable and expanded system are running at least three years behind schedule.

Voters have been promised a "next generation" emergency radio system that would close some of the problems and gaps in the current system, which was launched in 2004 and designed to put Marin emergency responders on a single platform and modern network.

Recent firestorms across Northern California have underscored the importance of emergency communications, especially among first-responders. For those police and firefighters — and those they are trying to save — effective and efficient emergency communication is a critical lifeline.

We had hoped Marin was ahead of the curve in that department with plans advancing to install a new and improved system. Those devastating fires of 2017 and 2018 should step up the importance of getting it built and in use as soon as possible.

That's what 67 percent of voters expected in endorsing Measure A in 2014, a 20-year tax — about \$29 per household — to replace the county's current system that has faced problems with coverage and difficulties in coming up with parts for repairs.

Installation of the existing system was marred by expensive delays, prompting critics of the 2014 tax plan to wonder whether voters were simply being asked to underwrite another round of costly delays.

Despite earnest assurances otherwise, that seems to be exactly what Marin taxpayers have bought.

Officials now say their original schedule was "very ambitious," that they hadn't anticipated setbacks from problems in the bidding process, and that they have had to revise plans and re-do the environmental review process for antenna sites.

We had hoped MERA's leadership, its board of 25 local representatives and its staff, would have been able to avoid delays by doing a much better job of keeping the public informed and involved about its progress. Keeping the public informed shouldn't end when voters approve a tax.

Despite a few regular public updates that mostly re-emphasized the need for the new system, officials have publicly detailed little about bidding problems, additional costs or the conclusion that they would need to alter plans, including adding more antenna sites.

That change in antenna sites opens the door to another round of environmental review.

It was the location of some of the antennas that delayed the 2004 launch. One site, next to a water tank on Mount Tiburon, was installed only after weathering a long political and legal battle from neighbors.

Officials are right to have learned from that experience and take steps now to prepare what should be a legally bullet-proof environmental review process, including ample public notice and information to avoid further political skirmishes.

But meeting that standard is going to take time.

Marin fire Chief Jason Weber says the delays will be worth it, building a better communications system that fixes most of the flaws and gaps in the 2004 equipment.

He should know, but we hope that 2022 doesn't wind up being — as the top MERA official said — “very ambitious,” as well.

Tags: [editorials](#)



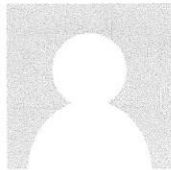
SPONSORED CONTENT

**The options for
paying for an assisted**



living or memory care
community for your
parent

By Aegis
Aegis Living



Marin IJ Editorial Board

**5 Questions to Ask Your
Digital Advertising Agency**

Get the insights

adta

Article Comments:

A. Marin emergency radio project plagued by delays, Matthew Pena, 03/25/2019

Eustace Baggs • 3 months ago

The ij acts like forty million is nothing to a county of 250,000. The amount is obscene.

Old As Dirt • 3 months ago

Where there's unions, job performance isn't important for either management or labor.

Novato Joe • 3 months ago

Nobody is manning the ship. They are all down at Starbucks discussing retirement and double dipping on pensions.

righthooktotheshin • 3 months ago • edited

Gov. Nuisance responded to this by stating: We have set up a \$4 million consulting team to make sure no fires will occur until this issue is solved

righthooktotheshin • 3 months ago

Liz Warren offered to teach the responders how to signal using the smoke from the fires
said it was a family tradition that worked at least 1/1024 of the time

realdonaldtrump • 3 months ago

Another theft of our parcel taxes with no accountability

F Chzerski • 3 months ago

Why is anyone surprised? This is normal.

bill brennan • 3 months ago

Is it even necessary?

realdonaldtrump bill brennan • 3 months ago

They said it was. Are they ever wrong?

Jon Jones • 3 months ago • edited

40 million tax dollars just doesn't get much these days.

Joe Dodger • 3 months ago

Pretty standard, poor execution by our government with no accountability. Not sure why anyone expects anything different, like on-time or on-budget...

hillclintgonegirl • 3 months ago

I posted this earlier and it was deleted, let's see if that happens again. Too much truth? - 'The planned \$40 million overhaul' should read 'the planned \$34.3 million overhaul has already gone over budget by \$14.3 million to date, and is still at least 3 years from completion, so this figure will increase further.'

Yet despite 'the threat of wildfire in Marin growing increasingly worrisome for many residents in the wake of several deadly and destructive blazes tearing through nearby communities' since Marin voters approved it 5 years ago, Marin County Fire Department chief Weber isn't sweating the delay.

"Instead of rushing us into something..." This project and the MERA 911 tax vote were studied and orchestrated years before 2014. These delays border on criminal. Where's the accountability?

samisme • 3 months ago

\$150 per resident.

David • 3 months ago

You want tires with that car?

hillclintgonegirl David • 3 months ago

Well maybe 2 or 3, please? Even retreads if you have them.

Winter Archer • 3 months ago

Somebody needs firing.

That_Jar_On_a_Hill Winter Archer • 3 months ago

Their firing, but our need.

B. George Russell: MERA still trying to pass go, 03/30/2019

Marin Thinker • 2 months ago

This would be funny except when you think of how that money could have put the golf course issue to rest, and paid for crossing guards, and a number of other things in our county.

Jon Jones • 3 months ago

Your tax dollars at play.

C. Editorial: Let's hope MERA proceeds without further delay. 03/31/2019

F Chzerski • 3 months ago

5G system?

MARIN EMERGENCY RADIO AUTHORITY

c/o Novato Fire Protection District
95 Rowland Way, Novato, CA 94945
PHONE: (415) 878-2690 FAX: (415) 878-2690
WWW.MERAONLINE.ORG

NEXT GENERATION PROJECT **Media Contacts Update: 03/25/2019**

- The MERA President was recently contacted by a local media outlet about the status of the Next Gen Project and we wanted to share some points with you.
- Media inquiries about the Next Gen System should be referred to MERA Deputy Executive Officer Dave Jeffries at dave@jeffriespsc.com or 707-483-1098. A brief email describing your contact with the media can be helpful.
- POINTS TO CONSIDER:
 - After Measure A passage in November, 2014, MERA contracted with County on 6/30/15 to "successfully implement Next Gen Project on budget and on time". Pursuant to the Measure A Tax Ordinance, the Citizens Oversight Committee, with community members from each Supervisorial District, has met regularly to review the use of Measure A Parcel Tax Funds on the Next Gen System Project.
 - The County, on MERA's behalf, contracted with Federal Engineering to develop a Next Gen System Contractor Request For Proposal (RFP), help evaluate bids and select the successful bidder as well as manage Project construction.
 - MERA secured \$33M Bond financing for the Project.
 - The County, on MERA's behalf, contracted with JRA and WRA to manage the CEQA process, develop the Subsequent EIR (SEIR), address public comments and revise the SEIR accordingly for future MERA Governing Board approval.
 - Concurrent with the CEQA process, MERA and the County have conducted numerous community outreach meetings regarding the Next Gen Project.
 - Original Project completion timeline has been delayed due to Regional Planning Committee system frequency redesign requirements and approval, Motorola contract issues and Change Orders and additional time needed for development of the County-wide comprehensive SEIR, including extensive alternative site analysis studies, a draft which is expected to be released for public review in the next 60 days. Completion of system final design and site lease finalization cannot commence until the final SEIR is approved by the MERA Governing Board.
 - Given these delays, MERA and the County obtained Motorola commitment to supporting and extending useful life of the current System until NGP cutover. The current System continues to provide effective communications to our public safety users. MERA also negotiated the ability for Members to replace

some of their current radios with radios that will work on the current and new Systems.

- Efforts to mitigate NGP schedule delays include approval of early radio programming saving 8 months, advancement of other Project tasks awaiting CEQA completion, identification of fast-tracking Project delivery opportunities with Motorola and identification of ways to expedite post CEQA site leasing and construction planning.
- MERA NEXT GEN PROJECT OBJECTIVES:
 - Install a new radio communications system as approved in Measure A by a vote of the public in November 2014.
 - Modify the existing MERA system with new 700 MHz equipment to meet revised FCC requirements by 2023.
 - Improve Marin County communications coverage to reduce 911 response times and ensure reliable communications among first responders during all disasters, and everyday operations.
 - Provide Next Gen System communications coverage to meet 97% reliability in the Motorola contracted coverage area with delivered audio quality of 3.4 or better as measured by TSB-88 testing methods.
 - Integrate the new Emergency Operations Facility (EOF) into the communications system.
 - Maintain compliance with all land use, permitting and California Environmental Quality Act (CEQA) requirements.
- PROPOSED NEXT GEN SITES:

○ Civic Center (Existing)	Sheriff's Office (EOF) (New)
○ Big Rock Ridge (Existing)	Tomales (New)
○ Mt. Tamalpais (Existing)	Coyote Peak (New)
○ Mt. Barnabe (Existing)	Skyview Terrace (New)
○ Point Reyes Hill (Existing)	Muir Beach (New)
○ Dollar Hill (Existing)	Wolfback Ridge (New)
○ San Pedro Ridge (Existing)	Mt. Burdell/OTA (New)
○ Mt. Tiburon (Existing)	Mill Valley Water Tank (New)
○ Sonoma Mountain (Existing)	
○ Stewart Point (Existing)	
- PROPOSED SITES TO BE DECOMMISSIONED:

○ Forbes Hill	Mill Valley City Hall	Bay Hill Road
○ Mt. Burdell	Mill Valley Police Station	
- More information can be found on the MERA website at: www.meraonline.org

Marin Emergency Radio Authority Next Gen Project Budget and Expenditures (Over 20 Years) Revision Date: 06/17/2019

Description	Current Project Budget 12/12/18	Posted and Approved Expenditures thru 06/14/19	Actual % Expended
1. Vendor Contract and FSA (w/o radios)	26,559,324	1,904,289	7 %
2. Vendor Radios	7,410,216	0	0 %
3. Site Acquisition/Construction/CEQA	5,300,000	685,902	13 %
4. Project implementation staffing (DPW)	2,000,000	453,708	23 %
5. FE Construction/Project Management	1,798,603	800,081	44 %
6. RGS MERA staffing	1,005,000	513,778	51 %
7. Marin DPW	25,000	11,640	47 %
8. Other Capital costs	30,000	28,966	97 %
9. MERA Legal	400,000	161,633	40 %
10. Public Outreach and Awareness	397,000	398,999	101 %
11. Admin Fees	3,200,000	607,263	19 %
12. Financing Costs	9,971,000	2,138,130	21 %
13. System Upgrade Agreement (SUA)	8,940,804	0	0 %
Project Budget:	67,036,947	7,704,389	11 %
Budgeted Project Contingency	4,000,000	(5.5% of Project Total)	
Unappropriated Project Reserve	2,225,626	(3.0% of Project Total)	
Project Total:	73,262,573		

Project Funding Sources:

Source	Annual	20 Years
Parcel Tax	3,550,000	71,000,000
Interest: Measure A Taxes (06/14/19)		159,890
Interest: Utility Parcel Taxes (06/14/19)		30,362
Interest: 2016 Bonds (03/11/19)		1,072,321
NERA (Non-Public Safety Radios)		1,000,000
Total:		73,262,573

Motorola Contract Milestone #	Percentage	Estimated Date
#1 – Completion of Kick-Off Meeting	10%	Completed
#2 – Completion of Customer Design Review (CDR)	10%	Q4 2019
#3 – Completion of Shipment of Fixed Network Equipment (FNE)	45%	Q3 2020
#4 – Installation Completion	25%	Q2 2021
#5 – System Acceptance or Beneficial Use	5%	Q4 2022
#6 – Final Acceptance	5%	Q2 2023
Total:	100%	
Other – Subscriber Equipment due upon shipment		