

# DISTRICT HISTORY

## WHAT IS THE COLUMBIA 9-1-1 COMMUNICATIONS DISTRICT?

Columbia 9-1-1 Communications District (C911CD) is the sole Public Safety Answering Point (PSAP) and dispatch center for all public safety agencies based in Columbia County, Oregon and small adjacent portions of Clatsop and Multnomah Counties. We are an Oregon Special District formed under Oregon Revised Statutes (ORS) Chapters 198 and 403 and governed by a Board of Directors elected from five geographic zones within Columbia County. The Directors serve at large and select their President, Vice President, Secretary and Treasurer. The Board governs with the participation of a statutory Advisory Committee consisting of appointed executives from each law enforcement, emergency medical, emergency planning and fire service based in the county. The Board appoints 5 citizen members to the annual Budget Committee and hires an Administrator as the Chief Executive Officer to manage day-to-day operations of the District.



The District provides 9-1-1 call-taking, dispatching and non-emergency communications services for seven law enforcement agencies and five fire districts – including emergency medical dispatch for four fire district owned ambulance services and one private ambulance. In addition, we provide a variety of communications support activities for several other public and private entities in the county. We own and maintain the dispatch center facilities and the county wide public safety communications system, including the narrowband VHF 8 channel simulcast voice radio system, UHF mobile data system, the microwave backbone and associated remote facilities and tower sites.

## HOW & WHY WAS THIS DISTRICT FORMED?

Prior to 1983, emergency call taking and public safety dispatching was performed by individual departments or provided by an intergovernmental organization called Central Dispatch located at the St. Helens Police Department. Central Dispatch was dissolved in 1983. At that time, St. Helens Police maintained their own dispatch center and became a secondary 9-1-1 answering point. Clatskanie Rural Fire Protection District did fire and medical dispatching for their district and for Mist-Birkenfeld RFPD. An Oregon Revised Statutes (ORS) 190 intergovernmental agreement formed Columbia County Communications Agency (C-Com) to assume the remainder of dispatch responsibilities in the county and to be the primary 9-1-1 answering point for all 9-1-1 calls originating in Columbia County. The agency set up operations in the basement of the County Courthouse, was funded by user fees and was governed by an intergovernmental council and user board. By 1987, some users were having trouble meeting costs and at least one agency could not pay at all. In addition, C-Com was experiencing problems with management, user satisfaction and staff morale. Several organizational structures and funding alternatives were considered during this period.

In 1989, Columbia County voters approved the formation of Oregon's second emergency communications district, Columbia County Emergency Communications District, intended to provide services as the sole 9-1-1 call taking and dispatch center for the county and all cities and districts based in it. In 1995, the Board legally changed the District's name to what we are known as today - The Columbia 9-1-1 Communications District.

## **THE NEW DISTRICT TAKES ITS FIRST STEPS IN BUILDING A STRONG SERVICE**

In May 1990, the Board of Directors assumed governing responsibility and a tax base proposal prepared by members of the Advisory Committee was defeated narrowly by voters. In September 1990, a one year operations levy was passed for 1990-91. Voters passed a reduced proposal for a tax base in November 1990. The Board established itself as the public contracting authority for the District and adopted public contracting rules. The Board established a Mission Statement and Goals and, with involvement of the Advisory Committee, selected the District's first administrator who began work in March of 1991.

By the end of 1991, the District had assumed all of the assets and responsibilities of its predecessor agency and had also assumed the call taking and dispatch responsibilities of the two other dispatch centers. A new radio site was established at Benson Point through a partnership between the District and Evenson Logging, Clatskanie and Mist-Birkenfeld Fire Districts. Board, Personnel and Fiscal policy manuals were adopted and a new collective bargaining agreement was completed by fiscal year 1992-1993.

The District established an ongoing prioritization and implementation process for urgent service and technical upgrades during this period. Changes included adding an emergency medical pre-arrival instruction program, adding 9-1-1 reporting access for the speech and hearing impaired, adding foreign language interpretation services, installing toll free business line access county wide, development of trainer standards, training manuals and quality control mechanisms, several small radio system improvements and back-up power upgrades at remote radio sites. Public education activities were initiated, including presentations in schools, local Chambers of Commerce, service and social clubs, Granges and local governing boards, along with a public safety newsletter, print ads and radio announcements.

The funding for the next ten years consisted of carryover from the previous organization, the one year levy for 1990-91, 9-1-1 excise taxes, the voter approved tax base for years 1991-1999, and small user fees for certain services not intended to be funded by the permanent tax rate.

## **FIRST LONG RANGE PLAN IS DEVELOPED AND IMPLEMENTED**

Fiscal year 1994-1995 brought a detailed assessment of ongoing service requirements for long-term effectiveness. A long range plan, developed in partnership with all public safety agencies in the county, was adopted in February 1995 by the Board of Directors and the 9-1-1 Advisory Committee. The plan included 3 major phases in the following priority: 1) facility replacement, enhanced 9-1-1 caller location identification, up to date radio control and ergonomic work environment; 2) computer-aided dispatch; 3) public safety voice radio system replacement. As a first action step the purchase of 1.5 acres near the McNulty Office Park in St. Helens.

In the May 1996 election, the Board of Directors proposed a \$7.9 million general obligation bond measure to fund a new facility, system upgrades recommended in the long range plan, and a proposed \$1.04 million tax base upgrade for ongoing operations. Voters narrowly defeated both measures. Based on exit poll research and recommendations of users, the District shortened the scope of the capital upgrades to reduce the bond issue by \$1 million. The revised proposals were again defeated in the November 1996 election.

In fiscal year 1997-98, due to voter approved changes ordered by Ballot Measure 47 and implemented under Ballot Measure 50, the District tax base was eliminated and tax collection was converted to a permanent rate based system. A new assessed valuation, for the first year, was based on fiscal year 1995-96 fair market value minus 10%. Each year forward, taxing districts are limited to a maximum 3% increase of revenue resulting from increased property values, with exemptions for new construction. The permanent rate established for the District under this system is .0002554. Even with the offset of new construction, the District experienced an actual revenue loss of \$280,000 the first three years. The adverse financial impact from the earlier ballot Measure 5, which limits local government combined rate to \$10 per \$1000 has steadily grown as communities in Columbia County have reached compression.

## **VOTERS APPROVE CONTINUED OPERATIONS AND FUNDING FOR A NEW FACILITY AND UPGRADED 9-1-1 CALL PROCESSING SYSTEM**

Faced with growing activity levels, potentially severe staff and service reductions escalated by the new tax limitations and aging unstable electronic equipment, the Board proposed a \$4.375 million 5-year local option tax levy (a new funding mechanism created under Measure 47/50) on the September 1998 ballot. The proposal included funding for continued operations and a new pre-fabricated modular building with an upgraded call processing system. The radio system replacement proposed in 1996 was not included – the District promised to seek alternative funding sources to implement this component of the long-range plan. In the November 1998 general election, voters affirmed a 57% yes vote supporting the 5-year local option levy.



To implement the capital upgrade portion of the local option levy, the District invited Advisory Committee and staff to participate on several implementation committees. The committees met actively during the facility planning and during selection and training for new ergonomic consoles, equipment and software for call processing, computer-aided dispatch and radio control.

The District partnered with the State of Oregon to secure enhanced 9-1-1 telephone equipment. Phase one enhanced 9-1-1 routes the 9-1-1 call originating from a landline telephone to the correct center, provides the name and location of the phone (based on phone company billing records), lists the public safety agencies that serve that address, provides for quick transfer capability to neighboring 9-1-1 centers, alternate routing circuits to help avoid service interruption during disasters and provides administrative tracking records.

The facility, of prefabricated modular construction, was delivered and secured to the prepared foundation in October 1999. Construction cost for this facility was kept under \$50 per square foot in spite of added structural design for earthquake stability. Following technical installations and training on new systems, a “cutover” of over 100 telephone and radio line connections was completed on November 22, 1999. The 24 hour transition was conducted without degradation in the delivery of 9-1-1 services to the public or public safety partners, meeting the primary goal set by the various transition teams.

Simultaneously in the fall of 1999, a concern was raised as Wal-Mart completed site development for a new store across the creek from the new 9-1-1 facility. Wal-Mart asserted that their site work posed no increased flood risk. The District subsequently ordered a new survey and hydrology analysis to assess the potential flood risk to the facility and it was discovered that the original survey provided to the District during purchase was incorrect. The new survey found that while its floor elevation placed the facility 3 feet above the 100 year flood plain, the physical location of the building was within the 100 year flood plain and one corner of it was in the 100 year floodway. A grading plan, proposed by the hydrologist, approved by Federal Emergency Management Agency (FEMA) and the City of St. Helens, was carried out in March 2006. The post grading survey places the facility completely outside of the 100 year floodway. FEMA approved the flood map revision (LOMR) reflecting this change, effective September 26, 2007.

In June 2000, the District implemented Computer Aided Dispatch (CAD) following extensive research by staff members. CAD interfaces with enhanced 9-1-1 call information for quicker processing of calls for service, provides responder recommendations, mapped call and responder locations, automated coordination of dispatcher actions, automated tone activation and paging and provides activity reports for administrators. This represented a totally new way of processing calls for dispatch staff – and one that they successfully assimilated within 90 days. CAD also provides partner agencies access to CAD activity screens and reports at their sites as well as supports the mobile data system and the Automatic Vehicle Location (AVL) system.

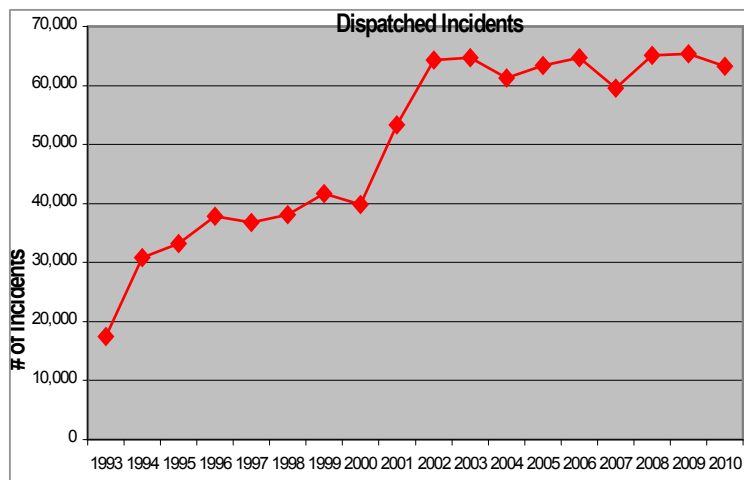
In early 2007, the District began use of a CAD to CAD message switch that allows for computer aided call information transfer among the seven metro-Portland 9-1-1 call centers. The Oregon State Police (OSP) and the Oregon Department of Transportation (ODOT) metro call center for the urban area surrounding Portland became part of this plan in early 2011. This message switch was the first phase of data interoperability in the region, made possible through UASI funding.

In May of 2004, by a 70.3% yes vote and a 52.7% turnout, voters renewed the Districts 5-year local option levy for the purpose of continuing current levels of operations, at a rate slightly lower than the expiring levy. The levy pays over half of the Districts operating costs.

### ACTIVITY LEVELS QUADRUPLE IN THE FIRST 20 YEARS

Use of the 9-1-1 system has steadily increased since formation of the District. Staff now process over 60,000 incidents and 80,000 phone calls annually – quadruple the number handled in 1989.

Prior to voter approved operating funding and upgrades and the new radio system made possible by federal funding, staffing and/or technical system resources were frequently stretched to maximum limits. To meet the growing demands of a county high in unemployment and low on resources, the District developed and has maintained an operating culture that focuses on innovative, cost effective solutions.



## CONGRESSIONAL EARMARK SECURED FOR NEW COUNTYWIDE PUBLIC SAFETY RADIO SYSTEM AND MICROWAVE BACKBONE

The public safety agencies the District serves and other partners, including the Chambers of Commerce and CEPA, teamed up with Congressman David Wu, Senator Gordon Smith and Senator Ron Wyden to seek federal funding for the replacement of the public safety radio system.



This was the final step in completing the upgrades identified as urgent in the 1995 long range plan. November 2001 brought notification that the funds had been approved and would be administered through the Department of Justice Community Oriented Policing Services (COPS) program. In early 2002, Day Wireless Longview was selected to build the new interoperable system for all of our public safety users.

The District solved five problems with this upgrade:



1. **Interoperability** -- The public safety agencies that work together in the county could not talk to one another because they operated on different frequencies or on systems that did not reach throughout the county. The new system is an 8 channel simul-cast narrowband Very High Frequency (VHF) radio system that allows countywide communications among all public safety members.
2. **Coverage** -- There were several “dead spots” in the county – as population became more dense, public safety field units increasingly found themselves in areas where they could not receive or transmit to the dispatcher for help. The new 5 site system provides saturated coverage countywide.
3. **Stability** -- The former system was patched together by phone circuits that were subject to accidental backhoe cuts, landslide damage or phone company programming glitches – when the phone lines went down so did the radio system. The new system uses a microwave backbone – very stable connectivity and independent of phone lines.
4. **Compliance** – The Federal Communications Commission (FCC), in an effort to promote greatest efficiency of radio spectrum, requires narrow banding in all new applications, and will require narrow banding for all systems in the future. The new system complies with this requirement.
5. **Scalability** – The new system will allow the District and its partner agencies to continue to invest in its communications infrastructure to meet growing activity demands and to take advantage of new technologies that promote efficient, effective service.

A modular section was added at the rear of our facility to house the new radio technology. Backup power, humidity and temperature control, security locks, alarms and fencing are included at each of the five microwave radio sites. The new system went on line in mid-February 2004. Training and implementation was accomplished with the aid of an implementation task force consisting of representatives from all agencies. Included in this upgrade is a countywide digital display paging system serving all public safety agencies. The microwave backbone supports wireless connectivity to CAD and has capacity to support video arraignment from remote offices.

### **FACILITY: MAJOR INCIDENT CONTROL CENTER COMPLETED**



The Major Incident Control and Training Center (MICC) was the second phase of our 9-1-1 facility upgrade authorized by voters in November 1998. It is located in two and one half prefabricated modules added on to the 9-1-1 facility in January 2004. The center is a multi-purpose facility equipped with 20 telephone extensions, 5 outside phone lines, data-ports, audio/visual equipment and other tools to allow it to function in a variety of capacities to support operations and public information during major incidents. Additionally, it is used by public safety agencies in Columbia County for drills and exercises, meetings, and training. A small portion of one module is set aside for storage or additional office space.

Spring of 2011 brought the completion of a third phase to our 9-1-1 facility and consisted of three modules. This space brought much needed overcrowding relief for our administrative staff. We had personnel working from a storage space and on a small table in someone else's office. The new wing, affectionately known as the "West Wing", gave those personnel an office; much needed space for storage, meetings, and future growth. This addition was funded through diligent multi-year saving that allowed us to make the improvements without sustaining debt. The District is debt free with modest reserves in capital, facility, and revenue loss funds.

### **MOBILE DATA BACKBONE MADE POSSIBLE WITH HOMELAND SECURITY GRANT**

In fiscal year 2003-4 the District applied for and received a grant of \$94,154 to assist in a \$200,000 project to install a mobile data backbone that went on line in February 2005. The mobile data system provides a means of exchanging secure data between dispatcher and field units and maximizes radio channel efficiency by reducing audible transmission congestion as activity levels grow.

Each agency is responsible for the purchase and maintenance of mobile units on the system, while the District maintains the backbone, data hardware and software. The St. Helens Police Department, on behalf of all county agencies and several individual departments, applied for and received grants for the equipment needed in patrol and fire apparatus to use the system. In 2006 the District added the capability for police vehicles to get driver's license photos over this system. Mapping was implemented in 2007, Automatic Vehicle Location (AVL) in 2008, and Radio over Internet Protocol (RoIP) is being installed over the spring of 2011.



## **SYSTEM AND FACILITY ENHANCEMENTS**

The District was awarded grant funds in 2005 from the federal Homeland Security Critical Infrastructure Protection Program to upgrade facility security. As the sole answering and dispatch point for all emergency services in Columbia County, the Columbia 9-1-1 facility is designated as an essential facility. There is no identifiable risk to Columbia 9-1-1 of international terrorist attacks, however, Columbia County has been the target of domestic environmental terrorism in recent years and is not immune to “copycat” threats.

Enhancements made possible through this grant include property perimeter fencing with controlled access entrance gate, an interior/exterior door access system and an upgraded security camera system that includes a motion activated recording system. The security camera system provides video images of the District facility and grounds on dispatch work area and administrative office monitors. Funds awarded through the Federal Homeland Security Portland UASI 2006 grant program provided installation of similar security upgrades to remote radio site facilities used by the District.

In 2006 voting receivers were added to two spur sites to enhance coverage. In 2007, the antenna system was upgraded to increase pager coverage for the Mist-Birkenfeld and Clatskanie areas. In 2010 a tower was added to our system at Clatskanie Mountain and in early 2011 our Bald Hill tower site was upgraded with microwave which further enhances our system.

We will continue to seek various funding sources for communications system enhancements that will carry us into the future. Partnerships with the state agencies such as OWIN and UASI nationally along with our north coast neighbors are strengthening our system now and into the future.

## **ENHANCED 9-1-1 PHASE II LOCATION IDENTIFICATION & MAPPING**

By mid-2006, with funding provided through the State of Oregon 9-1-1 Program, the District completed technology and software upgrades to add the capability for call takers to identify the location of callers who dial 9-1-1 from their cell phones. Included was a digital countywide mapping system that is used to identify the latitude/longitude location signal from cell phones and is incorporated into the CAD system. The District has made the base map available through to the county assessor, cartographer, all cities, and all public safety agencies served by the District, at no charge. The map is maintained through a partnership that includes: the State of Oregon, Columbia County, its cities and districts, and the Columbia 9-1-1 Communications District.

## **EMERGENCY COMMUNICATIONS STAFF RECRUITMENT AND DEVELOPMENT**

In 2005, to ensure we are hiring persons most likely to succeed as Communications Specialists the District participated in the development of a screening mechanism for new hires that tests for behavior characteristics such as: extreme multi-tasking and split hearing capabilities, the ability to remain calm in repetitive high stress situations. This mechanism supplements the District’s current screening processes which include minimum keyboard speed and accuracy testing, aptitude testing, oral board, administrative interviews, and a thorough background investigation.

District staff also developed new hire training offered in a classroom setting interspersed with live incident training with their coaches. The classroom curriculum lays a foundation for hands-on learning with a trained coach and supplements curriculum provided at the Basic Telecommunicator Academy at the Department of Public Safety Standards and Training (DPSST). The classroom training should considerably shorten training time as well as provides focused and phased training however staffing shortages have prevented full implementation of this process. During 2011 our new hire Comm Spec training program will

undergo a complete rewrite and restructure in order to ensure our trainees are afforded every opportunity to succeed.

The District annually reviews recruitment, screening, selection, training, and employee retention programs to assure that the highest level of expertise and ethics are maintained among our workforce and to provide strong incentives for long term commitment by employees.

## **EMERGENCY RESPONSE, PLANNING, AND HOMELAND SECURITY (DHS) REQUIREMENTS**

In 2003 Portland and its surrounding counties were designated to participate in an Urban Area Security Initiative (UASI) – a federal funding program with the purpose of enhancing preparedness in over 70 US cities. We participate in planning and communications enhancement opportunities with the other UASI PSAPs located in Multnomah, Washington, Clackamas Counties in Oregon and Clark County in Washington. The Portland UASI participated in a full scale 10 day disaster exercise called TOPOFF (top officials) staged in 4 UASI areas simultaneously in the country. The exercise tested readiness in all areas of response. We hosted a Joint Information Center (JIC) and a Public Information Call Center (PICC) during the exercise. Our employees and elected board members maintain compliance with the US National Incident Management System (NIMS) training and exercise requirements.

The District was granted UASI funding to complete installation of the federally designated interoperable VHF channels at all radio sites, as well as 800MHz radios programmed with the Portland metro area channels and the National Public Safety Telecommunications Council's (NPSTC) interoperable channels at south county sites. Radio/data system security was enhanced at each site through UASI funding and through a safety grant from Special Districts Association of Oregon (SDAO).

The years 2005 and 2006 brought region-wide and individual county interoperable communications strategic planning and Tactical Interoperable Communications Planning (TICP) for the Portland UASI partners. We will be implementing various phases of this plan over the next 7-10 years.

During the winter of 2007/2008 we opened a PIC and JIC in support of the disaster response to a windstorm, flood, and heavy snow storm. We also tactical dispatchers to emergency operations centers in Vernonia and Mist to support communications related to the disaster. The PIC was staffed primarily with volunteers from St. Helens and Scappoose Community Emergency Response Teams (CERT). We continue to provide public information support and incident response communications to various high profile events. When systems failed in neighboring Clatsop County we were able to provide back up 9-1-1 answering and related support until that center recovered.

In 2000, the Columbia Emergency Planning Association (CEPA), made up of local industries, public safety agencies and other local government and community members, partnered with the District to contract with a high speed emergency landline based outcall system to use in notification of the public in case of need to evacuate or shelter in place due to chemical accident or other emergency situation. The annual fee for the service is shared by Dyno-Nobel Corporation, Boise Paper LLC St. Helens, Armstrong Industries, US Gypsum Rainier, Georgia Pacific Wauna, Columbia River Fire and Rescue, City of St. Helens, City of Scappoose, Scappoose Fire, Columbia City and Columbia County. Any local government or industry can initiate notifications through the 9-1-1 District as emergency needs dictate. The District pays for the enhanced 9-1-1 data base, which includes non-published landline telephone numbers used for call notifications, and manages special call-out lists and self-registries for cell phones and other alternative contact information.