

CLACKAMAS C800 RADIO GROUP

BOARD OF DIRECTORS MEETING AGENDA

October 18, 2017 / 10:30AM

Meeting to be held at: CCOM - EOC 2200 Kaen Rd Oregon City, OR

Call In 800-704-9804 / Access Code: 345832#

1. Call the Board of Directors meeting to Order - Chair Captain James Rhodes
2. Roll Call of Partners: (18/10)
 - a. City of Canby
 - b. City of Gladstone
 - c. City of Lake Oswego
 - d. City of Milwaukie
 - e. City of Molalla
 - f. City of Oregon City
 - g. City of Sandy
 - h. City of West Linn
 - i. Canby Fire District
 - j. Clackamas Fire District #1
 - k. Colton Fire District
 - l. Estacada Fire District
 - m. Hoodland Fire District
 - n. Molalla Fire District
 - o. Sandy Fire District
 - p. Tualatin Valley Fire & Rescue
 - q. Clackamas County Sheriff
 - r. Clackamas County Health
3. *Approval of Minutes of: September 13, 2017 Board Meeting
4. Public Comment
5. Communications
6. Financial Report - John Hartsock
7. Committee Reports
 - a. Executive Committee - James Rhodes
 - b. Technical - John Hartsock
 - c. Citizen Accountability - John Hartsock
8. Old Business: (* Action Item)
 - a. System Management: Ron Polluconi
 - b. System Upgrade/Replacement
 - i. Project procurement - John Hartsock
 - ii. Project Status - John Hartsock
9. New Business: (* Action Item)
 - a. * Approval of Resolution 02-17 authorizing the use of Oregon LGIP for investment of C800's funds.
 - b. * Award of Contract to Alternate Power Systems for propane tank monitoring.
 - c. * Award of Contract for Replacement of the Crutcher Bench bridge
 - d. **Next Board Meeting November 8, 2017 10:30A @ CCOM - EOC**
10. Open Agenda
11. Adjournment

CLACKAMAS C800 RADIO GROUP

Board of Directors Meeting

Meeting Minutes of the September 13, 2017 Board Meeting

Location: CCOM/EOC - 22200 Kaen Rd, Oregon City, OR

1. **C800 Board Meeting Called to Order:** The C800 Board of Directors meeting was called to order at 10:30 am by Chair Captain James Rhodes.

2. **The following were in attendance:**

City of Canby / Chief Bret Smith

City of Gladstone / Deputy Chief Randy

Hopperstad / Lt Fryett

City of Lake Oswego / Capt Dale Jorgensen /

Leslie Taylor

City of Milwaukie / Chief Steve Bartol / Capt

Mark Dye

City of Molalla / Chief Rod Lucich

City of Oregon City / Chief Jim Band

City of Sandy / Chief Ernie Roberts

City of West Linn / Mike Francis

Canby Fire District / Chief Jim Davis

Clackamas Fire / Deputy Chief Ryan Hari /

Amanda Neelands

Colton Fire / Chief Richard Beaudoin

Estacada Fire / Chief Bob Morrisey

Molalla Fire / Chief Vince Stafford – (Jim Davis Proxy)

Sandy Fire / Chief Phil Schneider

TVFR / Chief Mark Havener

CCSO / Capt. James Rhodes

Clackamas County Public Health / Philip
Mason

Clackamas County / Laurel Butman / Brian
Nava

CCOM / Bob Cozzie / Cheryl Bledsoe

Motorola Solutions / Brad Steiner / Andrew
Chyterbok

C800/WCCCA / John Hartsock / Bjorn

Morfin / Ron Polluconi

Skylands NA / Daniel Kearns

3. **Approval of Minutes – August 9, 2017 Board Meeting:** Jim Davis made a motion to approve the minutes as submitted and second was made by Jim Band. A unanimous vote was cast to approve the minutes.

4. **Public Comment:** None

5. **Communications:** None

6. **Financial Report – John Hartsock:** See handout. Nothing unusual to report and budget is on track.

7. **Committee Reports:**

a. Executive Committee – James Rhodes

i. Did not meet.

b. Technical – John Hartsock

i. Met to go over the status of ongoing preventative maintenance.

c. Citizen Accountability Committee – John Hartsock

i. Will meet on September 27th at 7pm in the Milwaukie Public Safety Community Meeting room.

8. Old Business:

- a. System Management
 - i. All infrastructure preventative maintenance work for winter is in progress.
 - ii. Finished up summer preventative maintenance.
 - iii. Experienced some fall out on amplifiers at a few sites, no longer able to get parts so we had to buy a few replacements.
 - iv. Overall, things are looking good coming into winter.
- b. System Upgrade/Replacement – Ron Polluconi / John Hartsock
 - i. Project Procurement
 - 1. The Motorola contract is available for anyone who would like a copy.
 - 2. Working on completing bids for the first four sites.
 - 3. Our biggest struggle for site acquisition currently is working through the Forest Service process, but moving forward.
 - ii. Project Status –
 - 1. See above.

9. New Business:

- a. *Award of Contract to Summit Solutions Group LLC for the construction of the Sandy, Canby, Damascus, Wilsonville sites.
 - i. A motion was made by Jim Band to approve the award to Summit Solutions Group and seconded by Bret Smith. A unanimous vote was cast to approve the award of contract to Summit Solutions LLC.
- b. *Award of Contract to Motorola Solutions for the design, furnishing, and installation of the P25 public safety radio system.
 - i. A motion was made by Jim Davis to approve the award to Motorola Solutions and seconded by Bret Smith. A unanimous vote was cast to approve the contract with Motorola Solutions for the P25 radio system.
- c. **Next Board Meeting – October 18, 2017 10:30am at CCOM/EOC**

10. Open Agenda: None

11. Adjournment: Meeting was adjourned at 11:07 am by Chair Captain James Rhodes

PROJECT STATUS

Emergency Communication System Upgrade (ECSU)

C800 Project Leader: John Hartsock

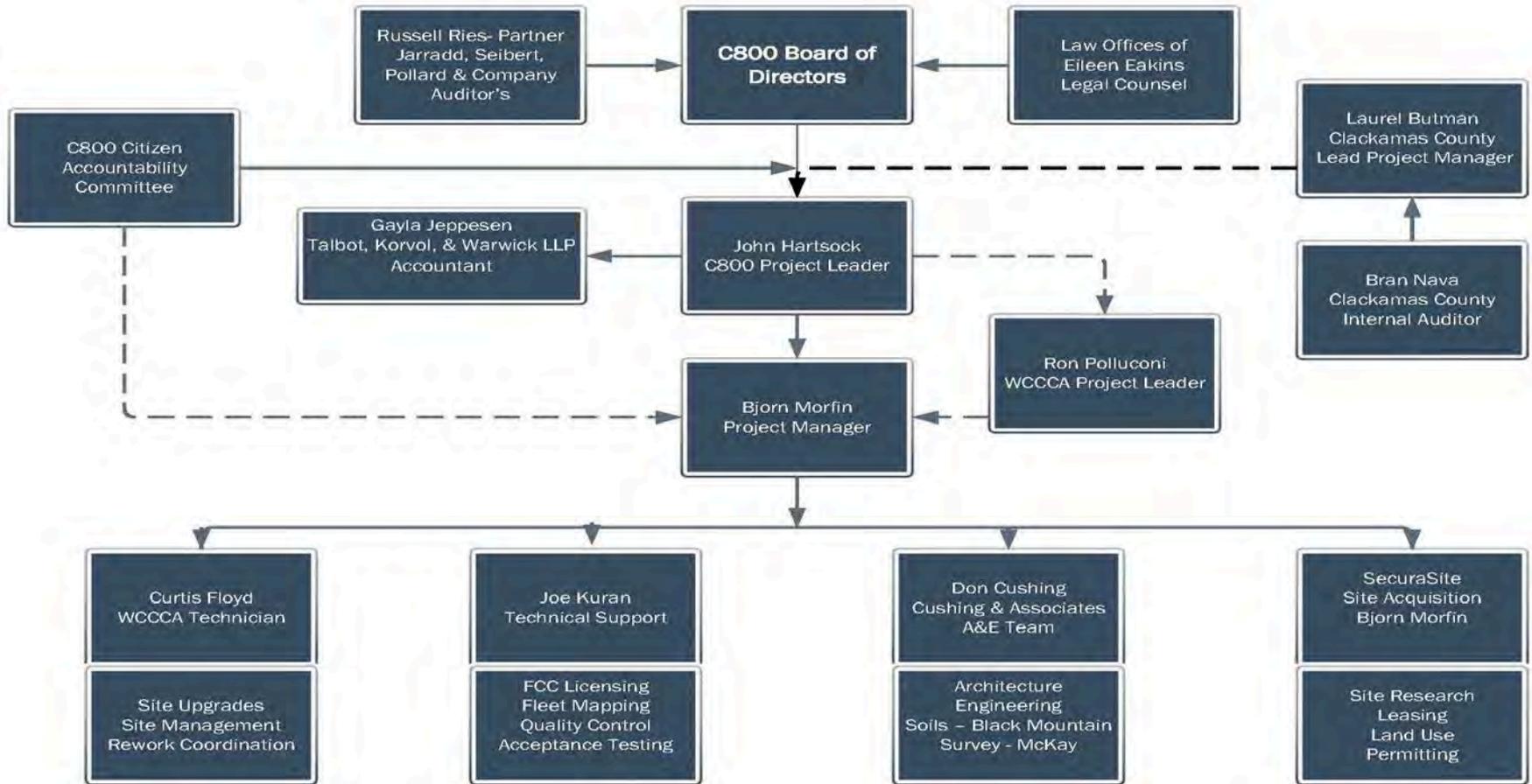
WCCCA Project Leader: Ron Polluconi

Project Manager: Ken Seymour – WCCCA/C800 Contractor

Date: October 1, 2017



C800 ECSU Project Team



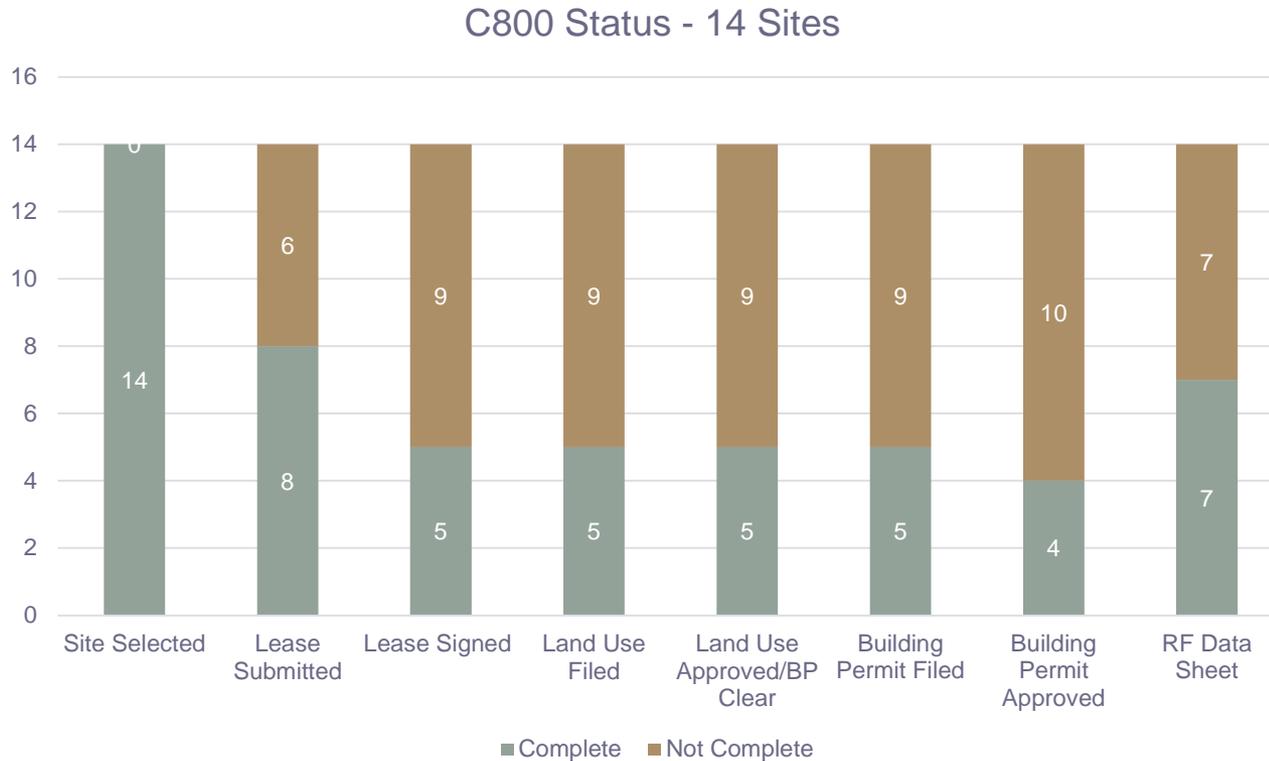
Project Status Summary

	C800
<ul style="list-style-type: none"> New Site Acquisition & Design: 	<ul style="list-style-type: none"> Barton (Carver): Site Acquisition (SA) awaiting signed lease Cooks Butte / Kerr Parkway Water Tank: City is reviewing lease agreement Damascus: Building permit available – Construction has been awarded and to begin soon. Wilsonville: Land use approved. Drawings being submitted for building permit. Construction has been awarded. Sandy: Building permit available – Construction has been awarded and to begin soon. Canby: Building permit available – Construction has been awarded and to begin soon.

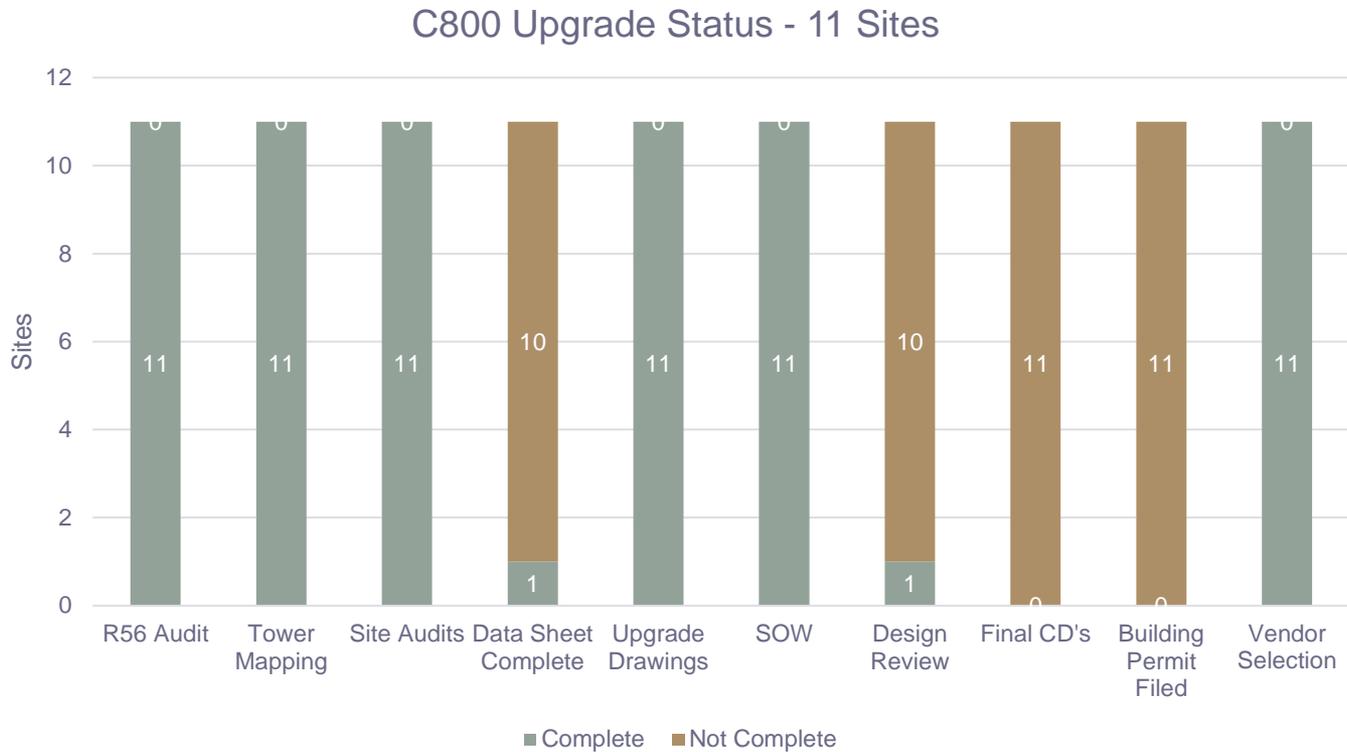
Project Status Summary

	C800
<ul style="list-style-type: none"> New Site Acquisition & Design: 	<ul style="list-style-type: none"> Crutcher Bench (BLM): Awaiting BLM approval of NEPA work and lease approval Highland Butte (BLM): Awaiting BLM approval of NEPA work and lease approval Tom Dick & Harry (USFS): NEPA work underway - awaiting USFS review. Angel Falls (USFS) Changed to Memaloose: NEPA work underway - awaiting USFS review. Oak Grove Butte (USFS): NEPA work underway - awaiting USFS review. . Whale Head (USFS): NEPA work underway - awaiting USFS review.
<ul style="list-style-type: none"> Existing Site Design 	<ul style="list-style-type: none"> Design Build Firm – Todd Hess Building Company - retained to complete design and construct the 13 existing sites. Planning work underway – construction anticipate in October.

Site Acquisition Status – C800



Site Upgrade Status – C800



Project Schedule

ID	Task Name	Duration	Start	Finish	2017												2018												2019											
					1st Half				2nd Half				1st Half				2nd Half				1st Half				2nd Half															
					Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4																
0	WCCCA_C800_Newberg Systems Upgrade 1_9_2017	979 days?	Thu 9/17/15	Tue 6/18/19	[Gantt bar spanning from Thu 9/17/15 to Tue 6/18/19]																																			
1	Hire Project Manager	106 days	Thu 3/31/16	Mon 12/5/16	[Gantt bar spanning from Thu 3/31/16 to Mon 12/5/16]																																			
2	New Site Acquisition & Design & Construction	740 days	Mon 11/2/15	Fri 8/31/18	[Gantt bar spanning from Mon 11/2/15 to Fri 8/31/18]																																			
25	WCCCA/C800 Phase IV P25 System (Voice/Data/Paging)	979 days	Thu 9/17/15	Tue 6/18/19	[Gantt bar spanning from Thu 9/17/15 to Tue 6/18/19]																																			
26	P25 LMR System and Subscribers	979 days	Thu 9/17/15	Tue 6/18/19	[Gantt bar spanning from Thu 9/17/15 to Tue 6/18/19]																																			
71	Microwave Backhaul Systems	611.3 days	Fri 7/15/16	Mon 11/19/18	[Gantt bar spanning from Fri 7/15/16 to Mon 11/19/18]																																			
78	New/Upgrade 48 VDC and Battery Backup Systems	666 days	Fri 4/22/16	Fri 11/9/18	[Gantt bar spanning from Fri 4/22/16 to Fri 11/9/18]																																			
87	Paging, Messaging Systems upgrade/replacement	550 days	Fri 1/27/17	Thu 3/7/19	[Gantt bar spanning from Fri 1/27/17 to Thu 3/7/19]																																			
96	IP based Fire Station Alerting System over IP Infrastructure	445 days	Fri 5/9/17	Thu 2/21/19	[Gantt bar spanning from Fri 5/9/17 to Thu 2/21/19]																																			
104	Video and Security systems	395 days	Thu 6/1/17	Wed 12/5/18	[Gantt bar spanning from Thu 6/1/17 to Wed 12/5/18]																																			
111	Interoperable RF Systems and Links	391 days	Tue 12/19/17	Tue 6/18/19	[Gantt bar spanning from Tue 12/19/17 to Tue 6/18/19]																																			
119	New WCCCA Disp Center Complete	0 days?	Fri 12/21/18	Fri 12/21/19	[Gantt bar spanning from Fri 12/21/18 to Fri 12/21/19]																																			

- New Site Design & Construction complete: August 2018
- Existing Sites Upgrade complete: June 2018
- System Operational Date: November 2019



C800 Radio System Upgrade Budget (1)

Project:	C800 Radio System Upgrade		
Date Original:	10/1/2015	Date Updated:	Sept 30, 2017
Project Manager:	Bjorn Morfin		

Item	Budget	Original Encumbrance	Additional Encumbrance / Change Order	Estimate to Complete	Percent Complete	Estimated Total	(Over) Under Budget	Expended
Soft Cost								
Site Acquisition Consulting - Quest	60,000	30,000	40,000	0	95.81%	70,000	(10,000)	67,069.81
Site Acquisition Consulting / Permits / Proj Mgmt - Securasite	320,000	268,500	50,000	0	57.63%	318,500	1,500	183,565.13
Site Planning A&E - Cushing	725,000	317,178	326,281	75,000	66.35%	718,459	6,541	476,706.79
Geotechnical+13:45 / Environmental Consulting - Black Mtn	200,000	89,100	61,082	50,000	52.90%	200,182	(182)	105,901.00
Survey - McKay	75,000	50,160		20,000	56.34%	70,160	4,840	39,530.00
USFS Land Use Fees	10,000	10,000		0	97.84%	10,000	0	9,783.81
Land Use Fees	25,000	268		20,000	41.34%	20,268	4,732	8,379.00
Plan Check / Permit Cost	60,000	3,000		57,000	9.59%	60,000	0	5,756.56
Printing	2,500			2,500	0.00%	2,500	0	0.00
Bid Advertising	3,500	60		3,400	12.85%	3,460	40	444.77
Materials Testing & Inspection	40,000	1,200	2,500	35,000	6.78%	38,700	1,300	2,623.75
Project Management	300,000	100,000		50,000	60.73%	150,000	150,000	91,094.10
Legal Fees	30,000	12,000	10,000	8,000	42.63%	30,000	0	12,787.60
Licensing	20,000			20,000	23.68%	20,000	0	4,735.00
Miscellaneous	30,000	6,800	2,000	4,000	57.90%	12,800	17,200	7,410.88
Sub-Total Soft Cost	1,901,000	888,266	491,863	344,900	58.89%	1,725,029	175,971	1,015,788
Construction Cost								
Site Construction	8,895,000	402,439		8,492,561	4.45%	8,895,000	0	395,409.59
Buildings	1,350,000	986,718		363,282	27.46%	1,350,000	0	370,756.60
Towers	660,000	511,282		148,718	27.08%	660,000	0	178,712.00
Generator	500,000	428,750		75,000	37.71%	503,750	(3,750)	189,970.00
48VDC	1,065,000			1,065,000	5.99%	1,065,000	0	63,816.00
Lake Oswego Antenna	18,000	17,500	0	0	100.07%	17,500	500	17,511.75
Existing Sites	100,000	6,400		93,600	6.40%	100,000	0	6,400.00
Sub-Total Construction Cost	12,588,000	2,353,089	0	10,238,161	9.71%	12,591,250	(3,250)	1,222,575.94

C800 Radio System Upgrade Budget (2)

Project:	C800 Radio System Upgrade	
Date Original:	10/1/2015	Date Updated: Sept 30, 2017
Project Manager:	Bjorn Morfin	

Item	Budget	Original Encumbrance	Additional Encumbrance / Change Order	Estimate to Complete	Percent Complete	Estimated Total	(Over) Under Budget	Expended
Equipment Costs								
Simulcast Equipment	20,726,000	\$19,571,568.00		1,000,000	15.71%	20,571,568	154,434	3,231,985.75
Master Site Equipment	in Simulcast			0		0		0.00
Console	in Simulcast			0		0		0.00
Back up Dispatch	in Simulcast			0		0		0.00
Spares	1,200,000			1,200,000	0.00%	1,200,000	0	0.00
Paging	373,000			373,000	0.00%	373,000	0	0.00
Subscriber Radios	5,000,000	2,151,904	3,542,935	(5,694,840)	107.76%	4,999,999	1	5,387,881.54
Unified Push to Talk	in Simulcast			188,000	0.00%	188,000		0.00
Asset Management	119,000			119,000	0.00%	119,000	0	0.00
Post Warranty / System Refresh	5,800,000	5,812,085		0	100.00%	5,812,085	(12,085)	5,812,058.44
Test Equipment	100,000			100,000	0.00%	100,000	0	0.00
Microwave	3,368,000	408,169		2,961,831	14.47%	3,368,000	0	487,448.01
Security System	1,364,000			1,364,000	0.08%	1,364,000	0	1,079.96
Subtotal Equipment Costs	38,050,000	27,941,724	8,542,935	1,610,991	39.17%	38,095,650	142,350	14,920,454
Bond Cost	300,000	290,372		0	100.00%	290,372	9,628	290,372
Subtotal Project Cost	52,839,000	31,473,451	9,034,798	12,194,052	33.11%	52,702,301	324,699	17,449,190
Contingency	6,161,027			6,161,027	0.00%	6,161,027	0	
Total Project Cost	59,000,027	31,473,451	9,034,798	18,355,079	29.64%	58,863,329	324,699	17,449,189.64

Premium 7,165,794

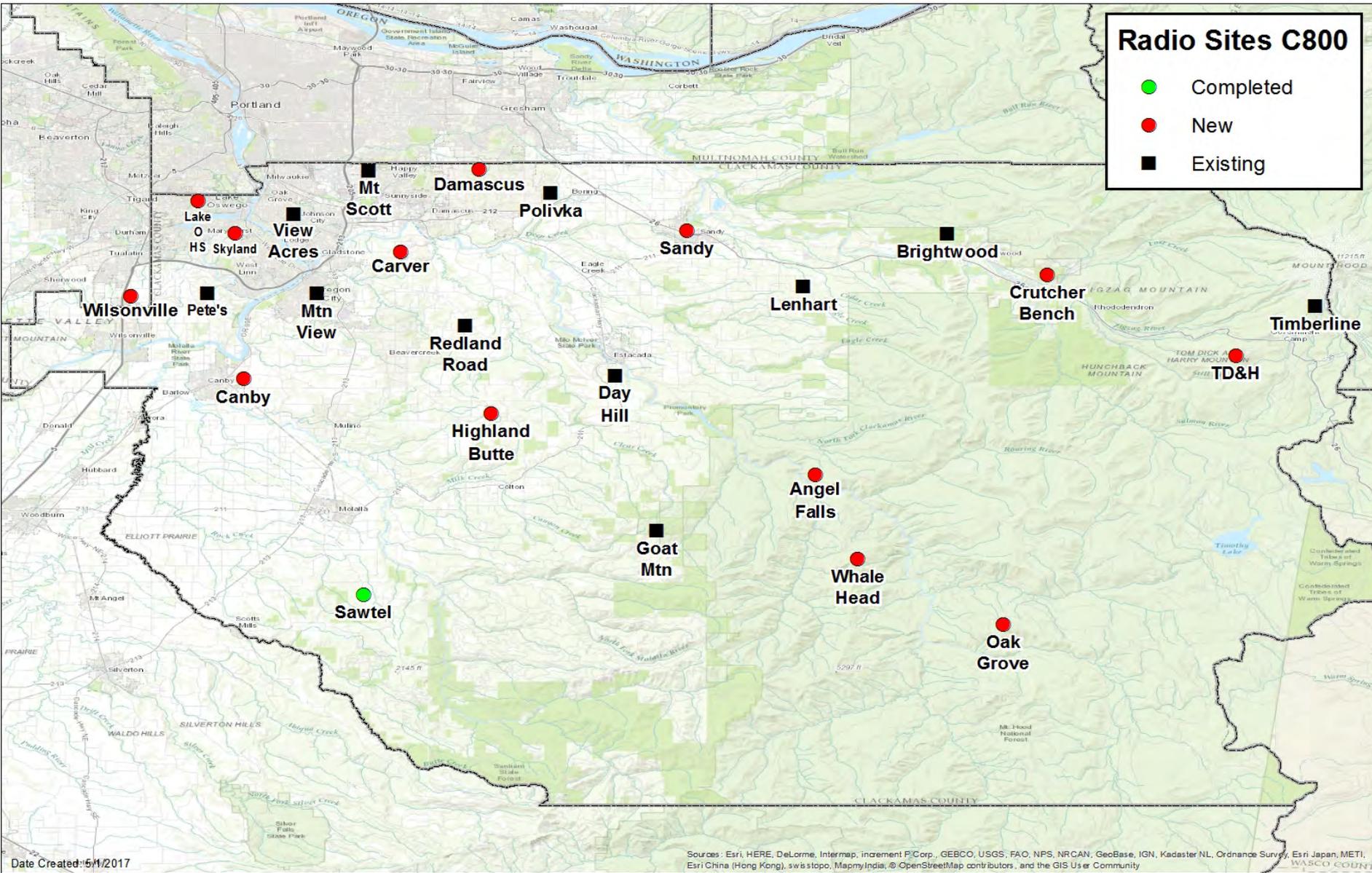
Bond Proceeds	5,845,000	Taxable
	53,155,000	Non Taxable
	59,000,000	

Q4'17 Quarterly Outlook

	C800
<ul style="list-style-type: none"> • Procurement 	<ul style="list-style-type: none"> • Receive shelters for Sandy, Canby, Damascus, and Wilsonville sites
<ul style="list-style-type: none"> • Leases & Land Use Applications 	<ul style="list-style-type: none"> • Proceed with site plans on Cooks Butte and Lake Oswego Water Tank location • Expect approval of Highland Butte & Crutcher's Bench BLM applications > move forward with Geotech and soils tests • Obtain lease and start design on Barton site
<ul style="list-style-type: none"> • Existing Site & Building Upgrades 	<ul style="list-style-type: none"> • Proceed with upgrade plans for civil work relating to shelter/generator foundation upgrades, doors, Electrical, and related site compound renovations. Obtain pricing for work.

Appendix C

C800 Site Locations



What's Happening With the Communications Upgrade Project? September 27, 2017

The Clackamas County Board of Commissioners on behalf of Clackamas 800 Radio Group (C800) referred a Capital Construction Bond Measure to replace the countywide emergency radio communications system to the voters in the May 2016 election. The measure received a 71% approval.

PROJECT SUMMARY: To create an efficient, dependable public safety radio communications system that works in all parts of Clackamas County!



When the public calls 9-1-1 for help, Clackamas County's emergency communications dispatchers utilize the C800 radio system to dispatch all fire/rescue, law enforcement, and ambulance providers countywide. Although the current system built in 2000 has worked for decades, manufacturers no longer make key parts and the communications towers are not designed to withstand the earthquakes predicted for Oregon.

The project includes:

- ❖ Converting the emergency radio system to current digital technology;
- ❖ Expand coverage to county areas that currently have none by adding 6 communication sites;
- ❖ Improve in-building coverage, so radios can function within hospitals, schools, and other large structures by adding 7 communication sites;
- ❖ Improve reliability during major disasters in part by improving 13 existing communication sites;
- ❖ Replace approximately 1000 analog radios countywide;

The Partnership:

Clackamas 800 Radio Group partnered with Washington County Consolidated Communications Agency (WCCCA) for the development of the existing system 20 years ago, and now the new system. This has been a very successful partnership producing economies of scale, operating efficiencies, and an excellent level of service for both counties public safety providers, residents, and businesses.

The City of Newberg has joined the partnership – WCCCA / C800 / City of Newberg or WCN.



What's happened since the May 2016 voter approval:

- ❖ Preliminary system design continued
- ❖ Site acquisition efforts were commenced with four of the new sites leased / two BLM and four USFS sites under consideration through the Federal Government land use process / two sites under discussion with the City of Lake Oswego / one site with lease negotiations being finalized.
- ❖ The bonds to provide funding were sold in December of 2016
- ❖ A citizen oversight advisory committee has been established and meets quarterly
- ❖ Site designs completed for four sites three of which have been permitted for construction and one in the process
- ❖ Communications buildings for the 13 new sites have been competitively bid and awarded.
- ❖ Communications towers for the 13 new sites have been competitively bid and awarded.
- ❖ Contract for the design and upgrades to the 13 existing sites has been competitively advertised and awarded
- ❖ Contract for the construction of four of the new sites has been competitively advertised and awarded
- ❖ A Request for Qualifications for the radio equipment has been developed / issued and responded to / and a vendor determined – that being Motorola Solutions, Inc
- ❖ A contract for the radio equipment was negotiated with Motorola Solutions and approved in September.
- ❖ Motorola Solutions, per their commitment, has demonstrated to the C800 Board that the pricing received was equal to or better than that provided to adjacent jurisdictions including: City of Portland / CRESA / City of Salem.

CLACKAMAS 800 RADIO GROUP

Radio Site Locations - Site Lease Cost

October 18,2017

1	Carver	12,000.00
2	Skyland	11,000.00
3	Damascus	14,000.00
4	Wilsonville	12,000.00
5	Mt Scott	0.00
6	Mt View Water Tank	0.00
7	Petes Mountain	16,150.00
8	Polivka	6,722.00
9	Sandy	12,000.00
10	View Acres	25,000.00
11	Brightwood	0.00
12	Crutcher	0.00
13	Tom Dick & Harry	0.00
14	Lindhart	0.00
15	Timberline	9,000.00
16	Canby	12,000.00
17	Day Hill	16,000.00
18	Highland	0.00
19	Redland Rd	13,178.00
20	Angel Falls	0.00
21	Oak Grove	0.00
22	Whalehead	0.00
23	Goat Mountain	24,947.00
24	Sawtell	0.00
25	LO#2	0.00
26	Canterbury	In WCCCA Cost
	Total	\$ 183,997.00



**11300 SE Fuller Rd
Milwaukie, Oregon 97222
(503) 780-4806
C800.ORG**

Board of Directors Action Request

To: C800 Board of Directors
From: John Hartsock, Manager
Date: October 18, 2017
Re: Approval of Resolution 02-17 to Utilize LGIP for Investments

REQUEST: It is hereby requested that the C800 Board of Directors approve Resolution 02-17 authorizing the use of the Local Government Investment Pool (LGIP) for investing excess funds.

ISSUE: C800 utilizes Clackamas County Bank for our checking account. This account does not pay interest. C800 maintains a balance of approximately \$200,000 during most of the year.

Staff is recommending that we invest the excess funds over a minimum balance of \$5,000 that we have on hand in LGIP. LGIP is authorized by the State Treasurer for investment of local government funds. LGIP is currently paying an interest of 1.45% daily.

FINANCE: Provides for interest payment on funds.

LEGAL: LGIP is a state authorized depository for investment of local government funds.

RECOMMENDATION: It is recommended that the C800 Board of Directors approve Resolution 02-17 authorizing the use of the Local Government Investment Pool (LGIP) for investing excess funds.

RESOLUTION 02-17

October 18, 2017

BE IT RESOLVED that the Board of Directors of the Clackamas 800 Radio Group hereby approves the use of Oregon Local Government Investment Pool (LGIP) for the investment of funds.

The above resolution statements were approved and declared adopted this 18th day of October 2018.

Captain James Rhodes, Chair



11300 SE Fuller Rd
Milwaukie, Oregon 97222
(503) 780-4806
C800.ORG

Board of Directors Action Request

To: C800 Board of Directors
From: John Hartsock, Manager
Date: October 18, 2017
Re: Issue a Purchase Order to Alternative Power Systems for LP Tank Monitoring

REQUEST: It is hereby requested that the C800 Board of Directors approve issuing a purchase order in the amount of \$64,080 to Alternative Power Systems for the furnishing and provisioning of remote LP tank monitoring systems.

ISSUE: It is critical to assure that there is adequate LP fuel at the communications sites to operate the emergency generators. The current practice has been to check fuel levels as part of technician visits. C800/WCCCA staff have determined that with the increase in the number communication sites a more automated system should be utilized to assure that the information is current.

Staff researched various solutions to this issue and located a device made specifically for this purpose. One of the systems was procured and installed at the Sawtell site as a test case. Results have met our expectations and we recommend that the units be installed at all sites.

On August 1, 2017 WCCCA staff issued a solicitation for quotations to provide and provision these units at C800's new and existing sites as a part of the Bond project. Three firms, Ferrell Gas / Blue Star Gas / Alternative Power Systems expressed interest. Only one proposal was received from Alternative Power Systems.

FINANCE: The funds are budgeted in capital outlay as part of the Bond funding.

LEGAL: A C800 Purchase Order will be utilized as approved by legal counsel.

RECOMMENDATION: It is recommended that the C800 Board of Directors approve issuing a purchase order in the amount of \$64,080 to Alternative Power Systems for the furnishing and provisioning of remote LP tank monitoring systems.