



**NEWBERG CITY COUNCIL
WORK SESSION
SEPTEMBER 6, 2016, 6:00 PM
NEWBERG PUBLIC SAFETY BUILDING (401 EAST THIRD STREET)**

WORK SESSIONS ARE INTENDED FOR DISCUSSION. NO ACTION WILL BE TAKEN ON THE AGENDA ITEMS AND NO DECISIONS WILL BE MADE. NO ORAL OR WRITTEN TESTIMONY WILL BE HEARD OR RECEIVED FROM THE PUBLIC.

- I. CALL MEETING TO ORDER**
- II. ROLL CALL**
- III. DISPATCH CENTER**
- IV. ADJOURNMENT**

Pages 1-6

ACCOMMODATION OF PHYSICAL IMPAIRMENTS:

In order to accommodate persons with physical impairments, please notify the City Recorder's Office of any special physical accommodations you may need as far in advance of the meeting as possible and no later than two business days prior to the meeting. To request these arrangements, please contact the city recorder at (503) 537-1283. For TTY service please dial 711.

CITY OF NEWBERG’S RADIO AND DISPATCH SYSTEM FOR POLICE AND FIRE

The City’s police and fire dispatch and radio system has been an ongoing topic for many years.

SO WHY IS THE COUNCIL TALKING ABOUT THIS NOW

- The City’s police/fire radio system will soon be unable to communicate with the planned technology changes to the Washington County Communications Agency.
- The costs of replacing police radios and enhancing the City communications infrastructure to continue with current partners is estimated at nearly **\$4 million**.
- The City must consider
 1. Changes in radio and emergency communications technology
 2. Less costly communications and radio system alternatives
 3. Financing strategies including reallocations of other General Fund dollars to pay for improvements and Pros and cons of new revenues sources

BACKGROUND

1. The community is rightfully proud of the professionalism, efficiency, hometown knowledge and caring record of Newberg Dispatch Center and the City Council has expressed preference to continue with a Newberg Communications Center.
2. Newberg uses the 800 Megahertz radio system (as well as Tualatin Valley Fire and Rescue, Newberg’s contract provider for the next two years) and is part of an 800 MHz regional radio partnerships of Multnomah County / Clark County, Washington / Washington County / Clackamas.
3. Replacement of current police radios and Communications system enhancements to continue operating in the 800 mhz system will be required by 2019 (to coincide with Washington County improvements) and are estimated at approximately **\$4 million (see attached draft estimate)**.
4. Commitment to upgrade and ordering of replacements will be required by the end of 2016.
5. Equipment and technology upgrades would replace approximately 50 analog radios, would enhance our Dispatch Center to meet technology changes and capabilities and install additional towers.
6. Replacement of the current system will enable first responders to engage in simultaneous conversations on the same digital platform, ensure reliable area wide signal coverage and be adaptable for data transmissions, encryption and use of text messages among first responders.
7. For earthquakes and other disasters, upgrading equipment and strengthening key facilities would improve the reliability of the emergency communications system even when a major emergency causes land line or cell phone networks to overload or fail.

Staffing	General Fund	9-1-1-Fund	Public Safety Communications Fund
11.25	7.65	1.60	2.0

Alternatives

8. Over the past twenty years there have been several conversations about consolidation of communications services within Yamhill County, partnerships with Washington County Communications, and contracting service to other communications centers.
9. Yamhill County Communication is the larger of two Public Safety Answering points for 9-1-1 and non-emergency calls in Yamhill County providing emergency and non-emergency services for 5 law enforcement agencies, 8 fire districts and 3 ambulance service areas. Given past Council preferences, there is no current estimate of the cost of joining Yamhill County Communications.
10. When considering participating in Yamhill Communications Agency, interoperability has been a concern. The ability of public safety responders to share information via voice and data communications systems, on demand, in real time, when needed is important
11. Public safety communications can occur only when the communications paths (frequencies, equipment and signaling) are compatible. Newberg and Yamhill County have systems and technologies which don't talk to one another easily Analog vs. Digital // Conventional vs. Trunked / 800 vs, 450 mhz. Yamhill County operates with a UHF 450 MHz radio system
12. First responders need to be able to communicate with one another during wide scale emergencies but also in day to day work with joint responses to fires and traffic pursuits among other incidents. When police and fire radios are on different frequencies they can't communicate directly with each other using their radios. Instead, they relay messages through Dispatch.
13. No recent effort has been made to determine ability to convince Yamhill County Communication members cities/districts to move to 800 Mhz radio system

Consolidation with Washington County Consolidated Communications Agency

In **2011**, the City received two cost estimates: transfer of dispatch services and radio services

<u>Police Dispatch</u>	<u>Radio Services</u>	<u>Total</u>
Newberg \$321,110	\$71,134	392,244
Dundee \$46,039	\$3,309	49,348
Total		438,283

* The general operating budget of WCCA has increased over 20% since 2011

*does not include radio repairs, switch over expenses and services provided by Newberg Dispatch not provided by WCCA such as warrant service, police records)

Washington County Consolidated Communications Agency Cost Estimate questions

Cost reductions?

- Possible cost sharing on cell towers (estimated cost of \$736,000)
- Eliminate fire station alerting system (\$45,305)
- Credit for recently upgraded or newly purchased radios
- Reduction in console size from 4 positions to 3 positions

FINANCIAL

Revenue (including beginning fund balance)

	General Fund	9-1-1 Fund	Public Safety Communications Fund (includes projected increase fee to \$2.50)	
General Fund (including \$44,000 from Dundee)	1,164,383			
9-1-1 State Tax		198,966		
Public Safety Fee (Fee increase to \$2.50 was included in 2016-17 budget but has not been implemented to date)			247,608	
Total				1,654,957

Expenditure

Operations

2016-17	General Fund	9-1-1 Fund	Public Safety Communications Fund	
Personnel	697311	175570	222,500	
Materials and Services	448072	18200	0	
Capital	19000			
Contingency		5196	25108	
Total	1,164,383	198,966	247,608	1,610,957

Radio Contract – Washington County Consolidated Communications (per radio)	
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Capital

Capital Fund 32

Communications –Equipment software	113,392
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Capital Fund 32

Radio replacement	153,554
Radio replacement (Fire)	96,065

How might \$4,000,000 in additional upgrade costs be achieved?

- Assumption 10 year general obligation bond to reflect equipment estimated life.
- Annual tax payment would require a vote.
- Reallocate General Fund from other services?
- Changes to Public Safety Tax. (\$5.00 increase in public safety fee would generate approximately \$500,000)

10 year general obligation bond

- Assuming 10 year bond
- 5% interest rate
- Annual payment of approximately \$509,000
- Exclusive of bond costs

City of Newberg's tax rate for 2016-17 is \$4.3827

(Estimated annual payment of a 10 year bond is \$685,000)

Next Steps?

- Refine Washington Consolidated Communications Agency cost estimate including console size, backup system (simulcast) alternatives; shared tower sites with Yamhill County or Mid-Willamette Communications, clarify credits for upgraded radio already purchased or scheduled to be purchased with 2016 budgeted funds..
- Discuss future of Yamhill communications with board or member agencies?
- Refine loan/bond costs?

Newberg

Capital and Expense Cost Estimates for Communications Systems Replacement (allocated \$\$ by year are pre-negotiated estimates)

Proposed System with Upgrades to offset P25 Coverage Limitations, Add one Site for Interoperable Comms with McMinnville (Eola Hills - Exiting communication Site)

Capital Cost Estimates for Communications Systems Replacement							
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	Project Total	
Master Site Equipment	\$ -	\$ -	\$ 80,461	\$ 241,384	\$ 80,461	\$ 402,306	Allocated
Simulcast Equipment	\$ -	\$ -	\$ 286,327	\$ 858,982	\$ 286,327	\$ 1,431,636	Direct Costs
Console Equipment	\$ -	\$ -	\$ 72,875	\$ 218,026	\$ 72,675	\$ 363,577	Direct Costs 4 positions
Backup Dispatch	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Microwave Backhaul	\$ -	\$ -	\$ 96,800	\$ 96,800	\$ -	\$ 193,600	2 Hot Standby Links
Logging Recorder	\$ -	\$ -	\$ -	\$ -	\$ 183,954	\$ 183,954	1 recorder
Generator/Commercial	\$ -	\$ -	\$ 36,656	\$ -	\$ -	\$ 36,656	1 Site (Cemetery)
48 VDC Power System	\$ -	\$ -	\$ 47,792	\$ 47,792	\$ -	\$ 95,584	2 sites (Cemetery and Eola)
Fire Station Alerting Systems	\$ -	\$ -	\$ 13,592	\$ 31,714	\$ -	\$ 45,305	Allocated
Site Alarms and Monitoring	\$ -	\$ -	\$ 21,582	\$ 64,746	\$ 21,582	\$ 107,910	Direct Costs for 2 communications sites
Broadband Infrastructure	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Commercial or First Net
Broadband controller	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	Commercial or First Net
Paging	\$ -	\$ -	\$ -	\$ 33,599	\$ -	\$ 33,599	Allocated
Unified PTT (mobile dev)	\$ -	\$ -	\$ 9,012	\$ 27,035	\$ 9,012	\$ 45,059	Allocated
Asset Management	\$ -	\$ -	\$ 2,939	\$ 8,818	\$ 2,939	\$ 14,697	Allocated
Fire Subscribers	\$ -	\$ -	\$ -	\$ 278,354	\$ -	\$ 278,354	From Motorola revised planning tables
Law Subscribers	\$ -	\$ -	\$ 308,608	\$ -	\$ -	\$ 308,608	From Motorola revised planning tables
Existing APX radio upgrades	\$ -	\$ -	\$ 29,540	\$ -	\$ -	\$ 29,540	From Motorola revised planning tables
Test Equipment	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Additional Radio Sites	\$ -	\$ -	\$ 736,943	\$ -	\$ -	\$ 736,943	Cemetery Raw Land, Eola existing site upgrade
Additional Service Vehicles	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Equipment Total	\$ -	\$ -	\$ 1,742,927	\$ 1,907,250	\$ 656,951	\$ 4,307,128	
Spares and Materials	\$ -	\$ -	\$ 46,691	\$ 38,780	\$ 672	\$ 86,143	
Total Equipment	\$ -	\$ -	\$ 1,789,618	\$ 1,946,030	\$ 657,623	\$ 4,393,271	
Project Management	\$ -	\$ -	\$ 10,782	\$ 10,782	\$ 10,782	\$ 32,346	Allocated
Contengency Equipment	\$ -	\$ -	\$ 23,812	\$ 19,778	\$ 343	\$ 43,933	
Post Warranty Support	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
System Refresh/Upgrade	\$ -	\$ -	\$ -	\$ -	\$ 383,180	\$ 383,180	Allocated
Bond Issuance Fees	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 67,938	Estimated from numbers provided at meeting 1.4%
Total Cost	\$ -	\$ -	\$ 1,824,212	\$ 1,976,589	\$ 1,051,928	\$ 4,920,668	
Operational Cost Projection for fiscal 2014 ~ 2020							
	2014/2015	2015/2016	2016/2017	2017/2018	2018/2019	2019/2020	
Projected Operating Cost as Current	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Projected Operating Cost as Proposed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
Delta - As Current vs. Proposed	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
FTE -As Current	0.00	0.00	0.00	0.00	0.00	0.00	
FTE - As Proposed	0.00	0.00	0.00	0.00	0.00	0.00	
Delta - As Current vs. Proposed	0.00	0.00	0.00	0.00	0.00	0.00	

4.76% Radio Allocation %

NOTE: Year of allocate expenses are best guesstimates not actual values or aligned with supplier terms.... Reference ONLY