

Program Description

The Communications Department ensures District-wide integration and coordination of all communication and technology applications. The department is responsible for support of the multitude of District-wide communications systems, including District-wide and site specific landline phone systems; all emergency response portable, mobile, and base station radios; cell phones and PDAs; pagers; and all mobile data computers (MDCs) in response apparatus and their requisite software and wireless communications systems. The Department budget also includes leased cellular tower contract revenue.

Budget Summary

Expenditures	2012-13 Actual	2013-14 Actual	2014-15 Revised Budget	2015-16 Adopted Budget
Personnel Services	\$ 386,591	\$ 356,487	\$ 470,761	\$ 468,571
Materials & Services	1,854,568	1,866,690	2,069,245	2,324,450
Total Expenditure	\$ 2,241,160	\$ 2,223,177	\$ 2,540,006	\$ 2,793,021

Personnel Summary

Position	2012-13 Actual	2013-14 Actual	2014-15 Budget	2015-16 Budget
Communications Supervisor	1.00	1.00	1.00	1.00
Communications Technician	2.00	2.00	2.00	2.00
Communications Program Assistant	1.00	1.00	1.00	1.00
Total Full-Time Equivalents (FTE)	4.00	4.00	4.00	4.00

2015-16 Significant Changes

Within Materials and Services, account 5301 supports expendable supplies for communications equipment, WCCCA system pagers, and phone and tablet cases and accessories. Account 5330 supports a District-wide cell phone, communications lighting, radios, and fire ground communications equipment, including \$85,400 for InMotion OMG replacement, \$25,500 for Deputy Fire Marshal and Inspector tablet replacement and new base station desksets and junction boxes. Dispatch fees reflect the charges from WCCCA (\$1,772,440) and Clackamas C800 dispatch and service fees (\$13,630). Telephone, account 5430, reflects the costs for District-wide telephone line and cellular costs.

Communications, continued

Status of 2014-15 Service Measures

- Ensure intra- and inter-agency communication operability during disasters and/or exercises.

Goal(s)/Call(s) for Action: III; VII
Service Type(s): Mandatory
Measured By: Maintain an appropriate matrix of communications requirements for use when the District is operating in Disaster Operations mode. Ensure that a comprehensive deployment plan for backup communications exists during an exercise or a real event. Provide emergency communications equipment training to all District personnel.
Status or Outcome: New employees are trained on disaster communications as part of the Fire Operations Center (FOC) orientation. Continue to identify radio training throughout the year as appropriate, such as earthquake drills, annual CPR training, and other exercises. Infrastructure will be in place, reducing staffing resources assigned to the human repeater program during disaster operations to as few as three in designated fire stations. Continue to develop and maintain COML program.

- Maintain consistent up-time of mobile data computers. Ensure critical response aids resources are updated and function as expected.

Goal(s)/Call(s) for Action: IV; VI/1; VII
Service Type(s): Essential
Measured By: Real-time monitoring and reporting on the Onboard Mobile Gateways (OMGs) performance metrics.
Status or Outcome: The OnBoard Mobility Manager (OMM) provides real time monitoring and Mobile Data Computer (MDC) connectivity to CAD. MDCs receive automatic response aids updates nightly.

- Provide technical support for and maintain the communications infrastructure, equipment, and maintenance needs of the District. Maintain a solid relationship with WCCCA. Manage policies and procedures to ensure proper operation and use of the District's communications resources.

Goal(s)/Call(s) for Action: VI/1; VII
Service Type(s): Mandatory
Measured By: Munis work orders are monitored to ensure issues are dealt with in a timely fashion. Partner with WCCCA on applicable projects and maintain active committee participation.
Status or Outcome: Communications is part of the CAD replacement team working with WCCCA to develop specs for the WCCCA CAD replacement next FY. Evaluated future mobile network options for FY16.

Status of 2014-15 Service Measures, continued

- Participate as an active partner in project management, planning, and implementation to support District-wide communications needs.

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Goal(s)/Call(s) for Action: VI/1 and 2
 Service Type(s): Management
 Measured By: Open lines of communication are experienced from inception to completion, resulting in a smooth and successful conclusion of the project.
 Status or Outcome: Partnered with IOPs to provide new wildland VHF Radios with updated templates. Partnered with EMS to successfully deploy two medic units to transport for AMR. Active partner with Emergency Management to develop emergency communications plans, staff training and infrastructure improvements.

- Monitor opportunities at the regional, state, and national levels that support efforts in the area of voice and data interoperability.

Goal(s)/Call(s) for Action: III/1; VI/1
 Service Type(s): Essential
 Measured By: Ensure regular attendance at regional meetings. Exchange information and prioritize communications needs at the quarterly communication program management meetings.
 Status or Outcome: The Communications Program Management team meets as needed to address regional, state, and national initiatives. Actively participate in the CAD replacement project meetings. Partner with WCCCA to perform a portable and mobile radio template upgrade.

- Forecast Communications expenditures and meet budgetary expectations.

Goal(s)/Call(s) for Action: VI/E; VII/E and 3
 Service Type(s): Essential
 Measured By: Provide Finance with a 15-year capital spending plan to meet District technology requests.
 Status or Outcome: Completed and posted to the SharePoint budget site.

Communications, continued

Status of 2014-15 Change Strategies

- Enhance use of station simplex protocol during disaster operations - Update the Disaster Operations Communications Protocol. Utilizing the 20 base station radios in the fire stations, eliminate the need to use Human Repeaters outside of District facilities. The plan is to use fewer human repeaters stationed in predetermined fire stations to provide repeater functions to the District on Simplex in the event of 800 MHz Trunking System failure. Simplex radio coverage in West Linn is problematic and there is the potential need for a base station radio in one of the city buildings. With the South Operating Center coming online later this year as the alternate FOC, the Disaster Operations Communications Plan will be updated.

Goal(s)/Call(s) for Action: III/1
Budget Impact: Minimal
Duration: Year 2 of 2
Budget Description: Year 1 – no increase
Year 2 – budget for recommended changes
Partner(s): Fire Chief's Office/Emergency Management
Status or Outcome: Base stations were purchased from WCCCA and will be installed at Stations 67 and 34 to provide additional resources during Emergency Operations. Antenna replacement for ten stations will be completed in FY15. Purchased and installed base station radio at West Linn City Hall to provide simplex coverage for stations 58 and 59. Continue working with Emergency Manager to update Disaster Operations Communications Plan.

- Evaluate future mobile network options – Based on the evaluation in fiscal year 2013-14, the duration of this change strategy has changed. This is a three-year plan to upgrade the District MDCs to 4G connectivity and potential replacement or upgrade of the Onboard Mobile Gateways (OMGs). The first phase is to evaluate 4G options, and test CradlePoint, along with other mobile platforms. The second phase will be to evaluate connectivity options that include vehicle telemetry. The third phase will be the recommendation for the future mobile network platform. There are many changes coming in the next two years, including CAD Replacement, Fleet Telemetry Change Strategy, and potential devices other than standard MDCs that will affect connectivity options. For these reasons, it is prudent to evaluate all of these options and extend this Change Strategy from two to three years.

Goal(s)/Call(s) for Action: VI/1 and 2
Budget Impact: Slight increase required
Duration: Year 2 of 3
Budget Description: Year 1 – R&D
Year 2 – R&D
Year 3 – budget for recommended changes
Partner(s): Information Technology, Integrated Operations, Fleet
Status or Outcome: Completed R&D of five devices and presented a five-year cost analysis for the upgrade. Worked closely with Fleet Operations to tie into the goal of adding telemetry to frontline apparatus.

Status of 2014-15 Change Strategies, continued

- Nationwide Public Safety Broadband Network - Ensure TVF&R is positioned to take advantage of the national public safety wireless broadband network initiative. This is a \$6.5 billion endeavor by the FCC to promote the next generation 9-1-1 and emergency alert systems for first responders. Additionally, the plan promotes critical infrastructure survivability. This is not intended to replace the current 800 MHz radio network, but will provide a secure, reliable, dedicated, and interoperable network for emergency responders. Communications will stay abreast of the progress and implementation of this network regionally, as well as nationally, to determine how this initiative meets current and future operational needs.

Goal(s)/Call(s) for Action: III/1; VI/1 and 2
 Budget Impact: Resource neutral
 Duration: Year 2 of 6
 Budget Description: Years 1-3: resource neutral
 Years 4-6: potential increase
 Partner(s): Fire Chief's Office/Emergency Management, Integrated Operations, Information Technology, WCCCA, BUG/BOT
 Status or Outcome: Continue to monitor activities and attend meetings, seminars, etc., as opportunities are presented.

Additional 2014-15 Accomplishments

- Code 3 and Comms install of FCO Tahoes.
- Code 3 and Comms install of DC vehicles.
- Code 3 lighting upgrades for pumper apparatus.
- Comms package installs of six new Medic units.
- Code 3 and Comms install of three CARS.

2015-16 Service Measures

Technical Services Provided	2011-12 Actual	2012-13 Actual	2013-14 Actual	2014-15 Projected	2015-16 Estimate
Mobile, portable, base station, patch	636	636	654	685	730
Mobile data computers, VRM, OMGs, and cellular connectivity devices	156	156	171	195	216
Cell phones	105	105	105	85	12
Smartphones	68	68/33 ¹	70/33	79/33 ¹	98/35 ¹
Pagers	150	150	150	150	150
Satellite phones	10	11	10	10	10
Work orders completed	585	625	294	325	325
Preventative maintenance inspections	400	400	250	650	400
Standalone GPS units	25	12	14	22	32
Installations – apparatus and vehicles	3	5	6	14	10

¹ Represents stipend.

Communications, continued

2015-16 Service Measures, continued

- Ensure intra- and inter-agency communication operability during disasters and/or exercises.

Goal(s)/Call(s) for Action: III; VII
Service Type(s): Mandatory
Measured By: Maintain an appropriate matrix of communications requirements for use when the District is operating in Disaster Operations mode. Ensure that a comprehensive deployment plan for backup communications exists during an exercise or a real event. Provide emergency communications equipment training to all District personnel.

- Maintain consistent up-time of mobile data computers (MDCs). Ensure critical response aids resources are updated and function as expected.

Goal(s)/Call(s) for Action: I/A; IV; VI/1; VII
Service Type(s): Essential
Measured By: Real-time monitoring and reporting on the Onboard Mobile Gateways (OMGs) performance metrics.

- Provide technical support for and maintain the communications infrastructure, equipment, and maintenance needs of the District. Maintain a solid relationship with WCCCA. Manage policies and procedures to ensure proper operation and use of the District's communications resources.

Goal(s)/Call(s) for Action: VI/1; VII
Service Type(s): Mandatory
Measured By: Munis work orders are monitored to ensure issues are dealt with in a timely fashion. Partnering with WCCCA on applicable projects and maintain active committee participation.

- Participate as an active partner in project management, planning, and implementation to support District-wide communications needs.

Goal(s)/Call(s) for Action: VI/1 and 2
Service Type(s): Management
Measured By: Open lines of communication are experienced from inception to completion, resulting in a smooth and successful conclusion of the project.

- Monitor opportunities at the regional, state, and national levels that support efforts in the area of voice and data interoperability.

Goal(s)/Call(s) for Action: III/1; VI/1
Service Type(s): Essential
Measured By: Ensure regular attendance at regional meetings. Exchange information and prioritize communications needs at the quarterly communication program management meetings.

- Forecast Communications expenditures and meet budgetary expectations.

Goal(s)/Call(s) for Action: VI; VII/3
Service Type(s): Essential
Measured By: Provide Finance with a 15-year capital spending plan to meet District technology requests.

2015-16 Change Strategies

- Evaluate future mobile network options – Based on the evaluation in fiscal year 2013-14, the duration of this change strategy has changed. This is a three-year plan to upgrade the District MDCs to 4G connectivity and potential replacement or upgrade of the Onboard Mobile Gateways (OMGs). The first phase is to evaluate 4G options, and test CradlePoint, along with other mobile platforms. The second phase will be to evaluate connectivity options that include vehicle telemetry. The third phase will be the recommendation for the future mobile network platform. There are many changes coming in the next two years, including CAD Replacement, Fleet Telemetry Change Strategy, and potential devices other than standard MDCs that will affect connectivity options. For these reasons, it is prudent to evaluate all of these options and extend this Change Strategy from two to three years.

Goal(s)/Call(s) for Action: VI/1 and 2
 Budget Impact: Slight increase required
 Duration: Year 3 of 3
 Budget Description: InMotion (Sierra Wireless) OMG replacement (pre-plan).
 Partner(s): Information Technology, Integrated Operations, Fleet

- Nationwide Public Safety Broadband Network - Ensure TVF&R is positioned to take advantage of the national public safety wireless broadband network initiative. This is a \$6.5 billion endeavor by the FCC to promote the next generation 9-1-1 and emergency alert systems for first responders. Additionally, the plan promotes critical infrastructure survivability. This is not intended to replace the current 800 MHz radio network, but will provide a secure, reliable, dedicated, and interoperable network for emergency responders. Communications will stay abreast of the progress and implementation of this network regionally, as well as nationally, to determine how this initiative meets current and future operational needs.

Goal(s)/Call(s) for Action: III/1; VI/1 and 2
 Budget Impact: Varied
 Duration: Year 3 of 6
 Budget Description: Years 1-3: resource neutral
 Years 4-6: potential increase
 Partner(s): Fire Chief's Office/Emergency Management, Integrated Operations, Information Technology, WCCCA, BUG/BOT

- Evaluate future fire station alerting options – evaluate and test new fire station alerting (tap-out) options. The CAD replacement project presents an opportunity to upgrade the current tap-out system's functionality. Staff will evaluate options beyond the current Omron PLC type tap-out system, which was custom-built and is difficult to support. A preferred system would provide remote programming, zoning, alert verification, reader board/timer capabilities, multiple tones, etc.

Goal(s)/Call(s) for Action: VI/5; VII/1
 Budget Impact: Slight increase required
 Duration: Year 1 of 2
 Budget Description: Year 1 – Evaluate and budget
 Year 2 – Implementation
 Partner(s): IT, Integrated Operations, Facilities

Communications, continued

	2012-13 Actual	2013-14 Actual	2014-15 Revised Budget	2015-16 Proposed Budget	2015-16 Approved Budget	2015-16 Adopted Budget
10175 General Fund						
5002 Salaries & Wages Nonunion	\$ 232,853	\$ 210,201	\$ 263,918	\$ 274,046	\$ 274,046	\$ 274,046
5004 Vacation Taken Nonunion	14,419	15,357	20,303	21,083	21,083	21,083
5006 Sick Taken Nonunion	10,035	10,634	4,062	4,217	4,217	4,217
5008 Personal Leave Taken Nonunion	2,194	1,581	1,741	1,809	1,809	1,809
5010 Comp Taken Nonunion	530	100				
5015 Vacation Sold			6,972	7,240	7,240	7,240
5016 Vacation Sold at Retirement		4,015				
5019 Comp Time Sold Nonunion		392				
5021 Deferred Comp Match Nonunion	9,941	8,338	14,504	15,059	15,059	15,059
5121 Overtime Nonunion	174	365	1,000	2,000	2,000	2,000
5201 PERS Taxes	34,395	32,758	62,736	41,746	41,746	41,746
5203 FICA/MEDI	19,407	18,123	24,046	23,886	23,886	23,886
5206 Worker's Comp	4,186	3,646	5,658	5,891	5,891	5,891
5207 TriMet/Wilsonville Tax	1,799	1,703	2,309	2,370	2,370	2,370
5208 OR Worker's Benefit Fund Tax	105	102	152	154	154	154
5211 Medical Ins Nonunion	42,415	37,045	47,075	53,058	53,058	53,058
5221 Post Retire Ins Nonunion	4,425	2,925	3,600	3,600	3,600	3,600
5230 Dental Ins Nonunion	4,946	4,743	5,404	5,130	5,130	5,130
5240 Life/Disability Insurance	2,502	2,201	4,503	4,504	4,504	4,504
5270 Uniform Allowance	914	910	978	978	978	978
5295 Vehicle/Cell Allowance	1,350	1,350	1,800	1,800	1,800	1,800
Total Personnel Services	386,591	356,487	470,761	468,571	468,571	468,571
5300 Office Supplies	2		75			
5301 Special Department Supplies	19,586	14,943	18,735	33,480	33,480	33,480
5330 Noncapital Furniture & Equip	27,805	29,573	78,385	207,770	207,770	207,770
5350 Apparatus Fuel/Lubricants	2,041	1,576	2,500	2,250	2,250	2,250
5364 M&R Fire Comm Equip	19,372	15,001	16,243	26,308	26,308	26,308
5414 Other Professional Services				3,200	3,200	3,200
5415 Printing		128	250	700	700	700
5420 Dispatch	1,567,102	1,597,011	1,677,059	1,786,070	1,786,070	1,786,070
5430 Telephone	215,000	207,063	271,868	260,932	260,932	260,932
5450 Rental of Equip	1,632	1,259	1,920	1,920	1,920	1,920
5461 External Training	1,114		750	750	750	750
5462 Travel and Per Diem	716	16	1,000	850	850	850
5500 Dues & Subscriptions	120	120	360	120	120	120
5570 Misc Business Exp	80		100	100	100	100
Total Materials & Services	1,854,568	1,866,690	2,069,245	2,324,450	2,324,450	2,324,450
Total General Fund	\$ 2,241,160	\$ 2,223,177	\$ 2,540,006	\$ 2,793,021	\$ 2,793,021	\$ 2,793,021